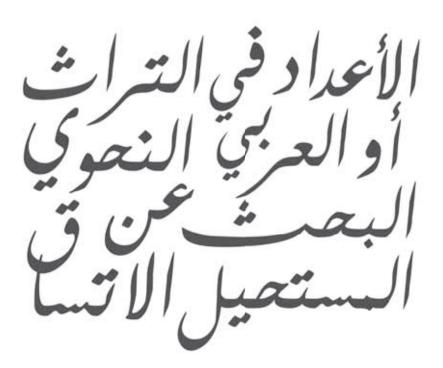
Numerals in Arabic grammatical theory:

An impossible quest for consistency?



Numerals in Arabic grammatical theory: An impossible quest for consistency?

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Contents

| A | cknow | ledgements | 11 |
|----|---------|---|----|
| Tr | anslite | eration conventions | 13 |
| I | Pre | liminary chapters | 15 |
| 1 | Intro | oduction | 17 |
| 2 | Liter | rature review | 21 |
| | 2.1 | Psychological vs. linguistic approach | 23 |
| | 2.2 | Prescriptiveness vs. descriptiveness | 29 |
| | 2.3 | Characterising Sībawayh's method | 32 |
| | 2.4 | Prescriptiveness of post-Sībawayh grammar | 46 |
| | 2.5 | The pedagogical turn | 48 |
| | 2.6 | The contact of Greek logic and grammar | 49 |
| | 2.7 | $Mu^{\varsigma} tazilah$ and grammar \hdots | 53 |
| | 2.8 | The closure of the linguistic corpus | 58 |
| | 2.9 | Semantics in post-Sībawayh grammar | 61 |
| | 2.10 | Conclusion | 70 |

| II | Pr | esentation of the issues linked with the numerals | 73 |
|----|------|---|-----|
| 3 | Prel | iminary remarks | 75 |
| | 3.1 | Explicit grammatical commentaries | 76 |
| | 3.2 | Prime examples | 78 |
| | 3.3 | Grammatical tests | 80 |
| | 3.4 | The testimony of canonised tradition | 84 |
| | 3.5 | Extrapolation | 96 |
| 4 | Nun | nerals in isolation | 101 |
| | 4.1 | A limited set of roots | 101 |
| | 4.2 | Many patterns and irregularities | 102 |
| | 4.3 | Coalescence of numerals in compound numerals | 119 |
| | 4.4 | Conjoined numerals | 121 |
| | 4.5 | Morphosyntactic issues linked with numerals | 122 |
| | 4.6 | Semantic considerations | 135 |
| | 4.7 | Conclusion | 151 |
| 5 | Nun | nerals in the sentence | 153 |
| | 5.1 | The numerals' morphological class | 153 |
| | 5.2 | Syntactic slots occupied by numerals | 155 |
| | 5.3 | The special case of 'aḥad | 158 |
| | 5.4 | Conclusion | 161 |
| 6 | The | expression of the counted object | 163 |
| | 6.1 | The appositional construction | 164 |
| | 6.2 | The predicative construction | 165 |
| | 6.3 | The annexational construction | 166 |

| | 6.4 | The specifying construction | 166 |
|-----|-------|--|-----|
| | 6.5 | Summary | 167 |
| | 6.6 | Issues related to the counted object | 169 |
| 7 | Cone | clusion | 185 |
| III | Tŀ | nree different frames to tackle numerals | 187 |
| 8 | Sība | wayh's approach to numerals | 191 |
| | 8.1 | Introduction | 191 |
| | 8.2 | The link with the counted object $\ldots \ldots \ldots \ldots$ | 194 |
| | 8.3 | Between "three" and "nineteen" | 203 |
| | 8.4 | The logic at stake in the $Kit\bar{a}b$ | 208 |
| | 8.5 | Beyond Sībawayh | 211 |
| 9 | Al-M | Mubarrad's approach to numerals | 213 |
| | 9.1 | Introduction | 213 |
| | 9.2 | Morphology and syntax of numerals | 216 |
| | 9.3 | Expression of definiteness | 225 |
| | 9.4 | Numerals in annexation | 226 |
| | 9.5 | The specifier complement $tamy\bar{\imath}z$ | 229 |
| | 9.6 | The logic at stake in the $\textit{Muqtadab}$ | 236 |
| | 9.7 | Beyond al-Mubarrad | 238 |
| 10 | Ibn a | as-Sarrāj's approach to numerals | 241 |
| | 10.1 | Introduction | 241 |
| | 10.2 | Specifying the numerals | 246 |

| | 10.3 | Kam is an unspecified numeral | 255 |
|----|------|---|-----|
| | 10.4 | Issues on the numerical specifier and kam | 257 |
| | 10.5 | Compound morphosyntax | 262 |
| | 10.6 | The logic at stake in the ${}^{\circ}\!U\!\!\circ\!\bar{u}l$ | 264 |
| | 10.7 | Beyond Ibn as-Sarrāj | 266 |
| IV | Re | esults of the study | 269 |
| 11 | A co | mparison of the three grammarians | 271 |
| | 11.1 | Formal differences between the three treatises $\ \ldots \ \ldots \ \ldots$ | 271 |
| | 11.2 | Example of treatment of specific issues | 276 |
| | 11.3 | Differences in methodology | 281 |
| 12 | Sum | mary | 301 |
| V | Bib | pliographical references | 307 |
| VI | Aı | nnexes | 325 |
| | Inde | x of Qur³ānic verses | 327 |
| | Inde | x of poetic lines | 333 |
| | Inde | x of Classical authors | 339 |
| | Inde | x of proper names | 344 |
| | Gene | eral index | 349 |
| | List | of tables | 356 |
| | Sum | mary in Dutch | 359 |
| | Auth | or's résumé | 365 |

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The project of this study was born in the aftermath of my master degree in teaching Arabic as a foreign language at the American University in Cairo. I began to read Classical Arabic grammarians with Dr. Zeinab Taha, and was fascinated by the refinement of the interpretative layer these grammarians were adding to the description of the language itself. After losing some time in a subject that was far too difficult for me (namely, variant readings of the Qur'ān), I turned to the grammar of numerals. At first, I expected to not only understand why numerals behave the way they do in Arabic, but also to find some linguistic variation with time.

In the end, I discovered that the numerical system, as complicated as it seems, has not varied much since the first centuries of Islam. However, the grammarians' interpretations of the reasons behind the way numerals behave have varied a lot between the IInd/VIIIth and the IVth/Xth centuries. What we teach to Arabic students today largely reflects the IVth/Xth century era of grammatical interpretation. I hope this limited study will help both scholars and students understand what happened to numerals in the early development of Arabic grammar.

Transliteration conventions

The romanization system that will be used in this paper is the same as in the *Encyclopedia of Arabic language and linguistics* (Versteegh 2006b, viii) with the following differences for the ending vowels and $t\bar{a}$ ' $marb\bar{u}tah$:

The $t\bar{a}$ ' $marb\bar{u}tah$ will be romanized as a h at the pause and as a t elsewhere, as in madrasah and madrasatun $mash\bar{u}ratun$). The 'alif $maqs\bar{u}rah$ will be romanized as an a in 'ihda, and as an a in 'asa.

| 1 | ā | س | S | J | 1 |
|---|---|---------|---|---|---------------|
| ب | b | ش | š | م | m |
| ت | t | ص | ķ | ن | n |
| ث | ţ | ض | ḍ | ٥ | h |
| ج | j | ط | ţ | و | w or ū |
| ح | ķ | ظ | ģ | ي | y or ī |
| خ | x | ع ا | c | ی | á |
| د | d | غ | ġ | ء | 3 |
| ذ | d | ف | f | ة | h <i>or</i> t |
| ر | r | ق | q | | ' |
| ز | Z | <u></u> | k | | |

Table 1: Transliteration system

Part I Preliminary chapters

Chapter 1

Introduction

The chapters on the syntax of numerals are among the strangest in Classical Arabic grammar, because of the incredible number of syntactic rules that apply, in particular in the expression of the counted object: numerals and counted object either agree or disagree in gender and number, numerals are either annexable or not, expression of definiteness is far from straightforward, and so on. In addition to these syntactic rules, numerals also have different morphosyntactic behaviour: some have adjectival patterns, others have nominal, participial, compound, dual, external masculine plural patterns, some are declinable, others are indeclinable, among other issues.

Lastly, the expression of the counted object is also problematic. Here is a summary of the main rules that apply in Classical Arabic:¹

"One" and "two" are adjectives that agree in number and gender with their counted objects, as in *waladun wāḥidun* "one boy" and *waladāni tināni* "two boys" in the independent form,² and *maʿa bintayni tinatayni* "with two girls" in the oblique form.

Between "three" and "ten", it is possible to annex the numeral to its counted object, as in <u>talāṭatu 'awlādin</u> "three boys" (annexational construction). It is also possible to use the numeral in an adjectival slot, as in <u>al-'awlādu talāṭatun</u> "the boys are three" (predicative construction), and <u>al-'awlādu t</u>-

¹See Howell (1883/2003, IV, 1423–1501); Wright (1967, I, 253–264; II, 234–249); Fleisch (1990, I, 506–524).

 $^{^{2}}$ The three nominal cases have received different names in English: nominative, accusative and genitive; u-form, a-form, and i-form; independent, dependent and oblique forms. We will use this third set.

 $\underline{t}al\bar{a}\underline{t}atu$ "the three boys" (appositional construction). In all three cases, the numeral carries a final $t\bar{a}$ " $marb\bar{u}\underline{t}ah$ when it counts masculine nouns, and not when it counts feminine nouns. The counted object is in a plural form in all cases.

Between "eleven" and "nineteen", there are also three possible constructions in order to express the counted object: $tal\bar{a}tata-$ "ašara waladan" thirteen boys" (specifying construction), al-'awlādu $tal\bar{a}tata-$ 'ašara" the boys are thirteen" (predicative construction), and al-'awlādu t- $tal\bar{a}tata-$ 'ašara" the thirteen boys" (appositional construction). Compound numerals are made of two parts that disagree in gender, except for "eleven" ('aḥada-'ašara and 'iḥdá-'ašrata) and "twelve" ($t\bar{t}n\bar{a}-$ 'ašara and $t\bar{t}nat\bar{a}-$ 'ašrata), where both parts agree in gender. All compound numerals are invariable in both parts, except "twelve" that takes the dual declension in its first part ($t\bar{t}n\bar{a}-$ 'ašara and $t\bar{t}nay-$ 'ašara). The counted object is in the singular in the specifying construction, and in the plural otherwise.

Between "twenty" and "ninety", one can express the counted object in the same three constructions as with compound numerals: 'išrūna waladan "twenty boys" (specifying construction), al-'awlādu 'išrūna "the boys are twenty" (predicative construction), and al-'awlādu l-'išrūna "the twenty boys" (appositional construction). Decades have the same form to count masculine and feminine nouns. Just like with compound numerals, the counted object is in the singular in the specifying construction, and in the plural otherwise.

With "one hundred" and "one thousand", one can express the counted object in the same three construction as with numerals between "three" and "ten": mi'atu waladin "one hundred boys" and 'alfu waladin "one thousand boys" (annexational construction); al-'awlādu mi'atun "the boys are a hundred" and al-'awlādu 'alfun "the boys are a thousand" (predicative construction); and al-'awlādu l-mi'atu "the hundred boys" and al-'awlādu l-'alfu "the thousand boys" (appositional construction). Mi'ah and 'alf are used to count masculine and feminine nouns. The counted object is in the singular in the annexational construction, and in the plural otherwise.

A specific difficulty arises from the fact that *mi'ah* and *'alf* can also be counted, between "two" and "nine" for the former, and with no limit for the latter, as in *talātu mi'ati waladin* "three hundred boys" and *talātatu 'ālāfi waladin* "three thousand boys". In this case, *mi'ah* and *'alf* follow the rules mentioned above, except that *mi'ah* remains in the singular after "three" to "nine".

It appears from what precedes that the annexational and specifying constructions are in a complementary distribution for the expression of the counted object between "three" and "one thousand". This point is at the core of the discussions on numerals in the Arabic grammatical tradition. Grammarians try to explain why compound numerals and decades are not annexable. Other issues do not receive as much attention.

More difficulties arise from the fact that ideally all numerals should be interchangeable in order to express any quantity of any counted object. What is more, all nominal groups consisting of a numeral and its counted object should also ideally be able to occupy any syntactic slot that the counted object can occupy in the sentence.

This large syntactic and morphological diversity contrasts with a remarkable semantic unity: Numerals express an exact countable quantity, applicable to objects that are either counted (cardinals) or classified (ordinals). Although it is possible to discern some semantic diversity among numerals, common sense has no difficulty to understand that there is an obvious semantic link between expressions like "first", "four", "twenty men", "to triple", "one eighth" or "three thousand years".

What is more, this semantic unity is clearly the reason why there are chapters devoted to numerals in Arabic grammars and especially to the expression of the counted object. Otherwise, there would be no justification for grammarians to discuss in the same chapters substantives and adjectives that behave so differently.

In other words, numerals display at the same time a great morphosyntactic diversity and a great semantic unity. Because of this particularity, we believe that the way Arabic grammarians tackle the grammar of numerals reveals their approach to the link between formal and functional grammar, i.e., the way they articulate morphosyntactic and semantic dimensions of the language they study.

To put it in an oversimplified way, there seems to be two major trends that oppose historians of Arabic grammar. On the one hand, some of them insist on the fact that the history of Arabic grammar is the history of its gradual formalisation, at the expense of its functional and communicative dimension, which relegates semantic studies to separate fields of Arabic philology such as rhetorics and Qur'ānic exegesis (Carter, Baalbaki). Contrary to this view, other historians of Arabic grammar hold that Arabic grammarians show a growing interest in semantics that is manifest in the categories used to describe the language, either just after Sībawayh (Owens, Ṭāhā) or after the confrontation between grammar and Greek logic (Bohas, Guillaume, Kouloughli).

The present study aims to show, through a detailed analysis of the evolution of the grammar of numerals between the $\pi^{nd}/\nu \pi^{th}$ and the π^{th}/ν^{th} century, that these two views are equally true because they describe two concomitant phenomena. Our research hypothesis is that there is, on the one hand, a progressive "reduction" into formal rules of a communicational descriptive grammar that once focused on the intention of the speaker and the understanding of the interlocutor, while there is, on the other hand, a gradual introduction of formal semantic criteria in grammatical definitions, aiming at a one-to-one correspondence between syntactic structures and meanings expressed.

In this study, we will focus on three major grammarians, namely Sībawayh (d. 180/796), al-Mubarrad (d. 285/898), and Ibn as-Sarrāj (d. 316/928).³ After a literature review covering the last forty years of academic research in the methodology of Arabic grammarians in these centuries (chapter 2), we will present in detail all the morphological, morphosyntactic and semantic issues linked with numerals described by Arabic grammarians (chapters 3 to 7). We will then focus on the way these three authors account or not for the inner consistency of these issues within their grammatical methodological frames (chapters 8 to 10). Finally, in chapter 11, based on the way these three grammarians deal with numerals, we will be able to check our hypothesis that the search for consistency in the linguistic behaviour of numerals moves from a functional to a formal dimension of semantics.

³See in annex, p. 339, a table of the Classical authors cited in this study, sorted by their date of death. See also p. 344 the index of proper names, sorted alphabetically.

Chapter 2

Literature review: The links between semantics and syntax in the Arabic grammatical tradition

Introduction

Medieval Arab historians who wrote the history of grammatical ideas "coterminously with the descriptive writings", as Owens (1990a, 1) puts it, present contrasting views on this history. They tend to describe the diversity within this grammatical tradition in a way that leaves little space to historical development as such, focusing instead on perceived *maḍāhib* "schools" and excluding dissenting voices, or treating them in a caricaturesque and anachronic way (Carter 2000, 264).

This surprising synchronic way of writing history corresponds to the "strictly synchronic approach" that Medieval Arabic grammarians themselves have toward language (Versteegh 1995, 98). These conjoined phenomena make "the diachronic syntax of Arabic [...] a hard nut to crack", as Dévényi (1987–88, 196) puts it.

Bohas, Guillaume, and Kouloughli summarise this typically scholastic scholarship, which reinforces the impression of homogeneity of the tradition:

Of course, the commentator could always express his disagreement on some point or another with the author upon whom he commented, but then, as the general system became more and more elaborate, all the possible solutions to a given problem were eventually worked out, together with the argumentation for and against every solution, so the only way one could disagree with somebody on some point was to accept somebody else's position on this point (Bohas, Guillaume, and Kouloughli 1990/2006, 15).

Since the nineteenth century, historians of Arabic grammar have tried to critically understand this tradition, at times deconstructing the traditional views (Weil 1913b¹ is an early example of this trend) and at times accepting it at face value. Gradually, the availability of more edited texts has made it possible for scholars to study specific issues in the development of the Arabic grammatical tradition.

Among the early editions made according to modern standards are the following works: the grammatical anthology by Silvestre de Sacy (1829); Ibn al-'Anbārī's 'Inṣāf (partially edited by Košut 1878, then by Weil 1913b); al-'Astarābādī's Šarḥ al-Kāfiyah (1858) ; az-Zamaxšarī's Mufaṣṣal (Broch 1879); Sībawayh's Kitāb (Derenbourg 1881–89/1970); Ibn al-'Anbārī's 'Asrār al-ʿarabiyyah (Seybold 1886); Ibn Yaʿīš's Šarḥ al-Mufaṣṣal (around 1900); and as-Sīrāfi's 'Axbār an-naḥwiyyīn (Krenkow 1936), to mention only the most important ones.

As for the early studies in the history of Arabic grammar, we find a great diversity of topics studied: Goldziher (1871/1967) studies the link between Arabic grammar, law and orthodoxy; Vernier (1891–92) publishes a grammar based on grammatical sources; Machuel (1908) studies grammatical terminology; Weiß (1910) studies Aristotelian influences in Arabic grammar; Weil (1913b), mentioned above, deconstructs the traditional view of the competing schools of Kūfah and Baṣrah; Weil (1915) studies the grammatical methods as such; Beck (1946) focuses on specific grammatical issues; Muṣṭafá (1948) investigates the identity of the first grammarian; Reuschel (1959) attempts to qualify al-Xalīl's (d. 170/786) influence on his pupil Sībawayh (d. 180/796); and Dayf (1968) studies the grammatical "schools".

These topics will be discussed extensively in the next decades, along with "new topics" such as the Greek influence on Arabic grammar, the link between grammar and Qur'ānic exegesis, the Bedouin informants of the grammarians, diglossia, the identity of the <code>naḥwiyyūn</code> in the <code>Kitāb</code>, to name only the main issues, some of them under discussion until the present day.

In this literature review, we will focus on the studies published after the seventies and contributing to the issue of the grammatical methods used by

¹The introduction (pp. 1–116) is published separately in Weil (1913a).

Arabic grammarians. As we will see in detail below, scholars have tried to characterise the methods of Arabic grammarians as being descriptive or prescriptive, functional or formal, communicative, structural, semantic, speculative, pedagogical, logical, juridical, aiming at consistency, subdividing categories or aiming at a limited set of rules, and so on. Some scholars have also pointed out the artificiality of applying some of these criteria to the Arabic grammatical tradition.

Another issue, which is not discussed as such in the secondary literature, is the periodisation of the Arabic grammatical tradition. Bohas, Guillaume, and Kouloughli (1990/2006) separate between a formative period until the end of the IIIth/IXth century, an apogee in the IVth/Xth century, and a maturity and decline period until the xth/xvith century. Versteegh (1997b) believes that Sībawayh inaugurates a shift in the grammatical tradition, and so do the contact of logical doctrines with grammar at the end of the IIIrd/IXth century and the works of al-Jurjānī in the vth/xIth century (Versteegh 1981, 1997b). Owens (1991) and Tāhā (1995) consider Ibn as-Sarrāj to be a turning point between early and later grammarians. Baalbaki (2008) divides the grammatical tradition into three periods, pre-Sībawayh, Sībawayh, and post-Sībawayh. Carter (1999) discerns four stages in the Arabic grammatical tradition: before Sībawayh; Sībawayh; from Sībawayh to Ibn as-Sarrāj; and after Ibn as-Sarrāj. Since our study focuses on Sībawayh, al-Mubarrad and Ibn as-Sarrāj, we will not consider in this review the pre-Sībawayh grammatical methods and we will not consider grammarians after the vith/xiith or viith/xiiith centuries.

Before reviewing these issues, we would like to introduce a distinction that will help us understand many of the subsequent questions posed by the methods of the Arabic grammarians, namely, the dichotomy between $laf_{\bar{q}}$ and ma'na, which we can for the time being translate as "utterance" and "meaning".

2.1 Psychological vs. linguistic approach

Kouloughli (1985) has received little attention in the literature and we would like to present his view here in detail. In this article, the author proposes a new understanding of the couple $laf\dot{q}$ and $ma^cn\dot{a}$ and its meaning in the Arabic tradition, where it has a central position in all the disciplines that are concerned with language and texts, such as grammar, rhetorics, and poetry. He proves that this pair of terms refers to different notions depending on the context and the epoch when it is used. He opposes two extreme views of the

meanings that these two terms have in the Arabic tradition, being conscious that this is a distorted presentation and that authors are actually situated somewhere between these two extremes. The interest of this presentation is that it enables us to understand clearly what is at stake before we consider the continuum. At one end of the continuum is a psychological approach and at the other end a linguistic one.

La première [problématique] qui a ses racines dans ce qui semble être le « sol primitif » des représentations arabes sur le discours et ses fonctions et devrait en conséquence être la clef de lecture de la grande majorité des textes anciens, est essentiellement une problématique psychologique, fondée sur une conception intentionaliste du ma'nā et caractérisée par l'absence de relation fonctionnelle (c'est-à-dire biunivoque) entre lafz et ma'nā.

La seconde qui nait de manière progressive et diffuse, et trouve son expression la plus aboutie dans les travaux de 'Abd al-Qāhir al-Ğurǧānī (XIe siècle), est une problématique linguistique, fondée sur une conception conventionaliste du terme $ma^{\circ}n\bar{a}$ et marquant l'avènement d'une vision fonctionnelle de la relation $lafz/ma^{\circ}n\bar{a}$ (Kouloughli 1985, 43–44).

According to the psychological approach, $ma'n\acute{a}$ is not an "object", not even an intellectual one, but an "activity": " $ma'n\~{a}$, en tant que « nom d'action [»] du verbe ' $an\~{a}/ya'n\~{\iota}$ signifie donc primitivement « le fait-de-viser »" (Kouloughli 1985, 45). He bases this interpretation on a text by 'Ab $\~{\iota}$ Hil $\~{\iota}$ al-'Askar $\~{\iota}$ (d. 400/1010). In this sense, it is not possible to speak of the $ma'n\acute{a}$ of a particular concept but of an utterance. It is possible to express $ma'n\acute{a}$ by different means: signs (' $\~{\iota}$ s $\~{\iota}$ ar $\~{\iota}$ h), written texts ($xai\'{\iota}$ t), counting on fingers ('uqad) and through the situation itself ($na\~{\iota}$ bah). This means that $ma'n\acute{a}$ is not primarily attached to the utterance but to the utterer, and more precisely to his intention (Kouloughli 1985, 45).

In this frame, $laf\dot{q}$ is not an isolated word but the utterance, understood as the totality of the linguistic sign, signifier and signified, and not only the signifier. This is the natural consequence of the fact that $ma\dot{}n\dot{a}$ does not refer to the signified, leaving it to the $laf\dot{q}$ to assume both the signified and the signifier (Kouloughli 1985, 46).

The result of this situation is that the same $ma'n\acute{a}$ can be expressed by different ' $alfa\dot{q}$ and that the same $laf\dot{q}$ can express different $ma'\bar{a}n\bar{\imath}$ so that "ce qu'il y a de commun à ces deux cas de figure, c'est l'idée d'une « indétermination » de la relation $lafz/ma'n\bar{a}$ en tant que telle" (Kouloughli 1985, 47), hence the many Qur'ānic variant readings, dialectal and poetic variants, and the fact that language is fundamentally perceived as equivocal.

According to 'Abū Hilāl, there is some sort of "residual" ma'ná in the lafḍ itself, just like when a parrot utters a word. The parrot does not "intend"

anything, so that it expresses no authentic $ma'n\acute{a}$. However, there is a signified embedded in the parrot's utterance. This shows well how $laf \dot{q}$ can both assume the signified and the signifier, without being an authentic $ma'n\acute{a}$ understood as the psychological intention of the utterer, or, in other words, "le lafz, en tant qu'il est un *instrument* pour signifier les intentions se trouve, en quelque sorte indirectement, investi de $ma'n\ddot{a}$ " (Kouloughli 1985, 49).

At the other end of the continuum is what Kouloughli calls the linguistic approach to the opposition laf d vs. ma $\acute{n}a$, which is best represented by alJurjānī (d. 471/1078). His research on Qur'ānic \acute{i} \acute{j} $\ddot{a}z$ "inimitability" led him to the fundamental discovery that there is a strict correlation between a minimal variation in form and a minimal variation in meaning of utterances that are otherwise similar (Kouloughli 1985, 59).

Al-Jurjānī thus had to redefine the terms $ma^cn\acute{a}$ and $laf\rlap/q$. If a minimal difference in $laf\rlap/q$ implies a difference in the meaning perceived by the listener / reader, and if one supposes that there is an intention behind this minimal difference in $laf\rlap/q$, as must be the case with a qualified utterer, then one has to conclude that the intention of the utterer is stictly correlated to the $laf\rlap/q$ he will use to express it and that, in other words, the semantic value of this $laf\rlap/q$ is nothing else than the $ma^cn\acute{a}$ intended by the utterer (Kouloughli 1985, 59–60).

This shift introduced by al-Jurjānī practically reduces the laf d to the signifier, a mere sequence of sounds, and gathers in the ma'na both the signified and the intention of the utterer. The consequence of this shift is that different 'alfād cannot have the same ma'na any more because a difference in laf d reveals a different intention of the utterer. Another consequence of this shift is that there is a one-to-one relationship between laf d and laf d and

Kouloughli (1985, 55) goes on saying that the grammatical tradition has progressively evacuated the communicative and functional aspects of language from its scope, focusing on formal aspects of language because of an "empire tyrannique de la théorie du marquage casuel ('amal)" that has finally dictated the structure of grammatical treatises.

The author is clear that these two approaches of the relationship between lafd and ma $\acute{n}a$, psychological vs. linguistic, are caricatures of two extreme positions and that each author has a particular stand on a continuum that goes from one extreme to another. This will help us formulate our hypothesis in a more specific way: What is at stake in the evolution of the grammar of numerals from Sībawayh to Ibn as-Sarrāj is the beginning of this progressive shift from a psychological understanding of the couple lafd vs. ma $\acute{n}a$ to a linguistic understanding.

Frank (1981) also deals with meaning among grammarians between the $\Pi^{nd}/V\Pi^{th}$ and the $V\Pi^{th}/X\Pi^{th}$ century. Unfortunately, he does not aim at a historical perspective of what meaning means. According to him, in the sources he studied, meaning refers primarily to two different things, "1) the purpose or aim (al-qasdu) of the speaker, what he wishes ('arada, yarsdu) or intends (qasada, yaqsidu) by his utterance and 2) the equivalent restatement or the analytic paraphrase of it" (Frank 1981, 268–269). In these two meanings we can recognise Kouloughli's psychological and linguistic ma'na, but in a way that is maybe more difficult to exploit further.

In a more specific way, Frank identifies four types of meanings in grammatical works of the first four centuries of Islam: "1. Meaning as the intent of the sentence, i.e., the intention or purpose of the speaker in making his utterance. [...] 2. The meaning of a noun or a verb as its referent. [...] 3. Meaning as the semiotic equivalent [rephrasing or $ta^2w\bar{l}$]. [...] 4. Meaning as the content or conceptual significate of a word, phrase, or sentence" (Frank 1981, 314–315). He adds that these meanings "are found in three domains as they exist in three basic modes: in the mind (fi l-qalbi, fi d- $dam\hat{i}ri$) as mental or as psychological acts, in words as linguistic or semiotic entities, and in the world as referents" (Frank 1981, 316).

It is true however that "the problem [of what is a formal theory of meaning] seems not to have posed itself and it is hardly required for us to attempt to formulate a theory for them, forcing the texts to answer a question they do not raise and, more pertinently, the answer to which is not needed for our understanding of their responses to the questions they do raise" (Frank 1981, 314), but does this mean that one cannot try to understand in what direction grammarians have evolved? The relevance of Kouloughli's approach as compared to Frank's is that it includes the second term laf d, enabling a dynamic view of the evolution of the Arabic tradition.

Ayoub (1991) expresses the same idea as Kouloughli, whom she does not quote, in different terms. For her, it is too simplistic to oppose form and meaning and pretend that $S\bar{\imath}b$ focuses only on form:

L'opposition pertinente pour entendre les propos du Livre dans leur juste résonnance n'est point forme/sens, mais forme/substance: Le sens lui-même se prête à la forme. Ou, dit autrement, le formel dans le Livre inclut, à la fois, le syntaxique et le sémantique (Ayoub 1991, 40).

We can recognise Kouloughli's intuition that $laf\underline{q}$ gathers both the signifier and the signified in early grammars, which means that what she calls "substance" could be equated with the "intention of the speaker". We will come back later to Ayoub's article, whose main focus is on the theory of 'amal "(syntactic and semantic) operation" in the $Kit\bar{a}b$.

More recently, Versteegh (1997b, 228) has also dealt in detail with the issue of the changing meaning of the couple lafd vs. ma $n\acute{a}$. He firstly recognizes, like Frank, that the grammatical tradition lacks clear definitions of the term ma $n\acute{a}$, and that most Arabic grammarians took the meaning of ma $n\acute{a}$ for granted, relying on their common sense.

This leads him to the same conclusion as Kouloughli (1985), namely that "these two definitions represent two different approaches towards the semantic component of speech" (Versteegh 1997b, 229), either as the intention of the speaker, who uses speech to express what he has in mind, or as something "inherent in speech itself, which can be brought out by a process of interpretation by an exegete or a linguist" (Versteegh 1997b, 229). He immediately adds that these two approaches do not exclude one another, even if "the Islamic tradition kept the two disciplines apart, so that it could, for instance, be said of a scholar that he did well in grammar but knew nothing about lexicology. Because of this division of tasks the contribution of Arabic lexicography towards the development of a semantic theory is small" (Versteegh 1997b, 232). It seems, however, that Versteegh does not insist as much as Kouloughli on the evolution that is at stake in the shift from one paradigm to another, and that is at the heart of our research question.

We would like to reproduce here the sixteen different possible aspects of meaning that are listed by Versteegh (1997b, 230–231) and that will help us add some clarity in the debate about the role of semantics in the Arabic grammatical tradition, taking the risk described above by Frank to "[force] the texts to answer a question they do not raise", basically because texts do not raise the question of the evolution of grammatical theories:

- linked with the speaker:
 - 1. the intention of the speaker or his purpose in making an utterance (related terms maqşūd, qaşd, murād, niyya, all meaning "intention")

- · linked with the message:
 - 2. the message which the hearer extracts from the speech (related term $mafh\bar{u}m$ "what is understood")
 - 3. the equivalent of an expression or utterance, i.e., its interpretative analysis or paraphrase (related terms $tafs\bar{\imath}r$, $ta'w\bar{\imath}l$, both meaning "explanation")
 - 4. the motif or theme of a poem (related term garad "purpose")
 - 5. the intent or the mood of the sentence (especially in the phrase $ma'\bar{a}n\bar{\iota}\ l$ - $kal\bar{a}m$ "meanings of speech")
 - 6. the communicative purpose of speech (related term fā'ida "advantage")
- linked with the extra-linguistic world:
 - the referent in the extra-linguistic world (related term musammā "what is named")
 - 8. the intrinsic causal determinant of accidents in physical objects, or qualifier (in Muʿtazilite thinking, related term 'illa "cause")
- · linked with thought:
 - 9. the conceptual correlate of a word, phrase or sentences
 - 10. the essential qualities of an object that are perceived by the mind in the sense of the Aristotelian forma
 - 11. abstract correlate of physical objects in the sense of Platonic ideas
- · linked with the linguistic sign:
 - 12. the semantic content of a set of radicals, its lexical meaningful
 - 13. the underlying structure of a surface sentence (related terms 'asl "origin, principle", $taqd\bar{t}r$ "assigning")
 - the function of a morphological or syntactic category (related term mawdi "position")
 - 15. abstract notion (vs. concrete notion, in the expression $ism\ ma`n\bar{a}$ "abstract noun" vs. $ism\ `ayn$ "concrete noun")
 - 16. that for which an expression has been established (in the theory of the wad^c al-luġa "imposition of speech")

As for the term $laf\dot{q}$, Versteegh simply says that it "always indicates a physical correlate of whatever ma ' $n\bar{a}$ stands for" (Versteegh 1997b, 228). Unlike Kouloughli, Versteegh does not explicitly mentions the possibility that $laf\dot{q}$ could assume some of the semantic aspects mentioned above. In Kouloughli's "psychological" paradigm, ma ' $n\dot{a}$ refers only to the first aspect of Versteegh's categorisation, which we will note [m. 1], and $laf\dot{q}$ not only assumes the physical correlate of the intention (the actual utterance) but also Versteegh's [m. 12] to [m. 14], i.e., the semantic aspects linked with the actual utterance. As for Kouloughli's "linguistic" paradigm, ma ' $n\dot{a}$ refers to both Versteegh's [m. 1] and [m. 12–14], and $laf\dot{q}$ to their physical correlate, the actual utterance.

In this study, we propose to follow Versteegh's definition of $laf\underline{q}$ as the "physical correlate of whatever $ma'n\bar{a}$ stands for" and to focus on the evolution of the different dimensions of $ma'\bar{a}n\bar{\iota}$. From now on, we will refer

to intentional semantics [m. 1], communicative semantics [m. 2–6], extralinguistic semantics [m. 7–8], cognitive semantics [m. 9–11] and formal semantics [m. 12–16]. These can be further grouped into intersubjective, pragmatic semantics [m. 1–6] and objective, formal semantics [m. 7–16].

Although this classification of Versteegh primarily aims to distinguish the different meanings the term $ma'n\acute{a}$ takes in Arabic Classical texts, we will use it to characterise the different dimensions of semantics involved in Classical Arabic grammar treatises.

Accepting the risk of systematising things too much, we can represent more precisely what is at stake in Kouloughli's view of the evolution of the psychological dialectic $ma'n\acute{a}$ [m. 1] vs. $laf\rlap/q$ [incl. m. 12–14] towards the linguistic dialectic $ma'n\acute{a}$ [m. 1.12–14] vs. $laf\rlap/q$.

With this classification of meanings, we wish to trace the evolution of the equilibrium between *lafd* and *ma'ná* in the Arabic grammatical tradition, as studied by modern scholarship in the last forty years because we believe that this is the key to understanding the evolution of this tradition and that modern scholarship is not always clear on its use of the term "meaning":

From the point of view of the historiographer the most fascinating aspect of the development of the science of language in the Arabic world is the perseverance of the dichotomy of $lafz/ma'n\bar{a}$ in spite of a constantly changing perspective in the use of $ma'n\bar{a}$. [...] It is surprising how easily the term 'meaning' is often used without any specification in studies on linguistic theory or speech production (Versteegh 1997b, 275).

Let us now consider the different issues that contemporary scholars have tackled in order to describe and evaluate the Arabic grammatical tradition. Our review of the literature will cover scholarly research done since the seventies, and focus on the grammatical methods that characterise the grammatical tradition, mainly in the four centuries after Sībawayh.

2.2 Prescriptiveness vs. descriptiveness

It seems that Peterson is the first contemporary author to have tackled the issue of prescriptiveness and descriptiveness in the Arabic grammatical tradition. He writes that "it is fair to say that the Arab grammarians were primarily descriptive in their methods and prescriptive in their intention" (Peterson 1972, 504). He justifies his position by saying that the formalism

 $^{^2}$ One can also account for Bohas' distinction between $ma'n\acute{a}$ I [m. 12] and II [m. 14] (Bohas 1984, 27). See Versteegh (1997b, 247–248) for the application of [m. 14] to $ma'n\acute{a}$ II.

that Fleisch (1957) charges them with can better be compared to structuralism, "in the sense that most twentieth-century linguistics, including generative-transformational approaches, is structuralist" (Peterson 1972, 503). In other words, they combine surface formalism in their definitions and abstract analyses of deeper levels. In this sense, he adds, Arab grammarians are not in any sense merely descriptive. Unfortunately, this description, just like many further quotations we will discuss, shows little interest in historical developments, as Peterson tends to generalise his judgement to the whole tradition.

In a more historical perspective, Carter characterises the shift that he sees in post-Sībawayh grammar. He opposes the *Kitāb* to Baṣran grammar as it developed in Baġdād after Sībawayh:

Le caractère essentiel de grammaire başrienne — rigidement formelle et impitoyablement prescriptive — provient de l'« islamisation » de leur discipline propre par les grammairiens de Bagdad qui, en épurant sélectivement le contenu du *Kitāb*, créèrent exactement le type de système grammatical visant à la justification interne que l'Islam attendait d'eux (Carter 1973b, 302).

In another formulation, he writes that "l'élément descriptif de la grammaire du second siècle (celle que l'on trouve dans le *Kitāb*) fut virtuellement éliminé lorsque la grammaire se trouva inféodée aux besoins de l'Islam au siècle suivant" (Carter 1973b, 303). The same ideas on the "islamicisation" of grammar are again expressed in Carter (1984, 213–214).

Apparently, Carter is the only scholar to address frontally the link between Islam at large and grammar. A few years later he summarises his views by saying that "the close interdependence of Arabic grammar and the Islamic religion is already well known, both with regard to the origins of grammatical science and its application in dogma, exegesis and law" (Carter 1991, 9). As we will see below, other scholars limit their research to the field of law and exegesis, where terminological and methodological influence can be perceived.

Carter does not hesitate to call Baṣran grammar, as opposed to Sībawayh, "pedantic" and "sterile" (Carter 1973b, 304), an accusation that is also adressed by Baalbaki (2001, 186; 206 and 2007a, 3) to most grammarians after al-Mubarrad and Ibn as-Sarrāj.

According to Carter, post-Sībawayh Baṣran grammarians are not to blame for this shift in their methods. They applied their undeniable intelligence to what the Sunna asks them to do, namely "restaurer sans relâche les lois éternelles régissant une langue parfaite" (Carter 1973b, 304). As for Kūfan grammarians, he believes that their works rarely rise above the level of

controversy and *ad hominem* arguments (Carter 1973b, 304). Insisting once more on this post-Sībawayh change in grammatical methods, Carter (1981/83, 117) writes that "these games [such as the proper name test]³ mark the profound shift in direction which grammar underwent as it changed from a descriptive to a prescriptive discipline".

Baalbaki presents a more subtle view of the equilibrium between descriptiveness and prescriptiveness of Arabic grammar, especially in Sībawayh's work, saying that it manages at the same time to be descriptive and to manipulate and evaluate attested usages in order to reveal the underlying harmony of the language (Baalbaki 1979, 7).

In a more specific way, Baalbaki (1979, 22) adds that the manipulation of linguistic material to discover the major principles according to which language works "must not be considered as an element of a prescriptive approach by Sībawayhi, as he uses it only to describe the language, without imposing unattested data, or using his conclusions to promote particular utterances at the expense of others."

Versteegh seems to be following another path when he writes about the underlying rules in the language that "it is the task of the grammarian to determine those rules, and thus to codify the inner system of speech, in other words, to unravel the «secrets of the Arabic language» (asrār al-ʿarabiyya)" (Versteegh 1978, 261). His thought becomes clearer, as far as the debate over prescriptiveness and descriptiveness is concerned when he writes about Sībawayh that "il n'est pas dans son intention de donner une description de la langue arabe, et encore moins une grammaire prescriptive, mais il veut, au contraire, expliquer les faits linguistiques, tels qu'il les rencontre dans le kalām al-ʿArab" (Versteegh 1981, 48). A few years later, he develops the same idea about the specific task that grammarians have, namely, explaining the underlying rules of the language, not to codify them (Versteegh 1989b, 246).

Grammarians are thus looking for reasons that explain why Arabs speak the way they actually and spontaneously do.⁴ This is linked, in Versteegh's view, to the origin of grammar, which "grew out of the preoccupations of the early Islamic scholars with the text of the *Qur'ān*, particularly the exegetical interpretation, rather than the analysis of the various readings (as [he] supposed elsewhere, Versteegh 1983)" (Versteegh 1990c, 238–239).

³See below, p. 80, about these grammatical tests.

⁴This is also valid, according to Versteegh, for variant readings of the Qur'ān. Sībawayh can reject "uncompromisingly all non-canonical variant readings" even if they have a better standing in Arabic, and this, according to the underlying principle that the existing has the preference over the theoretical (Versteegh 1983, 149).

It is in this explanatory frame that Versteegh comments on Sībawayh's use of $qiy\bar{a}s$:

In the $Kit\bar{a}b$ Sībawayhi made very clear that in this respect he did not share the opinion of his Basran predecessors: unlike them he did not use analogy ($qiy\bar{a}s$) as an instrument to measure the correctness of speech or even as a method for the production of new analogical forms. For Sībawayhi analogy was only an explanatory device with which the correctness of linguistic theories rather than linguistic forms could be gauged (Versteegh 1997b, 240–241).

Bohas (1981, 215) seems to agree with Versteegh's theory of the Arabic grammatical tradition as a explanative corpus of the language of the Arabs, but he goes a step further when he writes, based on his reading of Ibn Jinni's $Xa\bar{s}\bar{a}'i\bar{s}$, that the background aim of Arabic grammarians is to prove the unique and exceptional position of the Arabic language, in which the word of God was revealed.

Finally, Bohas, Guillaume, and Kouloughli criticise the superficial dichotomy that the oppostion between descriptiveness and prescriptiveness covers when applied to a presumed shift in the Arabic grammatical tradition after Sībawayh. Rather, they say that Sībawayh's aim is twofold: to teach how to speak the language of the Arabs correctly and to enjoy the knowledge of the language, as well as the prestige attached to this knowledge (Bohas, Guillaume, and Kouloughli 1989, 261).

After 1989, the opposition between prescriptiveness and descriptiveness is not used to characterise the change in grammatical methods after Sībawayh. In other words, scholars agree that grammatical methods change after Sībawayh but this change does not primarily lie in a shift from descriptiveness to prescriptiveness, except for Levin (2000) and Carter (1999, 66).

2.3 Characterising Sībawayh's method

2.3.1 The ethical theory

Scholars have endeavoured to characterise Sībawayh's grammatical methods in terms that would be less caricaturesque than in the early period of Western scholar activity. Carter (1968) was a pioneer in a direction that other scholars took after him, namely, the legal origin of Sībawayh's method.

In the same spirit [as in Itkonen 1991, 343], unscientific though it may be, I can also record my own sense of "relief and exhilaration" on discovering (through a hint from a much later grammarian) that Sībawayhi's *Kitāb* became immediately comprehensible when read like an 8th-century legal text (Carter 1994b, 411).

Primarily, this hypothesis of Carter was his contribution to the debate on the origin of the grammatical tradition itself, and on the "Greek hypothesis" in particular, which kept Western scholars busy in the seventies and early eighties. We will not deal here with this debate as such, see Talmon (1990, 265–266) and Baalbaki (2007b, xx) for a detailed account of this debate and its antecedent in the late nineteenth and early twentieth centuries.

Carter describes Sībawayh's attitude toward language as being as far as possible from a logical phenomenon, namely, a form of human behaviour:

Loin d'être l'expression de principes logiques, le langage est, pour Sībawayhi, exactement le contraire, c'est-à-dire une forme de comportement humain. On ne pourrait guère trouver de contraste plus grand entre approches linguistiques que celui qui sépare Sībawayhi des Grecs du fait que, si la logique est à la fois abstraite et absolue, le comportement humain est concret et conventionnel (Carter 1972a, 82).

The consequence of this "ethical" view is that Sībawayh is compelled to treat words as people, having rights and duties (Carter 1972a, 83). The linguistic criteria developed by Sībawayh are thus, in Carter's theory, the prolongation of moral and juridical criteria, which leads him to write that "les quatre critères de rectitude linguistique sont tirés directement de la morale : ce sont ḥasan, qabīḥ, mustaqīm et muḥāl, dans leur sens littéral respectif de « bon », « mauvais », « juste » et « faux »" (Carter 1972a, 83).

Faithful to his view of the structural links between grammar and Islam, Carter (1973a, 147) explains in more detail his interpretation of Sībawayh's method: "Sībawayh regarded speech as a form of human behaviour", and he studies the different "ways" people speak, just like "ways of behaving". The hypothesis of Carter is that nahw "way" is a "back-formation from the word $nahwiyy\bar{u}n$, which Sībawayhi uses to refer to 'those who concern themselves with the way people speak."

As any other human behaviour, language is a relationship between two people, and it is subjected to rules. In the case of language, Carter is also the first one to have noted the importance of the listener in Sībawayh's grammatical method:

It is the listener who determines rightness: much of what we say, as Sībawayhi points out, is conditioned by what we think our listener expects, whose questions we continually anticipate (Carter 1973a, 149).

In his keynote speech at the second Israeli symposium on the Arabic grammatical tradition in Haïfa in november 1990, Carter says that grammar understood as a 'way' is analogous to Sunna, the 'Way' par excellence, and finds its place in the coherent system of medieval Islam at large (Carter 1991,

19–20). For him, this accounts for the minor role that the categories of true and false have played in the grammatical tradition:

For example, if the above outline is correct, it would account for the fact that truth and falsehood only play a minor role in grammar, having at first (with Sībawayhi) played none at all. Since in the Muslim view only God can see into people's hearts, there was no way for a grammarian, at least a purely formal one such as Sībawayhi, to determine the truth of an utterance, and he, like the lawyers, simply assumed that actions (including linguistic ones) can only be judged by their appearance. It was none other than Halīl himself who is supposed to have declared, in verse,

'Only God knows what is in men's hearts, and all you have is what shows in their tongues' (Carter 1991, 19 quoting al-Marzubānī's Nūr al-qabas, 65.7).

He later formulates the same idea in a more straightforward way, by introducing a distinction between "the meaning of what people say" [m. 9] and "what they intend to say" [m. 1]:

By eliminating truth and falsehood as linguistic criteria at the very start of his $Kit\bar{a}b$, Sībawayhi establishes that he has no interest in the meaning of what people say, only in how they say what they intend to say (Carter 1994b, 408).

This "ethical" interpretation of Sībawayh's method, which initially aims to answer the question of the origin of Arabic grammar, is further explored and compared to different authors of different periods in Carter (1997) and Carter (2001).

In a way that relates with Carter's theory, Baalbaki has further explored the idea that words have rights and duties, and has described at length the hierarchical classification of words according to these rights and duties by Sībawayh:

Sībawayhi's analysis of utterances and his application of the concept of *taqdīr* are related to his set of considerations by virtue of which the sounds, words, etc. are to be classified and treated. Thus there are criteria for this classification, in a certain order or hierarchy, of sounds, words, etc., and the different positions in this hierarchy determine, for Sībawayhi, the treatment each 'merits'. This concept of 'merit' is among the concepts that relate harmony to hierarchy, as we shall see later (Baalbaki 1979, 14).

In his *Kitāb*, [Sībawayhi] invariably tries to establish an organized system of hierarchies where every element occupies the specific position which it 'merits' based on a number of criteria, such as *hiffa* (lightness), *tiqal* (heaviness), *tamakkun* (declinability), and *taṣarruf* (plasticity). By arranging linguistic items hierarchically, Sībawayhi not only tries to disclose the underlying order and organisation of Arabic but also to justify various aspects of usage, such as the discrepancies between words in causing 'amal, in being marked or unmarked, and in being triptotes or diptotes (Baalbaki 2007b, xxxv).

The arrangement of linguistic elements according to a hierarchical order is thus a prominent feature of Sībawayhi's phonological and morphological analysis (Baalbaki 2008, 120).

Versteegh, following a track he initiated at the end of the seventies, describes the method of Sībawayh as the reintroduction of the recourse to native speakers as the most reliable source of linguistic knowledge: "From the times of Sībawayhi onwards they returned, therefore, to $sam\bar{a}$? as the most reliable source of linguistic knowledge and the ultimate criterion of truth in linguistic matters" (Versteegh 1989a, 292). What is more, the Arabic language has the property of being "extensible" (sa al-kalām) and native speakers have some freedom to "expand" its syntactic constraints ($ittis\bar{a}$) (Versteegh 1990b, 284).

It is only in Versteegh (1995) that he seems to integrate elements of Carter's theory and articulate them to his own view of Sībawayh's method as an explanation of underlying structures of the actual speech of Arabs:

From the very beginning of grammatical theory, Arab grammarians treated the facts of language as a system in its own right, within which the linguistic units behaved just like members of a society. Language has its own laws, and from these laws linguistic units derive certain rights and duties. Since language is part of God's creation, there can be no arbitrariness in this system and for every phenomenon, for every apparent exception, there must be an explanation in terms of the overall system. The ultimate task of the grammarian is to explain to the believers why they talk as they do. Obviously, such a conception of the task of the grammarian could hardly be termed descriptive, but it would be wrong to regard the grammarians as normative, either. The only term that covers their conception of the function of linguistics seems to be 'explanatory' (Versteegh 1995, 7–8).

2.3.2 The enunciative theory

A new interpretation track appeared at the end of the eighties, namely the "enunciative theory". It is first introduced by Guillaume (1985) and further developed by Bohas, Guillaume, and Kouloughli in the following terms:

Fondamentalement, la démarche de Sibawayhi se distingue de celle des grammairiens classiques par la place centrale qu'elle accorde à la dimension énonciative du langage. Chez lui, l'analyse des énoncés ne consiste pas à dégager les règles formelles qui gouvernent l'assemblage des éléments qui les constituent (les parties du discours), mais bien plutôt à retracer les opérations, tout à la fois formelles et sémantiques qui permettent au locuteur de construire la séquence linguistique, la « profération » (lafz) correspondant à son « vouloir-dire » (maˈnā) subjectif [...] (Bohas, Guillaume, and Kouloughli 1989, 261, referring to Kouloughli 1985).

This description of the grammatical method of Sībawayh is centered on the speaker and on his enunciation, i.e., the actualisation of his intention ($ma'n\acute{a}$ [m. 1]) in a particular formulation ($laf\rlap/q$ [incl. m. 12–14]). The authors further explain that for Sībawayh the success of a linguistic strategy is determined by the degree of compatibility between choices that the speaker

has to make at different levels, semantic [m. 12–14], syntactic, morphological and phonetic when he expresses his intention [m. 1]. This is the frame in which they interpret Sībawayh's criteria, as described by Carter (1972a). What happens in later classical grammarians is that they reduce these criteria to only two values, "correct" saḥīḥ and "incorrect" fāsid (Bohas, Guillaume, and Kouloughli 1989, 261).

For the authors, Sībawayh's grammar is concerned by the underlying structures of the language, as revealed by the enunciative choices made by the speaker, as well as by the result of this hidden process, of which he is not aware as a native speaker.

It seems that Belguedj and Anghelescu had a very similar view, a decade before Guillaume, but they have not followed this track in their later publications. Anghelescu gives below clear examples of how Sībawayh focuses on the speaker and on his view of language as behaviour:

L'insistance des grammairiens sur at-taqdīm wa t-ta'ħīr "pré-position et post-position", nous paraît bien oiseuse si on la considère seulement comme un problème de l'ordre des mots. Il ne faut pas oublier que les deux noms d'action proviennent des verbes actifs et se réfèrent donc à l'intention de mettre un membre de l'énoncé dans une certaine position (en avant ou en arrière). De même, un vocable comme 'amilta, fréquemment utilisé par Sībawayhi, est pleinement significatif, parce qu'il veut dire "tu l'as fait actionner" (il s'agit d'un 'āmil sur un certain terme de l'énoncé) (Anghelescu 1975, 11 referring to Belguedj 1973).

She gives the example of the sentence Zaydun darabtu-hu "Zayd, I hit him", where the verb does not operate on Zayd. The locutor can also decide to vocalise Zaydan darabtu-hu if he wants the verb to operate on Zayd. Anghelescu (1975, 11) says that "Les contraintes d'ordre grammatical s'exercent donc, dans un cadre que le locuteur choisit lui-même."

According to Belguedj, the reason why the speaker would chose a particular flexion can be motivated not only by an intented meaning, but also by a phonetic preference for one sound over another (Belguedj 1973, 180).

The position of Versteegh (1990b, 284) is slightly different. He acknowledges that the speaker has a central role as a criterion of correctness in the $Kit\bar{a}b$ but he also says that the elements of the language behave according to their own rules.

In later articles, Versteegh is even clearer that this can by no means be called a "communicative grammar". The study of the language has always been based on a written corpus, not on communicative phenomena, although grammarians say that they are analysing the Bedouin observed speech (Versteegh 1996, 591). In a more detailed way he writes:

His [Sībawayhi's] method set the trend for the entire Arabic grammatical tradition. Henceforth, the main purpose of the grammarians became the explanation of the surface form of the language, in particular the declensional endings. This is not to say that Sībawayhi was not aware of the communicational function of language. In many cases he explains the difference between utterances by referring to the extralinguistic context and the expectations of the listeners (on the distinction of speech acts in the $Kit\bar{a}b$ see Buburuzan 1993). His use of the term $ma^cn\bar{a}$ is significant in this respect. It denotes both the categorial meaning of linguistic elements, and the intention of the speaker. But when he mentions the intention of the speaker, it is in the form of a paraphrase of the utterance, serving no other purpose than to make sure that the meaning of the utterance is understood (Versteegh 2004, 273).

This, because "the rules of grammar do not refer to the speaker, but to the elements of the language" (Versteegh 1990b, 284). According to Bohas, Guillaume, and Kouloughli, the rules of grammar evaluate the success of the speaker's enunciation by checking the listener's comprehension [m. 2] and the communicative purpose of the sentence [m. 6]. Ultimately, according to Bohas, Guillaume, and Kouloughli (1989, 261), Sībawayh's criteria enable him to evaluate the semantic [m. 12–14], syntactic, morphological and phonetic choices made by the speaker expressing his intention [m. 1].

At this point, there seems to be a discrepancy between Versteegh (1990b) and Versteegh (1996). In the former, Versteegh says that for Sībawayh the native speaker is the "ultimate source and criterion for the correctness of speech" while in the latter he says that in Sībawayh's actual practice he does not describe and explain the observed speech of the Bedouin. The only logical conclusion—that will be confirmed below, p. 59 as we will see—is that this native speaker is a fiction, though a necessary and efficient fiction in Sībawayh's system.

A late development of this enunciative theory can be discerned in Baalbaki (2008), who seems to draw it a step further in the direction of a communicative interpretation:

In this part of the $Kit\bar{a}b$ [the first part, devoted to syntax], $S\bar{a}b$ substituting is far more vivid and engaging that in the rest of the book, chiefly because syntactical study is where $S\bar{a}b$ substituting treatment of speech as a social activity and as interaction between a speaker and a listener is most visible (Baalbaki 2008, 31).

In a more specific way, Baalbaki adds that Sībawayh recognises to the speaker the quality of *ultimate operator* ('amal) "for the importance of intention (niyya) and hence meaning in 'amal as a whole" (Baalbaki 2008, 98). This is a clear recognition that meaning is ultimately on the side of the intention of the speaker, which drives Baalbaki to write that "it ought to be clear by now that Sībawayhi is more interested in the relationship between 'amal and the intention of the speaker than in the merely formal aspects related to 'amal' (Baalbaki 2008, 197).

In his review of Baalbaki (2008), Larcher translates Baalbaki's interpretation of Sībawayh's treatment of meaning in the frame of Kouloughli's (1985) criteria, although with a different terminology:

Dans la quatrième [partie], intitulée « The balance between form and meaning », Baalbaki pose que la tradition grammaticale arabe est vue comme faisant pencher la balance du côté du lafz et non du $ma'n\bar{a}$, autrement dit qu'elle est plus « formaliste » que « sémanticienne », mais qu'une telle affirmation n'est pas vraie de toute cette tradition en général et de Sībawayhi en particulier. Pour Baalbaki ce dernier tent au moins la balance égale entre lafz et $ma'n\bar{a}$, voire la fait pencher du côté du $ma'n\bar{a}$. En outre ce dernier est clairement vu comme une intention (sens littéral du mot) que le locuteur communique à l'auditeur, ce qui tire le $ma'n\bar{a}$ arabe, non du côté d'une sémantique « objective » (référentielle), mais du côté d'une sémantique « intersubjective » (pragmatique) (Larcher 2011, 122).

In other words, the importance that Sībawayh gives to the intention of the speaker as "ultimate operator" reveals a psychological approach to the dichotomy between $laf \not q$ and $ma \'n \acute a$, in Kouloughli's wording. This clearly gives to Sībawayh's grammatical method a communicative quality, where the speaker is at the center of the communication process. The role of the grammarian is to unveil the hidden process that lies between the intention of the native speaker, understood as "ultimate operator" (Baalbaki 2008, 98), and its actual realisation in a speech oriented at a listener.

In this respect, Larcher (2011, 122) draws our attention to the following example commented by Baalbaki:

One of Sībawayhi's šawāhid is wa-sāqiyayni miṭli Zaydin wa-Ğu'al * sabqāni mamšūqāni maknūzā l-'aḍal ("Two cupbearers like Zayd and Ğu'al, tall, slender and dense of muscle"). Obviously, sabqāni, mamšūqāni and maknūzā, which are in the nominative, agree neither with sāqiyayni nor with the two proper nouns (Baalbaki 2008, 180).

Instead of rejecting the independent form in the second hemistich, Sībawayh implicitly comments it as a case of $isti^n\bar{a}f$ (beginning of a new sentence), i.e., as the answer to a potential listener's question $man\ hum\bar{a}$?, which Baalbaki (2008, 180) explains as follows: "Obviously, the $lafz\bar{\imath}$ rules pertaining to noun modification give way here to meaning as the ultimate reflection of the speaker's intention."

In exactly the same kind of research as Baalbaki (2008), Marogy wants to "investigate the fallacy of the one-sided attitude to language ascribed to Sībawayhi, whether formal or functional, and restore the neglected complementary account of syntax and pragmatics to its focal position in the *Kitāb*" (Marogy 2010, xii). She concludes that "the *Kitāb* might be described as an instance of communicative grammar i.e. a grammar whose main purpose,

according to Leech [1983], is to relate syntax, pragmatics and semantics to each other" (Marogy 2010, 29).

In a recent article, Ayoub (2011, 145) deals with the criteria of correctness of speech in the $Kit\bar{a}b$. Based on a study of the "ethical" criteria $mustaq\bar{\imath}m$ "right", $muh\bar{\imath}al$ "wrong", hasan "good", $qab\bar{\imath}h$ "bad", and $kad\bar{\imath}b$ "false". While Carter (2004, 61–65) considers that the pair $mustaq\bar{\imath}m$ / $muh\bar{\imath}al$ evaluates the semantic correction of an utterance, and the pair hasan / hasan evaluates its structural correction, Ayoub shows that each pair refers together to hasan evaluates the mark hasan evaluates the mere existence between them is that the pair hasan evaluates the mere existence of the utterance, in terms of syntax and meaning, whereas the pair hasan evaluates its quality as an utterance, also in terms of syntax and meaning.

A *muḥāl* utterance is an utterance that is unintelligible, for structural and/or semantic reasons. This is the case of 'ataytu-ka ġadan "I came to you tomorrow" (K. I, 7.15), and Zaydun majnūnun bi-hi 'axū 'Abdi l-Lāhi "Zayd is crazy about him the brother of 'Abdallāh" (K. I, 207.15). The point, for Ayoub, is that these sentences cannot be corrected because it is impossible to know what is intended. An example of an amendable expression (*mustaqīm qabīḥ* "right [but] bad") is *qad Zaydan ra'ayta* "Zayd you saw", because, although it is ill-formed, it is intelligible.

What is at stake in Sībawayh's grammar is clearly to first evaluate the existence of a true enunciative utterance, its communicative purpose [m. 6] ($mustaq\bar{\imath}m$ or $muh\bar{\imath}al$), and then to evaluate the quality of $mustaq\bar{\imath}m$ utterances (hasan or $qab\bar{\imath}h$).

Some utterances are also labelled by Sībawayh as *kadib* "lie". The expressions *ḥamaltu l-jabala* "I carried the mountain" and *šaribtu mā'a l-baḥri* "I drank the water of the sea" (*K*. I, 7.16) are *mustaqīm* but they are a lie [m. 9]. Ayoub notes that Sībawayh does not use this criterion in his grammar, except in the two preceding examples:

Kadhib, en revanche, relève d'une théorie de l'adéquation au monde : l'énoncé est empiriquement faux. Le kadhib ne joue pas de rôle dans la théorie grammaticale (Ayoub 2011, 171).

2.3.3 Semantics and underlying levels in the *Kitāb*

Far from this enunciative track (later transformed into a communicative one), most scholars have embarked since the early nineties on a description of Sībawayh's method as showing little interest in semantics, in comparison with

both earlier and later grammarians. It is now clear that what these scholars mean by "semantic" actually corresponds to a "formal $ma'n\acute{a}$ " (Larcher's "objective, referential semantics", our [m. 7–16]), and not an "intentional $ma'n\acute{a}$ " (Larcher's "intersubjective, pragmatic semantics", our [m. 1–6]).

Ayoub (1990) is quite radical about Sībawayh's method. Here is what she writes about *tamtīl* "[underlying] representation", a tool by which Sībawayh restores, as she says, the intended meaning in a expression that is, as such, not used in the language:

Au fond, le pur arabe, complètement intelligible, est celui qui ne se parle pas. Le $tam\underline{t}il$, en tant que voulant le règne de l'univoque, sans partage, s'inscrit lui-même nécessairement en tant que monstrueux, en tant que 'ce qui ne se dit pas', la langue étant essentiellement équivoque. [...] Si cette lecture du $tam\underline{t}il$ est correcte, faut-il entendre la grammaire du Livre comme une grammaire formelle ? (Ayoub 1990, 11).

What she apparently means by this is that through $tam\underline{t}il$ Sībawayh reformulates the intended meaning in "pure Arabic", where the operation relationships are functioning perfectly, at a deeper level than the actual utterance. In other words, she believes that Sībawayh's $tam\underline{t}il$ corresponds with the intention of the speaker $(ma'n\acute{a} [m. 1] = laf \not q)$, and since $tam\underline{t}il$ usually does not fit the rules of actually uttered language, she concludes that pure Arabic is that which cannot be spoken, asking herself whether Sībawayh's grammar is completely formal or not, which would be very far from what an enunciative grammar could be.

Ayoub (1991) gives a much more detailed presentation of Sībawayh's method. We have already mentioned her idea that formal grammar in the $Kit\bar{a}b$ does not exclude a semantic dimension:

Dans le Livre, il n'y a pas d'un côté "forme" entendue comme gouvernement et de l'autre le sens, que l'on entende par cela l'intention du locuteur ou quelqu' autre notion, mais la théorie du gouvernement même se fonde sur des analyses sémantiques et rend compte tant d'opérations syntaxiques que sémantiques ou relatives à l'énonciation. En somme, on a tort de croire que la théorie du gouvernement ne traite que de forme en oubliant le sens: Elle traite de la forme même du sens. Voilà ce qu'on tentera de montrer dans les développements qui suivent. Le formel sera entendu comme relationnel. On le savait déjà par l'analyse de la notion du tamţīl, ce que la grammaire représente, l'objet de la représentation est la relation entre les termes, non les termes eux-mêmes (Ayoub 1991, 40-41).

In a comparison between al-Farrā' (d. 207/822) and Sībawayh (d. 180/796), Dévényi says that "Sībawayhi first explains the 'i'rāb endings in his formal grammatical model and then tells us what consequences these have in relation to the meaning" (Dévényi 1990a, 105) whereas in the case of al-Farrā' "it is directly the meaning ($ma'n\bar{a}$) that determines 'i'rāb and not vice versa" (Dévényi 1990a, 106). She adds that for Sībawayh, 'i'rāb is "an entity existing

in itself" that may express different meanings. Unlike Sībawayh, al-Farrā' "makes a one-to-one correspondence between the form of a sentence and its meanings" (Dévényi 1990a, 106), in a way which is much less formal than Sībawayh.

According to Versteegh (1994, 275), the early exegetical tradition was mainly concerned by the meaning of the text of the Qur'ān, endeavouring to find out the intention of God in the text, through paraphrase and restitution of underlying elements. The shift that Sībawayh and the grammarians after him have introduced is a focus on the deep structure of language itself.

In order to explore and at times restore this deep structure, which they equate with an underlying level of "operation" of some words on others, Sībawayh and his followers use the tool of $tamt\bar{\imath}l$ (in the $Kit\bar{\imath}ab$) or $taqd\bar{\imath}r$ (after Sībawayh, Versteegh 1994, 285). Whereas Ayoub (1990) equated $tamt\bar{\imath}l$ with a semantic reconstruction, Versteegh (1994) distinguishes two different types of reconstruction of the underlying level, structural ($tamt\bar{\imath}l$) and semantic (ma^cna' [m. 3]):

It is important to note that in the examples given above the relation between the tamtil and the actual utterance is not one of paraphrase: the representation does not constitute a semantic reconstruction of the sentence. This becomes particularly clear when we look at the meaning $(ma'n\hat{a})$ of the third example, which is not identical with its tamtil. Unlike the abstract representation the semantic paraphrase of the sentence is a complete, 'utterable' sentence:

```
mâ şana 'ta wa-aḥâka
tamṭîl *mâ şana 'ta aḥâka
ma 'nâ mâ şana 'ta ma 'a aḥîka
"what did you do with your brother?" (Versteegh 1994, 278).
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The same idea is summed up in Versteegh (1997b, 239) where Sībawayh and the following grammarians are said to have "occupied themselves with the formal-syntactic aspect of language to the exclusion of other aspects, such as the lexical meaning of the words". In this article Versteegh even seems to come back again to the views expressed in Versteegh (1990b) about the centrality of the speaker's intention in Sībawayh's method:

In conclusion we may say that Sībawayhi at least once explicitly mentions the role of $ma'n\bar{a}$ as the semantic correlate (the lexical meaning) of words [m. 9] and sets of radicals [m. 12], and that in some passages he refers to the purpose of speech as a medium to communicate the intention [m. 1] of the speaker to the listener [m. 2]. But in the majority of instances in the $Kit\bar{a}b$ $ma'n\bar{a}$ denotes the syntactic function of a word or category [m. 14] (Versteegh 1997b, 243. The additions between square brackets are ours.)

It appears from the above quotations that, against Baalbaki (2008), Versteegh considers that it is Sībawayh who was responsible for a shift from the

psychological (intersubjective, pragmatic) approach to a linguistic (objective, referential) approach.

In a somewhat less dichotomous way, he adds that "Sībawayhi acknowledges the existence of a semantic level but since he takes its existence for granted he does not appear to feel any need for dealing with it explicitly" (Versteegh 1997b, 260). However, the "semantic level" which is dealt with in this quotation must correspond to the intentional $ma'n\acute{a}$ [m. 1], otherwise it would contradict the previous quotation.

The only logical way to reconcile Versteegh (1990b) and Versteegh (1997b) is therefore to consider that $ma'n\acute{a}$ [m. 1], understood as the intention of the (native) speaker, is the ultimate source of correctness as a background (an efficient and necessary idealisation), leaving the foreground activity of the grammarian to focus on formal $ma'\bar{a}n\bar{\iota}$ [m. 12–14], and excluding the lexical meanings [m. 7]. In other words, the shift that Sībawayh operates, according to Versteegh, is that he inverts the priority of the Qur'ānic commentators between their background interest in formal $ma'\bar{a}n\bar{\iota}$ [m. 12–14] and their foreground interest in intentional $ma'n\acute{a}$ ([m. 1], the intention of God). As for the meaning produced by reformulation (communicative semantics [m. 3]), it is a tool used by both exegetes and grammarians (Versteegh 1994, 275, 278).

This is how we understand the following quotation:

One might almost say that from the times of Sībawayhi onwards the Arab grammarians accepted the existence of a semantic aspect of speech but felt this to be outside the scope of their own task, which was the elucidation of the syntactic changes in speech (the theory of governance and declensional endings). The analysis of the lexical meaning of words was left to the lexicographers, who codified these meanings in their dictionaries (Versteegh 1997b, 274).

Thus, Versteegh, referring to Dévényi, distinguishes Sībawayh's approach from that of al-Farrā', as far as semantics are concerned, in the following terms:

For the most part, Sībawayhi includes only syntactic arguments in his explanation of linguistic phenomena, whereas al-Farrā' very often invokes semantic constraints in his linguistic argumentation (Versteegh 1997b, 241, referring to Dévényi 1990a,b).

Baalbaki (2008, 171–172) seems to have very similar analyses regarding Sībawayh's attitude towards semantics. Although Sībawayh recognises the pertinence of notions such as synonymy and homonymy, he does not use them in the $Kit\bar{a}b$ and focuses instead on syntax and morphology.

However, faithful to his presentation of Sībawayh's communicative grammar Baalbaki acknowledges the absence of interest of Sībawayh in referential,

objective, formal $ma'\bar{a}n\bar{\iota}$ and, at the same time, his focus on the intention of the speaker, which gives its $ma'n\acute{a}$ to each utterance:

As we shall see in the next section of this chapter, $ma'n\bar{a}$ according to Sībawayhi is directly related to the intention of the speaker and the type of message he wants to impart to the addressee or listener, and is thus part of a wider process of communication which requires analysis. The speaker's intention is what gives each usage the desired $ma'n\bar{a}$, and it is in this context that Sībawayhi's frequent usage of expressions in which $ma'n\bar{a}$ is assigned to a certain case-ending, part of speech, particle, notion, etc. can be best understood (Baalbaki 2008, 173–174).

What Baalbaki does here is that, unlike Versteegh, he considers the meaning of syntactic structures [m. 14] to be in a dialectic situation vis-àvis the intentional $ma'n\acute{a}$ [m. 1], exactly like in the psychological paradigm described by Kouloughli ($ma'n\acute{a}$ [m. 1] vs. $laf\rlap/q$ [incl. m. 12–14]), while in the linguistic paradigm, the dialectic is $ma'n\acute{a}$ [m. 1.12–14] vs. $laf\rlap/q$, which seems to be nearer to Versteegh's view of Sībawayh's method.

2.3.4 A limited set of rules

Owens describes Sībawayh's methodology, and especially his substitution technique, in the following words:

Certains items were identified as typically occurring at certain grammatical positions. Sometimes these positions are explicitly named and clearly have an existence independent of the items that realize the position; in other cases the positions at which the items occur are not named but nonetheless implicitly have a fixed status within the overall grammatical structure. Very often a position is identified in conjunction with a typical filler, and other members of the paradigm, often morphologically or syntactically more complex, are identified relative to this typical filler (Owens 1990a, 35).

This technique enables Sībawayh to reduce the number of possible cases to a limited set of rules. For example, the surface form of the compound *xamsata-'ašara* "fifteen" is attached by Sībawayh to the existing simple underlying pattern *xamsatan wa-'ašaratan* (Owens 1990a, 43).

Baalbaki insists on the fact that a characteristic of Sībawayh's method is to limit as much as possible the number of rules he uses to describe the language (or rather, the underlying decisions that the native speaker makes when he wants to formulate his intention). It is thus part of Sībawayh's method to "minimize the exceptions and so keep intact the general rules which he endorses" (Baalbaki 1990, 22). For example, in the case of xamsata-'ašaru-ka "your fifteen" which Sībawayh qualifies of "bad language" without justification (see below, p. 130), Baalbaki says that "it is clear that, for him, this usage is weak because it is both scant, and irreconcilable with the qiyās

which stipulates that nouns which are indefinite (nakira) and $mabn\bar{\imath}$ remain $mabn\bar{\imath}$ in case of ' $id\bar{a}fa$ " (Baalbaki 1990, 22).

In a more general description, Baalbaki writes that "the first and surely most important concept to which $taqd\bar{\imath}r$ is related is that of the preservation of 'basic rules'" (Baalbaki 2008, 70) and he later gives his interpretation of these "basic rules":

Hence it is legitimate to introduce the concept of 'basic rule' to refer to the usage which Sībawayhi considers to be most common and most representative of a form, pattern, particle, etc. and which, in spite of the presence of deviating material, must be recognized as the actual manifestation of accepted norm. Obviously, Sībawayhi is keen to deal with a relatively small number of 'basic rules' which are considerably more manageable than a large body that would result from an indiscriminate approach which gives equal weight to the normal and the anomalous' (Baalbaki 2008, 135).

In the presence of variants that do not comply to these basic rules, Baalbaki (2008, 155–159) mentions three differents tactics adopted by Sībawayh: He either ignores (deliberately?) these variants, or he judges them negatively (just like *xamsata-ʿašaru-ka* mentioned above), or he interprets data in a way that does not contradict the rule, sometimes surprisingly, as the *ʾalif* in *kilā* and *kiltā* ("both [masc. and fem.]") which he refuses to interpret as a dual marker because it would create further inconsistencies.

2.3.5 Consistency at a lower and a larger scale

Carter insists on Sībawayh's search for consistency, both at a lower and a larger scales, and of course, his article on the construction ' $i\check{s}r\bar{u}na\ dirhaman$ is an advocacy for consistency in the $Kit\bar{u}b$ on both these scales (Carter 1972b).

Versteegh has explained this search for consistency in a general way that applies to the whole grammatical tradition:

For the Arabic grammarians speech is a system in equilibrium, whether it is the result of a revelation from Allāh (tawqif), or of an agreement between men (istilāh). Each and every letter, word, category, has its own place and its own rights. Every phenomenon can and must be explained, and every deviation from the original form (asl) is the result of a well-defined cause ('illa), and occurs according to well-defined rules (Versteegh 1978, 261).

According to him, this trend has been reinforced by the introduction of logic doctrines because, as he puts it, "chaque élément de la langue devenait une preuve de la perfection du tout" (Versteegh 1980, 49).

In a more specific way, Baalbaki writes that "the main concept that Sībawayhi employs in discovering underlying harmony in the language is

that of $taqd\bar{\imath}r$, 'suppletive insertion', which is the assumption of the virtual occurrence of parts of the utterance, mainly the operants or 'awāmil, believed by him to have been elided" (Baalbaki 1979, 7–8).

Following her own interpretative track about 'amal "(syntactic and semantic) operation" in the $Kit\bar{a}b$, Ayoub reaches the same conclusion that there is a very strong internal unity to Sībawayh's method, and that it applies to phenomena that modern linguistic tradition would consider as separate:

On touche là, à travers la question du gouvernement, à un point de spécificité de cette théorie grammaticale. Elle fait la part des propriétés géométriques du langage et les articule, d'une manière qui lui est propre, à la référence et à l'énonciation. De là vient l'importance cardinale de la théorie du 'amal où les trois types d'opérateurs se conjoignent. Elle articule des domaines qui sont sentis exclusifs l'un de l'autre dans le champ de la linguistique contemporaine: l'énonciation, la pragmatique et la syntaxe, ce qui se disait aussi grammaire de phrase et grammaire de discours. Ils le sont par le biais d'un attachement à la littéralité de la marque, à la matérialité de la langue comme forme phonétique, agencements, relations (Ayoub 1991, 81).

Since then, Baalbaki has been the champion of this cause, namely, revealing the consistency of the $Kit\bar{a}b$, both at a local level and between chapters. He does not hesitate to call "spectacular" the chapter in the $Kit\bar{a}b$ which deals with the $f\bar{a}$ ' that is followed by the subjunctive (Baalbaki 1990, 186) because of its local and wider consistency. The same goes for the chapters on the vocative and the generic negation $l\bar{a}$ (Baalbaki 2006). He further says, describing Sībawayh's $Kit\bar{a}b$:

Undoubtedly, it is the first coherent description of Arabic grammar, especially syntax and morphology. It is also one of the earliest authored works in any Islamic discipline; that is, it is not the product of oral communication between a teacher and his disciples, but a real attempt at composing a coherent whole which has a beginning and an end, and which systematically examines the material defined by the discipline. The ultimate proof of this lies with the numerous cross-references which Sībawayhi makes throughout the $Kit\bar{a}b$ and the amazing consistency with which he analyzes, in separate parts of it, phenomena which he considers to be parallel or analogous (Baalbaki 2007b, xix—xxx).

Humbert (1997, 554–555) summarises the three main arguments in favour of a written origin of the text, as presented first by Schoeler (1985, 1989): The division in chapters with titles that are too precise to be the product of an oral teaching, the many cross-references in the text, and the fact that nobody never read the book before Sībawayh, who died at an early age.

Humbert (1995, 83–92) has also shown, based on her study of the manuscripts, that the written work of Sībawayh has gained the authority of an oral teaching thanks to al-Mubarrad's copy, where he had introduced a transmission chain and critical commentaries of al-'Axfaš al-'Awsaṭ (d. 215/830), al-Jarmī (d. 225/839) and al-Māzinī (d. 248/862). These—at time

lengthy—glosses are still present in the modern editions, which are all based on al-Mubarrad's vulgate.

In his book devoted to the legacy of the $Kit\bar{a}b$, Baalbaki (2008) devotes no less than three sections to the issue of consistency in Sībawayh's method: "The classification of data within a coherent system" (152–170), "The tools of checking system validity" (215–226) and "The internal unity of the $Kit\bar{a}b$ " (226–230).

The other analytical methods presented in Baalbaki's (2008) chapter two are "The preservation of 'basic rules' (134–152), "The balance between form and meaning" (170–191), "The role of the speaker and the listener" (191–207), and "The use of $mit\bar{a}l$ and $s\bar{a}hid$ " (207–215). These issues have been dealt above.

We will now consider the studies on the grammatical methods of later grammarians. We will focus on the way scholars characterised the breaks in the Arabic grammatical tradition after Sībawayh.

2.4 Prescriptiveness of post-Sībawayh grammar

At an early stage, modern scholars have expressed their opinion that a great deal of spirit was lost in Arabic grammar after Sībawayh. As we have seen above, the first criterion that these scholars used to oppose Sībawayh to the later grammarians was that of prescriptiveness vs. descriptiveness. Carter makes this very harsh description of the evolution of post-Sībawayh grammar, which he links to the evolution of Islam at large:

L'histoire de la grammaire arabe n'est guère mieux que l'histoire des vicissitudes du *Kitāb* entre les mains de grammairiens de plus en plus prescriptifs : tout comme l'Islam en général devint de plus en plus consciemment normatif, le contenu purement descriptif du *Kitāb* se trouve réduit à un corpus fossilisé et improductif de données archaïques, et les arguments formels grâce auxquels Sībawayhi (comme n'importe quel linguiste compétent) était capable d'arriver à des considérations prescriptives furent élaborés et développés au point de perdre tout contact avec les réalités des structures et des processus linguistiques qui avaient constitué le propos original de Sībawayhi (Carter 1973b, 301).

Versteegh (1983, 158) sees two main reasons behind this prescriptive attitude of early Arab scholars: the "confusion of many speakers with regard to the use of the declensional endings, and the constant decay of the Classical standard". These two reasons—which could easily be regarded as one—are "intensified by the fact that a correct recitation of the Qur'ān depended precisely on the knowledge of the rules of grammar". The "grammatical

doctrine" that they produced was an answer to these problems. It consisted of a canon of rules extracted from the language of the Bedouins that was available to apply to the language.

This has led grammarians to retrospectively evaluate the language of the Arabs and refute some of their expressions that did not comply with the rules they had formulated. This is what 'Abū Janāḥ (1980) and Baalbaki (1985, 23) mention about al-Mubarrad.

In a later article, Baalbaki comes back to the prescriptive turn in post-Sībawayh grammar in more specific terms. He says that later grammarians have departed from the "delicate balance" Sībawayh had established between analogy ($qiy\bar{a}s$) and actual use ($sam\bar{a}$). Post-Sībawayh grammarians took a prescriptive direction, and eventually subjected attested usage to their own rigid rules (Baalbaki 1995, 123).

It is only thanks to grammarians like al-Jurjānī (d. 471/1078), according to Baalbaki, that an attempt was made to fuse again the study of *naḥw* and *balāġah*, which were clearly separated at his time (Baalbaki 1995, 132). We have seen above that whatever communicative value scholars attribute to the grammatical method of Sībawayh, he is widely considered as the one who autonomised the study of syntax from that of exegesis. Baalbaki continues by saying that "this attempt [of al-Jurjānī] was again short-lived, and *balāghah* itself was later plagued with rigidity and the lack of continued revision of theory" (Baalbaki 1995, 132).

This judgement of post-Sībawayh grammar as being prescriptive is again formulated in Baalbaki (2007b, xxxvi), Baalbaki (2008, 237) and Marogy (2010, 37).

Anghelescu (1985) represents another voice in this debate that seems to be rooted in the late forties and which focused on the opposition between normative and theoretical grammar. She concludes that the normative turn that the Arabic grammatical tradition takes after Sībawayh is not that of a prescriptive grammar understood as a pedagogical simplification but of a theoretical one, i.e., a grammar focused on formal explanations and the search for causes.

L'évolution - ou l'involution - de la grammaire vers la normativité est donc une question de langage: il ne s'agit pas d'une simplification didactique, mais d'une accentuation du caractère de théorie formelle de cette grammaire. Les éléments de théorie empirique ont toujours existé dans la grammaire arabe; leur spécificité consistait, peut-être, dans cette "immatérialisation de la fonction des voyelles finales" dont parlait L. Massignon (1954, 11). L'idée d'expliquer les choses visibles par ce qu'on ne voit pas (il faut mentionner à ce propos la conception du sens comme quelque chose de "caché", de "secret") pourrait être suggérée par le système de l'écriture arabe (Anghelescu 1985, 9).

Yet, most of these studies are primarily based on the comparison of later works with the $Kit\bar{a}b$, with which these grammatical works contrast, and not on an in-depth study of these works themselves. Scholars who have dealt with later grammarians apparently link post-Sībawayh's prescriptiveness with two phenomena: the need for a pedagogical tool, which was briefly mentioned above, and the contact between Greek logic and grammar, which helped formalise and systematise Sībawayh's teaching, opening the way to the search for grammatical causes.

2.5 The pedagogical turn

Post-Sībawayh shift has been described as that of speculation vs. pedagogy, as stated by Carter:

Regrettably the emphasis in Arabic grammar shifted very quickly from the speculative to the merely pedagogical, and in the reduction of Sībawayhi's theories to a canon of rules much was lost (Carter 1972b, 495).

As we have seen above, Carter links the pedagogical turn of Arabic grammar with the evolution of Islam, which needed to secure and systematise the Arabic language as "seul authentique véhicule de toute tradition passée, de toute discussion actuelle et de toute norme future" (Carter 1973b, 300). He detects this shift as early as in the work of al-Farrā' (d. 207/822):

Nous croyons possible de discerner les premiers signes de ce changement qualitatif de la grammaire arabe dès l'époque d'al-Farrā': son allusion à des « débutants dans l'instruction » implique clairement que la grammaire était devenue à son époque objet d'enseignement — conception qui est entièrement absente du *Kitāb* de Sībawayhi, rédigé seulement une trentaine d'années auparavant (Carter 1973b, 301).

In exactly the same manner, Carter adds that al-'Axfaš (d. 215/830), a disciple of Sībawayh, mentions fictitious poetic lines forged to test students and that similar pedagogical tricks are found in al-Mubarrad's *Muqtaḍab* (Carter 1973b, 301).

For Bohas, Guillaume, and Kouloughli, a definitive shift in the direction of a canonical model for later grammar happened with Ibn as-Sarrāj's '*Uṣūl*:

The importance of this event has for a long time been underestimated, for many reasons (among others, the fact that the *Kitāb al-Uṣūl* was not published until quite recently [in 1973]), and the accepted idea had been that Sībawayhi had, in fact, laid down the basic rules and methods of grammar, while the lated grammarians' contribution consisted only in expounding his theory in a more explicit and systematic form, or in finding new applications for it (Bohas, Guillaume, and Kouloughli 1990/2006, 4–5).

Guillaume is more specific describing the nature of the change that Ibn as-Sarrāj's '*Uṣūl* triggers:

Toutefois, la réalisation la plus significative en ce domaine reste incontestablement le *Kitāb al-'Uṣūl* d'Ibn as-Sarrāǧ (mort en 316/928), l'un des plus jeunes disciples d'al-Mubarrad: organisant pour la première fois la matière grammaticale selon un ordre rigoureusement systématique fondé sur des principes explicites et clairement définis, il offre un modèle totalement reproductible, où la place de chaque question, de chaque classe de données et de chaque discussion est déterminée, de façon univoque, par son statut dans l'organisation générale de la théorie. Il s'agit là d'une véritable révolution scientifique, en ce qu'elle permet aux grammariens de dépasser le stade de l'improvisation individuelle et d'installer leur discipline dans une perspective réellement cumulative. De fait, l'ordre d'exposition de la matière grammaticale élaboré par Ibn as-Sarrāǧ devait progressivement s'imposer comme le 'modèle canonique', repris, avec des variantes mineures, par la quasi-totalité des traités grammaticaux depuis le VIe'XIIe siècle (Guillaume 2000, 273).

In another direction, Suleiman (2003, 41-43) expresses the same ideas as Carter on the pedagogical role of Arabic grammar in Islamic society. He gives an example of the failure of a grammatical theory ($tar\bar{a}fu$) because it contradicts what has been taught for centuries, which goes against pedagogical consistency.

Looking at this issue from the other side, namely from the perspective of the $Kit\bar{a}b$, Carter says that is it an "ouvrage d'allure si descriptive et si spéculative qu'il en est à peu près inutilisable comme manuel pédagogique" (Carter 1973b, 301), which is illustrated in Baalbaki (2008, 263–272) by the use of $taqd\bar{u}r$ "suppletive insertion" and $ta'l\bar{l}l$ "reconstruction". These reconstructed underlying levels are felt by the speaker and the student as highly artificial and speculative, in other words, not pedagogical.

However, Baalbaki (2005, 43) does not consider that there is a "pedagogical turn" in post-Sībawayh. In the opposite, he believes that Sībawayh has renounced the pedagogical aim of grammarians before him and has inaugurated a speculative grammar that was not oriented at learners but at preserving its theoretical consistency.

2.6 The contact of Greek logic and grammar

The other reason behind the prescriptiveness turn of post-Sībawayh grammar is certainly the contact between Greek logic and grammar at the end of the IIIth/IXth century and Ibn as-Sarrāj's grammatical treatise is very representative of this contact:

The effort to systematize grammar and codify $us\bar{u}l$ must be seen be within the general context of the ever-growing preoccupation of the grammarians after Sībawayhi with logic (Baalbaki 2007b, xxxvii).

This point has been studied in detail by Versteegh in the early eighties. He says that "pour les grammairiens qui vinrent trois générations plus tard [après al-Farrā' (d. 207/822)] la logique grecque était déjà devenue quelque chose de familier, et il est bien facile d'en démontrer les traces dans leurs œuvres" (Versteegh 1980, 41–42). He mentions the following grammarians in particular, among the most famous ones: Ibn Kaysān (d. 299/912), az-Zajjāj (d. 311/923), Ibn as-Sarrāj (d. 316/928), al-Xayyāṭ (d. 320/932), 5 az-Zajjājī (d. 337/949), as-Sīrāfī (d. 368/979), al-Fārisī (d. 377/987), ar-Rummānī (d. 384/994) and Ibn Jinnī (d. 392/1001).

He identifies two questions that arose as a consequence of the confrontation with Greek logic: the issue of the relationship between words and significations and the issue of the criteria of correct speech:

Deux questions en particulier se posèrent [suite à la confrontation avec la logique grecque] : en premier lieu le problème de la relation entre mot et signification. Est-ce que les significations sont identiques pour toutes les nations, et seuls les mots diffèrentils selon les langues, ou bien, les significations sont-elles intimement liées aux mots et donc différentes pour chaque nation? Voici le problème de l'universalisme contre le relativisme. L'autre question est celle des critères de la parole correcte. Est-ce que la parole doit obéir aux lois de la pensée humaine, ou bien à des lois syntaxiques indépendantes? (Versteegh 1980, 42).

The first issue can be reworded as follows: If meanings differ from one language to another, then they belong to the scope of grammar, while if they are the same, whatever the language, then they belong to the scope of logic (Versteegh 1980, 42-43). In the second case, grammarians should limit their research to the behaviour of words (' $alf\bar{a}d$) in a given language while logicians should study the meanings (ma' $\bar{a}n\bar{i}$) that can be expressed in any language.

According to Versteegh, this clear separation preached by logicians was not only the result of their logical choices but also of personal considerations, namely, the fact that as non-Arabs they could not compete with the Arabic grammarians for a social recognition:

Pour les premiers logiciens arabes (ou plutôt arabophones, car la plupart d'entre eux furent des Chrétiens nestoriens de langue syriaque) il s'agissait de se trouver une place dans la société scientifique arabo-islamique. Le moyen de s'assurer cette place, ils le trouvèrent en avançant une séparation stricte entre le lafz « expression » et le $ma'n\bar{a}$ « signification » (Versteegh 1989b, 253–254, referring to Elamrani-Jamal 1983; Endreß 1977, 1986; Versteegh 1980).

⁵And not Ibn al-Xayyāṭ. See Kaḥḥālah (1957, IX, 23).

When one reads the works of these grammarians it is clear, according to Versteegh, that the use of logic is limited to terminology and classification, not to a complete reworking of grammatical theories. Thus, he calls this entry of logic in grammar a "nouvelle mode", i.e., an imitation of foreign models rather than the discovery of new opinions (Versteegh 1980, 46). This "new fashion" was almost inevitable, even for those grammarians who opposed it, such as as-Sīrāfī (d. 368/979), and who had to superficially reshape their teaching using the new terminology and classification (Versteegh 1980, 48).

Elamrani-Jamal has also tackled this issue of the links between logic and grammar. His aim is firstly to refute the Greek hypothesis about the origin of Arabic grammar but he also deals with contacts between logic and grammar in later periods. He remarks that in the end of the $\Pi^{\rm rd}/\Pi^{\rm th}$ century, grammar is fully developed when it is confronted to Greek logic:

La grammaire arabe est un art achevé lorsqu'elle est confrontée à partir de la fin du me siècle avec la logique. A ce titre, aucune explication d'origine sociologique liée à la communauté de l'Islam ne pourra en rendre compte entièrement, en tant qu'elle est distincte d'autres sciences qui sont aussi appelées traditionnelles, comme les sciences du hadīṭ (traditions du Prophète) ou du fiqh (Droit). Aussi la dernière thèse sur les origines de « la grammaire arabe » soutenue par Carter, qu'il affirme explicitement « substituer à l'hypothèse grecque », ne pourra être retenue comme une explication totale car elle ne peut rendre compte de l'existence autonome d'une science grammaticale (Elamrani-Jamal 1983, 73 referring to Carter 1972a).

Later, Versteegh (1990a, 207) gave a more detailed account of the new shape that Arabic grammar adopted under the pressure of the new fashion, which did not affect the actual content of the traditional linguistic theories but their presentation. The same content was presented in a more organised and rigorous way.

An illustration of this is found in the separation of verbs in three grammatical tenses, past, present and future, which entered Arabic grammar in the $\text{III}^{\text{rd}}/\text{IX}^{\text{th}}$ century to fit the logical representation of time that was widely accepted by then (Versteegh 1981, 55).

In a similar manner, Carter (1981/83, 117) notes about post-Sībawayh grammarians that "their energies went instead into the task of reducing Sībawayhi's huge corpus of all kinds of partially inflected words to a finite number of categories based on nine 'factors preventing full inflection' (mawāni' al-ṣarf [...])"

⁶Carter quotes here az-Zamaxšarī's (d. 538/1144) *Mufaṣṣal* 9.19 (§ 18) for the expression of these 'nine *mawāni' min aṣ-ṣarf*'. However, they are found more than two hundred years earlier in Ibn as-Sarrāj's (d. 316/928) '*Uṣūl* (II, 80–93).

It is however clear for Versteegh that a merger never happened between logic and grammar, except maybe in a few individual authors like Ibn 'Aqīl (d. 769/1367) in some limited issues (Versteegh 1991, 89). At a wider scale, grammarians rather rejected the pretention of logic, partly because of their "superior attitude" towards foreign input and partly because they could not accept to restrict themselves to the only formal of speech, leaving the semantic side to philosophers (Versteegh 1990a, 209–210).

Troupeau is certainly less radical than Versteegh in his conclusion on the "rationalisation of grammar":

En fait, la rationalisation de la grammaire arabe avait commencé beaucoup plus tôt [que ce que prétend Fleisch (1957)], avec des grammairiens de la première moitié du X^e siècle, comme Ibn al-Sarrāj (m. 928) et al-Zajjājī (m. 949). Ces grammairiens de Bagdād, en effet, ne se contentèrent plus d'énumérer et de décrire les phénomènes grammaticaux à la manière empirique de leurs prédécesseurs ; mais, influencés par la logique aristotélicienne, ils essayèrent de classer et d'expliquer ces phénomènes d'une manière rationnelle, au moyen de la recherche de leurs causes ('illa, pl. 'ilal) (Troupeau 1994, 13).

We have seen above, p. 43, that Baalbaki insisted on the fact that Sība-wayh was eager to describe the language with a limited set of basic rules, or rather principles, that apply widely, sometimes at the expense of simplicity or evidence because some speculative thinking is required to let actual use fit within these basic rules.

Bohas, Guillaume, and Kouloughli say that this speculative simplicity has disappeared from al-Mubarrad's *Muqtaḍab* and other post-Sībawayh works, where it has been replaced by a "heterogeneous" approach, apparently based on a "philological" interest in minority forms in the language.

It is, for instance, typical of this approach that al-Mubarrad (d. 285/898), in his *Muqtaḍab*, devotes a whole chapter to the irregular plural of *qaws* ('bow') *qisiyy*, this chapter being somewhat longer than the one in which he discusses the much more general and, we should feel, important problem of the assignation of the nominative to the subject of the verbal phrase (*Muqtaḍab*, I:8–9 and 39–41, respectively). This kind of approach, in which facts of different nature and rules of different degree of generality are put together in what seems a haphazard order, is also quite perceptible in the two other main grammatical works of the period, the *Maʿanī l-Qurʾān* by al-Farrā' (d. 207/822), who was in his time the leader of the so-called 'Kūfan' school (see below, pp. 6–8), and a shorter work bearing the same title by al-Axfaš al-Awsaṭ (d. 221/835), a disciple of Sībawayhi (Bohas, Guillaume, and Kouloughli 1990/2006, 5).

Owens (1990a) has adopted a similar criterion, namely heterogeneity vs. standardisation that he uses to evaluate the change that happened between the *Muqtaḍab* and the '*Uṣūl*. In this book that was fiercely attacked by Carter (1994a) he describes the evolution of grammar between Sībawayh and Ibn as-Sarrāj in a way that can be labelled as a "sophisticated simplification":

On the one hand, the most important development that occurred was surely the erection of a sophisticated, easily intelligible system for presenting the facts of Arabic grammar. Sarraj's 'Usuwl marks a milestone in that it ordered data of a most diverse nature – distributional, semantic, pragmatic [...] – within a small number of grammatical categories whose independence rested in their abstracting away from the set of individual features they represented. A formal prerequisite for this organization, though hardly a sufficient condition, was the mutual one-to-one assignment of linguistic items to classes [...] Each item was unambiguously assigned to a single grammatical category; each category represented a unique set of items (Owens 1990a, 242).

The early evolution of Arabic syntactic theory can thus be seen as a period in which a set of diverse, if basically similar, linguistic ideas was developed into a conceptually explicit, simple and well-organized grammatical description. It culminates in Sarraj's al-'Usuwl fiy l-Nahw, and its end sets the stage for the evolution of Arabic grammatical theory in new and original directions (Owens 1990a, 243).

In other words, the rationalisation of Sībawayh's grammar is twofold, according to Owens. The classes used to describe the language are multiplied in order to serve a one-to-one assignment of linguistic items and classes, and they are organised in a simple way, i.e., explicit and rational. Owens (1991, 235) considers that this is the core of the main shift that happened in tradition.

To this picture, Troupeau adds that rationalisation is motivated by the search for causes, along with the introduction of logic:

C'est dans le *Kitāb al-Uṣūl* d'Ibn al-Sarrāj que nous observons les débuts de la rationalisation de la grammaire, par l'introduction de divisions de la logique et la recherche des causes. On disait que la grammaire était demeurée folle jusqu'à ce qu'Ibn al-Sarrāj la rendît raisonnable par ses *Uṣūl*, et al-Marzubānī prétendait qu'Ibn al-Sarrāj avait traité la matière du *Kitāb* de Sībawayhi au moyen des divisions formelles des logiciens. Certes, des ouvrages sur les causes grammaticales avaient été composés par des grammairiens du siècle précédent, comme Quṭrub (m. 821) et al-Māzinī (m. 862), mais ces œuvres ne nous étant pas parvenues, c'est dans l'introduction du *Kitāb al-Uṣūl* que nous trouvons la première mention de ces causes (Troupeau 1994, 14, referring to as-Suyūṭī's *Buġyat al-wuʿāh*, 44).

What lies behind this search for rational causes is Muʻtazilah, a philosophical and theological movement that flourished in Baġdād in the ${\rm III}^{\rm rd}/{\rm Ix}^{\rm th}$ century. We cannot enter in the complexity of the history and the doctrine of Muʻtazilah. In the following pages we will simply review what the historians of Arabic grammar have written in the past decades in order to focus on the linguistic implications of Muʻtazilah.

2.7 Muʻtazilah and grammar

It is noticeable that the Miḥnah (ca. 218–246 AH / 833–861 AD), the inquisition-like persecution of non-Mu'tazilites, also referred to as Traditionalists, hap-

pened during the lifetime of al-Mubarrad (d. 285/898). It is thus the main political and religious context of his scholarly activity. Muʻtazilites were not at first preoccupied with grammar, however, elements of their doctrine have clear linguistic implications (creation of the Qur'ān, human convention for the assignment of meanings to words, nominalism). See Frank (1981); Loucel (1963–64); Peters (1976) for more details.

Troupeau describes the rationalisation of grammar in the first four centuries of Islam as the work of "the great Muʿtazilite grammarians", in the steps of Ibn as-Sarrāj. It culminates in the vI^{th}/xII^{th} century with Ibn al-'Anbārī (d. 577/1181):

Mais c'est surtout sous l'influence de la logique que la méthode de Başra évolua profondément à Baġdād, durant ces quatre siècles. On a vu que la logique avait été introduite dans la grammaire, au début du X^e siècle, par Ibn al-Sarrāğ, et que les grands grammairiens mu'tazilites du milieu de ce siècle en avaient généralisé l'emploi. Cette utilisation de la logique aboutit à une rationalisation de la méthode de Başra primitive, telle qu'al-Mubarrad l'avait introduite à Baġdād au siècle précédent. Déjà très avancée dans l'œuvre d'Ibn Ğinnī, à la fin du X^e siècle, cette rationalisation est achevée, au XII^e, dans l'œuvre d'Ibn al-Anbārī: elle constitue l'un des principaux aspects de l'évolution de la grammaire arabe, et l'on peut dire qu'elle est l'œuvre des grammairiens de Baġdād (Troupeau 1962, 405).

As far as grammatical methods are concerned, which is the focus of this review, the debated issue at the end of the $\pi^{nd}/v\pi^{th}$ century is that of the determination of "causes" ('illah, pl. 'ilal) in grammar. Grammarians can unearth the causes behind linguistic phenomena by using their reason because, in the Mu'tazilite views, language is a human convention. As pointed out by Carter, the political and religious implications of this simple claim are enormous:

If language could be proved to be a mere human institution, it would follow that the Qur'ān was created and consequently subject to all the limitations of human endeavour, thus enabling the Mu'tazila to claim that dogma and law should be constructed on the basis of reason only (Carter 1983, 68).

Troupeau (1994, 13) notes that the term "cause" ('illah) is said to have been introduced by al-Xalīl b. 'Aḥmad (d. 170/786), according to a tradition that goes back to az-Zajjājī (d. 337/949). He adds that the word 'illah is found in the $Kit\bar{a}b$, but in the general meaning of "reason", not "logical cause" and that it is only in Ibn as-Sarrāj's ' $Us\bar{u}l$ that these "causes" are explicitly mentioned:

Après avoir défini ce qu'il entend par la grammaire, Ibn al-Sarrāj poursuit: "Les causes alléguées par les grammairiens sont de deux sortes : la première sorte est ce qui fait parvenir à la langue des Arabes, comme lorsque nous disons : tout agent a une voyelle /u/ ; l'autre sorte est appelée "la cause de la cause", comme lorsque nous disons : pourquoi l'agent a-t-il une voyelle /u/ et l'aji [sic] sur lui, a-t-il une voyelle /a/ ? Et pourquoi, si le $y\bar{a}$ et le $w\bar{a}w$ sont vocalisés et si la voyelle qui les précède est /a/ sont-ils convertis en un alif? Cela ne nous procure pas le fait de parler comme parlent les Arabes, mais on en déduit leur sagesse dans les fondements qu'ils ont établis et par lesquels se manifeste la supériorité de cette langue sur les autres langues. Or mon propos, dans ce livre, est de mentionner seulement la cause qui, lorsqu'elle est généralisée, fait parvenir à leur langue, et de mentionner les fondements et ce qui est usuel" (Troupeau 1994, 14).

In a very different perspective, Baalbaki notes indeed that post-Sībawayh grammarians do not refer to grammatical causes ('ilal) in the same way as Sībawayh. He says that in the works of grammarians such as al-Mubarrad (d. 285/898), Ibn as-Sarrāj (d. 316/928), al-'Astarābādī (d. 686/1287) or as-Suyūtī (d. 911/1505) argumentation is much more theoretical than in the *Kitāb*, because, in a way, they assign some independent life to the causes themselves, which weakens their link to the grammatical phenomena they wish to explain (Baalbaki 2008, 59).

The impression that causes have an "independent life" can only be reinforced by the fact that early post-Sībawayh grammarians like Quṭrub (d. 206/821) and al-Māzinī (d. 248/862) are said to have composed books entirely devoted to the study of grammatical causes (Troupeau 1994, 14).

As is clear from Troupeau's quotation above, Ibn as-Sarrāj distinguishes two types of causes, descriptive and explicative. Later grammarians have refined their criteria and multiplied the types of causes they discern in grammatical texts. While az-Zajjājī (d. 337/949) observes three different causes at work in grammar, didactical (taʿlīmiyyah), analogical (qiyāsiyyah) and dialectical (jadaliyyah) or speculative (naḍariyyah) causes, ar-Rummānī (d. 384/994) counts as many as six different types of causes, analogical (qiyāsiyyah), rational (hikmiyyah), necessary (darūriyyah), conventional (wadʻiyyah), exact (ṣaḥīḥah), and false (fāsidah). These are presented in Troupeau (1994, 15).

Troupeau also says that this search for grammatical causes was not shared by everyone in the Islamic West, where this trend was violently criticised by the grammarian Ibn Maḍāʾ (d. 592/1196), under the influence of Ibn Ḥazmʾs (d. 456/1064) doctrine. Nakamura (1974, 100) writes that Ibn Maḍāʾ says that the tool of *taqdīr* must be avoided, along with any reconstruction of non-existing forms, and that the theory of 'amal should be abolished:

When Ibn Maḍā' says that the Arabic grammar has become deteriorated and complicated on account of the ra'y of the grammarians, what does he mean concretely by ra'y? Technically it is the theory of regent ($nazar\bar{\imath}yah$ al-'āmil). For this reason, he asserts first of all the abolition of this theory (Nakamura 1974, 100).

Versteegh insists on the fact that this search for grammatical (and rational) causes, which is typical of the Muʿtazilah, is the other side of the Arabic grammatical tradition after Sībawayh:

In the treatise I have translated and commented here $[az-Zajj\bar{a}ji^* \ \bar{i}^* d\bar{a}h]$ one finds the other side of Arabic grammatical theory [other than morphology and syntax], its preoccupation with issues that belong more to a general theory of language and linguistics than to a grammatical theory in the narrow sense of the word. This particular type of linguistic treatise flourished in the 3rd-5th/9th-11th centuries, during the period when the Muʿtazilite influence in linguistics was manifest (Versteegh 1995, xiii).

In this respect, (Versteegh 1995, 7) considers that az-Zajjājī (d. 337/949) occupies a special place in the Arabic grammatical tradition because, despite his opposition to the intrusion of logical notions in grammar, his Muʿtazilite opinions lead him to present and formulate his linguistic theories in the new logical frame.

According to Versteegh, almost all grammarians of the $\text{III}^{\text{rd}}/\text{IIx}^{\text{th}}$ and $\text{Iv}^{\text{th}}/\text{xth}$ centuries have in common that "most of them are said - or accused - to have been Mu'tazilites. This applies, for instance, to Quṭrub (d. 206/821), Māzinī (d. 249/863), Mubarrad (d. 285/898), Fārisī, Ibn Ğinnī, Sīrāfī, Rummānī, Zaǧǧāǧī." (Versteegh 1996, 595). Among the topics that are dear to Mu'tazilite grammarians he mentions the origin of language, metaphors, the doctrine of 'āmil, the dichotomy between ism and sifah in relation with the divine attributes, the nature of language, created or not, and the inimitability of the Qur'ān. He adds that what concerns them most behind all these topics is the relationship between thought and speech, between 'alfāḍ and ma'ānī, between grammar and rhetorics (Versteegh 1996, 595–597). And in Versteegh (1997b) he also mentions the following topics: the creation of the Qur'ān, the difference between ism and musamma, the identification of ism with tasmiyah, the status of language as an act of the speaker.

Versteegh explains that although the Muʿtazilah had lost its sympathy in the general public after the Miḥnah (Versteegh 1997b, 266), its ideas, methods and terminology infiltrated the domains of grammar, rhetorics and the principles of jurisprudence (Versteegh 1996, 596).

He concludes about the Muʿtazilites that "it was through their efforts that the other disciplines were forced to reconsider their options. In the end, we could say, Greek thought through the good services of the Muʿtazila conquered the Islamic world as well" (Versteegh 1996, 600).

Bernards is very careful about the link of al-Mubarrad with the Muʿtazilah and its influence on his grammar:

To be sure, al-Mubarrad had great admiration for the famous Mu'tazilite al-Jāḥiz, but he was also personally acquainted with the above-mentioned Qur'ān scholars Ibn Mujāhid and Ismā'īl b. Isḥāq al-Qāḍī who were both opposed to Mu'tazilism. It should be recalled, too, that al-Mubarrad taught grammar at Jāmi' al-Manṣūr, and access to this mosque was not free of control. Moreover, Jāmi' al-Manṣūr was situated in the quarter of Bāb al-Baṣra, a stronghold of the traditionalists who included the followers of Ibn Ḥanbal (d. 241/855), the man who had led the opposition to the pro-rationalistic policies of the caliphs prior to al-Mutawakkil. Whether al-Mubarrad held "rationalist" or "Mu'tazilite" views in his grammatical theories is a dead-end question since we do not have a definition of what a rationalist or Mu'tazilite grammar would be, if at all, nor is such an inquiry a goal of this study. What we are able to establish at this point is that on a social and political level, the Mu'tazila did not play any significant role in al-Mubarrad's life (Bernards 1997, 34–35).

The picture is quite different for Ibn as-Sarrāj, according to Carter (2000, 270), who describes his *Kitāb al-ʾuṣūl fī n-naḥw* as based "on a purely rational foundation, i.e. independent of descriptive, pedagogical or religious considerations", which he links to the Muʿtazilah in a way that prefigures ar-Rummānī's grammar (Carter 1984, 218):

In this Ibn as-Sarrāğ slighlty anticipated a trend which was already under way in legal reasoning, developments being inspired by the preoccupation of the Muʻtazila with demonstrating the ultimate rationality of Islamic thinking. Ibn as-Sarrāğ represents a major step in the evolution of grammar: even his pedagogical text $al-M\bar{u}gaz$ is conspicuous for its use of $taqs\bar{s}m$ or dichotomous classification, an important new technique which is totally absent from Sībawayhi's $Kit\bar{a}b$ and the Muqtadab of al-Mubarrad (Carter 2000, 270).

These $taq\bar{a}s\bar{\imath}m$ "exhaustive divisions" are also underlined by Bohas, Guillaume, and Kouloughli (1990/2006, 10) in Ibn as-Sarrāj's ' $U\bar{\imath}u\bar{l}$, but they do not mention a link with Mu'tazilah. They link it with logic, which Ibn as-Sarrāj had studied with al-Fārābī (d. 339/950), one of the most famous philosophers of his time.

On the other hand, they mention the two fields that grammarians had before them, to study the grammatical principles or the grammatical causes as such. They say that few works have survived from the second field:

As for the 'ilal approach, it seems to have given rise to rather important literature throughout the period; most of it, however, is no longer (or perhaps not yet) accessible to us, with two exceptions: the Kitāb al-Īdāḥ by al-Zaǧgãgī (d. 340/951) and the Xaṣā'iṣ by Ibn Ġinnī (d. 392/1002). Although these two works are quite different in many ways, they are founded on identical presuppositions: (a) that the grammatical theory evolved by the Arabic tradition is not only able to describe facts as they are, but also to explain why they are so; and (b) that this explanatory power of grammar is a consequence of the pervasive order, harmony and rationality which uniquely characterizes kalām al-'Arab, as opposed to other human idioms (Bohas, Guillaume, and Kouloughli 1990/2006, 11–12).

In addition to these two treatises, one can also mention Ibn al-Warrāq's (d. 381/991) *'Ilal an-naḥw* (Versteegh 2006a).

We will conclude this too brief survey of the links between Muʿtazilah and grammar by the idea expressed by Suleiman that this search for causes is linked with wider imperatives:

The study of the causes in AGT [Arabic grammatical tradition] was also tied to a wider ideological imperative whose object was (a) to prove that the internal 'logic' and harmony of Arabic grammar reflect the same in the language in its pre-descriptive state, and (b) this in turn reflects and proves the 'wisdom of the Arabs' (hikmat al-'Arab) (Suleiman 2003, 44).

Besides the formal contact of Greek logic and grammar, which is obvious in Ibn as-Sarrāj's treatise and which found its expression in a Mu'tazilite influence, another phenomenon has been described that also contributed to the formal turn in Arabic grammar after Sībawayh, namely, the closure of the linguistic corpus studied by grammar.

2.8 The closure of the linguistic corpus

The issue of the corpus on which Arabic grammarians work is briefly mentioned by Carter (1973a, 149) and Carter (1981/83, 109–110): It is more than probable that Sībawayh considered Arab vocabulary to be a finite corpus, hence his use of proper names as an permanent source of new words in the language. Doing grammatical research on a closed corpus or on an open corpus has great implications, since an open corpus constantly challenges the grammatical solutions found to account for the data, while a closed corpus enables the grammarians to focus on the rules and refine them. The fact that the linguistic data collected on the field by grammarians are considered to belong to a closed corpus means that "les grammairiens du IX^e-XV^e siècle décrivent virtuellement le même état de langue que ceux du II^e-VIII^e siècle" (Versteegh 1989b, 248).

Carter later tackles this issue in itself:

More disturbing still is the difference in attitude to data. The traditional Arab grammarians, after an initial and relatively short phase of truly descriptive grammar, were left with a corpus of data which was no longer the product of direct observation but had acquired the nature of legal evidence whose authenticity was guaranteed by the reliability of its transmitters. This material legitimized a self-consciously prescriptive grammar whose purpose was to perpetuate an ideal form of Arabic for reasons that are well known (Carter 1987–1988, 213).

Owens later adds that Ibn as-Sarrāj was able to systematically classify language utterances only because at his time the language described by grammarians is not spoken any more but is a closed corpus, which comprises written poetry, the Qur'ān, and the previous grammatical works (Owens 1991, 234–235).

Versteegh (1993a, 6) mentions this issue again, referring to Owens (1990a, 102), and further develops it in Versteegh (1995, 8) by saying that the corpus of the language described by the grammarians was closed in two ways, firstly because it was limited to the Qur'ān and pre-Islamic poetry and secondly because literate people were believed to spontaneously abide by the rules of grammar, which implied that they did not need any overt grammatical norm.

We have already mentioned above, p. 37, what seems to be Versteegh's position about the corpus explained by Sībawayh: He says he is describing and explaining the observed speech of the Bedouins while he actually describes and explains the language of the Qur'ān and poetry (Versteegh 1996, 591). Versteegh (1997a, 41–42) explicitly mentions this fiction, which Sībawayh must have been aware of, just like any other grammarian.

The fiction was possible because at the time of Sībawayh, there must still have been Bedouins fluent in Classical Arabic:

In the early centuries of Islam there were certainly Bedouin who could be and were used an informants. But in the course of the centuries there were no longer any pure Arabic-speaking Bedouin around, and the native speaker, the pure Bedouin, became a fictional figure, although the grammarians continued to talk about "their language" (Versteegh 1997a, 42).

Levin takes a quite different approach to this issue. He does not mention the discrepancies that Sībawayh must have been aware of. See Kapeliuk (2003) for an appraisal of Levin's ideas and a praise for Sībawayh's "modern methods". Rather than mentioning the discrepancies between the Bedouin actual language and the language studied by Sībawayh, Levin (2000) focuses on the dialectal variants that the $Kit\bar{a}b$ describes in much detail. He writes, in a way that articulates Sībawayh's both prescriptive and descriptive aim:

It is clear that Sībawayhi's prescriptive remarks do not form any deviation from his descriptive method, since they were made for the sake of people interested in learning the language of the 'Arab, either as a foreign dialect or even as a foreign language. (Levin 2000, 254, referring to Levin 1994)

More generally, the issue of the Bedouin informants of Arabic grammarians of the two first centuries is dealt with extensively in Gouttenoire (2010). The author does not present the case of Sībawayh but she deconstructs the literary theme of the "trip to the desert" of these grammarians, according

to the sources. She shows that it primarily serves an ideological purpose of ${\rm IV}^{\rm th}/{\rm X}^{\rm th}$ century grammarians.

Carter (2000, 266) sees a clear trace of the conscious move of the closure of the linguistic corpus in Ibn Wallād's (d. 332/944) $Intiṣ\bar{a}r$, edited by Bernards (1997). Ibn Wallād mentions (pp. 74-76) a dispute about the decision to put an end to inductive reasoning ($istiqr\bar{a}$ '), and to replace it by analogical deduction of causes ('ilal) based on general principles (' $uṣ\bar{u}l$) that could account for all linguistic phenomena.

He further comments on the closure of the linguistic corpus, which Ibn Wallād links to the antagonism between Kūfah and Baṣrah, by saying that the coherence of the abstract set of $`uṣ\bar{u}l$ "was no longer dependent on linguistic evidence but on systematic reasoning. It had therefore become necessary, in order to preserve the original $uṣ\bar{u}l$ from further change, to eliminate induction as a means of discovering new facts" (Carter 2001, 63). This dispute finally polarized between Kūfan grammarians who rejected the strict limitation of the data and Baṣran grammarians who accepted it.

Carter goes so far as to affirm that "all the polemic which developed later between these two schools is a logical by-product and rhetorical elaboration of the original Baṣran and Kūfan positions on induction" (Carter 1999, 57). Unsurprisingly, he parallels this development in the Arabic grammatical tradition with the closure of the legal corpus in the early ${\rm IV}^{\rm th}/{\rm X}^{\rm th}$ century (Carter 1999, 67).

Then, Carter proposes his view of the four stages of the development of more than ten centuries of Arabic grammatical tradition: 1. Pre-Sībawayh collection of linguistic data, "with almost no processing or analysis"; 2. Sībawayh endeavours to "survey the entire known language" and categorise it through induction and self-conscious analogy; 3. Rationality of the language being taken for granted, "the rationality of the analytical method itself is scrutinized" by authors like Ibn as-Sarrāj, "completing the transition from descriptive to prescriptive grammar set in train by his master al-Mubarrad"; 4. Closure of the linguistic corpus in the early $\text{IV}^{\text{th}}/\text{X}^{\text{th}}$ century by grammarians who "must now prove that the norms are themselves logical both in origin and structure". Sībawayh's $Kit\bar{a}b$ is "reduced to a database, and although all his descriptive and functional categories are taken over they are now subordinated to reasoning which is identical with the $us\bar{u}l$ al-fiqh, as Ibn al-Anbārī declared in the twelfth century" (Carter 1999, 66-67).

Baalbaki (2007b, xli–xlii) refers to Carter's description on this issue of the closure of the linguistic corpus on which grammarians based their interpretations. He had written earlier in a more specific way that the corpus of *šawāhid*

"(linguistic) witnesses" was practically closed by the end of the $\pi^{nd}/\nu \pi^{th}$ century, with the notable exception of some $ah\bar{a}d\bar{t}$ "prophetic sayings" that entered this corpus later as $aw\bar{a}hid$. Baalbaki (1995, 129) adds details about the date when the corpus of prose was closed:

For prose, the corpus was open roughly up to the end of the second/eighth century in the case of the urban areas $(ams\bar{a}r)$ and up to the end of the fourth/tenth century in the case of the Bedouin. It is clear that by the time of Ibn Ğinnī (d. 392/1002), who himself frequently consulted Bedouin informants, it was rare to encounter an eloquent $(fas\bar{\imath}h)$ Bedouin the purity of whose dialect is totally untarnished (Baalbaki 2008, 40–41).

The exinction of "native speakers" of Classical Arabic is directly linked with the supposed semantic and communicative dimension of grammar. Indeed, if Classical Arabic is no longer a living language, i.e., a language that nobody can be said to have an innate sense of its rules, its grammatical description can hardly focus on its communicative value, even if the myth of these native speakers survived their actual disappearance for some time.

We can now consider the issue of the role of semantics in post-Sībawayh grammar, not in contrast with prescriptiveness, but with formalism, to see how a formal semantic dimension emerged, as opposed to enunciative and communicative semantics.

2.9 Semantics in post-Sībawayh grammar

2.9.1 What is a formal grammar?

This fundamental question is not dealt with by our authors, and it seems that some of them have a negative judgement of what a "formal grammar" is. They oppose it, depending on their own theoretical frame, to a "lively" approach, or to an enunciative, communicative or functional grammar, which are positively labelled.

Technically speaking, a formal grammar is a grammar concerned with the linguistic forms, as opposed to the meanings conveyed by these forms. In a more specific way, Baalbaki assimilates structure and form to "case-endings, uttered and elided operants, and the syntactic function of words" (Baalbaki 1991, 89). A formal grammar is thus a grammar that focuses on 'i'rāb, syntactic operations and functions, and on morphological derivations.

2.9.2 An increased formalism after Sībawayh

Carter (1972a, 84–86) considers that post-Sībawayh grammarians have abandoned Sībawayh's view of words as entities having rights and duties in the sentence and have worked in a strictly normative context. He even adds that the end of this process was the identification of grammar with law:

At all events grammar had unmistakably identified itself with law by the 6th/12th century. To the evidence supplied by Haarmann can be added the contributions of Goldziher, e.g. the composition by grammarians of books especially for the use of lawyers, and other information which will not be enlarged upon here (Carter 1983, 77 referring to Goldziher 1871/1967 and Haarmann 1974).

He dates back the origin of this identification of grammar and law to the canonisation of the huge corpus of ${}^{3}ah\bar{a}d\bar{\imath}\underline{\imath}$ "sayings of the Prophet":

By the 3rd/9th century there are clear indications that the grammarians had begun to realize the significance of their particular skills in interpreting the law. This resulted directly from the achievement of Šāfi'ī [204/820] in elevating to canonical status the Sayings of the Prophet collectively known as the Hadīṭ. For while traditionally regarded as the end of a process ('closing the gate of iǧṭthād', with no possibility of further Revelation), the very success of Šāfi'ī led to a period of intense scholarly activity around the sifting, authentification and classification of thousands of individual hadīṭs, an undertaking for which the qualifications of the grammarian were indispensable. Opponents of the Ḥadīṭ namely the Mu'tazila, seized this opportunity to attack the Ḥadīṭ in its most vulnerable state, as can be judged by the hostile counterpolemic of Ta'wīl muḥtalif al-hadīṭ by Ibn Qutayba (d. 276/889). Many of the arguments he refutes are entirely linguistic in nature [...] (Carter 1983, 67).

However, as Gilliot (1997, 371) puts it, ' $ah\bar{a}d\bar{t}t$ are not a source of linguistic witnesses ($\check{s}aw\bar{a}hid$) because they are sometimes transmitted according to their meaning and not verbatim. For later grammarians, their absence in early grammatical works surely did not encourage them to use them as witnesses.

Baalbaki shows that the formalisation of grammar is due to a clear-cut separation between *nahw* "grammar" and *balāġah* "rhetorics":

It is the inability to distinguish between the relation of nahw to sarf and the relation of nahw to sarf and the relation of nahw to sarf and the relation of rary Arab scholars who have, following a wrong interpretation of the tradition, always thought of sarf and nahw as one unit, and of $bal\bar{a}\dot{g}a$ as another unit only distantly related to the first (Baalbaki 1983, 7–8).

This track was inaugurated by Belguedj some ten years before. He formulated the hypothesis that the separation between *naḥw* and *balāġah* was a conscious decision of post-Sībawayh grammarians. They chose not to deal

⁷This point is dealt with in more detail below, see p. 89.

with the intention of the speaker, which they left to *balāġah* to study, and focused on the grammatical techniques (Belguedj 1973, 183–184).

The consequence of this theoretical separation is that grammarians tend to focus more and more on the syntactic relationships, and especially 'amal "operation" as expressed by the case-endings, at the expense of the meaning intended by these relationships:

Case-endings represent for the Arab grammarians, and especially in the second and third centuries, mostly a syntactical phenomenon which is usually related with meaning, and not an exercise which serves the concepts of ' $\bar{a}mil$ and ma' $m\bar{u}l$ as can be felt from the writings of most grammarians from the fifth century onward (Baalbaki 1983, 8–9).

In a different conceptual frame, Guillaume (1986)⁸ says that the shift that happened at the end of the IIIrd/IXth century is "the transition from the study of *kalām* in the sense of 'actual speech' to the study of *kalām* in the sense of 'language'" (as quoted by Versteegh 1996, 592). This "nouvelle grammaire", as Guillaume labels it, was more technical, more structure-oriented, less concerned by the functional dimension of language. Versteegh (1989b, 259) quotes a fierce criticism addressed by Ibn Xaldūn (d. 808/1406) to his contemporary grammarians who are ignorant of "linguistic habit" and whose books are devoid of Bedouin poetry and discourse. Versteegh adds that this late period of Arabic scholarship has also produced subtle and sophisticated works:

Il n'est pourtant nullement paradoxal que ce soit à cette époque, dès le VII^e-XIII^e siècle que l'on rencontre les grandes synthèses de la réflexion linguistique arabe, comme par exemple les ouvrages d'al-Astarābādī, dans lesquelles toute la subtilité et toute la sophistification de cette tradition ont culminé (Versteegh 1989b, 259).

It has thus become a new doxa that grammarians (beginning with Sībawayh, for Versteegh, after him, for Carter and Baalbaki) have focused their interest on structure and form, at the expense of a focus on meanings:

It is generally accepted that Arab grammarians were predominantly concerned with structure and form—especially case-endings, uttered and elided operants, and the syntactic function of words—and rarely resorted to the criterion of meaning as the main arbitrer in grammatical analysis. Despite some differences between grammarians in their emphasis on structural and formal (i.e. $lafz\bar{\imath}$) considerations or on meaning, preference of the first over the latter took place at a fairly early stage in the history of Arabic grammar—a tendency which certainly grew with time, and eventually tarnished the image of grammarians and lost them their credibility (Baalbaki 1991, 89).

This does not mean that there was no significant methodological development after Sībawayh, but later works "can hardly match his insight into

⁸And not 1987, as stated in Versteegh (1996, 592).

grammatical issues and often reduce his lively and dynamic approach into a set of rigid rules" (Baalbaki 2007b, xxxvi). The opposition between Sībawayh's "lively and dynamic approach" and later grammarians' "rigid" and normative approach has been linked by Baalbaki with a shift in the equilibrium between lafḍ and ma'ná:

The Arabic grammatical theory is generally known for its preoccupation with lafz (form) more than $ma'n\bar{a}$ (meaning). Unfortunately, the preponderance of lafz over $ma'n\bar{a}$ is widely assumed to be true of the various stages of development of the discipline, perhaps as a result of the fact that until a few decades ago the grammatical tradition has been indiscriminately judged by almost exclusive reliance on later sources and commentaries considered to be representative of the whole tradition including earlier works. (Baalbaki 2008, 170).

Baalbaki (2008, 192) adds that post-Sībawayh grammar "fails to maintain [Sībawayh's] insight into the pragmatic role which he ascribes to the speaker, the listener, and the context in which speech takes place". According to him, post-Sībawayh grammarians base their research on the same corpus, use the same terminology, arguments and analytical tools as Sībawayh (Baalbaki 2008, 231), but in a stricter way that leaves no place for the communicative interaction between the speaker and the listener:

Before all this, it may be appropriate to point out that the differences between Sībawayhi and the later authors—which are largely due to the degree of strictness with which they apply the same set of analytical tools and methods to grammatical study—should not obliterate the fact that the main features of the whole tradition are basically those of the *Kitāb* (Baalbaki 2008, 235).

His conclusion is that this change in equilibrium between formal and semantic considerations characterises post-Sībawayh grammar at large:

In fact, the imbalance between lafz and ma' $n\bar{a}$ became a distinctive feature of the tradition almost in its entirety as Sībawayhi's dynamic and vivid approach was gradually abandoned. To be sure, the $Kit\bar{a}b$ does include a great deal of formal analysis and does embrace speculative elements in which Sībawayhi intervenes in constructions by proposing unuttered elements, particularly ' $aw\bar{a}mil$, which he claims to be responsible for certain formal aspects of those constructions and for various relationships among their constituent elements. It is clear, however, that this aspect of his syntactical analysis comprises a semantic component whose link with lafz he is normally keen to highlight. Hence, formal considerations in the $Kit\bar{a}b$ cannot be studied in isolation of meaning (Baalbaki 2008, 272–273).

This interpretation, which is summarised in Marogy (2010, 37), has been challenged in two different ways, firstly by showing that post-Sībawayh grammarians do include a semantic dimension in their grammar and secondly by emphasising on the fact that the contact with Greek logic had forced the grammarians to reconsider their position towards semantics. Larcher's criticism of Baalbaki's (2008) view gathers both these arguments, that we will consider separately below:

J'avoue être en désaccord cordial avec cette vision : je ne pense pas en effet que la grammaire arabe se soit jamais désintéressée du sens (comment d'ailleurs pourrait-il en être autrement dans un univers herméneutique ?). Simplement, dans une tradition s'étendant sur de nombreux siècles, on peut admettre qu'il y a des moments et, plus encore, à tout moment, des individus plus attentifs que d'autres à cet aspect des choses. Sībawayhi était sans conteste l'un de ceux-là et cela fait maintenant près de trente ans que son exceptionnel intérêt pour des questions de nature énonciativo-pragmatique a été reconnu. Mais cela fait trente ans aussi que ce même intérêt a été reconnu à l'autre bout de la chaîne chez les grands grammairiens du VII/XIIIème siècle, au premier rang desquels Raḍī al-dīn al-Astarābādhī (m. 688/1289)... Et entre les deux, on trouve des propositions remarquables touchant le sens chez Mubarrad, Ibn al-Sarrāǧ et bien d'autres (Larcher 2011, 123).

2.9.3 A rediscovery of the semantic dimension in post-Sībawayh grammarians

Thanks to more in-depth studies on post-Sībawayh grammarians, the unique and isolated position of Sībawayh has been challenged, especially with regards to his attitude towards intentional and communicative semantics [m. 1–6] and functional grammar. Owens notes for example that al-Mubarrad's description of the dependent form displays a functional dimension:

Sībawayhi, and even more so, 'Aḥfaš, offer a largely formal account in their description of the accusative form, the accusative characterizing a position of structural separation [...]. In Mubarrid the emphasis shifts to a functional one; accusatives are associated with a position, an object (Owens 1990b, 260).

In exactly the same manner, he says that al-Mubarrad's approach to the $tamy\bar{\imath}z$ is primarily based on semantic considerations, whereas in the $Kit\bar{a}b$ the parallel passages do not rely on semantic constraints to explain this construction:

Sībawayhi identifies certain formal features which the specification, $tamy\bar{\imath}z$, possesses: it is always indefinite and singular for instance. Nonetheless, the unifying parameter for the category came to be a semantic one: the $tamy\bar{\imath}z$ grew most directly out of the class of items characterized in terms of their meaning, 'explanation', $tafs\bar{\imath}r$. Semantics also played an increasingly important role in the interpretation of the possessive construction, where in Sībawayhi's earliest formulation no general prepositional paraphrases are proposed, these first appearing with Mubarrid (Owens 1990b, 260).

What is surfacing here is certainly a semantic concern, however linked with the syntactic functions and structures, i.e., semantic constraints in the syntactical definitions themselves, which correspond to [m. 13] and [m. 14]. The difference with the $Kit\bar{a}b$ is not their appearance, since it is very clear that they were present in Sībawayh's analyses, though not in the definitions. Ultimately, the difference lies in that they are now in a dialectic relationship with the lafd (i.e., ma^cna [m. 13–14] vs. lafd, not with the intention of the

speaker ($ma^cn\acute{a}$ [m. 1] vs. $laf\rlap/q$ [incl. m. 13–14]). In order to understand Owens when he says that "semantics also played an increasingly important role", one must understand here "objective, referential semantics" [m. 7–16], not "intersubjective, pragmatic semantics" [m. 1–6].

Ṭāhā has written her PhD thesis on this very topic: the emergence of a semantic dimension in post-Sībawayh grammar. She recognises that this dimension was never absent but that it surfaces clearly in Ibn as-Sarrāj, who represents a turning point on this respect:

But my examination has led me to the conclusion that there was never a total absence of semantics in the approach of the early Arab grammarians. Instead, there was, among the earliest writers, a lack of focus on semantics, since the primary goal of Sibawayhi was to explain the surface syntactic structures of the Arabic language together with its morphological derivation and inflection systems. [...] Explained in the following pages is the position of Ibn as-Saraaj as a turning point in the history of Arabic linguistic thinking — a scholar in whose work semantics and syntax complemented each other in the description of the language (Ţāhā 1995, 6).

Basing her research on the treatment of transitive verbs by Sībawayh, al-Mubarrad and Ibn as-Sarrāj, she shows that "Ibn al-Sarraaj achieved a far more elaborate and comprehensive description of the different syntactic and semantic roles of verbs in general and transitive ones in particular" (Ṭāhā 1995, 126), whereas Sībawayh "chose to ignore semantics it [sic] in order to concentrate on the linear description of surface sentence structure" (Ṭāhā 1995, 312–313). Thus, she calls "anecdotic" the presence of semantic criteria in the *Kitāb* and the *Muqtaḍab* (Ṭāhā 1995, 315). Once more, in order to understand this assumption, one must read "objective, referential semantics", not "intersubjective, pragmatic semantics".

In a way that expresses more precisely her theory of the appearance of a semantic dimension in post-Sībawayh grammar, Ṭāhā says that the efficiency of the classification introduced by Ibn as-Sarrāj is made possible by the introduction of semantic criteria in the syntactic definitions:

Al-Mubarrad's approach in describing verb in/transitivity is similar in many respects to that of Sibawayhi. Although al-Mubarrad continued to classify verbs on the bases of their morphological Forms and Patterns, he added other criteria for his classifications. In many instances the lexical meaning of the verb itself contributed to the classification (Ṭāhā 1995, 119).

This seems to correspond to what we have already quoted above about Dévényi's opinion on al-Farrā', as quoted by Versteegh:

For the most part, Sībawayhi includes only syntactic arguments in his explanation of linguistic phenomena, whereas al-Farrā' very often invokes semantic constraints in his linguistic argumentation (Versteegh 1997b, 241, referring to Dévényi 1990a,b).

⁹Her main ideas are summarised in Ṭāhā (2010).

In a later article, Ṭāhā states anew what she sees as a major difference in grammatical method, as far as verbal transitivity is concerned:

The most striking difference between the 10th-century grammarian Ibn as-Sarrāj and Sībawayhi is that the morphological aspect of determining transitivity is almost absent in Ibn as-Sarrāj's treatment of the issue. His analysis was mostly, if not entirely at times, based on the meaning denoted by the verb itself (Tāhā 2009, 415).

In one of the rare critical studies available on al-Mubarrad's *Muqtaḍab*, al-Māḍī (2009) takes the same direction as Ṭāhā, exploring the semantic dimension of grammar. After a rather ahistorical introduction, he defines the different "grammatical meanings" (ad-dalālah an-naḥwiyyah) dealt with in the *Muqtaḍab*: ad-dalālah al-mu'jamiyyah "lexical meaning" which he describes as the semantic meaning of the root [m. 12], ad-dalālah al-waḍīfiyyah "syntactic meaning" [m. 14], ad-dalālah as-siyāqiyyah "contextual meaning", which he describes as the six possible moods of the sentence [m. 5], 'ixbār "predication", ta'kīd "confirmation", istifhām "interrogation", suxriyyah "irony", ta'ḍīm "glorification" and ta'ajjub "astonishment", and, lastly, ad-dalālah al-isti'māliyyah "[actual] use meaning" which is the meaning attested by actual use if it differs from an original meaning, especially if an element has been elided in speech:

وهي الدلالة التي تظهر من كثرة استعمال التراكيب النحوية في الكلام مما يكون الاستعمال سببًا في تركها ودالًا عليها في الوقت نفسه، وهذه الظاهرة ظهرت بشكل واضح عند المبرد في باب الحذف إذ كانت المسوغ له في أحيان كثيرة. وهذا ظاهر قوله: «والحذف موجود في كل ما كثر استعمالهم إياه»، فالاستعمال يكون دليلًا على الحذف ودالًا عليه [...] (الماضي ٢٠٠٩، ٢٦ نقلا عن المقتضب ٢/١٤٦/٤)

This last meaning corresponds either to [m. 2] or [m. 3], depending on whether one insists on the reconstruction process of the elided utterance or on the understanding of an expression attested by use.

Thus, according to al-Māḍī, the types of meanings that al-Mubarrad deals with are either communicative [m. 2.3.5] or formal [m. 12.14], i.e., either linked with the message and its communicative value $(f\bar{a}'idah)$ or linked with the linguistic sign. Interestingly, he does not mention the intention of the speaker as a possible source of meaning in the Muqtadab. It is however not sure that with this simple interpretative grid the author would be able to exhaust the possible semantic dimensions in the Muqtadab.

2.9.4 Semantics forced on grammarians

As we have seen above, Versteegh does not insist on a shift in grammatical methods that would have happened after Sībawayh. His position is that Sībawayh inaugurates a new grammatical method that will prevail until the confrontation between Greek logic and grammar at the end of the IIIrd/IXth century. For this reason, it is only after this confrontation that a second change occurs in the relationship between grammar and semantics (the first shift happened from meaning-oriented exegesis to structure-oriented grammar with Sībawayh in the second half of the IInd/VIIIth century):

Not only did the grammarians feel forced to alter the presentation of their ideas and theories, for instance, by including proper definitions of the notions they operated with, but a general dissatisfaction with the purely formalistic approach of conventional grammar led to a number of attempts to change the character of linguistics as a discipline by introducing a renewed interest in the semantic aspect of speech (Versteegh 1997b, 259).

Versteegh (1997b) considers that al-Jurjānī (d. 471/1078) is "the most interesting representative of this new approach". The publication in 1982 of his Muqtasid, a large commentary on al-Fārisī's ${}^{1}\!\bar{d}ah$, made possible a renewed insight in his methods:

In this commentary al-Ğurğānī's opinion does not exhibit any major differences with standard grammatical theory, but in his other writings he criticizes the grammarians openly for not taking into account the semantic differences between various constructions, but concentrating exclusively on the formal-syntactic differences (Versteegh 1997b, 259).

Of course, the shift that was inaugurated and exemplified by al-Jurjānī does not mark a stop in ancient formal methods, nor does it mean that there was no interest in semantics before. Versteegh (1997b, 264) writes that the interest in semantics has come to the first plan, and that the old method still had followers after the v^{th}/x_I^{th} century.

A later stage of the study of the relationship between *lafḍ* and *maʿná* is the science of *waḍʿal-luġah* that studies the conventional link between words and meanings. The first author who dedicated a treatise to this new science was al-¹Ījī (d. 756/1355) but it is only in the xIIth/xVIIIth century that it was acknowledged as a separate science (Versteegh 1997b, 272–273).

We will not explore this path any further. Suffice it to say, for the sake of our review, that "the general attitude of the linguists towards meaning changed drastically when they were challenged by the universalist claims of the logicians who tried to monopolize the study of meaning" (Versteegh 1997b, 274). In a later article, Versteegh links this focus on form in the

early grammatical tradition to a disinterest in other languages than Arabic and in universal categories that could have applied to all languages. The confrontation with Greek logic has challenged this view by forcing Arabic grammarians to consider the issue as such (Versteegh 2000, 300).

Versteegh recognises that if Arabic grammarians did not turn into comparative linguists, at least they could not ignore semantic questions any more:

In the aftermath of this confrontation the grammarians became even more fixed on their own language, although the contact with logical ideas may have made them more receptive to another development in Arabic grammar, the interest in semantics with had been almost completely absent in the predecessing period. With both the efforts of linguistically oriented rhetoricians such as al-Ğurğānī (d. 471/1078) and as-Sakkākī (d. 626/1229) semantics became an integral part of the discipline (Versteegh 2000, 305).

As expected, Baalbaki is less straightforward than Versteegh on a semantic turn that Greek logic would have imposed on grammar. He rather considers that authors like al-Jāḥiḍ (d. 255/869), Ibn Jinnī (d. 392/1002), al-Jurjānī (d. 471/1078) or as-Suhaylī (d. 581/1185) are exceptions:

In contrast to the above-mentioned general tendency of later authors to give priority to lafz in their grammatical analysis, there were a few attempts to restore a central role to $ma'n\bar{a}$ and to highlight the speaker's awareness as the most essential arbiter to usage (Baalbaki 2008, 273).

But these attempts were "short-lived, and *balāghah* itself was later plagued with rigidity and the lack of continued revision of theory" (Baalbaki 1995, 132). He gives the example of as-Sakkākī (d. 626/1229) for whom the separation between syntax and semantics is a fact:

In his introduction to Miftah al-'ulam [pp. 2–3], Sakkākī (d. 626) tries to justify the structure of his book by pointing out the link between a number of linguistic 'ulam, including sarf, nahw, ma'and bayan. The mere need for such justification shows how these 'ulam have become isolated and compartmentalized (Baalbaki 1983, 7).

According to Baalbaki, other such attempts are found in Ibn Jinnī's *Xaṣā'iṣ* and al-Jurjānī's work, in particular his *Dalā'il al-'i'jāz* and *'Asrār al-balāġah* (Baalbaki 2007a, 8–13).

This view of Baalbaki differs quite a lot from that of Versteegh but not that much from that of Larcher mentioned above, with whom he only disagrees on how to interpret the historical evolution of the Arabic grammatical tradition. While Larcher made clear that at all times some individual grammarians had an interest in semantics and others did not, Baalbaki would answer that there is a tendency that began after Sībawayh to autonomise more and more syntactic and semantic issues, although some grammarians are exceptions. As for Versteegh, he would agree that an underlying interest in semantics in

the early grammarians was forced to the surface after the confrontation with Greek logic.

2.10 Conclusion

The first overall impression that we get from this review is that all authors follow their own interpretative track, linked with their entry point in the field. Carter, who studied Sībawayh at the beginning of the period that we consider in this review, renewed the field of study by proposing a new view on his methods. However, he is not as keen as Bohas, Guillaume, and Kouloughli to grant any value to later grammatical systems. The same goes for Baalbaki who mainly focused on Sībawayh's grammatical methods and legacy and who considers that Sībawayh's *Kitāb* represents both a summit and a unique case in the history of Arabic grammar. The case of Versteegh is almost the opposite of Carter and Baalbaki since he both studied pre-Sībawayh grammatical and exegetical methods and later grammarians under Greek logic influence. As for Owens, he confesses his ahistorical approach to the Arabic grammatical tradition (Owens 1995, 438).

Having focused our review on Sībawayh and the following four centuries for the most part, we have certainly biased our own view on pre-Sībawayh grammatical activity, as well as on later stages of grammar. These inherent limitations to the exercise being taken into account, it is still striking that Sībawayh is overrepresented, while al-Mubarrad and Ibn as-Sarrāj are very often mentioned with others, implying that they have not been studied much for themselves, which is especially true in the case of al-Mubarrad.

Lastly, it should also be mentioned that most studies written in Arabic deal with the traditional account of the history of Arabic grammar, which makes them of less interest for this review (al-'Anṣārī 1972; Dayf 1968; al-Ḥadītī 1975, 1980; 'Ibādah 2002; Jum'ah 1980; al-Maxzūmī 1955; Yāqūt 1992). The same can be said of the introductions to the edited texts of *al-Muqtaḍab* ('Uḍaymah 1966–79) and *al-'Uṣūl* (al-Fatlī 1973/85/96) which are almost purely factual and offer no historical perspective nor analysis.

Our main concern was the semantic dimension of Arabic grammar in the first centuries. It seems that there is some misunderstanding between the scholars who have dealt with this issue. This misunderstanding is the result of a lack in clear definition of what "meaning" means, which has been pointed out in the literature. Thus, we argue that it is not irreconciliable to say at the same time that 1) much of Sībawayh's method has been lost in the first generations after him, which scholars either link with an ethical

2.10. Conclusion 71

approach (Carter), a communicative approach (Baalbaki, Marogy), or an enunciative approach (Bohas, Guillaume, Kouloughli), 2) that a semantic dimension clearly surfaces in al-Mubarrad and even more in Ibn as-Sarrāj (Owens, Ṭāhā), 3) that the confrontation with Greek logic has forced the grammarians to deal explicitly with semantic issues that had been ignored 3a) beginning with Sībawayh (Versteegh) or 3b) after him (Bohas, Guillaume, Kouloughli) and 3c) that these attempts were short-lived (Baalbaki), and lastly, 4) that at all times individual grammarians had an interest in semantics and others not (Larcher).

However, these views all have in common that they lack a third dimension. They consider only two criteria, namely "having an interest in semantics" vs. time. The model proposed by Kouloughli has three dimensions, "having an interest in intentional semantics [m. 1]" vs. "having an interest in formal semantics [m. 12-14]" vs. time. The model we propose to use has no less than six dimensions, since five dimensions of semantics are evaluated against time: intentional semantics [m. 1], communicative semantics [m. 2-6], extra-lingistic semantics [m. 7-8], cognitive semantics [m. 9-11] and formal semantics [m. 12-16].

This classification of the different types of meaning brings more insight into the picture in two different ways. Firstly, it enables us to add communicative semantics [m. 2.5.6] as a separate entity, and secondly, it helps us to realise that some dimensions could be constant through time (reformulation [m. 3] is always present while the extra-linguistic referent [m. 7] and the conceptual correlate [m. 9] are usually ignored or treated by separate sciences). It also casts a new light on the fact that syntactic functions and morphological patterns carry a semantic dimension as well [m. 14], which we labelled as "formal" since it focuses on the linguistic signs, as opposed to the message or the intention of the speaker. It is in this sense that grammarians talk about the meaning of the ' $id\bar{a}fah$ or the meaning of the pattern $f\bar{a}'il$. It is in this sense that Ayoub (1991, 40) says that "le formel dans le Livre [Sībawayh's $Kit\bar{a}b$] inclut, à la fois, le syntaxique et le sémantique".

With these criteria, it becomes possible to describe the fundamental interest of Sībawayh in intentional [m. 1] and communicative semantics [m. 2.3.5.6], which is not at the expense of formal semantics [m. 12–14] but of extra-linguistic semantics [m. 7] and cognitive semantics [m. 9]. At the same time, this model can account for the gradual surfacing of formal semantics [m. 12–14] in post-Sībawayh grammarians, this time at the expense of intentional [m. 1] and communicative semantics [m. 2.5.6], as is claimed by some scholars, reformulation [m. 3] being a constant with time. It can also describe the Mu'tazilite interest in extra-linguistic [m. 7.8] and cognitive

semantics [m. 9], which were not taken into account before the confrontation with Greek logic.

Part II

Presentation of the issues linked with the numerals

Chapter 3

Preliminary remarks: Five methods to collect grammatical information

In chapters 3 to 7, we will simply describe the issues linked with numerals in three grammatical treatises: Sībawayh's (d. 180/796) *Kitāb*, al-Mubarrad's (d. 285/898) *Muqtaḍab¹* and Ibn as-Sarrāj's (d. 316/928) '*Uṣūl*. Our aim here is not to enter into the interpretations of these grammarians—unless necessary to understand the issues themselves—but only to give a general overview of all grammatical issues linked with numerals at large. In the next part of this study (chapters 8 to 10) we will see the wider theoretical frame in which each of these three grammarians addresses the issues presented here.

In the three treatises that we study here (as well as in most of the classical works in grammar) there are at least five methods for the (modern) reader to collect grammatical information, which are clearly distinct and should not be confused.² We will thus collect information on numerals: 1. as the object

^{&#}x27;In a few cases, his Radd 'alá $Kit\bar{a}b$ $S\bar{\imath}bawayh$ will also be mentioned. In this work, known to us through its refutation by Ibn Wallād (d. 332/944), al-Mubarrad criticises $S\bar{\imath}bawayh$'s teaching on specific issues and this sheds an interesting light on his theories. Bernards (1997), who has edited and studied both the Radd and its refutation, believes that the Muqtadab was authored after the Radd and that it expresses a later stage of al-Mubarrad's thinking.

²See Iványi (1991, 201–203) for the twelve differents ways in which Sībawayh introduces linguistic material in the *Kitāb*, according to their origin. These are (i) common use introduced by *naḥwa qawli-ka* ("as when you say"), (ii) fabricated examples (*tamṭīl* "representation"), (iii) uncertain use introduced by *zaʿama* ("to claim"), (iv) examples taken from the actual use

of the explicit grammatical commentary; 2. as prime examples that refer to specific grammatical rules; 3. in a series of morphological, syntactical and semantic tests; 4. in quotations from the tradition (Qur'ān, hadīt, poetry, grammatical tradition) where they are used either as linguistic evidence or counter examples; and lastly, 5. through extrapolation.

With the necessary precaution, it is possible to gather grammatical information in these five different cases. However, it is very important to remember not only what information was gathered but also how, or in other words, what the status is of the information gathered. The question at stake here is the legitimacy of a certain amount of interpretation that is necessary, especially because not all the points are dealt with at the same level of detail.

Lastly, a legitimate question that the researcher has to ask himself is that of the unity of the corpus studied. In other words, do our three grammarians describe the same language? We can consider with Versteegh (1989b, 248) that "le choix authentique de données linguistiques sur le terrain a donné lieu à la formation d'un corpus reçu et fixé. Si bien que les grammairiens du IXe-XVe siècle décrivent virtuellement le même état de langue que ceux du IIe-VIIIe siècle." There are however two distinct levels that are not always easy to distinguish in our texts, the level of the language described by the grammarians and the level of the language they use to describe that language. This means that even if we can be sure that there is no variation in the language used to describe it. This is for example the case of the *nisbah* form *tulāṭiyyun* "threefold" used to describe three-consonant radicals, which is not found in the *Kitāb*, but once in the *Muqtaḍab* and more than fifty times in the 'Uṣūl. We will mention other cases when we come across them in our study.

3.1 Explicit grammatical commentaries

This source of data is of course the safest one for the reader. Not only does the author deal with numerals, but he also discusses the different grammatical issues he considers. The majority of the data collected for this study was collected in explicit grammatical passages. Each grammatical

introduced by *qawl al-'Arab* ("language of the Arabs"), (v) non-canonical examples introduced by *ḥaḍafū* ("they elided"), *istaġnaw* ("they did not need") or '*awwaḍū* ("they replaced"), (vi) dialectal use of the type *qāla ba'ḍu-hum* ("some of them say") or *fī luġati Tamīm* ("in the dialect of Tamīm"), (vii) erroneous use of the type *qabīḥ* ("ugly") or *mā jāza* ("it is not correct"), (viii) Qur'ānic quotations, (ix) sound poetry, (x) poetry corresponding to type (v), (xi) poetry corresponding to type (vi), (xii) poetry corresponding to type (vii), which is true poetic licence.

treatise contains chapters devoted to the expression of numerals and their counted object, and it is from there that the investigation should begin.

Interestingly, in Sībawayh's *Kitāb*, the first chapter to deal with numerals extensively is $h\bar{a}d\bar{a}$ $b\bar{a}bu$ s-sifati l-musabbahati bi-l- $f\bar{a}$ 'il" chapter on adjectives that resemble the active participle" (K. I, chapter 41; 81.19–88.8). Numerals are dealt with again in chapter 413 titled $h\bar{a}d\bar{a}$ $b\bar{a}bu$ l-a-as \bar{a} 'a1 llatī $t\bar{u}qa$ 'a'a1 idati l-a1 idati l-a1 idati l-a2 idati l-a3 idati l3 idati l4 idati l5 idati l5 idati l6 idati l6 idati l7 idati l7 idati l8 idati l8 idati l9 idati l1 idati l2 idati l3 idati l3 idati l3 idati l4 idat

In al-Mubarrad's *Muqtaḍab*, numerals are dealt with in four chapters (*M.* II, 153–187), the first of which is the longest and deals with the main issues related to numerals: $h\bar{a}d\bar{a}$ $b\bar{a}bu$ l-'adadi wa-tafsīri wujūhi-hi wa-l-'illati fī-mā waqa'a min-hu muxtalifan "chapter on numerals, the commentary of their forms and the cause behind that, which has a different shape" (*M.* II, 153–174).

Lastly, in Ibn as-Sarrāj's 'Uṣūl, numerals are dealt with in the following sections: bāb tamyīz al-'a'dād "chapter on specifying the numerals" ('U. I, 311–314); bāb kam "chapter on kam" ('U. I, 315–320); masā'il min hāḍihi l-'abwāb "issues related to these chapters" ('U. I, 321–328). In the outline of the 'Uṣūl, these sections correspond to the cases when the noun in the dependent form is not situated after the agent of a verbal sentence.

Of course, in each treatise these chapters do not gather all the grammatical teachings on numerals. Specific issues are dispersed throughout corresponding chapters. For example, the morphology of compound numerals is dealt with in a chapter dealing with compounds generally, the *maṣdar*-like use of numerals is dealt with in a chapter on substantives used as *maṣādir*, and so on.

Despite all this, there is already a certain amount of extrapolation that readers must go through when they wish to gather information about a specific topic. This is because they look for answers to their own questions in the text instead of understanding the text's own logic and consistency.

The other difficulty that the reader faces when trying to collect data from a grammatical treatise (and this is especially true of Sībawayh's $Kit\bar{a}b$) is that the authorship of the data is not always clear. Sībawayh often quotes lengthy passages and interpretations from other grammarians and it is not obvious when he is speaking in his own name, or whether he agrees with what he

quotes.³ The same difficulty is also found in Ibn as-Sarrāj's $U_{\bar{\nu}}$, although not to the same extent. Thus, any doubtful authorship will systematically be mentioned.

3.2 Prime examples

Once the author has explained in detail what is at stake in a particular numeral, he sometimes uses this numeral as a quick and clear representative for the rule, a "prime example". This is the case for xamsata-ʻašara, which is quite systematically used as a representative for one particular type of nounnoun compound where both terms are indeclinable and carry a final fathah. It is evidently more practical to say that a compound is "like xamsata-ʻašara" rather than to repeat that this compound is made up of two indeclinable nouns that carry an invariable fathah.

In this case, an interesting use of $xamsata-^ca\check{s}ara$ as a prime example is when the generic negation $l\bar{a}^5$ together with the noun it negates is compared analogically to the compound cardinal $xamsata-^ca\check{s}ara$ (K. I, 300.13–301.14; M. IV, 357.10–358.9; $^{\circ}U$. I, 380.1–4; II, 66.6–7). Our grammarians draw an analogy between $xamsata-^ca\check{s}ara$ and $l\bar{a}$ rajula inasmuch as both expressions are considered to be indeclinable compounds.

Some comparisons are quite straightforward, as in the case of the use of *xamsata*–'*ašara* as a prime example of indeclinable nouns (*M*. II, 50.2–5; '*U*. I, 146.1–7), whereas other cases are not as clear, as in the comparison between *xamsata*–'*ašara* and '*ayyu-hum* in the expression *iḍrib* '*ayyu-hum* '*afḍalu!* "hit the one who is the best!" (*K*. I, 350.20–22).

Other cases are rather unexpected, for instance when $xamsata-^cašara$ is compared to the construction of annexed nouns in the vocative, as in $y\bar{a}$ bna

 $^{^3}$ See above, p. 46, about the glosses that made their way into al-Mubarrad's vulgate of Sībawayh's $Kit\bar{a}b$.

 $^{^4}$ Carter (1972b, 485) calls them *locus probans*, and Owens (1990a, 45) "cue word" and "archetypal member of [their] class".

⁵The generic negation $l\bar{a}$ operates on a noun in the dependent form deprived of $tanw\bar{n}n$, as in $l\bar{a}$ rajula $f\bar{i}$ d- $d\bar{a}ri$ "there is no man in the house". If the negated noun is separated from $l\bar{a}$ it takes the independent form and the $tanw\bar{n}n$, as in $l\bar{a}$ $f\bar{i}$ d- $d\bar{a}ri$ rajulun. Grammarians discuss the behaviour of the dual and plural final $n\bar{u}n$ in this construction. Compare $l\bar{a}$ $muslim\bar{n}na$ $f\bar{i}$ l- $mad\bar{i}nati$ "there are no Muslims in the city" to $l\bar{a}$ 'udunay la- $h\bar{a}$ "she has no ears". Lastly, the tanwin of the negated word is maintained if this word is followed by an explanatory word, as in $l\bar{a}$ $t\bar{a}li$ 'an $t\bar{a}$ $t\bar{a$

 $^{^6}$ See Baalbaki (2006, 239) for a detailed account of the expression $idrib~^2ayyu$ -hum afdalu! and the indeclinability of 2ayyu -.

'umma! "you, son of [my] mother" (M. IV, 251.3–4; 'U. I, 341.13–15; 380.5–6), or in the comparison with the intensive $n\bar{u}n$ in the verbs (M. III, 19.4–10).

Another famous case of a prime example is the expression 'išrūna dirhaman, which serves to represent a specific syntactic link between two nouns where the first term cannot be annexed to the second term for some reason and the second term is in the indefinite dependent form. Just like the morphological type xamsata—'ašara, this specific syntactic construction is simply referred to as the 'išrūna dirhaman-like construction. This is particularly true in the $Kit\bar{a}b$, where Carter (1972b, 490–495) has pointed out twenty-two such comparisons: with the $h\bar{a}l$ construction; 'inna (see also M. IV, 156.15–16); the maf ' $\bar{u}l$ lahu (see also 'U. I, 209.10–11); the dependent form of the μ ur μ f; the syntax of μ fam (see also μ fam (see

This way of using numerals as grammatical examples is not a problem per se. However, at some point the authors add grammatical information on an expression that has been first compared to the xamsata-'ašara compound type or to the 'išrūna dirhaman construction type in a chapter that is not devoted to numerals at all. In this case, one should carefully ask oneself whether the added information is retroactively valid for the whole class (and thus applicable to the prime example itself), or whether it is only valid for the specific case dealt with.

In the two cases mentioned above, numerals are used as prime examples outside chapters devoted to numerals. However, it should also be noticed that within numerals, $\underline{tal\bar{a}tah}$ (or sometimes xamsah) is used as a prime example for all numerals between "three" and "ten", 'išrūna is systematically used as the prime example for all the decades, and $\underline{tal\bar{a}tah}$ wa- $\underline{tal\bar{a}tana}$ is the prime example for the conjoined numerals between "twenty-one" and "ninety-nine". This means that everything that is said of xamsah should be valid for the other units (usually excluding "one" and "two"), everything that is said of 'išrūna applies to the other decades, and so on. It is thus clear that even at this simple level the reader has to go through a certain amount of extrapolation.

Of course, this way of dealing with grammatical examples is not specific to numerals and every reader of these grammatical treatises has already met Zayd who is either standing, departing, or beating his best enemy 'Amr, or the sound of the crow $(\dot{g}\bar{a}qi)$ which is used as the prime example of onomatopoeia.

Grammatical treatises tend to use the same prime examples. This clearly makes it easier for the reader to compare them and get to the point, but the other side of the coin is that the authors sometimes use the same prime examples to deal with different grammatical issues and the reader has to be very careful not to miss the point dealt with.

3.3 Grammatical tests

It is a well-known phenomenon that in classical grammatical treatises, grammarians "test" specific morphological and syntactic features by using a word in a specific context. It is as if the grammarians were asking themselves, "What happens if...?" Baalbaki (2008, 215–226) calls these tests "tools of checking the system validity". He mentions three "testing devices" in the *Kitāb*: "word formulation" or artificial word forging, which is a morphological test (Baalbaki 2008, 219–220), the proper noun test (220–224), and 'ilḥāq 'attachment', which consists in referring rare forms to attested ones in order no to multiply "basic rules" (224).

Next to the proper name test, there are other types of morphosyntactic tests, as well as syntactic and semantic tests.

3.3.1 Morphosyntactic tests

The case of the "proper name test" is maybe the most salient one. It is not certain that people would ever have been called *Darabta* (literally, "you hit") or *Kam* (lit., "how many"). However, grammarians spent quite some energy to find out what would happen to these words and expressions if they were to be called in the vocative or if one wanted to build their diminutive form.⁷

As almost any word in the language, numerals have been tested as proper names. The first obvious effect of this test is that they lose their numerical meaning. The aim of this test is for grammarians to see what remains of their initial morphology and what is lost. For example, since the relative adjective of the proper name $I\underline{t}n\bar{a}$ –' $A\check{s}ar$ is $I\underline{t}niyyun$ (and not * $I\underline{t}n\bar{a}$ –' $A\check{s}ariyyun$), it proves that the second part –' $A\check{s}ar$ still behaves as an added morpheme in the proper name $I\underline{t}n\bar{a}$ –' $A\check{s}ara$ (just like a $t\bar{a}$ ' $marb\bar{u}tah$, or a plural marker – $\bar{u}na$ or – $\bar{a}t$, or the $tanw\bar{u}n$).

⁷See Carter (1981/83) on the "proper name test". Carter draws up a list of no less than 14 morphological principles that al-Xalīl (d. 170/786) and Sībawayh (d. 180/796) apply to proper names: triliteralism, impossibility of the succession of four short vowels, integration into the Arabic morphological system, and so on (111–114).

In the opposite, the "mourning form" $(nudbah)^8$ of $I\underline{t}n\bar{a}-$ 'Ašar is $w\bar{a}$ $Tn\bar{a}-$ 'Ašarāh! (K. I, 281.12–13) (and not * $w\bar{a}$ $Tn\bar{a}h$!), which clearly shows that here the noun is treated as a whole.

Grammarians will then discuss the morphosyntactic frame in which to interpret this second part in $I\underline{t}n\bar{a}$ –'Ašar in a way that can consistently account for this behaviour in both cases, or in other words, which morpheme can be added to a noun, which must be elided in the relative adjective form but not in the mourning form?

Because of their varying morphological forms, numerals have been widely used in other morphological tests: What is the diminutive of $i\underline{t}n\bar{a}ni$, $\underline{t}al\bar{a}\underline{t}ah$, $\underline{s}ittah$, $\underline{t}am\bar{a}niyah$, $\underline{t}al\bar{a}\underline{t}\bar{u}na$, and so on? What is the vocative form of the proper name $\underline{T}al\bar{a}\underline{t}atun$ - $\underline{W}a-\underline{T}al\bar{a}\underline{t}\bar{u}na$? What relative adjective is built on $\underline{i}tn\bar{a}$ -'ašara? Are compound numerals still indeclinable when used as proper names? Does $\underline{t}al\bar{a}\underline{t}atun$ $\underline{w}a-\underline{t}al\bar{a}\underline{t}\bar{u}na$ behave the same way in the position of $\underline{m}ud\bar{a}f$, if it is a proper name, or if it means "thirty-three"?

3.3.2 Syntactic tests

Numerals are also used as syntactic testers (i.e., they reveal interesting syntactic rules when used in specific positions). For example, this is the case for the rule that stipulates that the masculine supersedes the feminine. Interestingly, all three grammarians, (Sībawayh, al-Mubarrad and Ibn as-Sarrāj), choose the chapter devoted to expressions of the type $x\bar{a}misu\ xamsatin$ "one of [a group of] five" and $x\bar{a}misu\ arba^atin$ "the one that completed a [group of] four and made it five" in order to mention and illustrate this rule.

Sībawayh is very clear that $h\bar{a}d\bar{a}$ $h\bar{a}d\bar{a}$ $ah\bar{a}da$ asara can refer to "one [masc.]" of [a group of] eleven [masc.]" where ten of them are females and one is a male (K. II, 178.22–23) and in the following expression: $huwa x\bar{a}misu arba'in$ "he is the fifth [masc.] of [a group of] four [fem.]", it is logical that "four" remains in the feminine if it refers to a group of four women to which a male is added (K. II, 178.24–179.1).

A similar example is given by al-Mubarrad in *M*. II, 182.2–3. *Rābiʿu ʾarbaʿatin* "one [masc.] of four [masc.]" applies in the case of a group of three women and one man. Ibn as-Sarrāj uses exactly the same example

^{*}This "mourning form" is built with the particle $w\bar{a}$ (sometimes $y\bar{a}$) before the name and the addition of a long 'alif at its end as in $w\bar{a}$ Zaydāh! "alas, Zayd!" For more details, see chapter 155 ($b\bar{a}b$ an-nudbah; K. I, 278–280).

 $^{^{9}\}mathrm{See}$ below, p. 132, for more details on these two types of expression, and p. 170, on gender agreement rules.

as Sībawayh in 'U. II, 427.2. He expresses this rule overtly by saying that al-'Arabu tuġallibu t-taḍkira 'iḍā xtalaṭa bi-l-mu'annaṭi¹¹ ("Arabs give the preference to the masculine if it is mixed with the feminine"; 'U. II, 427.4).

Numerals here are clearly used as syntactic testers in order to illustrate a rule, and this is because they generate clear gender conflicts.

Another interesting syntactic test is predication (' $ixb\bar{a}r$): What happens if the verb, the complement, the adverb, and so on, receives a predicate?¹¹ In the following Qur'ānic verse, al-Mubarrad (M. III, 104.6–8) interprets the independent form in nafxatun $w\bar{a}hidatun$ "one blast" as a case of $tawk\bar{l}d$ "emphasis", which is $ba'\bar{l}d$ "far-fetched" as opposed to the dependent form:¹²

And when the trumpet is blown with a single blast, ... (Q. 69, 13)

He modifies the sentence in order to make it a predicate of $a\varsigma-\varsigma\bar{u}r$: $al-manf\bar{u}xu$ $f\bar{\imath}-hi$ nafxatun $w\bar{a}hidatun$ $a\varsigma-\varsigma\bar{u}ru$ "what has been blown in it a single blast is the trumpet"; or to make it a predicate of an-nafxah: $al-manf\bar{u}xatu$ $f\bar{\imath}$ $\varsigma-\varsigma\bar{u}ri$ nafxatun $w\bar{a}hidatun$ "what has been blown in the trumpet is a single blast". He does this to prove that it is possible to predicate of an indefinite $ma\varsigma dar$ (nafxatun). The same verse is quoted by Ibn as-Sarrāj in a similar discussion on predication ('U. II, 297.20).

The predication test is also found in the 'Uṣ $\bar{u}l$. In the expression $h\bar{a}d\bar{a}$ $t\bar{a}litu$ $tal\bar{a}tatin$ "this is one of three", the $mud\bar{a}f$ 'ilayh can receive a predicate, as in $allad\bar{a}na$ $h\bar{a}d\bar{a}$ $t\bar{a}litu$ -hum $tal\bar{a}tatun$ "those of which this one is the third are three" ('U. II, 331.1–2). However, the same cannot be done with $h\bar{a}d\bar{a}$ $h\bar{a}d\bar{a}$ 'ahada–'ašara "this one is one of eleven" because in this case the first –'ašara has to be deleted¹³ and the only possible solution would be to say * $allad\bar{a}na$ $h\bar{a}d\bar{a}$ $h\bar{a}d\bar{i}$ -him 'ahada–'ašara, which does not convey the expected meaning ('u. II, 331.4).

In this case, the predication test reveals the specific behaviour of compound numerals, which cannot be in the position of $mud\bar{a}f$.

Baalbaki (2008, 215) says that Sībawayh does not use drills that became typical of later grammarians, such as *al-'ixbār bi-lladī* or *bi-l-'alif wa-l-lām*, he

¹ºAmund Bjørsnøs (University of Oslo) is currently working on the critical edition of Ibn as-Sarrāj's '*Uṣūl*. In a draft of his edition (p. 776), he follows the lesson of the Turkish manuscript Hacı Ağa 1077/2, fol. 136r., *bi-t-ta'nīt*.

¹¹See Carter (1995) for a presentation of these tests.

¹²The English translation of the Qur'anic verses are quoted from Shakir (1983).

¹³Instead of expected *hādā ḥādiya-'ašara 'aḥada-'ašara which would be too heavy.

adds that "the closest that Sībawayhi gets to this is the chapter on the relative or interrogative particle *ayy*, where he begins by examining relatively simple constructions beginning with *ayy*, such as *ayyu lladīna raʾayta fī l-dāri afḍalu*" ("which one of those whom you saw in the house is the best?"; Baalbaki 2008, 217).

3.3.3 Semantic tests

Lastly, numerals are also used as semantic testers. As an introduction to a chapter where various issues linked with *kam* "how many" are treated, al-Mubarrad comments on the following peculiar question: *kam talātatan sittatun 'illā talātatāni*? ("How many threes is 'six', if not two?"; *M.* III, 64.3), saying that *talātatan* is the *tamyīz* of *kam*; *sittatun* its *xabar*; and *talātatāni* its *badal* and that the meaning of the question is "which of the numerals is 'six' if not two threes?" ('ayyu šay'in min al-'adadi sittatun 'illā talātatāni?; *M.* III, 64.5).

Because of the clear meaning of numerals, there is no possible doubt on the meaning of the whole sentence, although it involves difficult syntactic features (kam, $tamy\bar{\imath}z$, ' $ill\bar{a}$ and $isti\underline{t}n\bar{a}$ ').

Another interesting case of a semantic test is al-Mubarrad's interpretation of the following Qur'ānic verse, which he quotes four times in the *Muqtaḍab* (for the agreement of the counted object: *M.* II, 158.1; for the syntax of *sawā*': *M.* III, 232.4; for a variant reading: *M.* IV, 304.12 and 305.1):

[...] in four periods: alike for the seekers (Q. 41, 10)

In *M*. III, 232.4, al-Mubarrad quotes this verse as an example of elision of the verb operating on its *maṣdar*.¹⁴ This elision is possible if there is something in the sentence that points out the meaning of the verb. Here, the presence of 'arba'ah "four" in the verse shows that the action actually took place ('anna qawla-hu 'arba'ah qad dalla 'alá 'anna-hā qad tammat; *M*. III, 232.4–5), this, probably because if it had not taken place, one would not know how many days it took. Because it is semantically unambiguous, the verb operating on

¹⁴In this use, this maṣdar corresponds to the later mafʿūl muṭlaq. According to Levin (1991, 917), the first occurrence of the expression mafʿūl muṭlaq is found in Ibn as-Sarrājʾs ʾUṣūl and Mūjaz. However, it is found only twice in the ʾUṣul, in the sectionsʾ titles (ʾU. I, 159.8; 11), and nowhere in the text itself, where Ibn as-Sarrāj uses the expression "maṣdar treated like a ḥūl̄r (maṣdarun yaqūmu maqāma ḥūlin). Could it be that a later editor has added the titles and the expression mafʿūl muṭlaq? Levin does not raise this question.

the *maṣdar* has been elided and the expression *sawāʾan* "alike" stands for the *maṣdar* in the expression *istawat istiwāʾan* "it is completely equivalent".

Ibn as-Sarrāj also comments on the question *kam talāṭatan sittatun 'illā ṭalāṭatāni?* ('U. I, 327.13) as well as on *kam 'išrūna xamsatan 'illā 'arba'u xamasātin?* "how many is twenty [in terms of] fives, if not four fives?" ('U. I, 327.17–18), where the specifier *xamsatan* is separated from *kam* by 'išrūna. Here, there is no possible doubt on the syntactic role of *xamsatan* because of the meaning of the whole expression.

In the sentences allaḍī la-hu 'indī mi'atu dirhamin 'illā dirhamayni "what I owe him is a hundred dirhams less two" and allaḍī la-hu 'indī mi'atun 'illā dirhamāni "what I owe him is a hundred dirhams not two" ('U. I, 304.7–8), numerals present no syntactic difficulty and the only reason why they are used is that their distinctive meaning immediately shows what is excluded from what. By saying that the equivalent of the first expression is "98 dirhams", Ibn as-Sarrāj confirms the meaning of the syntactic construction used, in a very simple way.

In the same manner, in the sentence la-ka 'alayya 'ašaratun 'illā xamsatan $m\bar{a}$ xalā dirhaman "I owe you ten [i.e., dirhams] less five but one dirham", he adds "i.e., six dirhams" ('U. I, 304.19–20) so that the meaning of each syntactic construction is clear. All three examples are found in a section of the 'Uṣ $\bar{u}l$, which is a collection of issues linked with the $istitn\bar{a}$ ' "exclusion".

Another example of a semantic test is found in the discussion of the expressions $l\bar{a}$ ' $\bar{a}t\bar{i}$ -ka ' $il\dot{a}$ ' $a\bar{s}rin$ min $a\bar{s}$ - $\bar{s}ahri$ and $l\bar{a}$ ' $a\bar{t}i$ -ka $hatt\dot{a}$ ' $a\bar{s}rin$ min $a\bar{s}$ - $\bar{s}ahri$ "I shall not come to you until the tenth of the month". Ibn as-Sarrāj contrasts this with ' $a\bar{t}i$ -ka $hatt\dot{a}$ ' $a\bar{s}rin$ min $a\bar{s}$ - $\bar{s}ahri$ "I shall come to you until the tenth of the month", i.e., "I come to you again and again until the tenth" ('U. I, 428.3–6). Ibn as-Sarrāj is probably making the point that the negative sentence is not the opposite of the affirmative sentence.

3.4 The testimony of canonised tradition

In addition to these occurrences of numerals, there are quotations of the Qur'ān, the $had\bar{t}$ and poetry that contain numerals and that are typically used as $\check{s}aw\bar{a}hid$ "witnesses" in order to prove a linguistic fact or to serve as counter examples (see Gilliot 1997). To this list, one should of course add the

language of "the Arabs" (individuals, tribes, etc.) which is quoted everywhere in grammatical works (Baalbaki 1985, 11).¹⁵

This obvious fact points to a phenomenon that has received much attention, namely the closure of the linguistic corpus (see above, p. 58). Grammarians tend to draw their examples from a limited pool of Qur'ānic, poetic and Bedouin "witnesses". In other words, it is as if the corpus of "witnesses" itself were canonised. Practically, they seem to function as "cruces" that grammarians have to comment on.

The relevance of doing so is evident. Just like the systematic use of the same prime examples, it enables a quick comparison between authors. However, a more detailed reading reveals that the same <code>šawāhid</code> are not always used to prove or illustrate the same point in grammar, and one may sometimes be misled by the use of a particular <code>šāhid</code> and miss the point because one reads it through the mirror of another grammarian's use.

In what follows, we shall present some typical examples (as found in our three texts) of $\check{s}aw\bar{a}hid$ related to numerals that come from the Qur'ān, the Prophetic traditions ($\dot{h}ad\bar{\iota}t$, pl. ' $a\dot{h}\bar{a}d\bar{\iota}t$), poetry and the language of the Arabs as canonised by the grammatical tradition.

3.4.1 From the Qur'an

Quotations from the Qur'ān are a source of linguistic data. However, our authors treat them quite differently. Altogether, there are 38 different verses containing numerals that are found in our texts. Out of these 38 verses, 21 are found in the $Kit\bar{a}b$, 31 in the Muqtadab and only 12 in the $U\bar{y}\bar{u}l$. Since the authors may quote the same verse more than once, these verses are actually found 23 times in the $Kit\bar{a}b$, 39 times in the Muqtadab and 13 times in the $U\bar{y}\bar{u}l$.

¹⁵See Baalbaki (2008, 35–47) for an account of these "attested data" in the *Kitāb*. He says that "a rough estimate on the basis of Hārūn's indices of the *Kitāb* reveals that Sībawayhi's *šawāhid* (pl. of *šāhid*; lit. evidence, proof) include about 1050 lines of poetry, 447 Qur'ānic verses, 350 speech patterns or idiomatic expressions and 41 proverbs" (Baalbaki 2008, 37). This is not comparable to the improbable 9.735 "sentences" which Yāqūt (1992) says Sībawayh analyses in the *Kitāb*, as quoted by Sara (2007, 3) and Marogy (2010, 30). See Larcher (2011, 121–122) for a review of Baalbaki (2008) on the issues of *samā* 'and *luġat al-Ḥijāz*, which, Larcher says, is not a Bedouin dialect but a conventional name for the language of the *Qur'ān*.

¹⁶See the list in the annex.

 $^{^{17}}$ 39 if one adds Q. 41, 6, which is the same as Q. 18, 110; 41 if one considers separately the verses Q. 112, 1 and 2, which are quoted together, and Q. 92, 19 and 20, which are also quoted together.

One can therefore say that al-Mubarrad tends to quote the Sacred Book almost twice as much as Sībawayh (39 times, compared to 23 in the $Kit\bar{a}b$). He often quotes a verse only to provide linguistic evidence, and not to analyse it. He relies on the $Kit\bar{a}b$ for almost half of these quotations (13 out of 31 different verses) and provides 18 new verses.

This impression is confirmed by the total number of Qur'ānic quotations found in the *Kitāb* and the *Muqtaḍab*. According to Hārūn's table, Sībawayh quotes 417 different verses (488 quotations altogether)¹⁸ whereas al-Mubarrad quotes 617 different verses (832 quotations altogether).¹⁹

Ibn as-Sarrāj has a quite different stand towards the Qur'ān, which he quotes far less than his predecessors (13 times, compared to 23 times in the *Kitāb* and 39 in the *Muqtaḍab*, for the only verses containing numerals). Almost all these verses are already found in the *Kitāb* (11 out of 12 different verses) and the last verse is found in the *Muqtaḍab*, which means that Ibn as-Sarrāj does not add new verses to the corpus. This impression is also confirmed by a general count of Qur'ānic quotations in the 'Uṣūl, according to aṭ-Ṭanāḥī's tables: 302 different verses are quoted 364 times altogether.

Out of these 38 different verses containing numerals, six are quoted for their variant readings (*Q*. 6, 160 in *M*. II, 185.9; *Q*. 11, 81 in *M*. IV, 395.10; *Q*. 23, 52 in *K*. I, 247.10–11; *Q*. 31.27 in *K*. I, 246.4–5 and '*U*. I, 249.12–13; *Q*. 41, 10 in *K*. I, 236.4 and *M*. IV, 305.1; *Q*. 112, 1 in *M*. II, 314.2).

Only seven of these 38 verses are common to all three treatises (Q. 2, 228; 6, 160; 7, 155; 23, 52; 72, 18; 112, 1; 4). These seven verses are quoted for the same grammatical reason in each treatise, except for Q. 7, 155 which is an interesting case:

And Musa chose out of his people seventy men for Our appointment (Q. 7, 155)

This verse is quoted by Sībawayh (*K.* I, 12.15) as an example of a doubly transitive verb, just like 'a'ṭá "to give" and kasā "to dress", whereas al-Mubarrad and Ibn as-Sarrāj quote it as a case of elision of a particle (qawma-hu instead of min qawmi-hi) which puts the majrūr (qawm) in the position of maf'ūl (*M.* II, 321.5; 342.10; '*U.* I, 178.1–2). Sībawayh mentions the elision of the particle as a possible underlying interpretation but still regards these

¹⁸The discrepancy with Baalbaki's count can probably be explained with the fact that in some cases Hārūn considers a single word to be a Qur'ānic quotation. Maybe these were not taken into account by Baalbaki, who does not say if his count includes repeated verses or not.

¹⁹Our count is based on 'Udaymah's tables.

verbs as doubly transitive ('Ibādah 2002, 28). This example is a case where the same verse receives different interpretations and too quick of a reading would have one miss the real point of Sībawayh by assimilating it into the later tradition.

The case of Q. 112, 1–2 is also worth noticing:

Say: He, Allah, is One. Allah is He on Whom all depend (Q. 112, 1-2)

None of our authors mentions it as a use of 'aḥad in an isolated form where wāḥid would be expected.²⁰ Indeed, as will be made clear later on, 'aḥad is either found in the position of muḍāf ('aḥadu r-rijāli "one of the men"), in conjoined numerals ('aḥadun wa-'išrūna "twenty-one"), or in negative sentences where it means "nobody", as in lam 'ara 'aḥadan "I saw nobody". It is never found alone in a positive sentence meaning "one", as here in Q. 112, 1.

Instead, they quote this verse because of the problematic pronunciation of the *tanwīn* in 'aḥadun with the following 'alif waṣl in al-Lāh (K. II, 298.16; M. II, 314.2; 315.11–12; 'U. II, 369.14); al-Mubarrad is the only one to mention a variant reading, i.e., the elision of the *tanwīn* in 'aḥadun.

Other cases deal more directly with the grammar of numerals, as in the following verse, which is a typical crux in the grammar of numerals in the Qur'ān:²¹

And they remained in their cave three hundred years and (some) add (another) nine (Q. 18, 25)

Here, the expression <u>talāta</u> mi'atin sinīna²² is unexpected and al-Mubarrad interprets sinīna as a badal of <u>talāta</u> mi'atin (M. II, 171.4) saying that it is not correct to read it as <u>talāta</u> mi'ati sinīna, as some Qur'ānic readers do by annexing <u>talāta</u> mi'ati to sinīna (M. II, 171.8). This verse is not quoted by Ibn

²⁰Cf. Howell (1883/2003, IV, 1424).

²¹Cf. Howell (1883/2003, IV, 1451-1453).

²²We chose to transliterate numerals between *talātu mi'atin* and *tis'u mi'atin* in two words and without a hyphen because they are never considered as compounds by our authors but as an 'idāfah construction where mi'ah is treated as a counted object. See below, p. 181. This corresponds to the Qur'ānic orthography as well. Cf. Wright (1967, I, 258; §325, rem. b) and Howell (1883/2003, IV, 1447) on the spelling of hundreds in one word.

as-Sarrāj, who instead quotes the poetic line 'idā 'āša l-fatá mi'atayni 'āman "if the boy lived two hundred years" ('U. I, 312.14) saying that in poetry one may find a noun in the indefinite dependent form after "one hundred".²³

Verses can also be quoted only to confirm the meaning of an expression, as is the case with expressions of the type $r\bar{a}bi'u$ 'arba'atin "one of four" (M. II, 181.3) and $r\bar{a}bi'u$ talāṭatin "the fourth of three" (i.e., "the one that completed [a group of] three and made it four"; M. II, 181.7). Since the meaning of these expressions is not obvious—or at least to show that they are very different—al-Mubarrad quotes Qur'ānic verses with two examples of each (M. II, 181.4–5.8–9):²⁴

[...] when those who disbelieved expelled him, he being the second of the two (Q. 9, 40) Certainly they disbelieve who say: Surely Allah is the third (person) of the three (Q. 5, 73)

As for the expressions of the second type he quotes:

Nowhere is there a secret counsel between three persons but He is the fourth of them, nor (between) five but He is the sixth of them (*Q*. 58, 7)

(Some) say: (They are) three, the fourth of them being their dog (Q. 18, 22)

It also occurs that variant readings are quoted, ²⁵ as in the Qur'ānic $man j\bar{a}$ a bi-l- $hasan\bar{a}ti$ fa-la-hu ' $a\bar{s}ru$ ' $amt\bar{a}li$ - $h\bar{a}$ ("he shall have ten like it"; Q. 6, 160; M. II, 185.8) that is also sometimes read fa-la-hu ' $a\bar{s}run$ ' $amt\bar{a}lu$ - $h\bar{a}$. This is a reading, which he says "linguists prefer" (fa- $h\bar{a}dihi$ l- $qir\bar{a}$ 'atu l- $muxt\bar{a}ratu$ 'inda 'ahli l-lugati; M. II, 185.9).

This verse is quoted in a discussion about the annexation of a numeral to a qualifier, which is "ugly" ($qab\bar{\imath}h$; M. II, 185.6) except if this qualifier "resembles the noun and comes at its place" ($mud\bar{a}ri^{\iota}un\ li-l$ -ismi $w\bar{a}qi^{\iota}un\ mawqi^{\iota}a$ -hu; M. II, 185.5) as is the case with ' $amt\bar{a}l$ in the verse quoted. Interestingly, al-Mubarrad says that he prefers the reading where the numeral is not annexed.

²³See Jum'ah (1980, 438-439).

²⁴See below, p. 132, for more details on these expressions.

²⁵See Baalbaki (1985) on the treatment of Qur'ānic variant readings by early grammarians.

The same verse is also used in M. II, 149.1 as evidence of a masculine noun (${}^{2}am\underline{t}al$) referring to a feminine (${}^{4}asana\overline{t}$) and is thus treated as a feminine (${}^{4}asru$ is the form used with feminine nouns). The same comment on the same verse is found in Ibn as-Sarraj (${}^{2}U$. III, 477.5–6).

Curiously, Q. 7, 160 is not quoted in our texts, although it contains an interesting case of a plural counted object used after a compound numeral:²⁶

And We divided them into twelve tribes, as nations (Q. 7, 160)

3.4.2 From the Prophetic traditions

There are no explicit quotations from the Prophetic tradition in Sībawayh's *Kitāb*, although the study of *ḥadīt* is said to have been his first aim, as Carter (1973b, 302) puts it, "Sībawayhi quitta sa Šīrāz natale avec l'intention primitive d'étudier le *ḥadīt*".²⁷ However, in the tables of his edition Hārūn (1966–1977, V, 32) mentions seven Prophetic traditions. In the *Muqtaḍab*, 'Uḍaymah does not provide a table of 'aḥādīt and does not point out the only case where a *ḥadīt* is explicitly quoted by al-Mubarrad (*M.* II, 184.5–6). As for the 'Uṣūl, aṭ-Ṭanāḥī (1986, 35) mentions three 'aḥādīt in his tables, one of which is explicitly quoted as such by Ibn as-Sarrāj ('U. I, 401.1–2).

It is generally accepted that the first one to have elevated the Prophetic traditions to a canonical status is aš-Šāfiʿī (d. 204/820), and among his opponents were the Muʿtazilites (Carter 1973b, 67). This formation period corresponds to the period when Sībawayh's $Kit\bar{a}b$ was produced, which means that both the Muqtadab and the \dot{U} \$\tilde{y}ull where written well after the Prophetic traditions had acquired a canonical status.

However, according to the Andalusian grammarian Ibn aḍ-Ḍā'i (d. 680/1281), the first grammarian who used <code>ḥadīt</code> as a linguistic source is Ibn Xarūf (d. 609/1212). This common opinion is challenged by al-Ḥadīt̄ (1981, 423–427), whose aim is to prove that the recourse to <code>ḥadīt</code> is as old as grammar itself, altough quotations may be few and implicit.

²⁶Cf. Howell (1883/2003, IV, 1438-1439; 1449-1450).

²⁷Carter quotes az-Zubaydī's (d. 379/989) *Ṭabaqāt an-naḥwiyyīn*, 66. Az-Zubaydī quotes 'Abū 'Alī [l-Qālī] l-Baġdādī (d. 356/967), whom Carter mistakingly identifies with al-Xaṭīb al-Baġdādī (d. 463/1071), who also mentions Sībawayh, in his *Tārīx Baġdād*, XII, 195.

The absence of explicit Prophetic traditions in the *Kitāb* and the early grammar works has raised questions among Islamic scholars. This is especially true of Salafī scholars for whom this absence is apparently problematic. 'Abū Ḥātim Bin 'Āšūr published a paper on the web portal al-'Alūkah²⁸ where he collects as many as 46 implicit references to Prophetic traditions in the *Kitāb*.

In the Kitāb

If one considers the 46 cases pointed out by Bin 'Āšūr, it is clear that the fact that Sībawayh quotes expressions found in the enormous $had\bar{\imath}t$ corpus does by no way mean that he actually intends a specific $had\bar{\imath}t$. This applies to short expressions such as fa-bi- $h\bar{a}$ wa-ni'mat "in that case it's all right" ($N_{\rm P}$ 7 in Bin 'Āšūr's list; K. II, 279.6). Other examples of common expressions in the language of the Arabs that are also found in the Prophetic traditions (and which Bin 'Āšūr pretends are "quoted" in the $Kit\bar{a}b$ as ' $ah\bar{a}d\bar{\imath}t$) are hayya ' $al\hat{a}$ s- $sal\bar{a}h$ "come to prayer!" ($N_{\rm P}$ 12, K. II, 48.6; see al-Ḥadītī 1981, 73) and $ibh\bar{a}rra$ l-laylu "the night is dazzling [out of darkness]" ($N_{\rm P}$ 15; K. II, 257.10;12). Altogether, the supposed ' $ah\bar{a}d\bar{\imath}t$ that are five words or less (and are thus difficult not to be considered as mere idiomatic expressions) make up 38 out of the 46 cases.

Some of the eight other cases (№ 1, 2, 3, 6, 8, 10, 11 and 13) are more convincing, such as the following, which is the only one to contain a numeral:

There is no day that God, powerful and glorious, loves more than the tenth of Dū l-Hijjah for fasting (№ 1; K. I, 199.14; see al-Hadīṭī 1981, 56).

In the Muqtadab

As for the *Muqtaḍab*, 'Uḍaymah does not mention any *ḥadīṭ* in the tables, nor does he point out the following phrase, which is interesting because it contains the verb 'ālafa "to make something a thousand" (Form IV) and because al-Mubarrad introduces it with the expression *wa-jā'a fī l-ḥadīṭ*²⁹ "and we find in the *ḥadīṭ*" (see al-Hadīṭī 1981, 93):

²⁸http://majles.alukah.net/showthread.php?t=54941 retrieved on September 6th, 2012.

²⁹In the *Muqtaḍab*, the word *ḥadīṭ* is used with the same religious meaning only in *M.* IV, 254.5–6; although, as 'Udaymah points it, it refers to a *xabar*, not a *ḥadīṭ*.

The first living being who made a group of a thousand with the Prophet of God, peace and blessing of God be upon him, is [the tribe] of Juhaynah and after them the Banū Sulaym (*M.* II, 184.5–6).

This <code>hadīt</code> is found in the canonical collections, although in a different textual form: <code>haddatanā</code> 'Abd ar-Raḥīm b. Sulaymān 'an Zakariyyā' qāla: 'awwalu man 'allafa bayna l-qabā'ili ma'a Rasūli l-Lāhi ṣallá l-Lāhu 'alay-hi wa-sallam Juhaynah "Zakariyyā' told 'Abd Allāhi b. Sulaymān who told us that the first tribe who made a group of a thousand with the Prophet of God, peace and blessing of God be upon him, is Juhaynah" (Muṣannaf VIII, 329, #36). Here, Form II is used in the verb 'allafa instead of Form IV 'ālafa.

If one goes back to the list of potential 'aḥādīt in the Kitāb established by Bin 'Āšūr, there are a few more phrases that are also found in the Muqtaḍab such as № 1 quoted above (M. III, 250.3, see al-Ḥadīt 1981, 57; 91), № 6, 'innī 'abdu l-Lāhi [...] 'ākilan kamā ya'kulu l-'abdu "indeed I'm the slave of God, eating just like a slave eats" (K. I, 219.10–11; M. IV, 311.3–4; see al-Ḥadīt 1981, 60; 93), and № 10, lā ḥawla wa-lā quwwata 'illā bi-l-Lāhi "there is no power and no strength save in God" (K. I, 308.18; M. IV, 371.1–2; 387.9). Altogether, al-Ḥadīt (1981, 97) mentions thirteen quotations of 'aḥādīt in the Muqtaḍab.

In the 'Uṣūl

In the case of the 'Uṣūl, aṭ-Ṭanāḥī (1986, 35) mentions three 'aḥādīṭ in his tables: Bin 'Āšūr's № 1 ('U. I, 131.9–10; II, 44.14–15; 18–19; see al-Ḥadīṭī 1981, 91; 100), № 9, labbayka 'inna l-ḥamda wa-n-ni'mata la-ka "here I am, indeed praise and grace are yours!" (K. I, 413.16; 'U. I, 272.1; see al-Ḥadīṭī 1981, 104–105), and a third one, which is found only in the 'Uṣūl, 'a-ra'ayta man lā 'akala wa-lā šariba wa-lā ṣāḥa fa-stahalla "have you seen whom who does not eat nor drink nor shout ever raise his voice?" ('U. I, 401.1–2; see al-Ḥadīṭī 1981, 107). This last ḥadīṭ is the only one of the three to be introduced by the expression qawlu n-nabiyyi "saying of the Prophet".

Lastly, the following two expressions listed by Bin 'Āšūr are also found in the 'Uṣūl (but not in aṭ-Ṭanāḥī 1986, 35): № 10 quoted above ('U. I, 386.9; 11) and № 11 (which is also found in the Kitāb), an-nāsu majziyyūna bi-'a'māli-him 'in xayran fa-xayrun wa-'in šarran fa-šarrun "people are retributed according to their deeds, if good then good and if bad then bad" (K. I, 109.21–22; 'U. II, 232.8–9; 248.1–2; see al-Ḥadīṭī 1981, 71; 106).

In conclusion, there are only two 'aḥādīt that contain a numeral in our texts: $m\bar{a}$ min 'ayyāmin 'aḥabba 'ilá l- $L\bar{a}hi$... (\mathbb{N}° 1; K. I, 199.14; M. III, 250.3; 'U. I, 131.9–10; II, 44.14–15; 18–19) and 'awwalu ḥayyin 'ālafa ma'a Rasūli l- $L\bar{a}hi$... (M. II, 184.5–6).

3.4.3 From poetry

Altogether, we found 38 different poetic quotations that contain numerals in our three grammatical treatises. Since some of these quotations contain more than one line, the total number of lines is 43. Out of these 38 different poetic quotations, 25 are found in the $Kit\bar{a}b$ (29 in total, since four of them are repeated), 22 (25) in the Muqtadab, and only 14 (17) in the $U\bar{y}ul$. Out of these 38 different quotations, only 8 are common to all three treatises.

Half of the 22 poetic quotations found in the Muqtadab are also found in the $Kit\bar{a}b$ (13 out of 22); al-Mubarrad provides the rest (9 out of 22).

As for the ${}^{\prime}U_{5}\bar{u}l$, almost all its poetic quotations are already found in the $Kit\bar{a}b$ (10 out of 14); the last four being unique to the ${}^{\prime}U_{5}\bar{u}l$ (i.e., not found in the $Muqta\dot{q}ab$).

Sībawayh comments on the following poetic line by al-'Ajjāj (d. 90/708):

xawwá^a 'alá mustawayātin xamsin / kirkiratin wa-tafinātin mulsin.

It [the camel] laid down on five [equal] levels / the chest and [the four other] bald callosities (K. I, 183.2).

His commentary states that "this" can be either considered a na't or a badal. It is not clear what exactly is meant here by "this". It could mean either xams, kirkirah or $\underline{t}afin\bar{a}t$, or all three. However, the two probable interpretations are either that xams is an ism in the function of badal or that it is an ism treated like a sifah in the function of na't.

Sībawayh also quotes the following poetic line:

Ka-'anna xuşyay-hi min at-tadalduli / darfu 'ajūzin fī-hi tintā ḥandalin.

As if his testicles, because of the dangling, / [were] the bag of an old woman with two colocynths in it (K. II, 182.18).

The expression <u>tintā ḥanḍalin</u> "two colocinths", which is used here as a grammatical proof, is a case where the numeral "two" is annexed to a

^a Manuscript A mistakingly reads ḥawwá.

³⁰See the complete list in annex.

collective noun instead of the expected <u>tintāni min al-ḥanḍali</u> or the even better <u>hanḍalatāni</u>, possibly followed by the adjective <u>tintāni</u>.

The same line is also quoted by al-Mubarrad (in a slightly different version; *M*. II, 156.3) to confirm his position that the dual is a subcase of the plural and that its use is a secondary form as compared to the annexation, although this is valid only in poetry. It is interesting to note that the analogical form (annexation) is tolerated here as poetic license and that the secondary form (the dual) is the one that is actually used.³¹ This poetic line is not quoted by Ibn as-Sarrāj.

Another case is the following line by al-'A'šá (d. 7/629):

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fī jubbin tamānīna qāmatan in an eighty fathom [deep] well (K. I, 18).
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Sībawayh quotes this line as a counterexample of the adjectival use of nouns. The general rule is as follows: In *marartu bi-ḥayyatin dirāʿun ṭūlu-hā* "I passed by a cubit-long snake" (K. I, 197.14) the noun dirāʿ occupies an adjectival slot but it remains in the independent form because it is not an adjective.

The same poetic line is quoted by Ibn as-Sarrāj in '*U*. II, 27.21 as an example of a noun used in an adjectival slot. The difference with Sībawayh is that it is not a counterexample; it is only later in the text that Ibn as-Sarrāj mentions Sībawayh's view that the oblique form is less common ('*U*. I, 28.4–5). Al-Mubarrad does not quote this line.

In other words, authors quote the same poetic lines to serve different purposes and only an attentive reading can prevent the reader from believing that since the "witness" is the same, it serves the same purpose.

3.4.4 From the canonised language of the Arabs

Needless to say, the same remarks that were made in the previous section are valid for "witnesses" that are taken from the language of the Arabs, or more precisely by the expressions in the language of the Arabs, which the grammatical tradition has practically canonised. Some of them could be considered as idioms, or everyday language, whereas for others it is difficult to know whether they are fabricated or not.

³¹See Ayoub (1990) on this paradox.

Indeed, it is very striking that all three authors (and later grammarians as well) constantly seem to draw these examples from the same pool of quotations. This fact creates a strong impression of uniformity between the grammatical works, and they clearly function as "cruces" that grammarians have to comment on.

A more in-depth look at these quotations is not an easy task because of their great number and because one has to decide whether small variations between two quotations should be counted as two separate entries or as the same quotation. The following remarks are based on a quick survey of more than 70 different quotations related to the grammar of numerals taken from our three grammar treatises. This survey is by no means systematic or comprehensive, but it gives a first impression of how our grammarians handle these quotations.

Out of these 70 different quotations, almost 40 are found in the $Kit\bar{a}b$, 30 in the Muqtadab and 50 in the ${}^{\prime}U\bar{y}\bar{u}l$. Only ten of them are common to all three treatises. While only eight are common to the $Kit\bar{a}b$ and the Muqtadab, and seven are common to the Muqtadab and the ${}^{\prime}U\bar{y}\bar{u}l$, there are 15 quotations that are common to the $Kit\bar{a}b$ and the ${}^{\prime}U\bar{y}\bar{u}l$. Another interesting fact is the number of quotations that are proper to only one treatise: Seven of the 70 different quotations are found only in the $Kit\bar{a}b$, seven in the Muqtadab, and twenty in the ${}^{\prime}U\bar{y}\bar{u}l$.

The impression that these three treatises draw their grammatical examples from the same pool of quotations can thus be slightly corrected. This is certainly true for the relationship between both the Muqtadab and the $U s \bar{u} l$ with the $Kit\bar{a}b$, however it is not true for the relationship between the $U s \bar{u} l$ and the Muqtadab.

Both the Muqtadab and the $U s\bar{u}l$ rely on the $Kit\bar{a}b$ for half of their quotations. However, in the case of the $U s\bar{u}l$, its second half is largely unique and is not found in the Muqtadab. Only seven quotations of this second half are found in the Muqtadab. In other words, what has already be noticed for the Qur'ānic and poetic quotations is also true for the general language quotations. The $U s\bar{u}l$ relies either on the $Kit\bar{a}b$ or on unique sources for its quotations, but not on the Muqtadab.

Roughly speaking, one can say that the *Muqtaḍab* relies on the *Kitāb* for half of its quotations (Qurʾānic, poetic or general language); and if compared to the *Kitāb*, it quotes more Qurʾān, the same amount of poetry, and less general language. As for the ʾUṣūl, it relies much more on quotations from general language and less on the Qurʾān and poetry than the two other treatises.

Here are only a few of the very numerous "witnesses" taken from the language of the Arabs. We will come across them throughout this study. Among the quotations that are common to all three texts, the following may be mentioned: humā xayru tnayni fī n-nāsi "they are the best two of the people" (K. I, 86.5-6; M. III, 34.9; 'U. I, 222.13: hādā xayru...); marartu bi-him talātata-hum "I passed by the three of them" (K. I, 157.6; M. III, 239.5; 'U. I, 165.5; II, 22.9–10); 'afradtu-hum 'ifrādan "I isolated them completely" (K. I. 157.11; M. III, 239.6-7: 'afradtu-hu bi-murūrī 'ifrādan; 'U. II, 22.15-16: 'afradtuhu 'ifrādan); la-hu xamsun min al-ġanami dukūrun "he has five [fem.] [heads] of male livestock" (K. II, 179.9; M. II, 186.7: 'indī talātun...; 'U. II, 428.5: la-hu talātatu dukūrin min al-ġanami); mā kāna 'ahadun mitla-ka "there was no one like you" (K. I, 20.10; M. IV, 90.4; 'U. I, 84.2; 85.10); talātatu šusū'in "three sandal thongs" (K. II, 185.12; M. II, 160.6; 'U. II, 430.8-9); talātatun 'atwāban "three [in terms of] dresses" (K. I, 257.23; M. II, 168.14; 'U. I, 324.5; 9: 'indī xamsatun 'atwāban); huwa nasīju wahdi-hi "he is one of a kind" (K. I, 159.3; M. III, 242.4: hādā nasīju...; 'U. I, 166.7); wulida la-hu sittūna 'āman "[a child] was born to him [while he was] sixty years [old]" (K. I, 75.5; 88.12–13; 93.19; 97.15–16; M. III, 105.4; 'U. I, 194.3; II, 255.10-11).

Other expressions that are not common to all three treatises are worth noticing: marartu bi-rajulin mi'atun (or mi'atin) 'iblu-hu "I passed by a man whose camels are a hundred" (K. I, 197.15; 198.4; 'U. II, 28.3); 'axaḍa Banū Fulānin min Banī Fulānin 'iblan mi'atan "the So-and-so took a hundred camels from the So-and-so" (K. I, 197.16; 'U. II, 27.19–20); hā'ulā'i talāṭatun qurašiyyūna "those are three Qurayshites" (K. II, 181.9; 'U. II, 429.11); la-ka mi'atun bayḍan³² "there are a hundred helmets for you" (K. I, 251.22; K. I, 232.19; 262.3: 'alay-hi mi'atun...; 'U. I, 322.5); ḍuriba bi-Zaydin 'išrūna sawṭan "because of Zayd he was beaten twenty lashes" (M. IV, 51.15; 'U. I, 79.12: min 'ajli Zaydin); hāḍihi 'išrū-ka "these are your twenty" (M. II, 178.3–4; IV, 30.17; 'U. III, 263.6); hāḍihi 'išriy-ya "these are my twenty" (M. IV, 249.1; 'U. III, 263.6).

Finally, the following are expressions that are found only in one of the three texts studied and which are thus unique to their authors: $h\bar{a}d\bar{a}$ ṣawtu kilābin "this is the voice of dogs" (K. II, 182.16); $h\bar{a}$ 'ulā'i niswatun 'arba'un "these are four women" (M. III, 341.4); darabtu Zaydan mi'ata sawṭin "I beat Zayd a hundred lashes" (M. IV, 51.9); alladī la-hu 'indī mi'atu dirhamin 'illā dirhamayni (or dirhamāni) "what I owe him is a hundred dirhams less two

 $^{^{32}}$ In K. I, 232.19 and 262.3 Derenbourg vocalises $b\bar{\imath}dan$, whereas in K. I, 251.22 he vocalises baydan. It seems that the singular baydan is better because it corresponds to the singular of dirhaman in ' $i\bar{s}r\bar{u}na$ dirhaman. Since ايضا has to be a singular in this slot, it can only correspond to the noncount form of baydah "egg, helmet, white truffle" which is vocalised bayd, not the plural form of 'abyad "white man" and "sword" which is $b\bar{\imath}d$ (Lane 1863–1893/1955–1956, I, 282–284).

(or 'not two')" ('U. I, 304.7–8); marartu bi-rajulin maqtū'i 'iḥdá l-'uḍunayni "I passed by a man one of whose ears was cut off" ('U. II, 16.21–22).

From the perspective of the modern reader, all these quotations belong to general grammatical knowledge and should be treated with caution since one risks to misinterpret them due to a feeling of *déjà vu*, as was the case with the previous types of "witnesses" mentioned above.

3.5 Extrapolation

The last of the five different methods to collect grammatical information on numerals is extrapolation. In many cases, the texts do not explicitly address issues linked with numerals, and one can only try to guess what the opinion of the author is. It could either be that the author considers this issue to be self-evident, or that he quotes the opinion of another grammarian whom he trusts and whose opinion he endorses. In some cases, we could also suppose that he is avoiding the issue.

3.5.1 The gender of numerals

A particularly clear example of a rule not explicitly mentioned is the question of the gender of numerals, which is traditionally tackled as follows. What is the morphological link between the two forms of the cardinals between "three" and "ten" when used before feminine and masculine nouns (talat vs. talatat)? In other words, is the form carrying the feminine marker derived from the other form? Or is it the other way round? Or any other link?

In the $Kit\bar{a}b$'s chapter 368, Sībawayh quotes Yūnus' (d. 182/798) opinion that the $t\bar{a}$ ' $marb\bar{u}tah$ has been added to the feminine $tal\bar{a}t$ in order to build the masculine form $tal\bar{a}tah$ (K. II, 119.6–10). At this point, Sībawayh does not mention his own point of view, which he reveals no less than 44 chapters later, in chapter 412, where he writes that all numerals between "three" and "ten" are feminine, even if they do not show the feminine final $h\bar{a}$ ', which they lose before feminine nouns (K. II, 176.13–18). He does not say why this feminine marker should be erased before a feminine noun. One can just infer—based on Sībawayh's other similar teachings—that it would be too heavy, but this last point is a supposition. It should be also noticed that Sībawayh does not refute Yūnus explicitly, neither in chapter 368 not in chapter 412. The attentive reader can only notice that Sībawayh's teaching is not compatible with Yūnus'.

Sībawayh's teaching is quoted word for word by Ibn as-Sarrāj in his $U_{\bar{y}\bar{u}l}$, with a remarkable difference. Compare the following two texts:

(١) اعلم أنّ ما جاوز الاثنين إلى العشرة ممّا واحده مذكّر فإنّ الأسماء الّتي تبيّن بها عدّته مؤنّة فيها الهاء الّتي هي علامة التأنيث وذلك قولك له ثلاثةُ بنينَ [...] وإن كان الواحد مؤنّة فيها الهاء التي هي علامة التأنيث وذلك فإنّك تخرج هذه الهاءات من هذه الأسماء وتكون مؤنّة ليست فيها علامة التأنيث وذلك قولك ثلاث بناتٍ (في الكتاب ٢، ١٧٦. ١٦-١٨).

(٢) فإذا جاوز الاثنين فيما واحده مذكر فإن أسماء العدد مؤنثة فيها الهاء وذلك ثلاثةُ بنينَ
 [...] فإن كان واحده مؤنثا أخرجت الهاء وذلك قولك ثلاثُ بناتٍ (في الأصول ٢، ٤٢٤.
 ١-١٥).

- (1) Know that what is above two until ten and whose singular is masculine, the noun that specifies its number is feminine and carries the feminine marker $h\bar{a}$ as in la-hu $\underline{tal\bar{a}tatu\ ban\bar{t}na}$ [...] and if the singular is feminine, you remove these $h\bar{a}$ at from these nouns, which are then feminine without a feminine marker, as in $\underline{tal\bar{a}tu\ ban\bar{a}tin}$ (K. II, 176.13–18).
- (2) And if it is above two and its singular is masculine, the numeral nouns are feminine, with the $h\bar{a}$ as in $\underline{tal\bar{a}tatu\ ban\bar{t}na}\ [...]$ and if its singular is feminine, you remove the $h\bar{a}$, as in $\underline{tal\bar{a}tu\ ban\bar{a}tin}$ ($U.\ II,\ 424.9-11$).

The most striking difference between the two quotations lies in the absence of the phrase $wa\text{-}tak\bar{u}nu$ $mu'anna\underline{t}atan$ laysat $f\bar{\imath}$ - $h\bar{a}$ ' $al\bar{a}matu$ t- $ta'n\bar{\imath}t\bar{\imath}$ "which are then feminine without a feminine marker" in (2). One could not be clearer about the gender of $\underline{t}al\bar{a}\underline{t}$. So the question is: Should (2) be understood as a short recension of (1), meaning that the silence in (2) should be filled by (1), or is the silence in (2) the expression of a different grammatical opinion? The former is probably the most logical answer because it is improbable that Ibn as-Sarr \bar{a} j would remain silent on a difference in opinion. Yet, this is a very clear example of an extrapolation of meaning in the ' $U\bar{\imath}u\bar{l}$.

In his Muqtadab, al-Mubarrad does not discuss Sībawayh's teaching overtly but he explains that the $h\bar{a}$ ' at-ta' $n\bar{t}\underline{t}$ in numerals used before masculine counted objects is part of the masculine pattern of the numeral, just like in $nass\bar{a}bah$ "genealogist"; it was not "added" to the numeral like it is added in $d\bar{a}ribah$. Numerals that do not carry the $h\bar{a}$ ' at-ta' $n\bar{t}\underline{t}$ are annexed to feminine nouns (M. II, 157.8–12). Just like Sībawayh, al-Mubarrad does not mention why this $h\bar{a}$ ' at-ta' $n\bar{t}\underline{t}$ should be deleted before feminine nouns.

The teaching of al-Mubarrad is found in one single chapter. It contradicts Sībawayh's teaching on the question of the gender of numerals (for al-Mubarrad, $tal\bar{a}tah$ is masculine just like $nass\bar{a}bah$, whereas for Sībawayh all numerals are feminine); on the other hand both authors agree on the fact that the final $h\bar{a}$ is deleted before feminine nouns, without giving any reason;

lastly, it is impossible to say whether al-Mubarrad still considers $\underline{t}al\bar{a}\underline{t}$ to be masculine after the elision of the final $h\bar{a}$ or if he considers it to be feminine. Our hypothesis is that he would still regard them as masculine because there is no reason why the elision of the final $h\bar{a}$ should change the gender of the numeral.

This issue is a very typical one, inasmuch as one sees clearly that the texts do not enter into a dialogue with one another, they do not tackle the issues in the same manner, although at a surface level they agree on the description of the language (the facts that the forms carrying the $t\bar{a}$ 'marb $\bar{u}tah$ are found before masculine nouns and the forms deprived of the $t\bar{a}$ 'marb $\bar{u}tah$ are found before feminine nouns), which is an extremely basic observation after all.

As for the gender of compound cardinals, it is to the reader to extrapolate from both the gender of cardinals between "three" and "nine" and the morphological formation of compounds. For example, Sībawayh considers that the second part of compound numerals has the status of a compensatory $n\bar{u}n$ (see below, p. 205). Since he considers that $tal\bar{a}t$ and $tal\bar{a}tah$ are feminine, one can probably extrapolate that he would consider $tal\bar{a}ta-a$ 'aš(i)rata and $tal\bar{a}tata-a$ 'ašara to be feminine as well, because there is no reason why the addition of a morpheme that has the status of the compensatory $n\bar{u}n$ should modify the gender of the first term.

3.5.2 Xumaysah?

Other issues are easier to deal with, such as the diminutive forms of certain regular numerals. While the authors spend some time discussing the diminutive form of <u>tamāniyah</u> "eight" (<u>tumayyinah</u> vs. <u>tumayniyah</u>?) and <u>talātūna</u> "thirty" (<u>tulayyitūna</u> vs. <u>tulaytūna</u>?), nowhere do they give the diminutive form of 'arba'ah or xamsah (see below, p. 110). Of course, these can be deduced from the regular cases but sometimes it is not particularly obvious. For example, xumaysah poses no particular difficulty, but one might ask the question, what is the diminutive form for 'arba'ah: rubay'ah or 'urbay'ah?

3.5.3 Twentieth?

A less evident case is the ordinal "twentieth". Nowhere in these grammatical treatises do the authors mention the ordinal forms of the decades or the hundreds or the thousands. Is it self-evident for them that 'išrūna means both "twenty" and "twentieth", or that al-bābu l-mi'atu means "the hundredth chapter" or that al-laylatu l-'alfu means "the thousandth night"? Are these

expressions a modern coinage or are they too trivial to be mentioned? (See below, p. 145.)

Fleisch (1990, I, 522, §107*e*) says that decades have both a cardinal and an ordinal meaning. At the beginning of §107, he gives the following three references: az-Zamaxšarī's Mufaṣṣal (95, §324), Ibn Yaʿīš's Šarḥ al-Mufaṣṣal (VI, 34–36)³³ and al-'Astarābādī's Šarḥ al-Kafiyah (II, 158–160).³⁴ Only al-'Astarābādī mentions the fact that decades have an ordinal meaning instead of the expected $f\bar{a}$ 'il pattern *'āširūna (Šarḥ al-Kafiyah, II, 160.1–3).

3.5.4 Numerals as xabar

The same goes for the use of numerals in the position of *xabar* in a nominal sentence, as in *al-'awlādu xamsatun* "the boys are five", which apparently poses no particular difficulty even though the only two examples found in Sībawayh's *Kitāb* are cases where the nominal sentence is embedded in a larger sentence, as in *marartu bi-ṭawbin sab'un ṭūlu-hu* "I passed by a garment, which is seven in length" (*K.* I, 197.14) and *marartu bi-rajulin mi'atun 'iblu-hu* "I passed by a man whose camel are a hundred" (*K.* I, 197.15).

In his *Muqtaḍab*, al-Mubarrad uses this construction but never comments on it, as in *wa-ḥurūfu l-ḥalqi sittatun* "and the guttural consonants are six" (*M.* II, 140.9); *qad ʿalima ʾanna-hum xamsatun* "he knows that they are five" (*M.* III, 239.13); or *jawārī-ka ʾarbaʿun* "your maids are four" (*M.* III, 342.6). Nothing seems to forbid one to use it with other numerals such as *ḍanantu ʾawlāda-ka ʿišrīna* "I thought your boys to be twenty" and *al-ʾawlādu xamsata-ʿašara* "the boys are fifteen", but this is clearly an extrapolation.

Just like Sībawayh, Ibn as-Sarrāj comments on the peculiar expression marartu bi-rajulin mi'atun 'iblu-hu ('U. II, 28.1–3) which seems to be a grammatical crux. However, unlike Sībawayh and al-Mubarrad, he gives more insight into this construction and says that if there is "some sort of cause" šay' min as-sabab³⁵ between the substantive (rajul) and the word used as an adjective (mi'ah), it is possible to put it in the position of mubtada', as in marartu bi-rajulin mi'atun 'iblu-hu "I passed by a man whose camel are a hundred", otherwise an adjectival slot would be preferable ('U. II, 27.17–18), as in marartu bi-rajulin mi'atin 'iblu-hu.

³³Fleisch (1990, I, 522) quotes an edition dated 1882–1886, pp. 324–325.

³⁴Fleisch apparently quotes the same edition as us, but he gives the pages 147-150.

³⁵Carter (1985, 2009) studies the term *sabab* in the *Kitāb* and in the later tradition. He shows (1985, 61–64) how its extend has considerably reduced, and how it came to refer only to *al-wajh* in *ḥasanun wajhu-hu*, which is the case here in *mi'atun 'iblu-hu*. See below, p. 195, for an account of *sabab* in the *Kitāb*.

Chapter 4

Numerals in isolation

After these preliminary remarks, which will be our methodological guidelines in the interpretation of the texts, we will focus on the separate issues at stake in the grammar of numerals in general. The purpose of presenting these issues in a systematic way is to have an overall view of them before considering the different theoretical frames in which our grammarians tackle numerals (ch. 8, 9 and 10).

We will consider numerals from three different perspectives: in chapter 4 we will treat numerals in isolation (roots, patterns, declinability, meaning); in chapter 5, numerals in the sentence (their different syntactic slots); and in chapter 6, in the expression of the counted object (gender agreement, number, definiteness and indefiniteness, and so on). At this stage, we will not distinguish between cardinals and ordinals.¹

4.1 A limited set of roots

Numerals in Arabic are expressed through a very limited set of roots, either biliteral: $\underline{t}n$ and m'; triliteral whd, $\underline{t}l\underline{t}$, rb', xms, sds, sb', $\underline{t}mn$, ts', ' $\underline{s}r$, ' $\underline{l}f$ '; or quadriliteral, if one takes into account the Semitic parallels for "four" and "eight": 'rb' and $\underline{t}mny$.

 $^{^{1}}$ See Howell (1883/2003, IV, 1485–1495) and Fleisch (1990, I, 520–522; §107) for the issues linked with ordinals.

As for biliteral $\underline{t}n$ and m, they are implicitly integrated into the triliteral system by the addition of a third radical $y\bar{a}$ in the pattern $f\bar{a}$ il in $t\bar{a}nin / a\underline{t}$ - $t\bar{a}n\bar{\iota}$, see below p. 104, or in the Form IV verb 'am'á "to make something a hundred", see below, p. 107.

Other roots are usually not considered to be numerals in Arabic, although they would in other languages. The root *sfr* serves to express "zero" but it is not found in our grammatical treatises. There is apparently no root to express "one million" and no clue is given in our texts as to its form.²

The word 'awwal "first" is also problematic.³ It is not treated at the same place as numerals in our texts, although there is no other word for "first". The $f\bar{a}$ 'il pattern in $w\bar{a}hid$ could have served as a parallel to the other ordinals $(t\bar{a}n\bar{t}, t\bar{a}lit,$ and so on) but it is already being used to express the cardinal meaning "one". If the pattern of 'awwal is obvious (the elative 'af'al, which is confirmed by its feminine ' $\bar{u}l\hat{a}$), 4 its root is far from clear. Ibn as-Sarrāj is the only one to have a complete discussion on this issue ('U. III, 339.8–340.5). The only possibility for its root is to be wwl because if it were 'wl its 'af'al form should be *'awal, not 'awwal, and if its root were w'l its 'af'al form should be *'awal,5 after a regular phonetic assimilation. Ibn as-Sarrāj adds that there are other cases in Arabic where the root begins by a doubled letter, as in ad-dadan "game" (root ddn) and kawkab "planet" (root kkb). Sībawayh and al-Mubarrad are silent on this point.

4.2 Many patterns and irregularities

The number of patterns that these few roots can take is very large. Some of these patterns are productive, in the sense that they apply to most of the roots, sometimes at the cost of small morphological modifications. Other patterns are not productive, and apply to only one or two roots.

²In his *Šarh al-Kāfiyah*, (II, 152.9–14), al-'Astarābādī mentions the expressions 'alfu 'alfin "one million" and 'alfu 'alfi 'alfin "one milliard". Cf. as well Wright (1967, I, 259; §326).

 $^{^{3}}$ Cf. Fleisch (1990, I, 521–522; §107*b–c*) and Wright (1967, I, 260; §328, rem. *a*).

⁴Blau (2002, 43, §69) mentions the existence of feminine 'awwalah in Post-Classical Arabic, as well as expressions like at-tawrātu l-'awwalu "the Old Testament", where 'awwal refers to a feminine (48, §101).

 $^{^5}$ Al-Fatlī vocalises أُوِّل, which makes no sense in the text.

4.2.1 The patterns fa'l, fa'al, and fi'l

The patterns fa $^{\prime}l$, fa $^{\prime}al$, and fi $^{\prime}l$ can be applied to some of the roots above in order to express the cardinal value of numerals. These patterns correspond to triliteral triptotic nominal patterns. They can take the feminine suffix marker -at-: fa $^{\prime}l$ -(at-)un, fa $^{\prime}al$ -(at-)un, fi $^{\prime}l$ -(at-)un as in the following numerals: xams-(at-)un, sitt-(at-)un, sab $^{\prime}$ -(at-)un and tis $^{\prime}$ -(at-)un. The feminine plural suffix $-\bar{a}t$ -can also be added to these numerals, with the regular pattern modifications, as in xamas- $\bar{a}t$ -un instead of xams-at-un.

These patterns can also take the masculine external plural marker: ' $i\check{s}r$ - $\bar{u}na$, xams- $\bar{u}na$, sitt- $\bar{u}na$, sab'- $\bar{u}na$, and tis'- $\bar{u}na$. Curiously, no author has commented on the fact that this masculine external plural marker is usually reserved to male human beings in Arabic grammar (see below, p. 126, for more details).

There are a few peculiarities that should be noticed. When applied to the root '*lf*, the pattern *fa'l* cannot take the feminine suffix ('*alfun* "one thousand"), so that the same form applies to masculine and feminine counted objects.

The root sds exhibits a double phonetic assimilation into sitt-(at-)un in the pattern fi'l. This point is briefly alluded to by Sībawayh (K. II, 382.17-18), it is not mentioned in the Muqtadab, and it is treated with great care by Ibn as-Sarrāj ('U. III, 242.12; 270.3-4; 432.3; 433.3-4).

The root 'šr is the only one to surface in more than one of these patterns.⁶ Compare 'ašar-at-un "ten [for masculine counted objects]", 'ašr-un "ten [for feminine counted object]", 'išr-ūna "twenty", -'ašar-a⁷ "-teen [in compounds for masculine counted objects]", -'ašr-at-a "-teen [in compounds for feminine counted objects]" and for this last form the dialectal variant -'ašir-at-a is also reported by the grammarians (pattern fa'il).⁸ We will represent this dialectal variant as -'aš(i)rata. See below, p. 119, for issues linked with the formation of compound numerals.

Lastly, the root whd also presents some irregularities. The pattern fall can be applied to it, but only in the position of annexation, as wahd- in wahda-hu "him alone" (this point is mentioned explicitly only in K. I, 168.17), and when the pattern fall is applied to the same root, the waw is transformed into an

⁶Cf. Fleisch (1990, I, 518-519; §106ff).

⁷In Post-Classical Arabic, the second part of compound cardinals may be spelt استُمْسَر, as in مِالْمَاهُمُّةُ إِلَّهُ اللهُ اللهُ اللهُ اللهُ اللهُ اللهُ اللهُ اللهُ اللهُ إِلَّهُ اللهُ ال

⁸Cf. Howell (1883/2003, IV, 1461-1462).

[°]Cf. Howell (1883/2003, IV, 1474-1478).

hamzah, as in 'aḥad "one" instead of *waḥad (K. II, 392.3–4; M. I, 299.4; 'U. III, 307.5–12). The feminine counterpart of 'aḥad is 'iḥdá (see below, p. 109, for the pattern f(la). 10

4.2.2 The augmented patterns $fa'\bar{a}l$ and af'al

The augmented pattern $fa'\bar{a}l$ applies to the root $\underline{t}l\underline{t}$ alone and the augmented pattern ${}^{2}af^{c}al$ applies to the root rb^{c} (as well as to the root wwl, as was made clear above, p. 102, where it is an elative). These patterns are treated here as triptotic nominal patterns. They can take the feminine suffix marker, singular and plural, and the masculine external plural marker as in $\underline{t}al\bar{a}\underline{t}un$, $\underline{t}al\bar{a}\underline{t}atun$, $\underline{t}al\bar{a}\underline{t}atun$ and $\underline{t}al\bar{a}\underline{t}una$.

There are other examples of triptotic nouns in the pattern 'af'al, like 'arnabun "rabbit" and 'af'a "viper", which are labelled by Fleisch (1990, I, 407–408) as very ancient Semitic words, and whose origin is far from clear. He also mentions 'afkalun "fright", 'azmalun "confused noise" and 'atlabun "small stones" (Fleisch 1990, I, 415).

The triliteral augmented pattern $fa^c\bar{a}l$ referring to triptotic nouns is much more common, as noted by Fleisch (1990, I, 353–354) and examples include 'atānun "jenny", adjectives like jabānun "coward", and many Form I maṣādir (such as <code>dahābun</code> "to go" and damārun "to destroy").

4.2.3 The pattern $f\bar{a}$ il

The pattern $f\bar{a}^cil$ is very common in the language. It is used to express the ordinal meaning of numerals between "two" and "nineteen". It corresponds to a triliteral triptotic active participle pattern. This pattern which also accepts the feminine suffix marker applies to all the roots mentioned above, with the exception of m and lf: $w\bar{a}hid$ -(at-)un "one", $t\bar{a}lit$ -(at-)un "third", $r\bar{a}bi$ -(at-)un "fourth", $x\bar{a}mis$ -(at-)un "fifth", $s\bar{a}dis$ -(at-)un "sixth", $s\bar{a}bi$ -(at-)un "seventh", $t\bar{a}min$ -(at-)un "eighth", $t\bar{a}si$ -(at-)un "ninth" and ' $t\bar{a}si$ -(at-)un "tenth".

All three authors link the meaning of this pattern to the corresponding verbs of the same root (K. II, 177.21–178.3; M. II, 181.3–182.1; ^{3}U . II, 426.3–8). 11

¹ºBlau (2002, 43, §69) mentions the feminine form احدة in Post-Classical Arabic, as in احدتهٰنَّ He does not vocalise it. Is it 'aḥadah, 'aḥdah, 'iḥdah? He also mentions occurrences of 'aḥad referring to a feminine in Post-Classical and Neo-Arabic, as in ... al-kaffayni tunaqqī 'aḥada-humā l-'uxrá "... the two palms one of which cleans the other" (Blau 2002, 48, §100).

¹¹Cf. Fleisch (1990, I, 520-521; §107a).

Interestingly, all of them tackle the issue of the ordinals in a chapter devoted to expressions of the type $x\bar{a}misu$ 'arba'atin "the fifth of four", which meaning they equate with alladī xamasa l-'arba'ata "the one that made the [group of] four to be five". See p. 132 for more details on these expressions.

There are a few irregularities linked with this very productive pattern. We have already mentioned the fact that it does not apply to m and lf, as well as the cardinal meaning of $w\bar{a}hid$ -(at-)un. These facts are not mentioned in our texts.

When applied to the root $\underline{t}n$, this pattern surfaces as $\underline{t}anin$ (fem. $\underline{t}aniy$ -at-un) after the addition of a $y\bar{a}$ ' to the biliteral root in order to fit the triliteral pattern. Our authors use this form without questioning it.

Another major irregularity is the form \$\hat{h}\bar{a}din\$ (fem. \$\hat{h}\bar{a}diy-at-un\$) "first [in compounds and conjoined numerals]": \$\hat{h}\bar{a}diya-\capsasara\$ "eleventh" and \$al-\hat{h}\bar{a}di\$ wa-l-\capsasara\$ "the twenty-first". Its formation is far from clear. At a surface level, it is formed on the weak root \$hdy\$, however its semantic link with the root \$whd\$ points toward a complex root modification from \$whd\$ to \$hdy\$ which is commented by none of our authors.

Lastly, since our authors consider the root of 'arba' and $\underline{t}am\bar{a}nin$ to be triliteral (rb' and $\underline{t}mn$), they have integrated them without discussion in this productive pattern, as in $r\bar{a}bi'$ -(at-)un and $\underline{t}\bar{a}min$ -(at-)un.

4.2.4 The verbal patterns

Verbal patterns can also apply to the numerical roots mentioned above. 12

The pattern faʿala (Form I)

The pattern $f\bar{a}^c il$ is semantically linked with the verbs of the first pattern built on the corresponding roots, as for $x\bar{a}misun$, which corresponds to the verb xamasa "to make something five" which is quoted by Sībawayh (K. I, 157.10–12; II, 178.2–3 (twice)). The following verbs are also found: \underline{talata} (M. II, 181.7; 8), $\underline{raba}^c a$ (K. II, 178.3; M. II, 181.7; 183.5) and \underline{sadasa} (M. II, 183.5) which mean "to make something three, four, and six".

The verb $saba^c a$, $yasba^c u$ is found in K. II, 270.14 in a list of verbs having a similar vocalic pattern $fa^c ala$, $yaf^c alu$, but is is difficult to interpret it since there is no context.

¹²Cf. Fleisch (1990, I, 524; §107k).

A legitimate question is the following: Do these verbs actually exist in the language or are they fabricated for the sake of the explanation? While Sībawayh says that xamasta-hum is a case of $tamt\bar{t}l^{13}$ (K. I, 157.10–12), al-Mubarrad expresses no such reservation.

Ibn as-Sarrāj has a clear position. Just like Sībawayh and al-Mubarrad he says that forms $x\bar{a}mis$ and $x\bar{a}misah$ are "built like an $ism\ al-f\bar{a}$ 'il" and that they correspond to the verb xamasa ('U. II, 426.3-8), but he also says earlier in the 'Uṣ \bar{u} l that these verbs do not really exist and that the ordinals are derived from the cardinals:

(3) It $[r\bar{a}bi'un]$ has no known verb; indeed it is derived from the numeral [itself] and not from a known maşdar, like $d\bar{a}ribun$ which is derived from ad-darb and daraba (U. II, 332.11-13).

The semantic comparison in the *Kitāb* to an implicit verb *xamasa* becomes a clear morphological comparison in the *Muqtaḍab* accompanied by a full list of verbs. This constrats with the clear-cut affirmation of Ibn as-Sarrāj that these verbs do not exist, although he himself compares the meaning of *xāmisun* to the theoretical verb *xamasa*.

The patterns fa 'ala and 'af ala (Forms II and IV)

Other verbs are also found in our texts, and it is not always clear whether they really exist of whether they only serve the purpose of the demonstration. This is the case of the following verbs, which mean "to make something one, two, three, and so on": waḥḥada, ṭanná, ṭallaṭa, and their maṣādir: tawḥīd, tatniyah, tatlīt, and so on.

While Forms I, if they exist, are directly linked with the $f\bar{a}$ il pattern of the ordinals and are always used to comment them, Forms II and IV seem to have an independent existence and are found in sentences commenting other points of grammar. Their meaning is very near, if not identical to Form I. However, their active participle is never found in the texts.

The following verbal forms are built on the root *wḥd* in the Form II "to put a word in the singular": *waḥḥada* (*M.* III, 107.6; 9; 11; '*U.* I, 121.4; 6; 223.3; 227.14; 422.16; 17; II, 347.13; 348.18; 354.1; 358.5 (twice); III, 239.11; 476.1). ¹⁴

¹³See Ayoub (1990) and Versteegh (2009, 447) on tamtīl as a testing tool.

 $^{^{14}\!}Both$ occurrences in $^3\!U\!.$ I, 121.4; 6 are actually corrections of Bohas (1991, 195) made on ms. R.

The passive wuḥḥida is also found ('U. II, 7.6); the maṣdar tawḥīd ('U. I, 255.13; 257.11, 13; 323.17; II, 33.21; 77.2); the passive participle muwaḥḥad as opposed to either jam' "plural" or muṭanná "dual" (M. III, 252.7; IV, 128.17; 'U. I, 325.1); or muwaḥḥad meaning "unified, unique" ('U. I, 257.15; 419.12; II, 263.3).

The root <u>tny</u> in the Form II "to put in the dual" is extremely common in all three texts, both as a verb (<u>tanná</u>) and <u>maṣdar</u> (<u>tatniyah</u>).

The root \underline{tlt} in Form II has the specific meaning "to express a quantity of three" but, by extension, it also seems to mean "to put a word in the lesser plural form [which begins with three]". Interestingly, it is not found in the U- \bar{t} but only in the $Kit\bar{a}b$ and the Muqtadab: \underline{t} alla \underline{t} (K. I, 86.17; II, 179.15; 181.15), $ta\underline{t}$ \bar{t} (K. I, 87.19; II, 144.9; 179.5; 11 (twice); 12 (twice); M. II, 167.6; 170.2), $mu\underline{t}$ alla \underline{t} (K. II, 144.10).

Except for the root ts, which is only found twice: tassa (K. I, 86.18; M. II, 161.4), the numerical roots between "four" and "eight" are not found in our corpus in the verbal patterns of Forms II and IV.

The root 'sr in the Form II is found only in the $Kit\bar{a}b$: 'assara (K. II, 181.15), and ta's $\bar{i}r$ (K. II, 144.9).

Lastly, al-Mubarrad is the only one to mention the verbs corresponding to "one hundred" and "one thousand", 'am'á (Form IV, after the restitution of a third radical $y\bar{a}$ ') "to make something a hundred" and 'allafa (Form II) or ' $\bar{a}lafa$ (Form IV) "to make something a thousand" (M. II, 184.3-4):

(4) If you reach a hundred you say $k\bar{a}n\bar{u}$ tis 'atan wa-tis' ina fa-'am'aytu-hum "they were ninety-nine and I made them a hundred" if you make them a hundred and $k\bar{a}n\bar{u}$ tis 'a mi'atin wa-'allaftu-hum "they were nine hundreds and I made them a thousand" if you want [the form] fa''ala, and 'ālaftu-hum "I made them a thousand" if you want [the form] 'af'altu-hum (M. II, 183.3–4).

Al-Mubarrad adds that "all this is actually said" (kullu dālika yuqālu; M. II, 184.4) and he quotes the ḥadīṭ mentioned above, p. 91 (الله مع رسول الله)

¹⁹The apparently innocent problem of knowing if the plural begins with "two" or "three" has been hotly debated by grammarians, Qur'ānic commentators and jurists. See Versteegh (1993b) on this issue. However, things are maybe not as simple for Sībawayh himself, who writes in *K*. II, 324.2 that the dual is a plural, as is clear from the use of the pronoun *nahnu* that refers equally to "two" or to "three". Al-Mubarrad also considers that the dual is a subcase of the plural (*M*. II, 156.3). Yet, more research on this issue is needed.

على بعد. بنو سليم بعد.) to support his point, as well as the following poetic line where he says the meaning of the verb 'allafa is made clear:

şabaḥnā-hum bi-'alfin min Sulaymin / wa-sab'in* min Banī 'Uṭmāna wāfī.

We welcomed them in the morning with a thousand [men] of [the tribe of] Sulaym / and seven faithful of the Banū 'Utmān. (M. II, 184.8)

Needless to say, the following contemporary meanings of these words are not found in our corpus: mutallat "triangle", murabba "square, squared", musaddas "revolver, hexagon", $tawh\bar{\iota}d$ "monotheism" and $tat\bar{\iota}t$ "trinitarian faith", as well as the verbs wahhada "to unite, to unify; to proclaim the unity of God", tallata "to say that God is three persons", and tabba "to square".

4.2.5 The pattern of tamanin

The case of $tam\bar{a}nin$ (fem. $tam\bar{a}niyah$) receives much attention in our texts. The interpretation chosen by all three grammarians is to consider it a triliteral root with two added morphemes, a middle 'alif' and a final $y\bar{a}$ ', and they discuss which of these two added morphemes should be elided when building the diminutive form of $tam\bar{a}nin$.

Sībawayh quotes the opinion of al-Xalīl who says that the origin of the final $y\bar{a}$ ' in $tam\bar{a}nin$ is the double $y\bar{a}$ ' suffix -yy- of the relative adjectives $(y\bar{a}$ ' al-' $id\bar{a}fah$; K. II, 16.1-2). Later in the same chapter, Sībawayh repeats this comparison and adds—this time approving this explanation, since he does not mention any grammarian—that this suffix does not have its original meaning of relative adjective (K. II, 17.18-19). However, in practice, $tam\bar{a}nin$ is treated like any other tamran t

The opinion of al-Mubarrad is that in $\underline{t}am\bar{a}niyah$ the two added "consonants" do not have the same status because "the $y\bar{a}$ ' is attached (mulhaqah) in the slot of a vocalised consonant ($w\bar{a}qi^cah f\bar{\iota} mawqi^c al-mutaharrik$), whereas the 'alif is not attached (gayr mulhaqah) and is in a slot where only a long vowel could be" (M. II, 255.5–6).

^a The fact that sab'in applies to men is unexpected and not commented by al-Mubarrad.

For Ibn as-Sarrāj, *tamānin* gathers "two added morphemes" (*zā'idatāni*) and the speaker has the choice to elide either morpheme in order to build the diminutive (*'U.* III, 46.18–19).

He is the only one to discuss the fact that although $\underline{tam\bar{a}nin}$ surfaces in a plural-like pattern it is not diptotic. He also says, without quoting al-Xalīl or Sībawayh, that the origin of the final $y\bar{a}$ in $\underline{tam\bar{a}nin}$ is the nisbah suffix -yy, as in * $\underline{tamaniyyun}$. One of the two $y\bar{a}$ has been elided and compensated by the 'alif in the third position ('U. II, 91.11–15). In other words, $\underline{tam\bar{a}nin}$ does not have a quadriliteral root.

In the end, it seems that only 'Abū 'Amr b. al-'Alā' clearly considered the root of *tamānin* to be quadriliteral (*tmny*).

4.2.6 The pattern of 'iḥdá

The case of 'iḥdá is also tricky. It is used as the feminine form of 'aḥad, but its derivation from it is far from obvious since there is no other case in the language of a pattern fi'lá derived from fa'al. Sībawayh and Ibn as-Sarrāj do not comment on the pattern of 'iḥdá.

Al-Mubarrad is the only one to discuss the morphology of '*iḥdá* and simply says that it does not correspond to a masculine form, from which it would be derived (*M.* II, 163.12–14).

4.2.7 The morphology of mi'ah

The word *mi'ah* "one hundred" deserves a special treatment. Its root is very peculiar, yet it does not seem to have triggered much curiosity among our authors and they did not perform the classic morphological tests, such as: diminutive, vocative, relative adjective (*nisbah*), or proper name. Needless to say, the orthography of its *hamzah* is not discussed by our authors.¹⁶

The only morphological discussion about *mi'ah* is its plural form, probably because it is *not* used after numerals between "three" to "ten".

Interestingly, although $mi'\bar{u}na$ and $mi'\bar{a}t$ are mentioned and commented on by Sībawayh, al-Mubarrad and Ibn as-Sarrāj (K. I, 87.11; II, 196.11–18; M. II, 169.4; ¹⁷ 170.3; 'U. I, 311.1; II, 446.11) as valid external plural forms for mi'ah,

¹⁶Cf. Wright (1967, I, 258; §325).

ing text has the plural form مائتين mi'atīna (M. II, 169.4), which has to come from the puzzling مائتين is found only here in the Muqtadab, along with two other

Fleisch (1990, I, 290; 295) does not mention them, and inversely, none of our three authors mentions the broken plural mi'an مِاءًى reported by Fleisch (1990, I, 499).

Ibn as-Sarrāj is the only one to quote al-'Axfaš's theory that the plural form of mi'ah is either of the pattern $fa'\bar{\imath}l$ where the $l\bar{a}m$ has been turned into a $n\bar{u}n$ and the fathah into a kasrah (as in $sin\bar{\imath}nun$ and $mi'\bar{\imath}nun$, a fully declinable pattern) or it is of the pattern $fi'l\bar{\imath}n$, just like $gisl\bar{\imath}n$ "something that has been washed" where the 'ayn is deleted (as in $sin\bar{\imath}nun$ and $mi'\bar{\imath}nun$, also a fully declinable pattern), Ibn as-Sarrāj apparently says that this second interpretation is correct ('U. III, 328.5–329.8).

The end of the paragraph is quite confusing since Ibn as-Sarrāj does mention the form with mext to but it is impossible to decide what he intends since he makes absolutely no comment on them (${}^{\prime}U$. III, 330.1–4). These two forms have no link with the discussion above where the point is to choose between fa \hat{i} \hat{l} and \hat{f} \hat{i} \hat{l} \hat{l} for the pattern of \hat{s} \hat{i} \hat{l} \hat{i} \hat{l} \hat{l}

4.2.8 The diminutive pattern $fu^{c}ayl$

Our grammarians do not spare any effort to discuss the diminutive forms of every possible type of word, and what looks like a morphological game apparently serves to gain a deeper understanding of the behaviour of the roots of the words. This is indeed one of the morphological tests to which they submit almost any word in the language.

The regular pattern for the diminutive is the triliteral triptotic nominal pattern fu^cayl , which is adapted according to the initial pattern of the word. In other words, one can potentially form the diminutive of any other pattern. Unfortunately, it would take us too far to consider these rules here. They are dealt with in much detail in K. II, 104-146 (ch. 359-396), M. II, 236-293 and U. III, 36-63.

In a nutshell, in order to build the diminutive form of a noun, the general morphological rule is to go back first to the masculine singular form (i.e., to

occurrences that are clearly dual forms. Later in the same chapter, the text has the plural form $mi^*\bar{n}na$ (M. II, 170.1) which comes from the more analogical $mi^*\bar{u}na$ and which is found six times in the Muqtadab, all of them in chapter 93. Is al-Mubarrad really talking of three different alternative plural forms for mi^*ah , namely $mi^*\bar{u}na$, $mi^*a\bar{t}$ and $mi^*at\bar{u}na$? Rather, we propose that ois here a misspelling for mi^*ab and that only the two forms $mi^*a\bar{t}$ and $mi^*\bar{u}na$ should be kept. 18Cf. Fleisch (1990, I, 524; §107l).

clean the word from any suffix), then to apply the *fu'ayl* pattern, and then to eventually restore the suffixes, as in *šujayr-at-un* "shrub" which is formed on *šajar-at-un* "tree".

The diminutive form of "regular" roots

In the case of numerals, some roots are not problematic, which is probably the reason why they are not discussed in the texts. The forms are not even mentioned and it is only through conjecture and application of the general rules that one can predict the following forms: xumays-(at-)un, subay-(at-)un, tusay-(at-)un and usay-(at-)un. The diminutive form of alf is not discussed either but there is no reason to reject the form ulayfun.

The case of 'arba'ah is not straightforward, but none of our three authors mentions it. As mentioned above p. 98, theoretically its diminutive form should be built on its surface form, and thus be 'urbay'-(at-)un, but one can not rule out rubay'-(at-)un as a plausible alternative.

The diminutive of talāt and the decades

The case of \underline{talat} is indirectly discussed with that of \underline{talat} ina, for which the question is whether the final $-\bar{u}na$ is a real plural marker (and should thus be kept as such after the diminutive is formed) or another added morpheme, just like the inner 'alif. If $-\bar{u}na$ is a plural marker, then the diminutive form of \underline{talat} - $\underline{u}na$ is $\underline{tulayyit}$ - $\underline{u}na$, otherwise it is $\underline{tulaytuna}$, i.e., the word is treated as a whole and the 'alif is elided (K. II, 119.6–10; 'U. III, 49.5–7).

In the Muqtadab, al-Mubarrad does not mention the diminutive of $\underline{t}al\bar{a}\underline{t}\bar{u}na$ but only that of $a\underline{t}$ - $Tal\bar{a}\underline{t}\bar{a}^{219}$ "Tuesday" ($Tulayyi\underline{t}\bar{a}^2$; M. II, 277.2–3). He refutes Sībawayh, who, according to him, believes that the diminutive form of $a\underline{t}$ - $Tal\bar{a}\underline{t}\bar{a}^2$ is $Tulayt\bar{a}^2$, which is interesting since Sībawayh refuses to form the diminutives of the days of the week in the first place (K. II, 138.7–15). Should we infer that al-Mubarrad would recommend the form $\underline{t}ulayyi\underline{t}\bar{u}na$ as the diminutive of $\underline{t}al\bar{a}\underline{t}\bar{u}na$?

From this discussion, one can infer that the diminutive form of <u>talāt</u> is <u>tulayyit</u>, because no morpheme has to be deleted. One can also infer the diminutive forms of the "regular" decades (which were themselves infered from the general rules): <u>xumaysūna</u>, <u>subay'ūna</u>, and <u>tusay'ūna</u>. One can even infer the diminutive of 'išrūna to be 'ušayr-ūna</u>. Interestingly, in all these

¹⁹See below, p. 118, on this vocalisation.

cases, the diminutive form is the same whether one considers the suffix $-\bar{u}na$ to be a plural marker or not.

The case of 'arba'ūna should also be straightforward, as soon as the case of 'arba'ah is decided. The two plausible forms are thus 'urbay'ūna and rubay'ūna.

The diminutive of itnāni, sittah and tamāniyah

Other diminutive forms are explicitly discussed: the diminutives of *itnāni*, *sittah* and *tamāniyah*.

In the case of $i\underline{t}n\bar{a}ni$ the ending is interpreted by all grammarians as a dual ending and the biliteral root is turned into a triliteral one through the addition of a $y\bar{a}$, just like in ibn, resulting in the diminutive $\underline{t}unayy-\bar{a}ni$ (K. II, 125.6–10; 136.10–12; M. II, 92.15; 269.11; U. III, 60.12–14). Interestingly, in the case of Sībawayh and Ibn as-Sarrāj, they both mention the diminutive of $i\underline{t}n\bar{a}ni$ in a quotation from al-Xalīl on the diminutive of $i\underline{t}n\bar{a}-a\bar{a}$ from which the case of $i\underline{t}n\bar{a}ni$ is deduced; there is no way to know whether they endorse al-Xalīl's opinion or not.

The diminutive form of *sittah* is built on its non-modified root *sds*: *sudaysah*. This form is found only in 'U. III, 270.3–4. Neither Sībawayh nor al-Mubarrad mentions it.

For the diminutive form of $\underline{tam\bar{a}niyah}$, see above p. 108 the discussion about its root and pattern. The two possible forms discussed are $\underline{tumayyinah}$ (where the final $y\bar{a}$ ' has been elided and the 'alif turned into a double $y\bar{a}$ ') and $\underline{tumayniyah}$ (where the 'alif has been elided).

In K. II, 102.9–10, Sībawayh briefly mentions that the diminutive of $\underline{t}am\bar{a}n\bar{\imath}$ (which is the form used before feminine counted objects) is $\underline{t}umaynun$ and that $y\bar{a}$ ' al-'i $q\bar{a}fah$ is elided. At this point, no much detail is given. Later in the $Kit\bar{a}b$ he quotes the opinion of 'Abū 'Amr, who prefers the form $\underline{t}umayniyah$ (K. II, 116.8–17) because the root is quadriliteral. Al-Mubarrad also chooses the form $\underline{t}umayniyah$ (M. II, 255.5–6) but he does not consider the root to be quadriliteral. Ibn as-Sarrāj (who, as we know from 'U. II, 91.11–15, does not consider the root to be quadriliteral) says that the speaker has the choice between the two forms ('U. III, 46.18–19) and then reproduces, without mentioning it, a short recension of $Kit\bar{a}b$ II, 116.8–19 where Sībawayh quotes 'Abū 'Amr!

In the end, it seems that the form chosen by all three authors is *tumayniyah* (after the elision of the 'alif'), but in each case the reasons behind this choice are far from clear.

From these forms, one can infer the diminutive form of *sittūna* and *tamā-nūna*: *sudaysūna*, and either *tumayyinūna* or *tumaynūna*, just like *tulayyitūna* and *tulaytūna* (see above p. 111).

As one can see, the grammarians give only a few forms explicitly, from which one has to infer the other ones. They do not want to teach the correct form as much as they want to discover the underlying regular patterns hidden in the language.

The diminutive of wāhid, 'ahad, mi'ah and the compounds

The diminutive forms of wāḥid, 'aḥad, mi'ah and the compounds are very problematic, they are not discussed by our grammarians, and one may wonder why, since they could have constituted interesting cases. What morphological changes would happen in wuwayḥid, the theoretical diminutive of wāḥid? Is 'uḥayd a valid conjecture for 'aḥad? Could the biliteral root m' be compensated for by a yā' in the third position, giving the form mu'ayyah? And is tulayyiṭa-'ašara a good guess for the diminutive of talāṭata-'ašara?

In the case of 'aḥad we have al-Mubarrad's testimony. He is the only one of our three authors to authorise the formation of diminutives of the days of the week; he says that the diminutive of 'Aḥad "Sunday" is 'Uḥayd (M. II, 276.1–277.1).

4.2.9 The relative adjectives

The formation of the relative adjectives (*nisbah*) serves as another morphological testing device, just like the diminutive forms, which the grammarians try to build with any word in the language.

However, the relative adjective forms are easier to build than the diminutive forms since they only require the addition of the suffix -iyy- to the masculine singular form of the noun, as in $q\bar{a}hir$ -iyy-un "Cairene" formed on al- $Q\bar{a}hir$ -ah "Cairo". Maybe the reason why our grammarians did not systematically apply this test to numerals is that it is too obvious. This explains why Sībawayh only studies the case of compound numerals and why al-Mubarrad is completely silent on this issue. Unlike them, Ibn as-Sarrāj has

a whole chapter devoted to the formation of relative adjectives ('*U.* III, 63–85) and he discusses in detail the case of "two", "eight" and compound numerals.

According to Ibn as-Sarrāj, the relative adjective built on the numeral "two" is *tanawiyyun*, which means that a third radical *wāw* has been added. Since this adjective is built on the masculine singular form of the noun, it corresponds to all the surface forms that this numeral can take, in both genders. In other words, *tanawiyyun* is the relative adjective of *iṭnāni*, *iṭnatāni* and *tintāni*. However, other grammarians are said by Ibn as-Sarrāj to have accepted other forms, built on the other surface forms: *iṭniyyun* (which Ibn as-Sarrāj mentions as a valid possibility), *iṭnatiyyun* and *ṭanītiyyun* ('U. III, 77.9–78.7).

The relative adjective built on the numeral "eight" is $\underline{tam\bar{a}niyyun}$, after the elision of the ending $y\bar{a}$ ' (which Ibn as-Sarrāj considers to be the trace of a nisbah suffix -iyy-, 'U. II, 91.11–15) and the addition of the suffix -iyy- ('U. III, 74.8).

It is not possible to build relative adjectives for compound numerals, except if they are used as proper names. This is al-Xalīl's opinion, as quoted by Sībawayh (K. II, 84.13–16), as well as that of Ibn as-Sarrāj ($^{\prime}U$. III, 69.9–12). Al-Mubarrad is silent on this point. The reason given by al-Xalīl and Ibn as-Sarrāj is that since the second part of the compound must be deleted in order to build the relative adjective, there would be a confusion between the adjectives built on the units and those built on compounds. If these numerals are used as proper names, there is no difficulty: Xamsiyyun and Tanawiyyun (or Tanawiyyun) are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives corresponding to the proper names Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives Tanawiyun and Tanawiyun and Tanawiyun and Tanawiyun and Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives Tanawiyun and Tanawiyun and Tanawiyun and Tanawiyun are the relative adjectives Tanawiyun and Tanawiyun an

In other words, *xamsiyyun* is altogether the relative adjective of the proper names *Xamsah*, *Xams*, *Xamsata-ʿAšar*, *Xamsa-ʿAš(i)rah* and of the numerals *xamsah* and *xams*.

The fact that Sībawayh does not mention his own opinion on these forms but simply quotes al-Xalīl, and the silence of al-Mubarrad should remind us that, although there is no reason to believe that they would have rejected these forms, we extrapolate when we say so.

²⁰Cf. Howell (1883/2003, III, 1377; 1379-1380).

4.2.10 The pattern fu `ul (or fu `l) and its plural `af $`\bar{a}l$

The triliteral triptotic nominal pattern $fu^{\iota}ul,^{21}$ plural ${}^{2}af^{\iota}\bar{a}l,$ means a portion, as in $\underline{t}ulu\underline{t}un$ "a third", $rubu^{\iota}un$ "a fourth", until ${}^{\iota}u\check{s}urun$ "a tenth". Its plural is the triptotic pattern ${}^{2}af^{\iota}\bar{a}l:$ ${}^{2}atl\bar{a}\underline{t},$ ${}^{2}arb\bar{a}^{\iota},$ until ${}^{2}a\check{s}\bar{a}r.$

Although it is well attested in the Qur'ān (*tulut*: Q. 4, 11 (twice); 12; 176; 73, 20 (twice); *rubu'*: Q. 4, 12; *xumus*: Q. 8, 41; *sudus*: Q. 4, 11 (twice); 12; *tumun*: Q. 4, 12) this regular pattern is not commented on as such by our grammarians (and none of these verses is quoted by them). It is found only in the following occurrence: *tulut* (K. I, 64.2; 4; 'U. II, 47.9).

This triptotic plural pattern 'af' $\bar{a}l$ is also the pattern used for the plural of 'alf: ' $\bar{a}l\bar{a}f$ "thousands".

The following peculiarities can be noted. The pattern fu'ul does not apply to whd for evident semantic reasons, nor to $\underline{t}n$ where it is replaced by the word nisf "half" (pl. ' $ans\bar{a}f$).

It does not apply either to ${}^{\circ}lf$ and m but apparently for no other reason than linguistic use.

4.2.11 The pattern $fa^{i}l$

Although not dealt with as such by any of our authors, numerical roots can surface in the triliteral triptotic nominal pattern $fa'\bar{\imath}l$, which has the same fraction meaning as the preceding fu'ul pattern.²³

The following occurrences are found in our corpus: $rab\bar{\imath}^c$ pl. ' $arbi'\bar{a}$ ' "a fourth" (K. I, 91.15; II, 200.10; M. II, 277.6; 'U. I, 250.5), $xam\bar{\imath}s$ pl. ' $axmis\bar{a}$ ' "a fifth" (K. II, 200.10; M. II, 209.8), $sad\bar{\imath}s$ pl. suds "a sixth" (K. II, 216.12; 'U. III, 19.2).

The other possible forms $\underline{tal\bar{t}}$, $sab\bar{\iota}'$, $\underline{tam\bar{t}}$, $tas\bar{\iota}'$ and $'as\bar{\imath}r$ are not found in our texts, although Kazimirski (1860) mentions them (except for $\underline{tal\bar{t}}$).

²¹There is another vocalisation to this pattern, which is probably more recent (it is not found in the Qur'ān): fu'l, pl. ' $af'\bar{a}l$.

²²Cf. Fleisch (1990, I, 523; §107h) and Wright (1967, I, 263-264; §336).

²³Cf. Fleisch (1990, I, 523; §107h) and Wright (1967, I, 263-264; §336).

4.2.12 The pattern fil

Numerical roots can also surface in the triliteral triptotic nominal pattern fi'l, which expresses a period of time, as in sayru rib'in "a trip during which camels are watered every four days".²⁴

This pattern is not found in our treatises.

4.2.13 The "deflected" patterns $fu \dot{a}l$ and $maf\dot{a}l$

The last patterns to be presented here are $fu'\bar{a}l$ and $maf'al.^{25}$ The following forms are attested in our texts: ' $uh\bar{a}d$ "one by one", $tun\bar{a}$ " "two by two", $tul\bar{a}t$ "three by three", $tul\bar{a}t$ " "four by four", as well as tule mawhad "one by one" and tule matha "two by two" (tule matha "two by two" (tule matha "tule matha"). III, tule matha "tule matha" (tule matha "tule matha"). III, tule matha "tule matha" (tule matha"). III, tule matha "tule matha" (tule matha").

Al-Mubarrad is the only one to add that this pattern also conveys an idea of *taktīr* "multiplication" (*M.* III, 381.8).

Apparently, there is no reason to doubt that the following forms are also possible, although they are not mentioned: $xum\bar{a}s$, $sud\bar{a}s$, $sub\bar{a}s$, $tum\bar{a}n$, $tus\bar{a}s$ and $sus\bar{a}s$, as well as matlat, marbas, maxmas, masdas, masbas, matman, matsas and massas. However, it seems that these patterns are not productive any more and the forms quoted in our texts (i.e., until "four"), which are quoted from poetry and from the Qursan, are probably the only one actually used.

There are three verses in the Qur'an that contain these words:

- [...] then marry such women as seem good to you, two and three and four (Q. 4, 3)
- [...] that rise up for Allah's sake in twos and singly, then ponder (Q. 34, 46)
- [...] on wings, two, and three, and four (Q. 35, 1)

While Q. 35, 1 is quoted by both Sībawayh and al-Mubarrad (K. II, 15.4; M. III, 381.1–2), and Q. 4, 3 by al-Mubarrad only (M. III, 381.2), Q. 34, 46 is quoted

²⁴Cf. Fleisch (1990, I, 524; §107j) and Wright (1967, I, 264; §337).

²⁵Cf. Fleisch (1990, I, 523-524; §107*i*), Wright (1967, I, 262-263; §333) and Howell (1883/2003, IV, 1495-1498).

by none of the authors, and the word *furādá* "one by one" is not found in our texts. Ibn as-Sarrāj does not explicitly quote these Qur³ānic verses.

There are two lines of poetry that contain the words mawhad and mathad (K. II, 15.8; M. III, 381.6), and ' $uh\bar{a}d$ (M. III, 381.4 (twice)). Ibn as-Sarrāj does not quote poetry linked with these words.

These two patterns are said by our grammarians to be $ma^cd\bar{u}l$ "deflected, swerved" because they were modified from their initial pattern. Both patterns are adjectival and diptotic, and are used only in the indefinite, to qualify another indefinite substantive (*K.* II, 15.3; *M.* III, 319.13). Ibn as-Sarrāj deals with these "deflected" patterns in the section devoted to the diptotic declension and does not mention their use in a sentence as indefinite qualifiers ('*U.* II, 88.9–14).

If these forms are quoted in our texts, it is apparently because of their specific meaning and declension and because they trigger a discussion about their triptotic declension when used as proper names (see below, p. 124).

The diminutive forms of ${}^{2}uhad$ and \underline{tuna} (${}^{2}uhayyid$ and \underline{tunayy}) are also discussed by Sībawayh (K. II, 15.9–10) and Ibn as-Sarrāj (${}^{2}U$. II, 83.9–10). They found these forms more interesting to discuss than the diminutive of the much more common $mi^{2}ah$. In his Muqtadab al-Mubarrad does not mention the diminutive forms of $ma^{2}d\bar{u}l$ numerals, nor does he discuss their declension.

From the relative adjectives built on these "deflected" forms, 27 $tun\bar{a}$ 'iyyun "twofold, bilateral", $tul\bar{a}tiyyun$ "threefold", $rub\bar{a}$ 'iyyun "fourfold", and so on, in the $Kit\bar{a}b$, only $Sud\bar{a}siyyun$ is found (K. II, 17.20) and it is dealt with as a proper name. It is all the more interesting since $sud\bar{a}s$ itself is not found in the $Kit\bar{a}b$. This is typical of Sībawayh's method, since he prefers to focus on the most complicated issues rather than to present the general cases. The case of $Sud\bar{a}siyyun$ gathers three difficulties: It is "deflected", the root sds is restored if compared to sittah, and it is a proper name.

In the *Muqtaḍab*, the only relative adjective built on a "deflected" numeral is *tulātiyyun* and it is found only once in *M.* I, 391.3 in an expression that will later become usual: *al-'asmā' at-tulātiyyah* "the triliteral nouns".

The situation is very different in the 'Uṣūl where Ibn as-Sarrāj describes both the nouns and the verbs as tulāṭiyyah ('U. I, 73.7; 123.1; 350.2 and 55 other occurrences), rubāʿiyyah ('U. I, 73.7; 123.1; 14 and 30 other occurrences), and xumāsiyyah ('U. III, 12.1; 37.3; 39.4 and 5 other occurrences). The adjective

 $^{^{26}}$ Troupeau (1976, 65) translates $ma^{c}d\bar{u}l$ as "dévié".

²⁷Cf. Wright (1967, I, 263; §335).

sudāsiyyun is also found once in the expression ģulāmun sudāsiyyun "a six-year-old lad (?)" ('U. III, 270.4).

Relative adjectives built on "deflected" forms are triptotic, although no author mentions it explicitly. See below, p. 124, the issues linked with the diptotic declension of $ma'd\bar{u}l$ numerals, and of their diminutive form, when used as adjectives and as proper names.

4.2.14 The days of the week

This presentation of the patterns that numerical roots can take would not be complete without mentioning the large number of nouns and verbs built on the same roots, whose meaning is linked with numerals. We will mention here only the days of the week by way of example, since the list is potentially unlimited.

The names of the days of the week constitute a special category of nouns with a numerical root. Since their only common point is their meaning, they will be dealt with in more detail in the semantic section below. As for now, let us simply list their pattern: $fa^cal\ (al^-Ahad)^2$ "Sunday"), $fa^c\bar{a}l\bar{a}$ " ($a\underline{t}$ - $\underline{T}al\bar{a}\underline{t}\bar{a}$ ", "Tuesday"), $fa^c\bar{i}l\bar{a}$ " ($al^-Arbi^c\bar{a}$ ", "Wednesday"), $fa^c\bar{i}l\ (al-Xam\bar{\imath}s)$, "Thursday"), $al-\underline{Itn\bar{a}ni}$ "Monday" has no clear pattern because of its biliteral root $\underline{t}n$ which is not restituted here as triliteral $\underline{t}ny$, and as for $al-\overline{f}um^cah$ "Friday" and as-Sabt "Saturday" they do not have a numerical root.

The pattern of $a\underline{t}$ - $\underline{T}al\bar{a}\underline{t}\bar{a}$ ' is not obvious. Sībawayh quotes other nouns in the singular that share the same pattern: $bar\bar{a}k\bar{a}$ ' "sangfroid", ' $aj\bar{a}s\bar{a}$ ' "large camel herd, part of the night", as well as the adjectives ' $ay\bar{a}y\bar{a}$ ' "unable, impotent" and $tab\bar{a}q\bar{a}$ ' "impotent (?)" (K. II, 348.20–21), but al-Mubarrad does not mention this pattern and Ibn as-Sarrāj quotes Sībawayh saying that he knows no other noun than $a\underline{t}$ - $\underline{T}al\bar{a}\underline{t}\bar{a}$ ' to have this pattern, next to the adjectives ' $ay\bar{a}y\bar{a}$ ' and $tab\bar{a}q\bar{a}$ ' ('U. III, 195.1–2). Kazimirski (1860, I, 233) vocalises $a\underline{t}$ - $\underline{T}ul\bar{a}\underline{t}\bar{a}$ ', whereas no explicit vocalisation is mentioned in Ibn Mandūr's $Lis\bar{a}n$ (II, 122).

As for al-'Arbi' \bar{a} ', Sībawayh says that he knows no other singular noun in the same pattern (K. II, 345.18), and Ibn as-Sarrāj mentions the alternative vocalisation al-'Arba' \bar{a} ' ('U. III, 189.7), which is the vocalisation mentioned by Kazimirski (1860, I, 810) along with al-'Arbu' \bar{a} '. All three vocalisations are mentioned in $Lis\bar{a}n$, VIII, 109.

²⁸All three authors consider that the names of the days of the week are proper names (K. I, 228.20-23; M. II, 276.1; U. I, 158.1-2), hence their capitalisation in transliteration for clarity's sake.

4.3 Coalescence of numerals in compound numerals

Compound cardinals between "eleven" and "nineteen", as well as their ordinal counterparts, are made up of two nouns whose patterns have been presented above. However, there are specific morphological issues linked with the coalescence in compound numerals as such.²⁹

4.3.1 The two nouns that were made one

Compound numerals occupy a very special place in these grammatical texts and have been commented extensively by the three authors. Their morphology is quite problematic and it is necessary to understand where the problem lies before entering the discussions between the grammarians.

Compound nouns in Arabic can behave very differently and grammarians have struggled to find a theoretical frame that would account for these differences. We will deal here only with compounds made of two nouns, i.e., what Baalbaki (2003, 89) calls group 3. The prime examples used by our three grammarians comprise very different types of nouns: proper names (Hadra–Mawt, Ba'la–Bakk, Ma'dī–Karib, Mār–Sarjis, Rāma–Hurmuz, 'Amra–Wayh); both cardinal and ordinal numerals (xamsata–'ašara, ḥādiya-'ašara); time, space and manner complements (ḥayṣa–bayṣa, bayta–bayta, kaffata–kaffata, šaġara–baġara, 'axwala-'axwala, bayna–bayna, ṣabāḥa–ma-sā'a, yawma–yawma, ḥīna-'idin); proper names of verbs (hay–hāt, ḥayya–hal); substantives ('ayḍa–mūz, 'anta–rīs, xāzi–bāz, xizbāz, xāzi–bā'); and nouns in the vocative (yā bna 'umma!)

This list could grow even longer if one were to include the other types of compounds, either formed from the fusion of two particles, or made of a particle and the noun on which it operates (Baalbaki's (2003) groups 1 and 2).

What is ultimately at stake in these compound nouns is the declension of their two parts. The three main possibilities are the following. 1) The first part is indeclinable (and carries an invariable vowel) while the second part is declinable (triptotic or diptotic); 2) the two nouns are in an annexational construction, with the first part being declinable and the second part in the oblique form (unless diptotic); or 3) both parts are indeclinable and carry an invariable vowel. Interestingly, Sībawayh, who presents these issues in the

 $^{^{29}}$ Cf. Fleisch (1990, I, 510–512; §106*n*–*q*) for the compound cardinals and Fleisch (1990, I, 522; §107*d*) for the compound ordinals. Cf. Howell (1883/2003, II, 813–814; IV, 1457–1459) as well.

most detailed way, says that the same compound can be heard in all three shapes: respectively *Ḥaḍra-Mawtu*, *Ḥaḍru-Mawta* and *Ḥaḍra-Mawta* (*Mawt* is said by him to be diptotic because it is a feminine proper name, hence its independent form *Mawtu* and its *muḍāf 'ilayh* form *Mawta*).

As for compound numerals, it would be easy to consider them indeclinable in both parts if this was also the case for "twelve". The fact that $i\underline{t}n\bar{a}-\hat{a}sara$ / $i\underline{t}nay-\hat{a}sara$ is declinable in its first part and indeclinable in its second part has triggered pages of commentary in our three treatises and the authors have endeavoured to find an explanation not only for this behaviour but also for the fact that other numerals do not behave the same way.

We will study these commentaries in much detail in the next part of this study because it would take us too far here, and because these issues are linked with the wider theoretical frame they adopt. See p. 207 for Sībawayh's position, p. 218 for al-Mubarrad's position, and p. 262 for Ibn as-Sarrāj's position.

4.3.2 Gender issues in the morphology of compound numerals

Another issue that is linked with compound numerals is the gender assymetry between their two parts: 'aḥada-'ašara and iṭnā-'ašara are the only two compound cardinals to behave like compound ordinals where both parts surface in the same gender: ṭāliṭa-'ašara, rābi'a-'ašara, and so on, ṭāliṭata-'aš(i)rata, rābi'ata-'aš(i)rata, and so on.

In all other cardinal compounds, both terms surface in opposite gender: $\underline{t}al\bar{a}\underline{t}ata$ –'ašara, 'arba'ata–'ašara, before masculine counted objects and $\underline{t}al\bar{a}\underline{t}a$ –'aš(i)rata, 'arba'a–'aš(i)rata, before feminine counted objects. Al-Mubarrad is the only one of our three grammarians to address this question.³⁰

He notes that numerals that refer to greater quantities have a common form in the masculine and the feminine. Although compound numerals refer to greater quantities, they do have different forms in the masculine and the feminine. His interpretation is that they are made up of two nouns that refer to lesser quantities (M. II, 168.10–12). Both parts of the compound surface in opposite gender as in xamsata–'ašara and xamsa–'aš(i)rata because it is not correct to fuse two nouns carrying a feminine marker. He formulates this principle as follows: $l\bar{a} tudxil ta$ ' $n\bar{i}tan$ 'alá ta' $n\bar{i}tin$ (M. II, 163.1). As for the apparent "double feminine" forms 'ihda–'aš(i)rata and $itnat\bar{a}$ –'aš(i)rata, he

³⁰Cf. Wright (1967, I, 256; §322, rem. b).

justifies them by saying that $ihd\acute{a}$ — and $itnat\ddot{a}$ — cannot be compared to regular feminine forms because $ihd\acute{a}$ — does not correspond to a regular masculine and because $itnat\ddot{a}$ — does not correspond to an existing singular (M. II, 163.12—15). He probably means that, since $itn\ddot{a}ni$ and its feminine $itnat\ddot{a}ni$ are not part of a regular series that would include $itnat\ddot{a}ni$ and $itnat\ddot{a}ni$ it is normal that their behaviour is different.

Strangely, al-Mubarrad does not mention the double feminine forms in the ordinal compound numerals: $h\bar{a}diyata-^ca\dot{s}(i)rata$, $t\bar{a}niyata-^ca\dot{s}(i)rata$, $t\bar{a}-litata-^ca\dot{s}(i)rata$, and so on, where it is difficult to pretend that both terms are not regular feminine forms.

Because of all these morphological difficulties in compound numerals, the grammarians have applied to them all their morphological tests and it is no surprise that one may come across their diminutive form, their relative adjectival form, or their use as proper names in vocative constructions.

4.4 Conjoined numerals

In order to express cardinals and ordinals between "twenty-one" and "ninety-nine" one simply uses the particle *wa*- to conjoin two numerals, as in *talātatun wa-talātūna* "thirty-three". Each part follows the rules that apply to it with no other change.

Sībawayh does not mention this issue at all in his *Kitāb*. Al-Mubarrad explains that, unlike lesser numerals (which build up compound numerals), "twenty-one" and the following numerals have not been made one word because there is no other example in the language of a compound noun where one of the terms has the same declension as *muslimūna* (*M.* II, 167.3–4). He adds that all numerals up till "ninety-nine" behave the same (*M.* II, 167.5–7). As for Ibn as-Sarrāj, he does not comment on the conjoined numerals but he only mentions the form 'aḥad in 'aḥadun wa-'išrūna "twenty-one" ('U. I, 85.4).

Al-Mubarrad is the only one to mention the two possible forms for "twenty-one" in the masculine: 'aḥadun wa-'išrūna and wāḥidun wa-'išrūna (M. II, 166.16). However, he makes no further comment. He also says that "twenty-two" is iṭnāni wa-'išrūna, and that iṭnāni is uttered "in the same way as you used to say it before connecting it to 'twenty'" (ka-mā kunta qā'ilan qabla 'an taṣila-hu bi-l-'išrīna; M. II, 166.16–17).

It is not clear whether our authors have a preference for 'aḥadun wa-'išrūna over wāḥidun wa-'išrūna, nor whether 'iḥda wa-'išrūna is a valid

option, and if it is, whether it is preferable over wāḥidatun wa-'išrūna. They say nothing about the other decades. Are the following forms valid options: 'aḥadun wa-ṭalāṭūna "thirty-one", 'aḥadun wa-'arba'ūna "forty-one", and so on, and in the feminine: 'iḥdá wa-ṭalāṭūna, 'iḥdá wa-'arba'ūna, and so on?

Az-Zamaxšarī (d. 538/1144) mentions the only form 'aḥadun in conjoined numerals (Mufaṣṣal, 95.1–2, §322). In a passage devoted to the phonetic change of wāw into hamzah (from *waḥad to 'aḥad in 'aḥada-'ašara and 'aḥadun wa-'išrūna), Ibn Yaʿīš (d. 643/1245) does not mention the possibility of using wāḥid and wāḥidah (Šarḥ al-Mufaṣṣal, X, 14.21–22), 31 and al-'Astarābādī (d. 686/1287) says that both forms 'aḥadun and wāḥidun are sometimes found in conjoined numerals (Šarḥ al-Kāfiyah, II, 146.20–21). 32

4.5 Morphosyntactic issues linked with numerals

After these morphological considerations, and before we consider numerals in a sentence, there are a few more issues that need to be discussed: the declinability of numerals, their annexability, and the addition of the definite article.

4.5.1 The declension of numerals

It is very remarkable that all types of declension are found in numerals: triptotic declension (including the weak root declension), diptotic declension, dual declension, external masculine and feminine plural declension, invariability.

The triptotic declension

The following numerals have a full triptotic declension: $w\bar{a}hid$ -(at-)un, $tal\bar{a}t$ -(at-)un, 'arba'-(at-)un, xams-(at-)un, sitt-(at-)un, sab'-(at-)un, tis'-(at-)un, 'as-run, 'asaratun, mi'atun, 'alfun and its plural $'\bar{a}l\bar{a}fun$.

The case of $\underline{tam\bar{a}nin}$ (fem. $\underline{tam\bar{a}niyatun}$) is slightly different because of the presence of a final $y\bar{a}$ in its pattern (if not in its root, see the discussion above, p. 108). Hence, it follows the triptotic declension of \underline{manqus} nouns: $\underline{tam\bar{a}nin}$,

³¹Fleisch (1990, I, 514; §106*u*) quotes the edition of Jahn dated 1882–1886, p. 774.

 $^{^{32}\}mbox{We do}$ not understand why Fleisch (1990, I, 514) gives the reference II, 163.2–5 in what seems to be the same edition as ours.

tamāniya, tamānin. The addition of the tā' marbūṭah rules out this peculiarity and tamāniyah follows the regular declension: tamāniyatun, tamāniyatan, tamāniyatin.

The ordinals <u>tānin</u> (fem. <u>tāniyatun</u>) and <u>hādin</u> (fem. <u>hādiyatun</u>) behave exactly like <u>tamānin</u>.

The diptotic declension

It seems that Ibn as-Sarrāj is the first grammarian to express clearly the rule of the two $maw\bar{a}ni^c$ min $a\bar{s}$ - $\bar{s}arf$ ("reasons that cause a word to be diptotic"; ^{2}U . II, 80–93, § 2.11.1). According to this rule, a noun is diptotic if it gathers at least two reasons for being diptotic (or if a reason is repeated twice), from a list of nine reasons, which are: (i) having a verbal pattern, (ii) having an adjectival meaning, (iii) carrying a feminine suffix that was not added to a masculine form, (iv) carrying an ending $-\bar{a}n$ to which a $t\bar{a}$ $marb\bar{u}tah$ cannot be added, just like gadb-an ("angry"), feminine gadb (not "gadb-an-ah), (v) being a proper name, (vi) being "deflected" (ma $^{c}d\bar{u}l$), 33 (vii) being in the plural, (viii) being of foreign origin, and (ix) being compound.

Both Sībawayh and al-Mubarrad endeavour to find rational explanations outside this theoretical frame.

Although not stated explicitly by our authors, all numerals carrying a $t\bar{a}$ ' $marb\bar{u}tah$ are diptotic when used as proper names, for males and females ($W\bar{a}hidatu$, $Tal\bar{a}tatu$, Mi'atu, and so on).

³³See above, p. 116, on 'adl "deflection".

 $^{^{34}}$ For example, all proper names ending with a $t\bar{a}$ ' $marb\bar{u}tah$ are diptotic, because they are proper names and because their $t\bar{a}$ ' $marb\bar{u}tah$ was not added to a masculine form (Mrs. $Jam\bar{\imath}lah$ is not a female Mr. $Jam\bar{\imath}l.$) The proper name Zaynab is diptotic because it is a proper name and because it is of foreign origin. Curiously, Ibn as-Sarr $\bar{\imath}a$ says that the two reasons that cause Zaynab to be diptotic are its being a proper name and being feminine (${}^{\prime}U.$ II, 87.9-10). The proper name Hind is not diptotic because it does not carry a feminine marker. Muhammad is not diptotic because its being a proper name is not sufficient, but 'Ahmad is, because it is a proper name and it has a verbal pattern. The proper name $Jam\bar{\imath}l$ is not diptotic, because it has lost its adjectival meaning so that the only reason it has to be diptotic (being a proper name) is not sufficient.

The case of plural nouns is less straightforward. Being a plural is not a sufficient reason for being diptotic ('aklub' dogs' is not diptotic), but plurals of plurals (jam'u jam'in) like 'akālib' dogs' are diptotic because the same reason for being diptotic is present twice. In the same manner, darāhim 'dirhams' is diptotic because it has the pattern of a plural of plural. Plurals that are used as proper names are not considered to be plurals anymore, just like adjectives used as proper names lose their adjectival meaning. Thus, the proper name Masājid is diptotic not because it has a plural pattern but because its pattern is not standard in the singular so that it resembles a foreign noun, in addition to its being a proper name ('U. II, 87.15–18).

Ibn as-Sarrāj is the only one to mention the diptotic declension of numerals when used in an "absolute" meaning, i.e., the numeral in itself, as in $m\bar{a}$ $f\bar{\imath}$ yadi-ka ' $ill\bar{a}$ $tal\bar{a}tatu$ instead of $tal\bar{a}tatu$ ("you only have three in your hand"; 'U. II, 98.17). In their absolute meaning, numerals are treated as their own proper names. They are diptotic because they are proper names and because they carry a $t\bar{a}$ ' $marb\bar{u}tah$ which is not added to a masculine form.

On the other hand, if the speaker intends³⁵ <u>talāṭatun min ad-darāhimi</u> "three dirhams", he should fully decline <u>talāṭah</u> in the first sentence ('*U.* II, 98.18–19) and say <u>talāṭatun</u>.

In the following sentence, numerals are diptotic because it is clear that what is intended is their absolute meaning: <u>talāṭatu 'akṭaru min iṭnayni wa-'aqallu min 'arba'ata</u> ("three is more than two and less than four"; 'U. II, 98.19–20).

Another consequence of the definite meaning of numerals in this use is that it is not correct to say *rubba talāṭata 'akṭaru min iṭnayni! ("many a three is more than two!"; 'U. II, 98.20–99.1) because rubba must be annexed to an indefinite noun (cf. 'U. I, 416.2–3), but in its absolute meaning talāṭah is definite.

Although this absolute use of numerals is very obvious (numerals used for their numerical value!) it is mentioned by Ibn as-Sarrāj alone.

The $ma'd\bar{u}l$ forms of numerals also follow the diptotic declension. Sībawayh does not say this explicitly, but he quotes al-Xalīl's comparison of $ma'd\bar{u}l$ numerals to 'uxar, another diptotic $ma'd\bar{u}l$ adjective (K. II, 15.1–2).

In a chapter devoted to the rules of the triptotic and diptotic declensions al-Mubarrad explains that among the five categories of nouns that are diptotic, both definite and indefinite, are the indefinite $ma^{c}d\bar{u}l$ adjectives such as $matn\acute{a}$, $tul\bar{u}t$ and $rub\bar{u}^{c}$ (M. III, 319.13).

Ibn as-Sarrāj deals with $ma'd\bar{u}l$ words because being $ma'd\bar{u}l$ is one of the nine reasons that can cause a word to be diptotic (${}^{\prime}U$. II, 88.8). $Ma'd\bar{u}l$ numerals are diptotic for the two reasons that they are $ma'd\bar{u}l$ and they have an adjectival meaning (${}^{\prime}U$. II, 88.14).

There are other issues that are connected to the declension of $ma^cd\bar{u}l$ numerals and that are explored in more detail by our authors. Are $ma^cd\bar{u}l$ numerals still diptotic when used as proper names? Are the diminutive forms of $ma^cd\bar{u}l$ numerals still diptotic? And when used as proper names? What is

 $^{^{35}}$ See above the enunciative theory, p. 35, on the importance of the intention of the speaker in Sībawayh's $Kit\bar{a}b$, as supposedly opposed to later grammarians.

at stake in these questions can be put as follows: Are $ma^c d\bar{u}l$ numerals still considered to be $ma^c d\bar{u}l$ when put in the diminutive or when used as proper names? As mentioned above p. 117, it seems obvious for them that relative adjectives built on "deflected" forms are not considered to be deflected any more. They are triptotic.

The same goes for "deflected" nouns used as proper names, they are not considered to be "deflected" any more. In chapter 310 (K. II, 39.22–40.16), Sībawayh says that $ma'd\bar{u}l$ nouns such as 'ams or sahar become fully declinable when used as proper names although they are diptotic otherwise. When used as proper names, they are no longer to be treated as "deflected", because they stand on their own with no semantic link to a "non-deflected" form. This is not the case of the proper name 'Umar, which is diptotic because it is "deflected" from the proper name 'Amir (K. II, 14.8–12; M. III, 326.5–7). In other words, the difference between the proper names 'Ams and 'Umar is that 'Ams is used as a proper name in its deflected form ('ams) whereas 'umar is the deflected form of another proper name ('umar). As for the deflected numerals used as proper names, they most probably behave like 'umar).

Although the diminutive form of $ma^cd\bar{u}l$ numerals is not explicitly given by Sībawayh, he says that as proper names, they are not diptotic any more (K. II, 15.9–10). In his Muqtadab al-Mubarrad does not mention the diminutive forms of $ma^cd\bar{u}l$ numerals, nor does he discuss their declension. He mentions the fact that the diminutive of the "deflected" proper name 'Umar is not considered as deflected anymore (M. III, 378.12–13). There is no reason to believe that he would treat differently the diminutive of $ma^cd\bar{u}l$ numerals used as proper names.

Ibn as-Sarrāj says that (according to Sībawayh?) the diminutive forms of $ma'd\bar{u}l$ numerals 'uḥayyid and tunayy are fully declinable ('U. II, 83.9–10). In the $Kit\bar{a}b$, Sībawayh meant the case when these diminutive forms are used as proper names, but it does not make a difference in the end because if the proper names 'Uḥayyid and Tunayy are fully declinable, it means that they are not considered $ma'd\bar{u}l$ anymore, which implies that the adjectives 'uḥayyid and tunayy are also left with only one reason to be diptotic, namely, being adjectives.

The dual declension

The numerals <code>itnāni</code> "two (masc.)", <code>itnatāni</code> "two (fem.)" and <code>tintāni</code> "two (fem., alternative form)" are unanimously regarded as a dual, although their singular forms "<code>itn</code>, "<code>itnah</code> and "<code>tint</code> are not attested. Our grammarians settle for the

parallel with *ibn*, *ibnah* and *bint* to consider that these forms are plausible, if not existent (*K*. II, 84.13–16; 136.11–12; 177.5–6; '*U*. II, 368.15–16; *M*. II, 92.15–16; 269.11).

The dual declension is apparently not affected by the absolute use of numerals described by Ibn as-Sarrāj, as in the expression <u>talātatu</u> 'akṭaru min iṭnayni wa-'aqallu min 'arba'ata ("three is more than two and less than four"; 'U. II, 98.19–20) mentioned above p. 123.

As presented above p. 119 in the morphology of compound numerals, $i\underline{t}n\bar{a}$ —'ašara and $i\underline{t}nat\bar{a}$ —'aš(i)rata follow the dual declension in their first part ($i\underline{t}nay$ —'ašara and $i\underline{t}natay$ —'aš(i)rata). This problem will be dealt with below, p. 206 for Sībawayh's opinion, p. 220 for al-Mubarrad's opinion, and p. 264 Ibn as-Sarrāj's opinion.

Numerals between "three" and "ten" also have a dual form,³⁶ although it is not clear whether the $t\bar{a}$ 'marbūṭah should be maintained or dropped: $t\bar{a}l\bar{a}t\bar{a}t\bar{a}ni$ "two threes" (M. III, 64.3 (twice); 5; 'U. I, 327.13;17) and $t\bar{a}l\bar{a}t\bar{a}ni$ "two fives" ('U. I, 327.16; 328.1). The only other dual found in our text is $xamsat\bar{a}ni$ "two fives" ('U. I, 327.13).

As for *mi'ah* and *'alf*, there is no difficulty.³⁷ Their dual forms are *mi'atāni* (K. I, 87.5 (twice); 8; 10; 252.16; 253.4; 6; M. II, 169.1; 2; 'U. I, 312.12; 14; 317.18) and *'alfāni* (K. I, 87.6; 'U. I, 312.12).

The external masculine plural declension

None of our author comments on the fact that decades follow the external masculine plural declension and none of them raises any doubt about the fact that this declension is usually linked with male human plurals.³⁸

The only discussion that is found in our three grammars is whether the suffix $-\bar{u}na / -\bar{i}na$ really is a plural suffix (see above p. 111 the discussion about the diminutive form of $tal\bar{a}t\bar{u}na$).

In addition to decades, one should also mention the plural $mi^{\nu}\bar{u}na$ "hundreds", which is declined as an external masculine plural (see above, p. 109).

³⁶Cf. Howell (1883/2003, II, 844).

³⁷Cf. Howell (1883/2003, II, 844).

³⁸See Fleisch (1990, I, 290, §61 i) for other substantives with external masculine plural forms such as ' $\bar{a}lam\bar{u}na$ "worlds", ' $ahl\bar{u}na$ "families", ' $ard\bar{u}na$ "earths".

The external feminine plural declension

The cardinals between "three" and "ten" have a plural form which follows the external feminine plural declension: talatatun "threes", 'arba'atun "fours", until 'ašarātun" tens".

However, the only forms actually found in our corpus are the following: *xamasātun* (*'U.* I, 327.18) and *'ašarātun* (*'U.* I, 311.10; 312.8).

As presented above p. 109, the numeral mi'ah also has an external feminine plural form $mi'\bar{a}tun$ which follows the same regular pattern (K. I, 87.11; 88.7; M. II, 169.4; 170.3; U. I, 311.11; 313.1).

The indeclinable numerals

As made clear above p. 119 in the morphological issues of compound numerals, both cardinal and ordinal compounds carry an invariable fathah on both parts, except $i\underline{t}n\bar{a}-\acute{a}\check{s}ara$ and its cardinal cognates $i\underline{t}nat\bar{a}-\acute{a}\check{s}(i)rata$ and $tint\bar{a}-\acute{a}\check{s}(i)rata$.

All other compounds of both genders carry the same fathah on both terms: $\underline{t}al\overline{a}\underline{t}ata-$ "ašara, "arba "ata- "ašara, …, xamsa- "aš(i)rata, sitta- "aš(i)rata, …, as well as their ordinal counterparts: $\underline{t}\overline{a}li\underline{t}a-$ "ašara, $r\overline{a}bi$ "a- "ašara, x $\overline{a}misa-$ "ašara, …, s $\overline{a}disata-$ "aš(i)rata, s $\overline{a}bi$ "ata- "aš(i)rata, … (K. II, 178.7–11; M. II, 161.4–6; 182.12–13; IV, 29.4–6; "U. I, 311.15; II, 140.3–6; 426.10–13).

The case of "eighteen" is as follows. A final $y\bar{a}$ is restituted in order to carry the invariable fathah as in $tam\bar{a}niya-`as(i)rata$. The feminine form is not problematic: $tam\bar{a}niyata-`asara$.

The same goes for the ordinal $h\bar{a}diya$ –'ašara, $t\bar{a}niya$ –'ašara and their feminine counterparts $h\bar{a}diyata$ –'aš(i)rata and $t\bar{a}niyata$ –'aš(i)rata where a $y\bar{a}$ ' is also restituted.

Ibn as-Sarrāj explains that compounds of the same type as xamsata-`ašara carry an invariable final fathah on both terms which, as one can assume, includes $tam\bar{a}niya-`aš(i)rata$, $ta\bar{a}diya-`ašara$ and $ta\bar{a}niya-`ašara$. However, he also explains that in $Ay\bar{a}d\bar{i}-Sab\bar{a}$ and $Q\bar{a}l\bar{i}-Qal\bar{a}^{40}$ Arabs "do not like the fathah in the $y\bar{a}$ ", and it is not possible to add a vowel to the alifah (alifah) alifah alifah alifah alifah0 alifah1 alifah2 alifah3 alifah3 alifah4 alifah4 alifah6 alifah6 alifah6 alifah7 alifah8 alifah9 alifah

³⁹Cf. Howell (1883/2003, IV, 1462-1465).

 $^{^{40}}$ ' $Ay\bar{a}d\bar{\iota}$ - $Sab\bar{a}$ is the name of a tribe that was known for fighting one another, used adverbially it means iftir $\bar{a}qan$ "with disunion". $Q\bar{a}l\bar{\iota}$ - $Qal\bar{a}$ is a place name.

different for "eleventh"? Is the form $h\bar{a}d\bar{\imath}$ —'ašara also found? Fleisch (1990, I, 522) says that az-Zamaxšarī (d. 538/1144) accepts the forms $h\bar{a}d\bar{\imath}$ —'ašara "eleventh" and $t\bar{a}n\bar{\imath}$ —'ašara "twelfth" as valid options (*Mufaṣṣal*, 95; §324). Except for the discussion about '*Ayādī*—*Sabā* and *Qālī*—*Qalā* by Ibn as-Sarrāj, our authors do not mention this issue.

4.5.2 The annexation of numerals

Annexation of numerals is a very complex topic, which crisscrosses our study for it is at the heart of most of the problems that have kept our grammarians busy as far as numerals are concerned.

Definition

Generally speaking, annexation (${}^{i}d\bar{a}fah$) is a syntactic construction involving two nouns, where the first one is deprived of both the article and the nunation, and agreed according to its position in the sentence, whereas the second term is put in the oblique form, with or without the article, in the singular or in the plural, as in $fatahtu\ b\bar{a}ba\ l$ -bayti "I opened the door of the house" or $marartu\ bi$ - $tal\bar{a}tati\ {}^{i}awl\bar{a}din$ "I passed by three boys". In these sentences, one says that $b\bar{a}b$ and $tal\bar{a}tah$ are "annexed" $(mud\bar{a}f)$ to the second term, which is called "that to which something is annexed" $(mud\bar{a}f)$.

This syntactic construction can express different meanings: possession, as in baytu Zaydin "Zayd's house"; measure, as in raṭlu zaytin "a rotl of oil"; species, as in ṭawbu xazzin "a silk cloth"; time adverb, as in ṣalātu l-Jumʿati "Friday prayer"; direct object in the active form, as in sāriqu l-bayti "the robber of the house"; or in the passive, as in madrūbu r-raʾsi "[the one whose] head is hit"; an adjectival relation, as in ḥasanu l-wajhi "beautiful of face"; a partitive meaning, as in ʾaḥadu r-rijāli "one of the men" or ʾajmalu l-banāti "the most beautiful girls"; and, lastly, the expression of the counted object, as in ṭalāṭatu ʾawlādin "three boys" or ṭalāṭatu-hum "the three of them". Some of these meanings can also be expressed with other constructions. Compare for example ḥasanu l-wajhi with ḥasanun wajhan (tamyīz) or yaḥsunu wajhu-hu (verb) and ḥasanun wajhu-hu (predication), baytu Zaydin with baytun li-Zaydi (particle), ṭawbu xazzin with ṭawbun min xazzin (particle), and so on.

The core of the problem with numerals is twofold. Because of their specific morphology, decades and compound numerals do not behave like the other numerals when annexed, and the different meanings that annexation can express lead to a possible confusion when it comes to numerals.

Annexation of "one"

The expression $w\bar{a}hidu$ -hu (or $w\bar{a}hidu$ - $h\bar{a}$), which is very common in all three texts, always means "its singular" and not the numeral "one" (K. II, 86.17; 87.1; 88.1; 93.11; ...; M. I, 279.8; II, 189.6; 207.3; 224.5; ...; 'U. I, 64.7; 152.7; II, 413.5; 416.12; ...)

Al-Mubarrad is the only author to comment on the impossible annexation of $w\bar{a}hid$ and $w\bar{a}hidah$ in their numerical meaning. He says that analogically it should be possible to say * $w\bar{a}hidu$ rij $\bar{a}lin$ "one of men" and * $tint\bar{a}$ rij $\bar{a}lin$ "two of men" (which are possible forms in poetry; M. II, 156.1–2), but the singular (rajulun) and the dual ($rajul\bar{a}ni$) are used instead (M. II, 155.14). This statement implies that for al-Mubarrad the ' $id\bar{a}fah$ construction is the base form (al-'asl) for the expression of the counted object.

The numeral "one" in the position of $mud\bar{a}f$ is expressed by 'aḥad (fem. 'iḥdá) and is followed by a definite noun either in the dual or in the plural. ⁴¹ However, in this case the meaning of the annexation is not the expression of the counted object, but a choice among two or more items. Compare for example 'aḥadu-hum" one of them" (partitive) to xamsata-hum "the five of them" (counted object).

Sībawayh does not comment on this construction explicitly in the *Kitāb*, but he uses it repeatedly in his metalanguage: 'alá 'aḥadi l-maf'ūlayni "on one of the two complements" (*K*. I, 13.12–13); *li-'anna 'aḥada-humā* "because one of the two" (*K*. I, 45.15); 'iḥdá ṭ-ṭā'ifatayni "one of the two types" (*K*. I, 415.13).

The same remark goes for the *Muqtadab*. Al-Mubarrad makes no explicit comment on this construction, although he uses it very often.

Ibn as-Sarrāj devotes a paragraph to 'aḥad and 'iḥdá, in which he explains that they are always in the position of muḍāf and that they cannot be put in the dual nor in the plural ('U. II, 17.2–4). He illustrates his point by examples of the type: marartu bi-rajulin maqṭū'i 'iḥdá l-'uḍunayni "I passed by a man one of whose ears has been cut off" as opposed to the incorrect *marartu bi-rajulayni maqṭū'ay 'iḥdá l-'aḍāni "I passed by two men one of whose ears has been cut off" ('U. II, 16.21–22), because in this expression 'iḥdá cannot be put in the dual. The reason given is that the meaning of 'aḥad and 'iḥdá means one item of one group (one of the two ears), not one item of each group (one ear of each man) ('U. II, 17.2–4).

⁴¹Cf. Fleisch (1990, I, 507; §106c and d).

Annexation of "two"

The only occurrence of <code>iṭnāni</code> in the position of <code>muḍāf</code> is found in the poetic line quoted above p. 92: <code>ṭintā ḥanḍalin</code> "two colocynths" (K. II, 182.18; M. III, 156.3). ⁴² Unlike al-Mubarrad, Sībawayh does not draw from this example the conclusion that annexation is the base form for the expression of the counted object.

Next to this poetic use, both Sībawayh and al-Mubarrad quote the incorrect expression *itnay-himā "the two of them" where the pronoun is supposed to express the counted object in *marartu bi-himā tnay-himā "I passed by both the two of them" (K. I, 168.17) and *marartu bi-'axaway-ka tnay-himā "I passed by both your two brothers" (M. III, 241.2). They reject these expressions because the annexation of itnāni to the dual pronoun -humā is redundant.

Al-Mubarrad is clearer than Sībawayh when he adds that "something cannot be annexed to itself" (wa-š-šay'u lā yuḍāfu 'ilá nafsi-hi; M. III, 241.2), which is the case in iṭnay-himā but not in xamsata-hum because -hum does not strictly refer to "five".⁴³

Annexation of cardinals from "three" to "ten"

For numerals from "three" to "ten", annexation is a common way to express the counted object⁴⁴ and there are many occurrences of this construction in the corpus. The second term is in the plural, either in the indefinite or with the definite article as in *talātatu 'abwābin* "three dresses" and *xamsatu l-'atwābi* "the five dresses" (*K.* I, 86.8–10; *M.* II, 164.4–5; '*U.* I, 311.5–10). None of these numerals is found annexed to a singular substantive.

There is one occurrence where annexation expresses possession, as in *xamsatu-ka* "your five" ('U. I, 325.14).

Annexation of compound cardinals

Our authors are divided on whether compound cardinals can be annexed to their possessor. Sībawayh and Ibn as-Sarrāj qualify as "bad language" (*luġah radī'ah*; K. II, 47.19; 'U. II, 140.8) the expression xamsata-'ašara-ka "your

⁴²Cf. Fleisch (1990, I, 507-508; §106f).

⁴³Cf. Howell (1883/2003, IV, 1426).

⁴⁴Cf. Fleisch (1990, I, 508-510; §106*h-m*).

⁴⁵Cf. Howell (1883/2003, II, 814).

fifteen" whereas al-Mubarrad seems to approve it (*M.* II, 178.10; 179.4; 6; IV, 30.16). He even discusses, and rejects, the possibility to decline *xamsata-'ašara* in this case (*M.* II, 178.10–180.12) as in *xamsata-'ašaru-ka*, *xamsata-'ašara-ka* and *xamsata-'ašari-ka*, which he says was the position of Sībawayh (*M.* II, 180.7)! We will come back to this issue in the *Muqtaḍab* where al-Mubarrad gives a proper interpretation of this annexation (see below, p. 226).

Ibn as-Sarrāj is the only one to mention the possibility to annex compound numerals to a pronoun referring to their counted object, as in the following quotation of al-'Axfaš: 'atayna-nī tamāniya-'aš(i)rata-hunna⁴⁷ and 'ataw-nī tamāniyata-'ašara-hum "the eighteen of them came to me" in the masculine and the feminine ('U. II, 22.13). It is not clear, however, whether he approves of this use.

Annexation of decades

The decades cannot be annexed to their counted object, but there is no problem to annex them to their possessor, as in 'išrū Zaydin "Zayd's twenty" (*M.* III, 32.12), 'išriy-ya "my twenty" ('*U.* I, 312.17; 262.6; *M.* I, 249.1) and 'išrū-ka "your twenty" (*M.* II, 178.4; IV, 30.17; '*U.* III, 263.6). ⁴⁸ Sībawayh does not mention this construction.

The fact that both meanings—possession and counted object—are very different is clear from the two expressions $\underline{tal\bar{a}t\bar{u}}$ -hum "their thirty" (according to M. II, 178.4 and * $\underline{tal\bar{a}t\bar{u}}$ -hum "the thirty of them" in the erroneous *ian-i

There is also an interesting "mourning" (nudbah) form⁴⁹ of 'išriy-ya: yā 'išriy-yāh! "alas, my twenty!" (M. IV, 273.5).

⁴⁶The position of az-Zamaxšarī is that it is possible to annex compound cardinals to their possessor, except for "twelve", because of its declension (*Mufaṣṣal*, 94.10–11).

⁴⁷The text reads <u>tamāniya</u>—'ašara-hunna, which is impossible and inconsistent with its masculine counterpart.

⁴⁸Cf. Wright (1967, I, 257; §323, rem b).

⁴⁹See above, footnote 8, p. 81, for more details on this form.

Annexation of conjoined numerals

Al-Mubarrad is the only one to mention that in conjoined numerals such as $\underline{tal\bar{a}tatun}$ $wa-\underline{tal\bar{a}t\bar{u}na}$ the $mud\bar{a}f$ 'ilayh should be added to both parts, as in $\underline{tal\bar{a}tatu-ka}$ $wa-\underline{tal\bar{a}t\bar{u}-ka}$ "your thirty-three". It is the case for any noun conjoined $(ma't\bar{u}f)$ to another one, as in the expression $\underline{\dot{g}ul\bar{a}mu-ka}$ $wa-\underline{\dot{t}ariyatu-ka}$ "your lad and your maid" (M. II, 178.6-7).

In other words, each part of these numerals behaves according to its own rule before the conjunction, which implies that their annexation cannot express their counted object but only possession.

Annexation of "one hundred" and "one thousand"

As for *mi'ah* and *'alf*, they can be annexed to their counted object, as in *mi'atu dirhamin* "a hundred dirhams" (*K.* I, 87.4; *M.* II, 167.11; *'U.* I, 304.7) and *'alfu dirhamin* "a thousand dirham" (*K.* I, 87.6; *M.* II, 164.7; III, 38.3; 65.6; *'U.* I, 312.11). ⁵⁰

Al-Mubarrad is the only one to mention the annexation of *mi'ah* and *'alf* to their possessor as in *mi'atu-ka* "your hundred" and *'alfu-ka* "your thousand" (*M.* II, 178.5).

Annexation of ordinals

Annexation of ordinals is dealt with in expressions of the type $x\bar{a}misu$ xamsatin "one of five" and $x\bar{a}misu$ "arba'atin "the one that completed [a group of] four and made it five", which all three author deal with in a chapter devoted to the rule that stipulates that the maculine supersedes the feminine. See below, p. 170, more details on this issue.

These two types of expression are clearly distinguished by Arabic grammarians.⁵¹ In the type of *xāmisu xamsatin* the ordinal is annexed to its corresponding cardinal and in the type of *xāmisu 'arba'atin* it is annexed to

⁵⁰Cf. Fleisch (1990, I, 514−515; §106*v*−*w*).

⁵¹Cf. Fleisch (1990, I, 521, note 1).

the preceding cardinal in the series. See above, p. 88, the Qur'ānic quotations linked with these expressions.

The first expression means "one of two", "one of three", "one of four", and so on, and not "the second of two", "the third of three" (*M.* II, 181.4; '*U.* II, 426.5–6). In this case, the annexation means the partitive.

The second type of expression, *xāmisu 'arba'atin*, has a verbal meaning. The annexation expresses the link between the verb and its object, just like in *sāriqu l-bayti* "the robber the house" (*M.* II, 181.6–8; '*U.* II, 426.8–9).

There are cases, however, where our authors use the ordinals annexed to their counted objects in their metalanguage, but they never comment on this use. See for example the following expressions where the counted object is either a substantive or a pronoun: kasarta tāniya l-ḥarfi hīna qulta fa'ila "you put a kasrah on the second consonant when you say 'fa'ila'" (K. II, 275.13–14); kāna tāliṭu-hu ḥarfa l-layyini "its third [consonant] is a glide" (K. II, 105.7); wamā kāna min-hā tānī ḥurūfi-hi kasratan "and that whose second consonant carries a kasrah" (M. I, 255.3); fa-ṣāra rābi'u-hu ḥarfa maddin "so its fourth [consonant] becomes a glide" ('U. III, 11.10).

Annexation of compound ordinals

Sībawayh does not mention an issue that seems to have kept al-Mubarrad very occupied, namely the verbal value of compound ordinals. He simply says that above "ten", in the expressions of the type $x\bar{a}misu$ 'arba'atin the second part of the first numeral (-'ašara) is deleted, as in $x\bar{a}misu$ 'arba'ata-'ašara "the one that made [the group of] fourteen to be fifteen", instead of * $x\bar{a}misa$ -'ašara 'arba'ata-'ašara (K. II, 179.2). In this case, the compound ordinal $x\bar{a}misa$ -'a-sara "fifteenth", abridged in $x\bar{a}misu$, has a verbal strength and meaning.

Al-Mubarrad says that he follows al-'Axfaš al-'Awsaṭ (d. 215/830) and al-Māzinī (d. 248/862) who believe that it is not possible to build a verbal $f\bar{a}$ 'il on a compound cardinal. Al-Mubarrad says that in expressions like $x\bar{a}misu$ 'arba'atin, $x\bar{a}mis$ is "treated like an active participle" (tujrī-hi majrá $d\bar{a}rib$; M. IV, 183.4), but this is impossible with a compound numeral. This forbids expressions like $x\bar{a}misu$ 'arba'ata-'ašara. He also says that "recent grammarians" have accepted it (an-naḥwiyyūna al-mutaqaddimūna; M. II, 182.12–183.1–7).

For him, the only possible expressions are of the type $r\bar{a}bi'u$ 'arba'atin, as in $x\bar{a}misu$ xamsata–' $a\bar{s}ara$ " one of fifteen", literally "the fif[teen]th of fifteen". The complete expression should have been * $x\bar{a}misa$ –' $a\bar{s}ara$ xamsata–' $a\bar{s}ara$,

but the first - 'ašara has been elided for lightness' sake, and $x\bar{a}mis$ was made declinable to avoid the three-term compound * $x\bar{a}misa-xamsata-$ 'ašara (M. II, 182.7–10).

This position of al-Mubarrad is one of the debated issues in his *Radd 'alá Kitāb Sībawayh*, where he expresses the same rejection of this construction, for the same reasons (Issue #113; *Radd*, 165–166).

There is no reference in the 'Uṣūl to the verbal strength of compound ordinals and Ibn as-Sarrāj seems to ignore the debate about the possibility of saying xāmisu 'arba'ata-'ašara.

However, Ibn as-Sarrāj mentions annexation of compound ordinals to their counted object, as in $al-h\bar{a}diya-$ 'ašara-hum 'anā "the one who is one of the eleven is me" and $a\underline{t}$ - $t\bar{a}niya-$ 'ašara-hum 'anā "the one who is one of the twelve is me" ('U. II, 331.12; 332.1). However, since these examples are the result of the predication test applied to the expressions 'anā $h\bar{a}d\bar{a}$ 'a $h\bar{a}da-$ 'ašara and 'anā $t\bar{a}n\bar{a}$ $t\bar{a}n\bar{a}$ $t\bar{a}n\bar{a}$ ·ašara (see above p. 82), it does not mean that they are actually used in the language and they should be treated cautiously.

4.5.3 The addition of the definite article to numerals

Except for compound cardinals, the addition of the definite article to numerals has not received much attention from our grammarians and it seems to be a self-understood issue for them. All numerals, cardinals and ordinals, are found in our corpus with or without the definite article.

The case of compound cardinals is different.⁵² In *K*. II, 47.17–19, Sībawayh says that Arabs very often annex *xamsata-ʿašara* or add the article to it without any change, just like they say *idrib ʾayyu-hum ʾafḍalu!* "hit the one who is the best!" or *ka-l-ʾāna* "like now". What is at stake here is the independent form of *ʾayyu-hum* and the dependent form of *al-ʾāna* in a position where one expects the dependent form *ʾayya-hum* and the oblique form *al-ʾāni*. However, Sībawayh considers that the very frequent use of *ʾayyu-hum* and *al-ʾāna* in these forms justifies the fact that they are not modified when put in another syntactic position. They are practically treated as indeclinable.

In exactly the same manner, when Arabs annex *xamsata-ʿašara* or add the article to it, they do not change it. Probably what Sībawayh intends is that the second part of the compound, which occupies the slot of a *tanwīn*, should

⁵²Cf. Wright (1967, I, 261; §329, rem.), and Howell (1883/2003, II, 813).

be deleted in annexation or after the addition of the definite article but that Arabs keep it as it is, just like they keep 'ayyu-hum and al-'āna in these forms.

Al-Mubarrad sees no difficulty in adding the definite article to compound cardinals (M. II, 180.5–7) or to annex them. He simply says that in this case their "intention of $tanw\bar{\imath}n$ " is deleted (M. II, 178.10–11). In other words, –'ašara occupies the slot of a $tanw\bar{\imath}n$, which is incompatible with annexation and with the definite article. However, this intention of $tanw\bar{\imath}n$ can be deleted.

The difference between Sībawayh's and al-Mubarrad's interpretation is that for Sībawayh actual use is a justification in itself while al-Mubarrad tries to find an explanation to actual use.

As for Ibn as-Sarrāj, it is not clear what his position is. He says that the Baṣrans accept *al-xamsata-ʻašara dirhaman* (*'U.* II, 14.12–16), without explicitly endorsing this expression himself. He also mentions that Arabs add the definite article to compound cardinals as in *al-xamsata-ʻašara* without making any change to it (*'U.* II, 140.6–7), and, lastly, he also quotes al-ʻAxfaš who says that some Arabs say *al-xamsata l-ʻašara* instead of *al-xamsata-ʻašara* (*'U.* II, 312.4–5).

Another issue, linked with this one, is the possibility to express a definite counted object. We will consider it below, p. 174.

At the end of this presentation of numerals in isolation where we have dealt with morphological and morphosyntactical issues, we will take a look at some semantic issues linked with numerals.

4.6 Semantic considerations

At first glance, the strongest link between all numerals is not their morphology, nor their syntax, but their semantics, and indeed these words can behave extremely differently but in the end their meaning is quite simple and obviously consistent.

4.6.1 The meaning of the patterns

We have seen that numerical roots surface in many different patterns. There seems to be a loose link between these patterns and the meanings they convey.

There are a few patterns whose meaning is stable when applied to numerals, such as the ordinal $f\bar{a}'il$ (except for $w\bar{a}hid$), the diminutive fu'ayl, the fraction fu'ul and its plural ' $af'\bar{a}l$, the fraction $fa'\bar{\imath}l$ and its plural ' $af'\bar{\imath}l\bar{a}$ ' (or fu'ul), the distributive $fu'\bar{a}l$ and maf'al. These meanings were discussed above, under each pattern.

However, for basic patterns that express the cardinal value of the root, there is no link between the pattern and its meaning. All of fa'l, fa'al, fi'l, $fa'\bar{a}l$, $fa'\bar{a}l\bar{l}$ and $fi'l\dot{a}$ can express the cardinal value of specific numerical roots, and only linguistic use can decide which form is accepted by the speakers.

Our grammarians treat these meanings very differently. None of them comments on the exception of $w\bar{a}hid$, which has a cardinal meaning and an ordinal pattern, and, in the same manner, they do not comment on the fact that the patterns expressing the cardinal numerals are almost all different. In the following paragraphs, we will consider some issues related to the meanings of the different patterns in which numerals surface.

Do decades have a plural meaning?

The meaning of the morphological shape of decades was discussed as follows. Is the suffix $-\bar{u}na$ a plural suffix? As we have seen above p. 111, this question was triggered by morphological considerations. In order to build the diminutive forms of decades, grammarians had to decide whether $-\bar{u}na$ was part of the pattern of the word or if it was a plural suffix.

Apparently quoting Yūnus, Sībawayh says that the final $n\bar{u}n$ in $\underline{t}al\bar{a}\underline{t}\bar{u}na$ compares to the final $n\bar{u}n$ in ' $i\bar{s}r\bar{u}na$ inasmuch as it cannot be separated from the word it modifies. In other words, $\underline{t}al\bar{a}\underline{t}\bar{u}na$ is not the plural of $\underline{t}al\bar{a}\underline{t}$ "three", just like ' $i\bar{s}r\bar{u}na$ is not the plural of *' $i\bar{s}r$ (K. II, 119.7–9).

Another interesting evidence for Sībawayh that *talātūna* is not the plural of *talāt* is that it would then mean "nine" (*K*. II, 119.9–10). To understand this argument, one has to consider that the plural begins with three and that "nine" is "three times three".

For al-Mubarrad, the decades are not plurals, although they behave in surface like the external masculine plurals (*M.* III, 331.11–332.2).

Ibn as-Sarrāj does not deal with this issue independently from the diminutive of $\underline{t}al\bar{a}\underline{t}\bar{u}na$ where he simply quotes Sībawayh's quotation of Yūnus saying that the diminutive is not built on $tal\bar{a}t$ to which the suffix $-\bar{u}na$ would then

be added but on $\underline{talatuna}$ as a whole, i.e., the suffix $-\overline{una}$ does not behave here as a plural suffix ('U. III, 49.5-7).

Should not 'išrūna mean "one hundred"?

The particular shape of 'išrūna also triggers some question.⁵³ Its meaning is clearly the dual of "ten" but its pattern could also have meant "one hundred", since the morphology of 'išrūna is exactly parallel to the other decades, <u>talātūna</u>, 'arba'ūna, and so on, which clearly mean "three decades", "four decades", and so on. The problem is that 'išrūna does not mean "'išr decades", which could mean "one hundred", if anything.⁵⁴

It is as if it was too confusing to have both the dual *'ašrāni (dependent and oblique 'ašrayni) for "twenty" and the plural 'ašrūna ('ašrīna) for "one hundred" coexist in the same series.

Al-Mubarrad is the only author to quote a discussion about the morphological form of 'išrūna, and the kasrah under the 'ayn in particular. Some say that this kasrah comes from the initial kasrah in iṭnayni, because 'išrūna means the dual of "ten", not its plural (M. II, 165.15–17), so that there is some trace of this "dual" origin. However, al-Mubarrad rejects this interpretation.

Instead he simply says that 'išrūna is neither built like other decades (i.e., the feminine form of the unit followed by -ūna, as in talāt-ūna: *iṭnat-ūna? or *iṭn-ūna?), nor is it built like the dual of "ten" ('ašaratāni) (M. II, 165.15–166.11). According to him, once the declension was removed, the word would appear in a singular form that does not exist (*iṭn), and "the meaning [of the word] would have disappeared" (la-baṭala ma'nā-hu; M. II, 166.14). Indeed, if -āni is a dual marker in iṭn-āni, what is a single iṭn?

Instead, he says that 'išrūna has a pattern of its own, just like "ten", whose masculine and feminine forms ('ašaratun and 'ašrun) are not analogical either

⁵³Cf. Fleisch (1990, I, 512-513; §106r).

⁵⁴It seems that Semitic languages surface in two competing systems. In some languages (Akkadian, Ethiopian, South Arabic), all the decades are built in the dual just like "twenty": e.g., Akkadian ešrā "twenty", šalāš-ā "thirty", erb-ā "forty", *ħamš-ā - ḥanš-ā "fifty", whereas in others (Hebrew, Arabic) decades are built in a plural form and "twenty" was integrated into the system: e.g., Hebrew 'eśr-īm, šelōš-īm, 'arbā'-īm, ḥamiš-īm, šišš-īm, šib'-īm, šemōn-īm, and tiš'-īm (Szemerényi 1960, 145–146).

(*M.* II, 166.1–4).⁵⁵ In the same way, the initial *kasrah* in *'išrūna* is an indication that its morphology and meaning is different from other decades (*M.* II, 166.7).

Ibn as-Sarrāj does not enter in this kind of consideration. He only says that "twenty" is derived from the same root as "ten" ('*U.* I, 312.3–4).

Why is "one hundred" not derived from "ten"?

Once again, al-Mubarrad is the only one to deal with the link between the meaning of *mi'ah* and its morphological shape. Morphologically, it is not derived from "ten" (as in hypothetical *'ašr-ūna "ten decades", like tis'-ūna "nine decades") but it is a completely different root, which is "its right" (ḥaqqu-hu) inasmuch as it begins a new series (M. II, 167.9–10).

The meaning of compound cardinals

Sībawayh states that compound cardinals are originally 'aṭf constructions, like xamsata-'ašara "fifteen", whose base form ('aṣl) is xamsatun wa-'ašaratun ("five and ten"; K. II, 47.8–9).

While al-Mubarrad does not tackle this specific issue, Ibn as-Sarrāj mentions the same opinion as Sībawayh, adding that the *wāw* between *xamsatun* and *'ašaratun* has been elided "for brevity" (*ixtisāran*; *'U.* II, 140.5).

The meaning of ordinal numerals

The issue at stake in the meaning of ordinal numerals is their link with the corresponding verbs, because it has syntactic implications.

We have seen above p. 104 that all authors agree on the fact that the $f\bar{a}^{c}il$ pattern of these numerals is linked with the corresponding verbs not only morphologically, but also semantically and syntactically.

Al-Mubarrad teaches that this $f\bar{a}$ il form has a verbal strength (and a verbal meaning), which explains that it can also be vocalised $r\bar{a}bi$ un $tal\bar{a}tatan$

 $^{^{59}}$ The text would not be intelligible without a correction from as-Sīrāfī (d. 368/979), which the modern editor 'Uḍaymah has integrated in the text: $fa\text{-}min\text{-}h\bar{a}$ 'anna-ka taqūla fī l-muḍakkari 'ašaratun wa-li-l-mu'annaṭi 'ašrun bi-l-'iskāni. Thanks to this correction, it becomes clear that al-Mubarrad draws a parallel between 'išrūna and 'ašaratun. The latter does not follow the regular patterns for masculine and feminine, since the masculine 'ašaratun carries the feminine $h\bar{a}$ ', while the feminine 'ašrun is deprived of it.

("making the three to be four"; M. II, 181.7). In this case, $r\bar{a}bi$ 'has clearly the status of the $ism\ al$ - $f\bar{a}$ 'il of the verb raba'a. This is not true in $r\bar{a}bi$ ' u 'arba'atin "one of the four" because the meaning of $r\bar{a}bi$ 'here is not verbal (M. II, 181.1).

Later in the Muqtadab he also says that the forms $x\bar{a}mis$ and $x\bar{a}misah$ are "derived from the numeral" ($m\bar{a}$ štuqqa la-hu min al-'adadi smun; M. II, 426.1), "built like an ism al- $f\bar{a}$ 'il" (banayta-hu $bin\bar{a}$ 'a smi l- $f\bar{a}$ 'ili; M. II, 426.7), which explains the feminine form where a " $h\bar{a}$ " is added just like in $d\bar{a}ribah$ " (M. II, 426.6).

Ibn as-Sarrāj describes these ordinals in exactly the same terms as al-Mubarrad. The forms $x\bar{a}mis$ is "built like an $ism\ al-f\bar{a}$ 'il" ($banayta-hu\ bin\bar{a}$ 'a $smi\ l-f\bar{a}$ 'ili; 'U. II, 426.3–8). However, earlier in the 'Uṣūl he labels expressions of the type $x\bar{a}misu$ 'arba'atin as "weak" because the corresponding verbs do not really exist ('U. II, 332.11–13).

The meaning of compound ordinals

According to Sībawayh alone, compound ordinals have a different origin (${}^{i}asl$) than compound cardinals. While cardinals have a conjoined origin (${}^{i}atf$ constructions), ordinal compounds are originally ${}^{i}d\bar{a}fah$ constructions, like $x\bar{a}misa-{}^{i}asara$ originating in $x\bar{a}misu$ $xamsata-{}^{i}asara$ (K. II, 47.9-10). He also adds that this has no implication for their treatment as compounds and he interprets both cardinal and ordinal compounds in the same syntactic frame, "the two things that are made one noun", justifying his choice by saying that both should be treated alike (K. II, 47.8-11).

As was made clear above p. 133, al-Mubarrad is the only one to discuss whether compound ordinals have the same verbal strength as ordinals.

The meaning of fractions

Needless to say, the meaning of the fraction pattern fu'ul is not discussed in our texts, where this pattern is not even mentioned. The same goes for fa'il, which is found in morphological lists but without comments.

The meaning of diminutives

As for the meaning of the diminutive pattern fu^cayl applied to numerals, our grammarians do not discuss it and it is not really clear what they mean by the

diminutive of "eight" or "thirty". It cannot be ruled out that they only intend numerals as proper names, although nothing forbids to build the diminutive of a substantive (*kulayb* is a "small dog").

An interesting parallel can be found in the diminutive of the names of the day, which Sībawayh forbids for semantic reasons. He explains that it is impossible to form the diminutive of the days of the week (K. II, 138.7–15) by drawing a distinction between nouns that refer to something present (alyawm "the day", aš-šahr "the month", as-sanah "the year") and those that refer to a non-present time ('ams "yesterday", ġad "tomorrow", at-Talātā'256 "Tuesday", al-'Arbi'ā' "Wednesday", al-bāriḥah "yesterday") He compares nouns referring to the present time to the proper names Zayd and 'Amr in the expressions hādā Zaydun "this is Zayd" and hādā l-yawmu "this is the day", as evidence that their diminutive form is permissible, as opposed to nouns that do not refer to something present and whose diminutive form is not acceptable. Maybe what is at stake is that a "small Zayd" can be put next to a "normal Zayd" and compared, but a "small yesterday" or a "small Monday" have no meaning because they are not "present", so that they cannot be compared. Sībawayh adds that Arabs prefer to use the diminutive of nouns that are "more stable" ('ašaddu tamakkunan) such as al-yawm "the day", allaylah "the night" and as-sā'ah "the hour" (K. II, 138.12–13).

Another reason that forbids the formation of the diminutive of the days of the week is that, unlike proper names like *Zayd*, they do not refer to a whole "category" ('*ummah*) but to one specific thing (*K*. II, 138.14–15). This argument is perhaps a bit weak because one could consider that Monday belongs and refers to the category of Mondays in the year, just like Zayd belongs and refers to the category of all men called Zayd.

Ibn as-Sarrāj, who mentions the argument of *tamakkun* to forbid the formation of the diminutive of the days of the week (${}^{2}U$. III, 62.10–11), does not help us any further to understand what the meaning of the diminutive numerals could be.

The position of al-Mubarrad is not useful either in this respect since he does not forbid the diminutive forms of the days of the week, whose meaning he takes for granted. He lists them as follows: *Subayt*, *'Uḥayd*, *Ṭunayyān*, *Ṭulayyiṭā'*, *al-'Uraybi'ā'*, *al-Xumayyis* and *Ṭumay'ah* (M. II, 276.1–277.4).

In the end, there is no reason to believe that the diminutive of "eight" and "thirty" could mean anything else than "a small eight" or a "small thirty",

⁵⁶See above, p. 118, on this vocalisation.

just like "a small dog",⁵⁷ and this because—as can be extrapolated from Sībawayh—they refer to something present, unlike the days of the week.

The meaning of "deflected" numerals

The "deflected" forms of numerals 'uḥād (or mawḥad), tunā' (or maṭnā), tulāt and rubā' are consistently said to have the distributive meaning wāḥidan wāḥidan "one by one", iṭnayni ṭnayni "two by two", and so on (K. II, 15.2; M. III, 381.7; 'U. II, 88.11–13).

Al-Mubarrad adds that the 'adl "deflection" of these numerals precisely consists in their change in meaning, which also conveys an idea of "multiplication" (taktīr; M. III, 381.7–8).

4.6.2 A *maṣdar*-like meaning of numerals?

In the expression wahda-hu "him alone", al-Xalīl is said by Sībawayh to "claim" that wahd- is treated as a maṣdar, as if it were the complement of an underlying verb of the same root (K. I, 157.10–12), a construction later called $maf^*\bar{u}l$ muṭlaq. And in the Ḥijāz, Arabs are also reported to use the expressions $\underline{talatata-hum}$ "the three of them", ' $arba^cata-hum$ "the four of them", until "ten"; what was said of al-Xalīl's interpretation for wahda-hu applies to these as well (K. I, 157.5–11). However, Sībawayh does not explicitly say what the underlying verb of the same root as wahd- is. This example is discussed by Ayoub (1990, 9) as a case of underlying representation ($tamt\bar{\iota}l$) in grammar.

According to al-Mubarrad, the expression *marartu bi-Zaydin waḥda-hu* "I passed by Zayd alone" is equivalent to (*ta'wīlu-hu*) 'awḥadtu-hu bi-murūrī 'īḥādan "I have isolated him completely by my passing by" and this shows that waḥd- has the meaning of 'īḥād, the *maṣdar* of the verb 'awḥada, which in turn explains its dependent form (*M.* III, 239.6–7). Later in the same chapter, al-Mubarrad also comments on a possible oblique form for the expression *marartu bi-him talātati-him*.

In the same manner, he adds that *marartu bi-l-qawmi xamsata-hum* "I passed by five people of the tribe" actually means *bi-hā'ulā'i taxmīsan* "by

⁵⁷In a personal communication during the second Foundations of Arabic Linguistics conference held in Cambridge, September 13 & 14, 2012, Michael Carter mentioned that these diminutive forms also carry an affective meaning, as in "dear little eight" or "dear little thirty".

⁵⁸See above footnote 14, p. 83, for more details.

them, making them five" (*M.* III, 239.10), i.e., the *maṣdar* of the verb *xammasa*. This Form II *maṣdar* corresponds to the Form IV 'īḥādan, which is according to him the meaning of *waḥd-* in these expressions.

The position of Ibn as-Sarrāj is quite different. In expressions of the type marartu bi-hi waḥda-hu "I passed by him alone", waḥd- is treated like the maṣdar in 'awḥadta-hu 'īḥādan "I have singularised him completely" ('U. II, 22.14–15), which is itself treated like a ḥāl ('uqīma maqāma maṣdarin yaqūmu maqāma ḥālin; 'U. I, 165.3–4), not a mafʿūl muṭlaq.

As for other numerals, it is possible to use them in the same type of expressions, as in *marartu bi-him talātata-hum* and *talātati-him* "I passed by the three of them". In the dependent form, talātata-hum is interpreted like wahda-hu but no verb is mentioned, and talātati-him agrees with the noun that it qualifies, just like kullu-hum, which is an appositive complement $(t\bar{a}bi')$ used for "emphasis" $(tawk\bar{\iota}d)$ ('U. II, 22.9–10).

Interestingly, in a section devoted to the fourth possible meaning for the appositive complement (*'U.* II, 46–55), namely "replacement" (*'ibdāl*), Ibn as-Sarrāj quotes the expression *laqītu qawma-ka talāṭata-hum* "I found your tribe, three of them", where *talāṭata-hum* agrees with *qawma-ka* as an appositive complement meaning the "replacement of a part of the first term" (*mā 'ubdila min al-'awwali wa-huwa ba'du-hu*; *'U.* II, 47.6–8). Ibn as-Sarrāj mentions that Sībawayh proposed this interpretation along with an other one: *talāṭata-hum* can also be an "utterance" (*wa-l-wajhu l-'āxaru 'an yutakallama*; *'U.* II, 47.10), i.e., it is uttered independently, as after a pause.

Lastly, there seems to be some hesitation concerning the gender agreement in these expressions. As for *waḥd*-, it is clear from the actual use of our grammarians that it is perfectly correct to say *waḥda-hā*. However, there are only two cases where the pronoun is in the feminine with other numerals, and in one of these cases Sībawayh and Ibn as-Sarrāj do not agree. When referring to the three words *laʿalla* "maybe", *ka-ʾanna* "as if" and *layta* "if only", Sībawayh uses *ṭalāṭu-hunna* (*K*. I, 168.17) whereas Ibn as-Sarrāj uses *ṭalāṭatu-hunna* (*ʾU*. I, 240.18).

The second case where the pronoun is in the feminine is an expression of al-'Axfaš as quoted by Ibn as-Sarrāj: 'atayna-nī tamāniya-'aš(i)rata-hunna "the eighteen of them [fem.] came to me" ('U. II, 22.13; see above, p. 130).

In the absence of any other occurrence of these expressions in the feminine, it is impossible to decide what the opinion of our authors is and whether it is possible for the numeral to agree in gender when it is annexed to a pronoun expressing its counted object, or whether in this *maşdar*-like use the numeral is invariable.

4.6.3 The absolute meaning of the cardinals

In expressions such as *xamsatu-ka* "your five" or '*išriy-ya* "my twenty", what is intended is not the absolute meaning of numerals, i.e., a meaning devoid of reference to any counted object, but it is actually an understood quantity of something that is known to the listener.⁵⁹

Ibn as-Sarrāj is the only one to mention the absolute meaning of numerals as in in *mā fī yadi-ka ʾillā ṭalāṭatu* ("you only have three in your hand"; *'U.* II, 98.17) and in *ṭalāṭatu ʾakṭaru min iṭnayni wa-ʾaqallu min ʾarbaʿata* ("three is more than two and less than four"; *'U.* II, 98.19–20) where *ṭalāṭah* is diptotic if the absolute meaning is intended, as discussed above p. 123.

In a section devoted to the sixth kind of indeclinable nouns (${}^{3}U$. II, 139.1–15), namely onomatopoeia ($a\bar{s}$ - $\bar{s}awt$ al- $mah\bar{k}\bar{\iota}$), Ibn as-Sarrāj includes in this category letters of the alphabet when used to spell a noun, and numerals when merely listed, as in $w\bar{a}hid$ $itn\bar{a}ni$ "one, two" (${}^{3}U$. II, 139.7).

The point at stake here is that if numerals are merely listed, they become invariable and no (syntactic) ending vowel should be uttered, as at the pause. Ibn as-Sarrāj (following Sībawayh) calls ' $idr\bar{a}j$ "listing" the utterance of a group of words not connected by any syntactic link and ' $i\bar{s}m\bar{a}m^{61}$ the type of non-vocalised pause that applies to them ('U. II, 139.6–8).

Ibn as-Sarrāj says that 'išmām applies to listed numerals because they are not (true) onomatopoeia ('U. II, 139.7–8). In other words, they are fully declinable nouns, which are treated like onomatopoeia when listed for their absolute meaning.

Finally, Ibn as-Sarrāj quotes another issue also mentioned in the *Kitāb* and which relates to the absolute meaning of numerals. Some Arabs are said to elide the initial *hamzah* in 'arba'ah "four" when listing numerals, in which

 $^{^{59}} Howell$ (1883/2003, IV, 1428) says that numerals serve here to express "unrestricted numbers". More details are found in Howell (1883/2003, IV, 1471–1474; VI, 998–1002).

 $^{^{60}}$ Troupeau (1976, 90) translates this term in the $\it Kit\bar ab$ by "assemblage" and adds that it applies to morphology, which is not the case here.

⁶¹See 'U. II, 371-374 for a detailed account of the four different types of pause, 'iskān, 'išmām, tašdīd and rawm at-taḥrīk, which are not always interchangeable. Troupeau (1976, 120) translates 'išmām by "action de faire sentir" and says that it applies in the field of phonetics. See al-Nassir (1993, 32) for an account of these four types of pause in Sībawayh's Kitāb.

case they vocalise the ending $h\bar{a}$ in $\underline{tal\bar{a}tah}$ with a fathah as in $\underline{tal\bar{a}taha}$ rba an "three, four" (K. II, 32.6–8; 'U. II, 139.8–9).

4.6.4 Expression of numerals in the dual and the plural

We have seen above pp. 125ff. that some numerals follow the dual declension and that others can be put in the plural. In this case, it is noteworthy that what is intended is their absolute meaning, not the calculation of a new numeral. In other words, *xamsatāni* means "two fives" not "ten", and *talātu xamasātin* means "three fives" not "fifteen".

The case of *mi'ah* and *'alf* is different since they can be used to express a new quantity, as in *talātu mi'atin* "three hundreds" and *talātatu 'ālāfin* "three thousands". The proof that they build new numerals is that they can in turn have a counted object, as in *talātu mi'ati waladin* "three hundred boys" and *talāṭatu 'ālāfi waladin* "three thousand boys", while it is not possible to say **talāṭu xamasāti 'awlādin* "three five boys".

What is the case of other numerals, compounds and decades? How can one say "two twenties" or "three forties"? Sībawayh is the only one to discuss—and reject—the possibility to put the decades in the dual and the plural because otherwise there would be two declension markers in the same word, as in *'išrūnāni "two twenties". He also quotes the following erroneous forms: *mi'atānāni "two two hundreds", *'alfānāni "two two thousands" and *Iṭnānāni "two Mondays" (K. II, 93.14–20).62

Moreover, Sībawayh says that there is no need to say "two twenties" because the word 'arba'ūna "forty" exists instead (K. II, 93.19). As for "two Mondays", it is impossible to say because the word al-Iṭnāni "Monday" actually replaces ('alá ḥadd "its definition") the expression al-yawmu yawmāni min aš-šahri "today is [the completion of] two days of the month" (K. II, 93.21).

There is no trace of this discussion in the two other grammar treatises.

⁶²Interestingly, Egyptian colloquial expresses the plural of numerals that have a external masculine plural form with an external feminine plural: 'išrīn-āt "twenties", xamsīn-āt "fifties". These are especially used when referring to the corresponding banknotes. The recent apparition of a two hundred banknote has even launched the audacious metēn-āt "two hundreds". As made clear by Sībawayh in K. II, 93.14–20 mentioned above, these forms are not possible in Classical Arabic.

4.6.5 Numerals having both a cardinal and an ordinal meaning

As we have seen above, the $f\bar{a}^{c}il$ pattern is used to express the ordinal meaning of numerals between "two" and "ten" and, with some adaptation, of numeral compounds between "eleven" and "nineteen".

However, the fact that for other numerals the same forms are used for both cardinals and ordinals is not mentioned by our authors: al- $b\bar{a}bu$ l- $'i\check{s}r\bar{u}na$ "the twentieth chapter", al- $kit\bar{a}bu$ l-mi'atu "the hundredth book", al-yawmu l-'alfu "the thousandth day", and it is only the adjectival construction of these numerals that makes their meaning ordinal. 63

Al-Mubarrad is the only one to mention that decades have no corresponding $ism\ al\ f\bar{a}'il$ because there would be confusion (yaltabisu) with the $f\bar{a}'il$ of numerals from "three" to "ten" from the root of which the decades' forms are also built (M. II, 184.1–3). In other words, one cannot build two different $f\bar{a}'il$ forms on the root tlt, on which both $tal\bar{a}tah$ "three" and $tal\bar{a}tana$ "thirty" are built.

But just like Sībawayh and Ibn as-Sarrāj, he does not observe explicitly that the semantic implication of this is that the names of decades have both meanings, cardinal and ordinal, and no example of decades (nor *mi'ah*, nor *'alf'*) used as ordinals is found in our texts.

Is it possible that this use was not attested in the first four centuries? In any case, it is noteworthy that our authors did not raise the issue.

The case of 'awwal may also be mentioned again here. However clearly related semantically to ordinals, it is not considered as such by our grammarians and $w\bar{a}hid$ is left alone in the series without an ordinal counterpart built on the same root. This fact is not questioned in our texts.

4.6.6 Are cardinals "unspecified nouns"?

Our three grammarians deal with a specific category, which they call *al-'asmā' al-mubhamah*, which can be translated as "unspecified nouns".⁶⁴ Since none of them presents us with a theory of these unspecified nouns, we are left with

 $^{^{63}\}mathrm{Cf}.$ Fleisch (1990, I, 522; $\S107e-f)$ and Wright (1967, I, 261–262; $\S330).$

⁶⁴Baalbaki (2008, 229) translates *mubham* by "undefined", Troupeau (1976, 42) translates it by "imprécisé", Versteegh (1993a, 158) by "unspecified", and Marogy (2010, 104) by "vague". We prefer "unspecified" because in most cases these nouns are in need of another noun that "specifies" (*yumayyizu*) them or that "explains" them (*yufassiru*); they do not need to be "defined".

only examples to deal with. This category is of great interest for our study because compound cardinals and decades are said by our grammarians to be "unspecified nouns".

According to Sībawayh, an "unspecified noun" is a noun that "applies to everything" ($taqa^cu$ ' $al\bar{a}$ kulli šay'in; K. II, 38.17). These nouns can replace a whole class of nouns, just like the demonstrative $h\bar{a}d\bar{a}$ or the relative pronoun $allad\bar{a}$. See Versteegh (1993a, 158) for a historical account of this category.

Sībawayh says explicitly that compound cardinals and ordinals are "unspecified" (mubham; K. II, 47.11), just like kam and $ka-d\bar{a}$, in a way that corresponds exactly to his own definition of "unspecified substantives" (K. II, 38.17). However, he never says explicitly that decades are unspecified, which would have made them even more similar to compound numerals, and he does not follow this track in his interpretation. This issue remains unclear in the $Kit\bar{a}h$

It is not certain that "unspecified nouns" are another "substantial" subcategory of 'asmā', different from 'asmā' al-'adad and 'asmā' al-fā'il, as Mosel (1975, 71) asserts. Rather, it seems that being "unspecified" is a semantic qualification of some nouns that are in need of a specifier. As al-Mubarrad puts it: lammā qulta 'išrūna 'abhamta ("when you say 'išrūna you are vague"; M. II, 144.6), so that the listener does not know what the speaker is talking about until they specify it.

In the expression 'išrūna rajulan, the word rajulan is a commentary on the "unspecified" numeral 'išrūna. It "throws light on its species" (*li-tubayyina naw* a hādā *l-* adadi; M. II, 144.7).

In exactly the same meaning, Ibn as-Sarrāj says that "any unspecified [noun], from the numerals or not, is explained by a [noun in the] indefinite dependent form" (kullu mubhamin min al-'a'dādi wa-ġayri-hā 'innamā tufassiru-hu n-nakiratu l-manṣūbatu; 'U. I, 114.16). Since not all numerals are specified by a tamyīz construction, this means that not all numerals are mubhamah but only the non-annexable ones.

Although being "unspecified" seems to be a semantic qualification (nouns whose meaning is defective and which can apply to everything), there are evident syntactic implications (these nouns are in need of a specifier) which could give the impression that they form a distinct substantial category of nouns.

This point will also be presented in more detail in the next part of this study, within the frame of each grammarian, p. 211 for Sībawayh's opinion, p. 235 for al-Mubarrad's opinion, and p. 255 for Ibn as-Sarrāj's opinion.

4.6.7 Is *kam* is a numeral?

Our authors all draw a parallel between *kam* and numerals (*K*. I, 250–256; *M*. III, 55–67; '*U*. I, 315–320): *kam* is a noun (*ism*) that replaces semantically any numeral, and just like them its "complement" can take two different shapes, in the dependent form (interrogative meaning) and in the oblique form (assertive or exclamatory meaning). The comparison stops here since there are actual differences, but the similitudes are enough to justify the parallel treatment between *kam* and numerals.

Sībawayh says that "kam operates on anything that 'išrūna operates on, and if it is not suitable for 'išrūna, it is not suitable for kam either" (kam ta'malu fī kulli šay'in ḥasuna li-l-'išrīna 'an ta'mala fī-hi fa-'iḍā qabuḥa li-l-'išrīna 'an ta'malu fī šay'in qabuḥa ḍālika fī kam; K. I, 251.11–2. However, there are cases where 'išrūna and kam are not interchangeable. In K. I, 251.11–12, Sībawayh rejects the expression *al-'išrūna la-ka dirhaman but he says that it is perfectly acceptable for kam (wa-lākinna-hā jāzat fī kam jawāzan ḥasanan) because "it is as if it [kam] replaces the mutamakkini fī l-kalāmi; K. I, 251.12).66 Sībawayh does not seem to see any contradiction between this difference of treatment between kam and 'išrūna and his assertion that they are interchangeable.

Al-Mubarrad says that in the interrogative position, kam behaves like a "numeral carrying a $n\bar{u}n$ " ('adad munawwan; M. III, 55.4), i.e., a numeral that cannot be in the position of $mud\bar{a}f$ because of its final $n\bar{u}n$, like ' $i\bar{s}r\bar{u}na$, or because of its intention of $tanw\bar{\iota}n$, like $xamsata-'a\bar{s}ara$ (M. III, 55.5; 10–11). This impossibility explains that the complement surfaces in the indefinite dependent form, as in kam rajulan 'inda-ka? "how many men are at your place?" (M. III, 55.4–5). This complement is called a $tamy\bar{\iota}z$ by al-Mubarrad,

 $^{^{69}}$ The account of tamakkun "full declinability" and 'adam tamakkun "partial declinability" in Baalbaki (2008, 118–119) is maybe not as clear as that of Chairet (2000, 216–217) who insists more on its gradient nature in the $Kit\bar{a}b$.

⁶⁶Manuscripts B, C and H have at-tamakkun instead of al-mutamakkin.

just like after numerals (M. III, 56.3). See below, p. 229, for a detailed presentation of the $tamy\bar{t}z$ in the Muqtadab.

At this point, the only difference between kam and 'išrūna is that kam can be separated from its $tamy\bar{\imath}z$, so that it is possible to say kam la-ka $j\bar{a}riyatan$?" "how many maids do you have?" (M. III, 55.8) whereas it is not possible to say "'išrūna la-ka $j\bar{a}riyatan$ (M. III, 55.10). The reason given by al-Mubarrad for this difference is that it is a compensation granted to kam for not being mutamakkin (M. III, 55.9). In other terms, instead of being fully declinable, kam has the strength to operate on its $tamy\bar{\imath}z$ even it is separated from it.

The *tamyīz* surfaces in the dependent form, yet it is possible to say *kam ģilmānu-ka*? "how many are your lads?" in the independent form, because in this case the *tamyīz* itself is not expressed overtly and the underlying expression is *kam ģulāman ģilmānu-ka*? just like the expression 'a-'išrūna ģilmānu-ka? "are your lads twenty?" corresponds to an underlying 'a'išrūna ģulāman ģilmānu-ka? (M. III, 56.4–8).

The most straightforward expression of a parallel between *kam* and numerals is found in the *'Uṣūl* where Ibn as-Sarrāj calls *kam* an "unspecified numeral" (*ism 'adad mubham*; *'U.* I, 314.1).

Like Sībawayh and al-Mubarrad he says that "kam is a noun that replaces all numerals" (kam ismun yantaḍimu l-ʻadada kulla-hu; 'U. I, 315.6) and that it is "like the rest of numerals at an underlying level" (kamā yakūnu sāʾiru l-ʾaʿdādi fī t-taqdīr; 'U. I, 316.4–5).

What is more, he adds that:

(5) *kam* is a numeral and its status is that of the object that is counted. If the counted object is time, it is time, and if it is an animal, it is an animal, and if it is something else, its status is the same. (7*U*. I, 317.4–6)

4.6.8 Is bid ah a numeral?

The case of bid^c (fem. bid^cah) is also interesting since it replaces semantically and syntactically any numeral between "three" and "nine" in compound numerals: $bid^cata-^cašara\ rajulan$ "ten-odd men" and $bid^ca-^caš(i)rata\ mra^atan$ "ten-odd women". This semantic and syntactic information about $bid^c(-ah)$ is mentioned by Sībawayh and Ibn as-Sarrāj (K. II, 179.2–3; V. II, 427.6–7), but not by al-Mubarrad, who does not use this word in his Muqtadab.

Interestingly, bid^c and bid^cah follow the same gender polarity rules as numerals between "three" and "ten". However, neither Sībawayh nor Ibn as-Sarrāj comment on this polarity nor do they mention the use of bid^cah and bid^c when used alone before a counted object as in bid^catu 'awlādin "a few boys" (and bid^cu banātin "a few girls").

Another noun that is usually associated with numerals is *nayyif*, which means "some" in expressions like *nayyifun wa-'išrūna rajulan* "twenty and some men".⁶⁸ This word applies to both masculine and feminine counted objects, it is not found in our texts.

4.6.9 Numerals as proper names

In our texts, numerals are tested as proper names⁶⁹ in the following cases: their relative adjective ('Arba'ata-'Ašar in K. I, 298.4–9; Xamsata-'Ašar in K. II, 84.3; Iṭnā-'Ašar in K. II, 84.13; Iṭnā-'Ašar and Xamsata-'Ašar in 'U. III, 69.9–12); their mourning form (Iṭnā-'Ašar in K. I, 281.12–13; Talāṭatun-Wa-Ṭalāṭūna in K. I, 282.9); their vocative form (Talāṭatun-Wa-Ṭalāṭūna in K. I, 282.9–12;16–17; Iṭnā-'Ašar in M. II, 162.9–10; Talāṭatun-Wa-Ṭalāṭūna in 'U. I, 344.16–17); their apocopated form (tarxīm) (Iṭnā-'Ašar in K. I, 298.22; Xamsata-'Ašar in K. I, 298.19–20; Xamsata-'Ašar in 'U. I, 363.4–6; 364.1–3); their diminutive form ('Uḥād and Ṭunā' in K. II, 15.9–10); their use in the opposite gender (Talāṭ in M. II, 157.13; Xams or Sitt in 'U. II, 100.11–12; Sab'ah in 'U. II, 111.6–7); their annexed form (Talāṭatun-Wa-Ṭalāṭūna in M. II, 178.6; compound numerals in 'U. III, 69.11–12); their declension ('Arba'ūna in M. III, 332.7; 'Išrūna in M. IV, 37.4; compound numerals in 'U. II, 80.1–5; 92.12–13; the diminutive of the 'deflected' forms 'Uḥayyid and Ţunayy in 'U. II, 83.9–10).

There are even cases where grammarians test the same numeral simultaneously in its numerical value and as a proper name in order to compare

 $^{^{67}}$ Cf. Wright (1967, I, 255; §319, rem. b) and Howell (1883/2003, IV, 1470–1471).

⁶⁸Cf. Wright (1967, I, 258; §324, rem).

 $^{^{69}}$ See above p. 80 on the proper name test.

more precisely what is modified by this semantic change. See for example the difference between the vocative form of *talāṭatun wa-ṭalāṭūna* as a proper name in *yā Ṭalāṭatan-Wa-Ṭalāṭīna!* "O Ṭalāṭatun-Wa-Ṭalāṭūna!" ('U. I, 344.15–16) and as a numeral in *yā ṭalāṭatu wa-ṭalāṭūna!* "O [the] thirty-three [of you]!" ('U. I, 344.17) where the regular rule for the conjoined nouns applies, as in *yā Zaydu wa-ʿAmru!* ('U. I, 332.10).

Another part of this test is to put proper names in the dual and in the plural but none of our authors applies this test to numerals as proper names. In the same manner, none of our grammarians tests ordinals as proper names. Maybe is it obvious that the same problems would find the same answers and that they did not need to treat them explicitly.

The last case of a numeral used as a proper name is the curious *Xamsata-'Ašaru–Zaydin* which is discussed by Sībawayh alone (*K.* II, 61.23–24). His point here is that *xamsata-'ašara* becomes declinable, as in $h\bar{a}d\bar{a}$ *Xamsata-'A-šaru–Zaydin* "this is *Xamsata-'Ašaru–Zaydin*" (*K.* II, 61.24), because nothing forbids it, unlike in names that originate in complete utterances (*ḥikāyah*, as in *Ta'abbaṭa–Šarran*) and that have to remain as they were before being used as proper names.

4.6.10 The meaning of the days of the week

For all three authors, the names of the days of the week, *al-'Aḥad* "Sunday" to *al-Xamīs* "Thursday", have a clear semantic link with numerals. Not only are they built on the numerical roots from *wḥd* to *xms*, but they also mean the corresponding ordinals from *al-'awwal* "first" to *al-xāmis* "the fifth", which are treated as adjectives in the expressions *al-yawmu l-'Aḥadu*, *al-yawmu l-Iṭnāni*, *al-yawmu ṭ-Ṭalāṭā'u*, and so on (*K*. I, 176.22–24; *M*. II, 92.18–93.1; '*U*. I, 158.1–2). They are the days' proper names (*K*. I, 228.20–23; *M*. II, 276.1; '*U*. I, 158.1–2). Moreover, as mentioned above p. 140, Sībawayh says that the names of the days of the week do not refer to a whole "category" ('*ummah*) but to one specific thing, and that they do not refer to something present (*K*. II, 138.7–15).

The case of *al-Jum'ah* "Friday" and *as-Sabt* "Saturday" is different since they mean *al-ijtimā* "the gathering" and *ar-rāḥah* "the rest" (Sībawayh)—or *al-inqiṭā* "the interruption (Ibn as-Sarrāj)—which are *maṣādir*, hence their construction in annexation in *yawmu l-Jum'ati* and *yawmu s-Sabti* (K. I, 176. 17–177.3; 'U. I, 194.16–19).

4.7. Conclusion

Our grammarians also mention that some Arabs say *al-yawmu l-Itnu* and *al-yawmu t-Tunayy* for "Monday" (*K*. II, 93.22–23; *M*. II, 92.17). Al-Mubarrad disapproves of this expression because the name of the day should have a "dual" meaning (*at-tatniyah*), just like the other days of the week, which were built on the corresponding numerals (*M*. II, 92.18–93.1).

For al-Mubarrad, the name of the days of the week can be compared to the expression *al-yawmu yawmāni min aš-šahri* "today is two days of the month", which he paraphrases as *al-yawmu tamāmu yawmayni min aš-šahri* "today is the completeness of two days of the month" (*M.* II, 93.1–2). He also adds that they should always carry the article because they are definite (*M.* III, 382.4–5).

4.7 Conclusion

As a conclusion to this chapter, one can say that numerals are words built on a very limited set of roots and a large number of patterns in order to express a potentially unlimited number of meanings (quantities, ranks, lexicalised meanings, idiomatic expressions, and their absolute meaning).

Morphosyntactically speaking, numerals and their cognates are not very flexible. In other words, they do not have a full *tamakkun* "freedom of behaviour". This is maybe not completely true of cardinals and ordinals from "three" to "ten", as well as "one hundred" and "one thousand", but it is certainly true of the other numerals (compounds, decades and conjoined numerals), and this, because they are built on the same roots as the units and because any change in these greater numerals may potentially end up into an already existing form.

On the other hand, numerals between "three" to "ten" present less morphosyntactic difficulties, once their root and pattern are taken for granted. These roots and patterns surely point toward old words that are not transparent anymore to the morphological system but that have been integrated into the triliteral root system.

At this point, it is also clear that "one" and "two" do not easily fit into the system, because of the existence in the language of a singular and a dual, which already express quantity. This explains the morphosyntactic peculiarities that the following numerals display: "eleven", "twelve", "twentyone", "thirty-one", and so on.

⁷⁰The text reads *al-yawmu t-Tinyu* but this vocalisation is somewhat strange and the diminutive *Tunayyu* is more consistent here in the context.

Chapter 5

Numerals in the sentence

5.1 The numerals' morphological class

The syntactic positions numerals can occupy in the sentence are clearly linked with the morphological class to which they belong, their "substantial category" (Mosel 1975). This fact is well-known to Arabic grammarians although they do not present things as systematically as a modern reader would expect. For this reason, it is only through some extrapolation that one can systematise their teaching. The following observations are not found verbatim in our texts.

Numerals are called 'asmā' al-'adad "numerical substantives", a subcategory of 'asmā' "nouns", as opposed to 'a'lām "proper names", maṣādir "verbal nouns", 'asmā' al-fā'il "active participle", 'asmā' al-fi'l "proper names of the verbs", ṣifāt "adjectives", ṣifāt mušabbahah bi-l-fā'il "adjectives resembling the active participle".

Although they belong to the category of ' $asm\bar{a}$ ' al-'adad, numerals can occupy slots preferred for proper names, active participles, verbal nouns or adjectives.

It is not clear whether $w\bar{a}hid$ "one" and $i\underline{t}n\bar{a}ni$ "two" are considered by our three authors to be adjectives occupying slots preferred for numerals or numerals occupying slots preferred for adjectives.

As adjectives, "one" and "two" offer less possibilities than other numerals. As we have seen above pp. 103, 109 and 129, 'aḥad (fem. 'iḥda') is derived

from the same root as the adjective $w\bar{a}hid$ and it is used instead of it in syntactic slots preferred for substantives (with the notable exception of Q. 112.1 presented above p. 87, which is not commented on by our authors). The case of 'ahad will be dealt with in greater detail below (pp. 158ff) because it has a specific syntax. It seems to belong to the substantives, and not to the adjectives anymore. In the same manner, the word wahd- (no feminine form) replaces $w\bar{a}hid$ and $w\bar{a}hidah$ in their masdar-like use (see above p. 141), as in $marartu\ bi$ - $h\bar{a}\ wahda$ - $h\bar{a}\ "I\ passed\ by\ her\ alone". It is always used as construct (<math>mud\bar{a}f$). What the category of wahd- is, is not clear. If we follow our authors, it seems to be a "substantive" (ism) that is used in a slot preferred for "verbal nouns" ($mas\bar{a}dir$).

As for the adjective $i\underline{t}n\bar{a}ni$, it has no corresponding substantive and except for its use in $\underline{t}int\bar{a}$ $\underline{h}an\underline{d}alin$ "two colocinths" which is a poetic license (see above pp. 92 and 130), there is no example in our corpus of its use in a syntactic slot preferred for substantives. The word $kil\bar{a}$ - (fem. $kilt\bar{a}$ -) "both" is used instead.

The case of ordinal numerals is also different. As mentioned above pp. 132 and 138, ordinal numerals are systematically linked by our authors to the corresponding verbs, as their 'asmā' al-fā'il "active participles" in expressions of the type $x\bar{a}misu\ xamsatin$ "one of five" and $x\bar{a}misu\ 'arba'atin$ "the one that completed [a group of] four and made it five". This points at a substantival nature of ordinals, although they are commonly used in adjectival slots. Just like our authors say that xāmisu 'arba'atin has the same meaning as alladī xamasa l-'arba'ata, one could consider that al-bābu al-xāmisu "the fifth chapter" actually stands for al-bābu lladī xamasa l-'abwāba l-'arba'ata "the chapter that made the four chapters to be five". However, this is an extrapolation and it is not found in our texts. Mosel (1975, 138) concludes that ordinals "nicht nur die Struktur faCil haben, sondern auch zur Kategorie ism al-fāCil gehören", and not to the category of 'asmā' al-'adad. Indeed, al-Mubarrad mentions that the expression *rābi'u talātatin* can also be vocalised rābi'u talātatan. In this case, talātah is the maf'ūl bi-hi of the active participle rābi^c (M. II, 181.7). This last assertion confirms the idea that ordinals are active participles ('asmā' al-fā'il) rather than numerals ('asmā' al-'adad).

Another issue—which is not discussed by our grammarians—is the ordinal use of decades, hundreds and thousands (see above p. 145). How should the following numerals be interpreted in *al-bābu l-'išrūna* "the twentieth chapter", *al-bābu l-mi'atu* "the hundredth chapter", *al-bābu l-'alfu* "the thousandth chapter"? None of our authors comments on whether these numerals are here in a slot preferred for adjectives or for active participles.

5.2 Syntactic slots occupied by numerals

Just like other substantives, numerals (except for "one" and "two") can occupy different syntactic slots, with which the category of 'asmā' is usually linked: mubtada' "topic of the nominal sentence", fā'il "agent of the verbal sentence", nā'ib al-fā'il "formal agent of a passive verbal sentence", ism kāna "topic of a kāna sentence", maf'ūl "object of the verbal sentence", badal "appositive complement", darf "adverb", mudāf "construct", mudāf 'ilayh "that to which the construct is annexed", majrūr bi-harf "put in the oblique form by a particle", and so on, with limitations due to their specific morphosyntactic nature. For example, the compensatory nūn¹ in 'išrūna "twenty" cannot be deleted before its counted object, which makes the expression 'išrūna dirhaman "twenty dirhams" indefinite. As a consequence, the sentence "tišrūna dirhaman la-ka is incorrect, because it is incorrect to begin a sentence with an indefinite expression. It should be formulated la-ka 'išrūna dirhaman "you have twenty dirhams". There is nothing irregular about this behaviour and it is not mentioned by our authors.

Although cardinal numerals are substantives, they can also—with some degree of "flexibility"—occupy syntactic positions preferred for other categories, in which case our authors mention the category according to which they are treated: Numerals can be treated like <code>sifāt</code> "adjectives" and be in the function of <code>na't</code> "qualifier" as in <code>rijālun xamsatun</code> "five men", they can be treated like <code>maṣādir</code> and be in the function of <code>maf'ūl muṭlaq</code> as in <code>marartu bi-him talāṭata-hum</code> "I passed by the three of them", they can be treated like 'a'lām and have a relative adjective built on them as in <code>Xamsiyyun</code>, they can be treated like adjectives and be in the slot of <code>xabar</code> "predicate of a nominal sentence" and <code>xabar</code> 'inna "predicate of an 'inna sentence".

¹In chapter 2, (K. I, 3.17-18; 22-23) Sībawayh defines this nūn, which he calls nūn al-itnayni wa-l-jamī^c "the [ending] nūn in the dual and the plural": wa-takūnu z-zā^cidatu t-tāniyatu nūnan ka-'anna-hā 'iwadun li-mā muni'a min al-harakati wa-t-tanwīni "the second appendix is a nūn, as if it were a compensation for what has been forbidden [to carry] a vowel or a tanwin." See Wright (1967, I, 235) and Ayoub (2009, 443-444) for an account of the four types of tanwīn: (i) tanwīn at-tamakkun, which is a marker of full declension, (ii) tanwīn at-tankīr, which is added to diptotic nouns to make them indefinite, as in marartu bi-'Amrawayhi wa-'Amrawayhin 'āxara "I passed by 'Amrawayh [whom you and I know] and by another 'Amrawayh", (iii) tanwīn al-'iwad "tanwīn of compensation", which is found in weak root nouns such as qāḍin and in adverbial expressions like hīna-'idin, and (iv) tanwīn al-muqābalah "tanwīn of correspondence", which is found in external feminine plurals, as in muslimātun, and which corresponds to the $n\bar{u}n$ in external masculine plural muslimūna. What Sībawayh calls nūn al-iṭnayni wa-l-jamī^c is not one of these four tanwin. See Howell (1883/2003, II, 842-846; III, 862-864); Fleisch (1990, I, 284; §59b). We call this $n\bar{u}n$ the compensatory $n\bar{u}n$, based on Sībawayh's definition. This compensatory $n\bar{u}n$ has the same distribution as the tanwin in some contexts but it also differs from it in some respects, as will be made clear in this study.

Our grammarians do not devote the same attention to the different syntactic slots numerals can occupy in the sentence. Generally, they prefer to focus on irregular or minority uses (slots preferred for adjectives, verbal nouns, and so on), rather than comment on majority uses (slots preferred for substantives).

5.2.1 A numeral as darf in the independent form

Sībawayh clearly choses to comment on a minority use in the expression wulida la-hu sittūna 'āman' "[a child] was born to him [while he was] sixty years [old]" which he compares to the expression sīra 'alay-hi marratāni "he was passed by twice" (K. I, 97.15–16).

In sīra 'alay-hi marratāni, marratāni "twice" is an ism, treated like a maṣdar in the syntactic position of formal agent³ of the passive verb sīra in the independent form.⁴ Sībawayh says that the meaning of this maṣdar is "two occurrences of the verb" (al-marratāni min al-f'il; K. I, 11.10). It replaces the maṣdar of the same root as the verb (sayratāni), so that the original underlying expression is sīra 'alayhi sayratāni "he was passed by twice."

The expression wulida la-hu sittūna 'āman appears already in K. I, 75.5 and is interpreted as a case where the darf replaces the formal agent (maf' $\bar{u}l$, or later $n\bar{a}$ 'ib al- $f\bar{a}$ 'il), as a consequence of flexibility of the language (li-sa'ati l- $kal\bar{a}m$). In other words, the darf ($sitt\bar{u}na$) is an ism in the independent form because the slot of the formal agent is unoccupied.

The meaning of the two expressions (al-marratāni min al-f'il and darf) is very similar if not equivalent, but the analysis of the underlying structures is very different. Sībawayh's comments are a good example of the type of commentary he proffers on minority cases where numerals are used in slots preferred for other parts of speech.

²See also in M. III, 105.4 and 'U. I, 194.3; II, 255.10-11.

³Sībawayh calls *maf* ^cūl what later grammarians call *nā* ^cib al-fā ^cil "formal agent".

⁴In this type of construction, the passive verb is thus said by Sībawayh to have two $maf\bar{a}\hat{\,}il$ "complements": The first one is in the independent form and if there is a second one it is in the dependent form as in duriba 'Amrun darban ša $d\bar{i}dan$ "'Amr was heavily beaten" and duriba bi-hi darbun $da\hat{\,}ifun$ "because of him, he was lightly beaten" (K. I, 97.1–3). What is as stake here is that in both cases the first $maf\hat{\,}ul$ is in the independent form, be it the formal agent ('Amrun in the first sentence) or the $ma\hat{\,}sdar$ (darbun in the second sentence).

5.2.2 Numerals in adjectival slots

A case of a numeral in an adjectival slot in the *Kitāb* is found in the poetic hemistich *xawwá* 'alá *mustawayātin xamsin* "it [the camel] laid down on five [equal] levels" (*K*. I, 183.2) presented above p. 92. Another case of an adjectival use of a cardinal numeral is found in chapter 430 (*K*. II, 211–214) devoted to *ṣifāt* that have a "broken" form in the plural, where Sībawayh gives the following example of a masculine noun to which a feminine *ṣifah* applies, *rijālun xamsatun* "five men", adding that *xamsatun ismun mu'annaṭun wuṣifa bi-hi l-muḍakkaru* ("*xamsah* is a feminine substantive by which the masculine has been described"; *K*. II, 212.10–11). This is exactly what he alludes to briefly earlier in *K*. I, 285.14–15, when commenting on the following poetic line:

Naḥnu banū 'ummi l-banīna l-'arba'atu
We are the four boys of the mother of the boys. (K. I, 285,13)

In this hemistich, "four" is used in an adjectival slot, or in Sībawayh's words, *jaʿala l-ʾarbaʿata waṣfan* ("he made 'four' a description"; *K.* I, 285.14–15).

In the same manner, al-Mubarrad comments on the expression $h\bar{a}$ 'ula'i niswatun 'arba'un "these are four women" (M. III, 341.4) where the numeral occupies a slot usually preferred for $sif\bar{a}t$ "adjectives". Al-Mubarrad says that in this slot 'arba' is not diptotic although it is in an adjectival slot and it has an 'af'al pattern, and this because it keeps its numerical value (as opposed to an adjectival value). When in the position of qualifier, 'arba' stands for the passive participle $ma'd\bar{u}d\bar{a}t$ and is not diptotic. This shows that its position of qualifier does not make it a qualifier, otherwise it would be diptotic. The same interpretation is made by al-Mubarrad in the expression $jaw\bar{a}r\bar{\imath}-ka$ 'arba'un "your female slaves are four" where there is a "underlying verbal value in the qualification" $taqd\bar{\imath}r$ al-fi'l $f\bar{\imath}$ n-na't (M. III, 342.6).

Ibn as-Sarrāj comments on the expression 'axada Banū Fulānin min Banī Fulānin 'iblan mi'atan "the So-and-so took a hundred camels from the So-and-so" ('U. II, 27.19–20). This quotation is found in a section devoted to "adjectives that are not proper adjectives" aṣ-ṣifāt allatī laysat bi-ṣifāt maḥḍah ('U. II, 27–31). Sībawayh also comments this expression in K. I, 197.16. 5

Another adjectival slot where numerals are commonly found is the *xabar*. It is dealt with above p. 99.

⁵Only manuscript A explicitly reads that mi'ah has been made a sifah.

5.2.3 Numerals in slots preferred for maṣādir

The major discussions about numerals used in slots preferred for *maṣādir* deal with expressions of the type *maratu bi-hi waḥda-hu* "I passed by him alone" and *bi-him talātata-hum* "by the three of them", see above p. 141.

Another case is found in the commentary of al-Mubarrad on the expressions darabtu Zaydan mi'ata sawṭin "I gave Zayd a hundred lashes" (M. IV, 51.9) or duriba bi-Zaydin 'išrūna sawṭan "because of Zayd, he was given twenty lashes" (M. IV, 51.15). In these cases, he says that numerals occupy the "slot of the maṣdar" (understand: maf'ūl muṭlaq). Numerals here express 'adad al-maṣdar "number of the maṣdar", and they occupy a slot called nā'ib al-maf'ūl al-muṭlaq by the later grammatical tradition. In the second expression, 'išrūna is in the independent form because this slot is left empty by the passive construction of the verb.

The only case where Ibn as-Sarrāj discusses this point is in the expression duriba min 'ajli Zaydin 'išrūna sawṭan "because of Zayd, he was beaten twenty lashes" ('U. I, 79.12) where 'išrūna sawṭan occupies the empty slot of the formal agent of the passive verb, whereas its natural slot here would have been to be nā'ib al-maf'ūl al-muṭlaq, expressing its quantity.

5.3 The special case of 'aḥad

As was made clear above, "one" needs a special treatment. Let us sum up what has been said already about it. Its root is whd (see above p. 103); its cardinal meaning is expressed by the $f\bar{a}$ 'il pattern which usually expresses ordinals (see p. 104) and, unlike other cardinals, it is an adjective (see p. 153); its ordinal meaning is expressed by 'awwal (fem. 'ūlá) whose pattern differs completely from other ordinals (see p. 102); its root is modified into 'hd in the word 'ahad (fem. 'ihdá) which is used as its construct form ($mud\bar{a}f$) and in conjoined numerals (see pp. 109, 129 and 121); the word wahd- (no feminine form) is always annexed to a pronoun and occupies the slot of a masdar (see p. 141). As mentioned above p. 87, the only occurrence of 'ahad in its numerical value of "one" where it is not annexed nor conjoined with a numeral is Q. 112.1 $Qulhuwal-L\bar{a}hu$ 'ahadun's.

⁶Al-Mubarrad paraphrases the expression by adding *al-ma* 'ná *bi-sababi Zaydin* "the meaning is: because of Zayd".

⁷See above footnote 14, p. 83, for more details.

⁸Cf. Howell (1883/2003, I, 143).

Finally, the word 'aḥad (no feminine form) is used in negative sentences and means "nobody". All three grammarians insist that it cannot receive a predicate in affirmative sentences in the meaning of "somebody". We will quickly present here the discussion about the negative 'aḥad, which seems to belong to the substantives, just like the numerical 'aḥad.

'Aḥad in a negative context

In chapter 18 (K. I, 20.10–21.19), Sībawayh explains that in some cases it is possible to predicate an indefinite noun of another indefinite noun, as is the case with the word 'aḥad in the expression $laysa^{10}$ 'aḥadun xayran min-ka "nobody is better than you" (K. I, 20.10–1). Otherwise, it would bring no new information to do so, as in *kāna rajulun ḍāhiban "a man was leaving" (K. I, 20.13).

In a negative context, 'aḥad is a general negation (nafyun 'āmmun), as in the expression $m\bar{a}$ 'atā-ka 'aḥadun "nobody came to me" (K. I, 20.21). Sībawayh says that it negates all possible alternatives ("a woman came to me", "a strong man came to me", "two people came to me", and so on), hence its designation of "general negation", and the fact that it does not have a feminine form.

Since 'aḥad negates all other possibilities, Sībawayh says that it is possible to predicate an indefinite ($xayran\ min-ka$) of another indefinite (aḥadun) as in laysa 'aḥadun $xayran\ min-ka$, because the listener does not need additional information to understand the utterance, unlike in * $k\bar{a}na\ rajulun\ d\bar{a}hiban$, where no new information is provided for the listener.

In a chapter devoted to verbs that operate on an object (M. III, 91–92), al-Mubarrad says that it is not possible to comment on " 2 4 4 6

Curiously, nowhere else in the *Muqtaḍab* does al-Mubarrad talk about "the sisters of 'aḥad". ¹¹ In a footnote 'Uḍaymah mentions a passage in al-

[°]In Post-Classical and Neo-Arabic, wāhid can be found instead of 'ahad in negative sentences, as in lam yadkur-hu wāḥidun min-hum "neither of the two mentioned it" (Blau 2002, 48, §99).

¹⁰Mā kāna instead of laysa in mss. B, C, and H.

 $^{^{11}} Howell~(1883/2003,~IV,~1478-1483)$ mentions as many as twenty-one words used in negative contexts to denote totality.

'Astarābādī's (d. 686/1287) Šarḥ al-Kāfiyah where the following can be read: $wa-ka-d\bar{a}$ kullu smin yalzimu-hu n-nafyu naḥwa lā 'aḥada wa-lā 'arība wa-lā katī'a ("and the same goes for all the nouns that are inseparable from the negative, like lā 'aḥada, lā 'arība, and lā katī'a"; Šarḥ al-Kāfiyah (2000), III, 271.4). 12 The three expressions mentioned mean "nobody". However, katī' is not found in the Muqtadab and 'arīb is found only once, in a poetic line (M. III, 98.14), and al-Mubarrad does not comment on katī' in it.

M. IV, 86–97 deals with verbs like $k\bar{a}na$, $s\bar{a}ra$ and 'a $s\bar{b}aha$, where the topic and the predicate refer to the same thing. With these verbs, it is possible to predicate of an indefinite noun as in $m\bar{a}$ $k\bar{a}na$ 'ahadun mitla-ka "nobody was like you" or $m\bar{a}$ $k\bar{a}na$ 'ahadun mujtari'an 'alay-ka "nobody was bold with you" (M. IV, 90.4).

The origin of these sentences is a nominal sentence made up of a mubtada' and a xabar (M. IV, 86.15). However in the case of ahad it is not possible to suppress the verb and go back to the incorrect ahadun mitlu-ka, i.e., it is not possible to comment the indefinite ahadun by a ahadun ahadu

In a section devoted to the addition of the interrogative *hamzah* before *laysa* (*'U.* I, 90–91), Ibn as-Sarrāj expresses the rule that stipulates that *wa-'aḥadun lā yusta'malu fī l-wājibi* ("and *'aḥad* is not used in the affirmative"; *'U.* I, 90.6).

Ibn as-Sarrāj deals with this negative 'aḥad in the two following issues: The expression of the type $m\bar{a}$ 'aḥadun fī d-dāri "there is no one in the house" ('U. I, 59.11; 66.18) is one of the few cases where it is possible to have an indefinite noun in the position of $ibtid\bar{a}$ '; and expressions of the type $m\bar{a}$ $k\bar{a}na$ 'aḥadun mitla-ka "no one was like you" or laysa 'aḥadun xayran minka" no one is better than you" ('U. I, 84.2) where it is exceptionally possible to comment on an indefinite noun by another indefinite noun.

In both issues, Ibn as-Sarrāj says that the expressions are correct although they break general rules, and this, because they convey a "useful meaning" (fā'idah; 'U. I, 59.10; 66.18; 84.2).

Lastly, Ibn as-Sarrāj says that it is also possible to use 'aḥad after kull, as in the following affirmative utterance: ya'lamu hāḍā kullu 'aḥadin "everybody

¹²Page II, 46.12-13, in the edition dated 1858.

 $^{^{13}\}mathrm{Curiously},$ the chapter in M. III, 97–101 has the same title as the chapter in M. IV, 86–97 and deals with closely related issues.

5.4. Conclusion 161

knows this" (${}^{2}U$. I, 84.11–12). This case is the only one mentioned in the ${}^{2}U$, where ${}^{2}a$, and means "someone" in an affirmative context, and there is no similar example in the $Kit\bar{a}b$ and the Muqta, and Muqta.

Interestingly, al-Mubarrad is reported to have taught in his *Radd 'alá Sībawayh* that in an affirmative context 'aḥad can mean "someone" when it could be replaced by a plural, as in the following examples, which correspond exactly to Ibn as-Sarrāj's example *ya'lamu hādā kullu 'aḥadin: jā'a-nī l-yawma kullu 'aḥadin* "everybody has come to me today" (*Radd*, 11.9) and 'awwalu 'aḥadin laqītu Zaydan "the first person I met is Zayd" (*Radd*, 11.9–10).

However in the *Muqtaḍab*, he explains that in its non-numerical meaning of "someone", 'aḥad cannot be predicated of (i.e., it cannot be commented by a *xabar*, in the affirmative) which falsifies his two examples in his *Radd*.

5.4 Conclusion

Just as for the morphosyntactic issues, our authors do not comment systematically on all syntactic problems posed by numerals. It is only through extrapolation that one can infer that, except for "one" and "two", cardinals are "numerical substantives" ('asmā' al-'adad), a sub-category of the part-of-speech called 'asmā' "nouns". Just like other substantives, they can potentially occupy all the slots preferred for the other sub-categories of "nouns" (sifāt, maṣādir, 'a'lām, and so on). In all this, numerals follow the rules that are valid for other nouns, according to their specific morphosyntactic characteristics.

It is not clear whether our authors consider that ordinals belong to the subcategory of 'asmā' al-ʿadad or to the subcategory of 'asmā' al-ʿfā'il. The same goes for "one" and "two". It is not clear whether they consider that they belong to 'asmā' al-ʿadad or to ṣifāt "adjectives". Their approach is not as systematic as ours, and they content themselves with the broad part-of-speech of "nouns", to which all numerals belong. Any attempt to systematise this view takes the risk to go beyond their own views.

Finally, at the end of this enquiry we reach the core of what has kept our grammarians occupied, as far as numerals are concerned, namely, the expression of the counted object along with the cardinal expressing its quantity. In the following pages, we will only mention the issues at stake, in order to be able to understand where our authors stand and how they tackle these issues within the larger frame of their grammatical theory.

Chapter 6

The expression of the counted object

For "one" and "two", al-Mubarrad is the only one to note that the noun itself expresses both the number ('adad) and the species (naw'), as in rajulun "[one] man" and rajulāni "two men". In these cases, number and counted object are expressed together by one single word (M. II, 155.10–13). For all other quantities, the numeral has to be expressed overtly with the counted object. It is however possible to say waladun wāḥidun "one boy" and waladāni ṭnāni "two boys", in an appositional construction.

Arabic knows two basic syntactic constructions between two substantives, namely annexation (i $d\bar{a}fah$, which can express various meanings presented above p. 128) and the appositional construction ($t\bar{a}bi$). Between two substantives, the appositional construction expresses "substitution" (badal) or "emphasis" ($tawk\bar{i}d$), and between a substantive and an adjective it expresses "qualification" (na't).²

The actual shape displayed by the counted objects after non-annexable numerals does not correspond to an annexational nor to an appositional

¹Cf. Howell (1883/2003, IV, 1425-1426).

 $^{^{2}}$ This account of *badal*, *tawkīd* and *naʿt* as possible sub-cases of the same construction is dependent on Ibn as-Sarrāj (2 U. II, 19–79). We will adopt it here for its clarity. He adds a fourth possible case, namely ' 2 atf 2 al-bayān "explicative apposition" which is not used by our grammarians to describe the link between numerals and their counted object. See Talmon (1982, 30) for an account of the difference between 2 awkīd and ' 2 atf 2 al-bayān, which are one and the same category in the 2 Aitāb.

construction but to a verbal complement in the singular indefinite. The reason why we will call this construction the specifying construction will appear below.

In addition to these three constructions (annexational, appositional, and specifying), it is also possible to express the relationship between numerals and their counted object by a predicative construction, as in *al-'awlādu xamsatun* "the boys are five", where the numeral is the predicate (*xabar*). The preferred category for the predicate is adjectival but it is very common to find substantives in this slot, as in *al-waladu ṭālibun* "the boy is a student".

6.1 The appositional construction

It seems that all numerals can be in an appositional construction with their counted object.³ This construction is natural for *wāḥid* and *iṭnāni* because they are adjectives (*ṣifāt*). As for other numerals, they are treated as *ṣifāt* in this slot, unless they are regarded as *badal* or *tawkīd*. For example, Sībawayh interprets *xamsah* in *rijālun xamsatun* "five men" as being treated like an adjective (K. II, 212.10–11), just like al-Mubarrad interprets 'arba' in *niswatun* 'arba'un "four women" (M. III, 341.4). It is also the frame in which Sībawayh and Ibn as-Sarrāj interpret 'iblan mi'atan mentioned above p. 157.

Since numerals are primarily substantives, the appositional construction involving numerals and their counted object can also express *badal* and *tawkīd*. For example, it seems that Sībawayh believes that *mustawayātin xamsin* "five levels" expresses *badal* (K. I, 183.2). See above, p. 92.

As for ordinal numerals, our authors remain silent about their syntax and their category. One can only suppose that whatever their original category ('asmā' al-fā'il or 'asmā' al-'adad), they can be in an appositional construction with their counted objects, as in al-bābu l-xāmisu "the fifth chapter". This is also true of cardinals used in an ordinal meaning, as in al-bābu l-'išrūna "the twentieth chapter". As for the syntactic meaning of this construction, one could consider it to be na't "qualification", badal "substitution" or tawkīd "emphasis". Finally, it could also be the case that semantically the counted object is the agent of the ism al-fā'il, as in al-bābu l-xāmisu understood as al-bābu lladī xamasa l-'abwāba, but this is clearly extrapolation since our authors are silent on this issue.

³Cf. Wright (1967, I, 255; §321).

Whatever the meaning of this appositional construction (na't, badal, or $tawk\bar{\iota}d$), the syntactic consequences are the same. The numeral and the counted object agree in case and in definiteness. For example, Ibn as-Sarrāj comments on ' $ind\bar{\iota}$ [...] ' $a\underline{\iota}w\bar{a}bun$ xamsatun "I have [...] five garments" ('U. I, 308.21–22) saying that the numeral has the meaning of badal. In the end, it is probably up to the speaker to tell what meaning he intends (Anghelescu 1975, 11).

6.2 The predicative construction

The predicative construction involves a substantive and an adjective, as in *al-waladu dakiyyun* "the boy is smart". By extension, it can also involve two substantives, as in *al-waladu ṭālibun* "the boy is a student". This construction can be embedded in larger constructions, such as 'inna, 'anna or $k\bar{a}na$ sentences, or be itself in an adjectival slot.

In the *Kitāb* there are a few commented cases where the syntactic relation between the cardinal numeral and the counted object is a predicative construction, as in *marartu bi-tawbin sab'un ṭūlu-hu* "I passed by a garment whose length is seven" and *marartu bi-rajulin mi'atun 'iblu-hu* "I passed by a man whose camels are a hundred" (*K.* I, 197.14–15). In these cases, the numeral is treated as a *ṣifah* in the slot of *mabnī 'alā l-mubtada'* in the embedded nominal sentences *sab'un ṭūlu-hu* and *mi'atun 'iblu-hu*—which are themselves in the slot of *na't*—and the counted object is the *mubtada'* of the same embedded nominal sentences.

The predicative construction can be found in a nominal sentence that is not embedded, as in <code>jawārī-ka</code> 'arba'un "your maids are four" (M. III, 342.6), but this is the only explicit example found in our texts. Otherwise, our authors use such expressions in their metalanguage, as <code>al-ma</code>'ná wāḥidun "the meaning is the same" (K. I, 7.1); <code>durūbu</code> l-'af'āli 'arba'atun "the types of verbs are four" (K. II, 239.16); <code>wa-ḥurūfu</code> l-ḥalqi sittatun "and the guttural consonants are six" (M. II, 140.9); 'adawātu l-qasami wa-l-muqsami bi-hi xamsun "the [syntactic] tools [expressing] the oath and that by which it is sworn are five" ('U. I, 430.2).

Occurrences of embedded nominal sentences include the following: *li-'anna l-ma'ná wāḥidun* "because the meaning is the same" (K. I, 57.7); *lā taṣīru 'iddata l-ḥurūfi 'arba'atan* "the number of the consonants does not become four" (K. II, 351.17); *qad 'alima 'anna-hum xamsatun* "he knew indeed that they were five" (M. III, 239.13); *li-'anna 'aqalla l-'uṣūli talātatun* "because the least roots are three [consonants]" ('U. I, 365.7). None of these expressions is commented on.

In all these cases, the cardinal numeral would probably be treated as a *şifah*, as is explicitly the case in the examples that are commented on.

As for ordinal numerals, none of our authors comments on their use in a predicative construction, yet, a few occurrences can be found in their treatises: hiya fī l-'aṣli tāliṭatun "in origin, it comes third" (K. II, 141.21); wa-n-nūnu tāliṭatun sākinatun "and the nūn comes third and silent" (K. II, 387.22); fa-'in kānat al-'alifu xāmisatan maqṣūratan "and if the 'alif comes fifth and maqṣūrah" (M. III, 148.5); li-'anna l-hā'a lā takūnu 'illā rābi'atan "because the hā' always comes fourth" ('U. II, 84.21). In these phrases, ordinal numerals are in a predicative construction with their counted object, they are treated like ṣifāt in the slot of xabar.

6.3 The annexational construction

The annexational construction ('iḍāfah construction) has been dealt with in detail above pp. 128ff., its possible meanings as well as the morphosyntactic limitations of some numerals, which prevent their annexation in some cases, especially if this construction expresses the counted object.

In a nutshell, only the following numerals can be annexed to their counted object: cardinals between "three" and "ten", ordinals between "third" and "tenth", "one hundred", and "one thousand".

6.4 The specifying construction

After compound numerals and decades, the counted object surfaces in the singular indefinite dependent form, as in 'išrūna dirhaman "twenty dirhams" and xamsa-'aš(i)rata jāriyatan "fifteen maids". Sībawayh does not name this construction, he simply describes it (Carter 1972b, 485 calls this construction tanwīn-naṣb). Al-Mubarrad and Ibn as-Sarrāj do not use a single term to name it, but they seem to use the words tabyīn "explanation", tamyīz "specification" and tafsīr "commentary" indifferently, while the word tamyīz seems to have prevailed in later tradition.

In some cases, annexable numerals are also found in a specifying construction with their counted object: Sībawayh mentions the expression 'alay-hi

⁴Cf. Fleisch (1990, I, 510-514; §106*n*-*u*) and Howell (1883/2003, I, 286).

6.5. Summary 167

mi'atun bayḍan⁵ "he owes a hundred helmets" (K. I, 262.3); he also says that under poetic license it is possible to say talāṭatun 'atwāban "three [in terms] of clothes" (K. I, 253.3), as in the poetic line 'iḍā ʿāša l-fatá mi'atayni ʿāman "if the boy lived two hundred years" which is commented on by all three authors (K. I, 87.8; 253.4; M. II, 169.1; 'U. I, 312.14). Al-Mubarrad repeats the same opinion as Sībawayh about this poetic license (M. II, 168.13–169.3); he also discusses the case of Q. 18, 25 mentioned above p. 87. Ibn as-Sarrāj disapproves of the expression 'indī xamsatun 'aṭwāban "I have five [in terms of] dresses", which he attributes to al-Farrā' ('U. I, 324.5); he also quotes Bagdadian grammarians who say that both 'indī xamsatun waznan and 'indī xamsatun waznun "I have five measures" are valid possibilities ('U. I, 326.1–2).

6.5 Summary

There are thus four possible constructions between numerals and their counted objects, appositional, annexational, predicative, and specifying. Both cardinals and ordinals can be found in these constructions, except for the last type where only cardinals are found. As for ordinals above "tenth", the only possible construction is the appositional one. The reason for this is that compound ordinals are not flexible, and there is no separate forms for the decade ordinals. The following table summarises the different possibilities to express numerals and their counted objects.

It appears from this table that the annexational and specifying constructions are in a complementary distribution for cardinals between "three" and "one thousand".

| | Cardinals | Ordinals |
|------------------------------|--|--|
| Appositional (definite) | al-waladu l-wāḥidu | al-waladu l-'awwalu |
| | al-'awlādu <u>t</u> -talātatu (p. 174) | al-waladu <u>t</u> - <u>t</u> āli <u>t</u> u |
| | al-'awlādu t-ṭalāṭata-'ašara (p. 134) | al-waladu ṯ-ṯāliṯa-ʿašara |
| | al-ʾawlādu l-ʿišrūna (p. 134) | al-waladu l-ʻišrūna (p. 145) |
| | al-'awlādu l-mi'atu (p. 134) | al-waladu l-mi'atu (p. 145) |
| | al-'awlādu ṭalāṭu l-mi'ati (p. 182) | al-waladu ṯāliṯu l-mi'ati (p. 183) |
| | al-'awlādu l-'alfu (p. 134) | al-waladu l-ʾalfu (p. 145) |
| Appositional indef., p. 164) | waladun wāḥidun (p. 163) | waladun 'awwalu |
| | 'awlādun ṯalāṯatun | waladun <u>t</u> āli <u>t</u> un |
| | 'awlādun ṭalāṭata–'ašara | waladun ṯāliṯa-ʿašara |
| | 'awlādun 'išrūna | waladun ʻišrūna (p. 145) |
| | 'awlādun mi'atun | waladun mi'atun (p. 145) |

⁵See above footnote 32, p. 95, for the vocalisation of baydan.

| | 'awlādun ṭalāṭu mi'atin (p. 182) | waladun ṯāliṯu miʾatin (p. 183) |
|------------------------------------|---|--|
| | 'awlādun 'alfun | waladun 'alfun (p. 145) |
| Annexational (definite) | (p. 129) | ('awwalu l-'awlādi, p. 198) |
| | talātatu l-'awlādi (p. 130) | <u>t</u> āli <u>t</u> u l-waladi (p. 132) |
| | (p. 130) | |
| | (p. 131) | |
| | mi'atu l-waladi (p. 174) | |
| | talātu mi'ati l-waladi (p. 182) | tālitu mi'ati l-waladi (p. 183) |
| | 'alfu l-waladi (p. 174) | |
| Annexational (indefinite) | | 'awwalu waladin (p. 198) |
| | talātatu 'awlādin (p. 130) | tālitu waladin (p. 132) |
| | | (tālitu talatata-'ašara, p. 133) |
| | | |
| | mi'atu waladin (p. 132) | |
| | talātu mi'ati waladin (p. 182) | tālitu mi'ati waladin (p. 183) |
| | 'alfu waladin (p. 132) | |
| Specifying (definite) | | |
| | | |
| | at-talātata-ʿašara waladan (p. 174) | |
| | al-ʻišrūna waladan (p. 174) | |
| | | |
| | | |
| | | |
| <u>©</u> | | |
| 1g 100 | talātata-ʿašara waladan | |
| fyir 'e, p | iataiata asara wataaan 'išrūna waladan | |
| peci | israna wataaan | |
| Specifying (indefinite, p. 166) | | |
| | | |
| Predicative (p. 165) | al-waladu wāḥidun | al-waladu 'awwalu |
| | al-'awlādu ṭalāṭatun | al-waladu ṯāliṯun |
| | al-ʾawlādu ṯalāṯata-ʿašara | al-waladu ṯāliṯa–ʿašara |
| | al-ʾawlādu ʿišrūna | al-waladu ʻišrūna |
| | al-'awlādu mi'atun | al-waladu mi'atun |
| | al-'awlādu ṭalāṭu mi'atin (p. 182) | al-waladu <u>t</u> āli <u>t</u> u mi'atin (p. 183) |
| | al-'awlādu 'alfun | al-waladu 'alfun |

Table 6.1: Expression of the counted object

In the next part of this study, we will consider in more detail the opinion of Sībawayh (chapter 8), al-Mubarrad (chapter 9), and Ibn as-Sarrāj (chapter

10) about the expression of the counted object in a specifying construction with numerals, which they interpret in very different theoretical frames.

But before that, there are a few other issues linked with the expression of the counted object that should be mentioned: gender issues, expression of definiteness, expression of the counted object by an adjective, a collective noun, a pronoun, the number of the counted object, the different plural forms of the counted object, "one hundred" and "one thousand" as counted object themselves.

6.6 Issues related to the counted object

6.6.1 Gender agreement and disagreement

All numerals between "one" and "nineteen", both cardinals and ordinals, have a masculine and a feminine form, or, rather, a form that applies to feminine counted objects and a form that applies to masculine counted objects. See above, p. 96, the issue of the gender of numerals. The case of compound cardinals, which was presented above p. 120, is interesting because of the gender discrepancy between their two parts.

To put it in a nutshell, cardinals from "three" to "ten" and from "thirteen" to "nineteen" disagree in gender with their counted object, whereas "one", "two", "eleven" and "twelve" agree in gender. This intringuing though very well known phenomenon has received little attention from our three authors, who simply describe it without comment (K. II, 176.13–177.19; M. II, 157.8–16; 163.1–15; 'U. II, 424.10–11; 425.1–3). In the same manner, our authors do not mention the fact that it applies to all the possible constructions between the numeral and the counted object: appositional (al-' $awl\bar{a}du$ t- $tal\bar{a}tatu$), predicative (al-' $awl\bar{a}du$ t- $tal\bar{a}tatu$), annexational (t- $tal\bar{a}tatu$ 't- $tal\bar{a}tatu$ (t- $tal\bar{a}tatu$), and specifying (t- $tal\bar{a}tatu$ 't- $tal\bar{a}tatu$ ").

The case of "one", "two", "eleven" and "twelve" is also intriguing. This phenomenon probably finds an explanation in the fact that "one" and "two" are adjectives, not substantives, and that this must have some influence on "eleven" and "twelve".

⁶Cf. Wright (1967, I, 254; §319) and Howell (1883/2003, IV, 1426-1434.).

⁷These rules are not always followed in Post-Classical and Neo-Arabic (Blau 2002, 48, §98).

As for ordinals, their $f\bar{a}$ il pattern is clearly gender marked, hence their agreement with their counted objects in all types of constructions. These issues are not discussed either by our authors.

Sībawayh does not explicitly say that decades, *mi'ah*, and *'alf* apply both to masculine and feminine counted objects but his own use shows that he would agree on this. Unlike Sībawayh, al-Mubarrad explicitly notes it (*M.* II, 165.13; 168.10–12; 170.8). He explains it by saying that they belong to the greater numerals. Although they also belong to the greater numerals, compound numerals do have different forms for the masculine and the feminine. Al-Mubarrad justifies this by saying that they are the compound of two lesser numerals (see above p. 120). Ibn as-Sarrāj deals with numerals that have a different form in the masculine and the feminine in *'U.* II, 424–425. Just like Sībawayh, he remains silent on those that have the same form in both genders.

6.6.2 Elements of different genders counted together

As far as the syntax of numerals is concerned, there are two types of gender conflicts that can happen. The first type⁸ happens when masculine and feminine nouns are counted together as in "three men and women" and the second type⁹ happens when the grammatical gender of the counted object differs from its biological sex as in French "trois tortues mâles", because "tortue" is feminine, but "tortues mâles" are males.

We have already mentioned above p. 132 the fact that all three authors choose the chapter devoted to expressions of the type $x\bar{a}misu\ vamsatin$ and $x\bar{a}misu\ vamsatin$ to mention and illustrate the rule that stipulates that masculine supersedes feminine in case of elements of different genders counted together.

Sībawayh quotes the expressions xamsa-'aš(i)rata min bayni yawmin wa-laylatin "fifteen [masc.] days [masc.] and nights [fem.]" or xamsata-'ašara min bayni 'abdin wa-jāriyatin "fifteen [fem.] slaves [masc.] and maids [fem.]". In the first case, he says that laylah has superseded yawm because if one talks of "fifteen nights" it is understood that they include the "days" (K. II, 180.4–6). He concedes that one could also have put the numeral in the feminine xamsata-'ašara (K. II, 180.14). In the second case,

⁸Cf. Howell (1883/2003, IV, 1435-1436).

[°]Cf. Howell (1883/2003, IV, 1437-1439; 1466-1471).

¹⁰Howell (1883/2003, IV, 1466–1467) reports that there are two exceptions where the feminine supersedes the masculine. The first one is the dual dabuʿāni "two hyenas [a male and a female]", which is built on the feminine singular dabuʿun instead of the masculine dibʿānun, in order to

there is no other option because if one of the two terms 'abd or jāriyah is not mentioned, the meaning changes (*K.* II, 180.11–14), and since we already know that the masculine generally supersedes the feminine (*K.* II, 178.22–23), it is understood from the text here that the numeral has to agree with the masculine (i.e., be put in the feminine) for this reason.

Apparently, al-Mubarrad does not deal with this issue except in the expressions *xāmisu xamsatin* and *xāmisu 'arba'atin* mentioned above (*M.* II, 182.3).

Ibn as-Sarrāj briefly mentions this issue in a section that is so dependent on the *Kitāb* that it is difficult not to read it with Sībawayh's teaching in mind. He quotes the same examples as Sībawayh, *xamsa-'aš(i)rata min bayna yawmin wa-laylatin* and *xamsata-'ašara min bayna 'abdin wa-jāriyatin*, and gives the same commentary ('U. II, 428.15–429.4).

6.6.3 Grammatical gender vs. biological sex

Sībawayh deals with the conflict between gender and sex in the counted objects in chapter 414 (K. II, 179.4-181.7). The general rule that can be inferred from his examples is that grammatical gender supersedes biological sex, as in talatu $siyahin dukurun^{11}$ "three [masc.] male [masc.] sheep [fem.]", talatu min al-baṭṭi "three [masc.] ducks [masc.]" or talatu 'a'yunin "three [masc.] [male] notables [fem.]" because sa, baṭṭah and 'ayn (su. II, su) are feminine in the singular, even if they refer to males like 'ayn. In the same way, for words whose singular is masculine, the numeral is put in the feminine as in: talatu 'a'susin "three [fem.] persons [masc.]" (su. II, su) even if su refers to a female.

Sībawayh does not mention here the masculine nouns ending with a $t\bar{a}$ ' $marb\bar{u}tah$ like $xal\bar{\imath}fah$ "caliph". It must have been obvious to him that the presence of the $t\bar{a}$ ' $marb\bar{u}tah$ does not affect the gender of the numeral used to count them, so that we can probably say $tal\bar{u}tau$ xulata' "three [fem.] caliphs [masc.]"

A problem arises for words whose gender is not fixed, as is the case for *nafs* "soul [fem.]", which is treated as a masculine if it means "man [masc.]" (K. II, 179.18–19), or *faras* "horse [fem.]", which is more commonly used as

avoid the form $dib^c \bar{a}n \bar{a}ni$. The second case is the expression of days and nights, because, he says, Arabs date by nights, which are feminine, not by days.

¹¹Derenbourg vocalises $\underline{duk\bar{u}r}$ in the independent form, interpreting it as a \underline{badal} of $\underline{tal\bar{a}tu}$, but it could as well be vocalised in the oblique form as a \underline{badal} of $\underline{siy\bar{a}hin}$. Sībawayh gives no clue on this issue.

a feminine, referring to both a stallion and a mare (*K.* II, 180.1–2). In these issues, Sībawayh mentions actual use and says which one is more common.

The teaching of al-Mubarrad is slightly different. These gender issues are solved by separating the words in conflict as in 'indī talāṭun min al-ġanami dukūr¹² wa-ṭalāṭun min aš-šāʾi dukūr "I have three [masc.] [heads] of male [masc.] livestock [fem.] and three [masc.] male [masc.] sheeps [fem.]" (M. II, 186.7). Another way of expressing the same idea is 'indī ṭalāṭatu dukūrin min aš-šāʾi wa-ṭalāṭatu dukūrin min al-ʾibli (M. II, 186.9). The point made by al-Mubarrad here is that the gender conflict is solved by the agreement of the numeral to the closest word.

Except for these differences, al-Mubarrad's interpretation of these conflicts is similar to that of Sībawayh. Although some words are feminine 'alá l-lafḍ "on the surface level", 13 like nafs "soul" (and the evidence for this is that its diminutive is feminine: nufaysah; M. II, 187.2), they can refer to males, as in talāṭatu 'anfusin "three [fem.] souls" and ṭalāṭatu 'anfusin "three [masc.] souls" (M. II, 186.12) which are both correct. Al-Mubarrad quotes here four passages from the Qur'ān where nafs is used in the feminine, as if the question was disputed among grammarians and needed stronger evidence.

As for Ibn as-Sarrāj, his teaching is similar to that of Sībawayh. The grammatical gender always prevails on the biological sex in case of a conflict as in <u>talātu šiyāhin dukūrun</u> "three [masc.] male [masc.] sheep [fem.]", <u>talātatu 'ašxāṣin</u> "three [fem.] persons [masc.]" even if women are intended, <u>talātu 'afrāsin</u> "three [masc.] horses [fem.]" even for stallions ('U. II, 428.2–429.4).

6.6.4 Adjectives as counted objects

Sībawayh says that it is "ugly" $(qab\bar{l}h)$ to annex numerals to adjectives¹⁴ and say $tal\bar{a}tatu$ $nass\bar{a}b\bar{a}tin$ "three genealogists" or $tal\bar{a}tatu$ $daw\bar{a}bba^{15}$ "three riding animals". It would thus be better to say $tal\bar{a}tatu$ $tite{tal}atatu$ $tite{tal}ata$

 $^{^{12}}$ Just like in the Kitāb, the syntactic position of $\underline{d}uk\bar{u}r$ is not stated by al-Mubarrad. See the preceding footnote.

¹³Al-Mubarrad apparently uses the expressions 'alá l-lafḍ (20 occurrences) and fī l-lafḍ (25 occurrences) in the same meaning, "on the surface level". He also uses the expression li-l-lafḍ three times, meaning "because of the surface level" (M. III, 33.8; 348.11; IV, 396.6).

¹⁴Cf. Howell (1883/2003, IV, 1454).

 $^{^{15}}D\bar{a}bbah$, plural $daw\bar{a}bb$. The plural is diptotic, hence its final fathah in the position of an indefinite $mud\bar{a}f$ 'ilayh.

Later in chapter 415 he also mentions relative adjectives (like *qurašiyyun* "Qurayshite") and participles (like *muslim* "Muslim" and ṣāliḥ "virtuous") to which numerals should not be annexed. One should rather say hā'ulā'i talāṭatun qurašiyyūna wa-ṭalāṭatun muslimūna wa-ṭalāṭatun ṣāliḥūna "these are three Qurayshites, three Muslims and three virtous [men]" (K. II, 181.8–10). The reason given by Sībawayh is that it is "disliked" (karāhiyah) to treat adjectives like nouns (K. II, 181.10). This is interesting, since the opposite is not true and it is possible to treat a noun like an adjective, probably because nouns have more "strength" than adjectives.

Al-Mubarrad also says that it is "ugly" to annex a numeral to an adjective. Instead, he recommends to say <code>talātatu</code> rijālin qurašiyyīna wa-talātatu rijālin kirāmin ("three qurayshite men and three generous men"; M. II, 185.6–7). This impossibility is lifted if this qualifier "resembles the noun and comes at its place" (muḍāri'un li-l-ismi wāqi'un mawqi'a-hu; M. II, 185.5), as in jā'a-nī talātatu 'amtāli-ka wa-'arba'atu 'ašbāhi Zaydin ("three like you came to me and four resembling Zayd"; M. II, 185.7–8) or in Qur'ānic <code>fa-la-hu'ašru'amtāli-hā</code>. Interestingly, al-Mubarrad does not mention the solution which consists in saying talātatun qurašiyyūna and talātatun kirāmun. If it is not correct to use adjectives in substantival slots then in talātatu rijālin qurašiyyīna, the adjective cannot be in the slot of badal but of na't.

What are these qualifiers that "resemble a noun" is not clear and only two of them are quoted here: ' $amt\bar{a}l$ and ' $asb\bar{a}h$ (M. II, 185.7–8). The expression "qualifiers that resemble a noun" probably refers to the semantic use of these words since no information is found in the Muqtadab about such a category of nouns.

Ibn as-Sarrāj also qualifies of $qab\bar{l}h$ "ugly" the expression $tal\bar{a}tatu$ $nass\bar{a}b\bar{a}tin$ "three genealogists" because $nass\bar{a}bah$ is an adjective (sifah) in the slot of a substantive, but "this does not give the adjective the strength of the substantive" (fa-lam yaj'al as-sifata taqwa quwwata l-ismi; 'U. II, 428.11–13). In another section, he deals with masculine nouns that are treated like feminine nouns as in ' $ind\bar{i}$ $tal\bar{a}tatun$ $nass\bar{a}b\bar{a}tun$ "I have three genealogists" and ' $all\bar{a}m\bar{a}tun$ "scholars", which he qualifies of "extremely correct" and "right language" when in the slot of the qualifier ($f\bar{i}$ n-nu' $t\bar{i}t$; 'U. III, 477.2–5), i.e., in an appositional rather than annexational construction.

In the same manner, Ibn as-Sarrāj adds that one should say $h\bar{a}$ 'ulā'i talāṭatun qurašiyyūna "those are three Qurayshites" and talāṭatun muslimūna "three Muslims" with the counted objects treated as an appositive complements instead of muḍāf 'ilayh because qurašiyyūna and muslimūna are

¹⁶See above, p. 88, for more details.

adjectives and they should not be treated like substantives, except in poetry, "out of dislike that the adjective be treated like the noun" (*karāhiyatan 'an yuj'ala l-ismu ka-ṣ-ṣifati*; '*U.* II, 429.12).

In all these cases, grammarians only deal with the annexational construction between numerals and their counted objects. There would be no problem in both the appositional and predicative constructions (al-muslimūna l-'išrūna "the twenty Muslims" and al-muslimūna 'išrūna "the Muslims are twenty") but one may ask oneself how they would say, 'išrūna muslimūna or, more probably, 'išrūna muslimūna "twenty Muslims"?

6.6.5 Expression of definiteness and indefiniteness

Theoretically, it is possible to express definiteness and indefiniteness when a counted object is expressed with a numeral, 17 in appositional construction (al-'awlādu t-talāṭatu vs. 'awlādun ṭalāṭatun), as well as in annexational construction (talāṭatu l-'awlādi vs. ṭalāṭatu 'awlādin) 18 and specifying construction (al-'išrūna waladan vs. 'išrūna waladan), according to the regular rules of definiteness and indefiniteness. As for the predicative construction, there is no choice but to say al-'awlādu ṭalāṭatun.

The issue of definiteness and indefiniteness in the expression of the counted object is not tackled systematically by our authors. The only cases they comment are the annexational and specifying constructions. All three authors say that it is correct to say *talāṭatu l-'awlādi*, according to the general rule of annexation (*K.* I, 86.9–10; 87.2–5; *M.* II, 175.12–14; 178.3–4; IV, 144.3; 'U. I, 311.8–11; 312.10–11).

In the case of "one hundred" and "one thousand", Sībawayh and al-Mubarrad also mention the possible addition of the definite article to the counted object, as in *mi'atu d-dirhami* "the hundred dirhams" (*K.* I, 87.4; *M.* II, 167.11–12). Ibn as-Sarrāj mentions the conflicting positions of the Baṣrans and the Kūfans on this issue. The Baṣrans prefer *'alfu d-dirhami* whereas the Kūfans accept *al-'alfu d-dirhami* (*'U.* II, 14.11–13). Ibn as-Sarrāj does not express his opinion explicitly but there is no reason to believe he would not follow Sībawayh and al-Mubarrad.

As for the specifying construction, things are far from clear. In *K*. II, 47.17–19, Sībawayh compares *al-xamsata-ʿašara* to *ka-l-ʾāna* "like now" (see

¹⁷Cf. Howell (1883/2003, IV, 1483-1484; V, 675).

¹⁸In Post-Classical Arabic, Blau (2002, 49, §102) mentions cases where, in annexational construction, both the numeral and the counted object carry the article, as in *as-sabʿatu l-ʾayyāmi* "the seven days", or only the numeral, as in *at-talāṭatu maʿānī* "the three kinds".

above p. 134), saying that Arabs leave it as it is after the addition of the definite article or after annexation, although it is indefinite. Yet, it is not clear what his position is concerning the definiteness status of *al-xamsata-'ašara dirhaman*, which he does not discuss as such. Interestingly, he himself uses this expression in *K*. II, 467.1: *al-'aḥada-'ašara ḥarfan* "the eleven letters". And in the same manner, he does not discuss expressions of the type *al-'išrūna dirhaman*.

Interestingly, the answer of al-Mubarrad is that in such cases analogy (not actual use) should prevail:

(6) wa-mimmā yubṭilu hāḍā l-qawla 'anna r-riwāyata 'an al-'Arabi l-fuṣaḥā'i xilāfu-hu fa-riwāyatun bi-riwāyatin wa-l-qiyāsu ḥākimun.

And among things that invalidate this [the argument that it is used in speech] is the fact that the speech of literate Arabs differs from it, so that it is word against word [actual use against the use of literate Arabs] and analogy prevails. (M. II, 175.7)

For decades, it is not permitted to say *al-'išrūna d-dirhama because the definiteness of the numeral has already been properly expressed ('uḥkima wabuyyina; M. II, 176.10). The correct expression is thus al-'išrūna dirhaman (M. II, 176.12).

Al-Mubarrad says that one has "to go back to the truth of analogy, and not to follow tradition" ('an yarji'a min qablu 'ilá ḥaqīqati l-qiyāsi wa-lā yamḍiya 'alā t-taqlīdi; M. III, 177.4–5), making it clear that these expressions were found in the language of people.

The position of Ibn as-Sarrāj is not clear, as he quotes many opinions without mentioning his own ('U. I, 321.14–17; 325.3–7; 14–15). In a section devoted to annexation, he is the only author to quote the position of the Kūfans who accept expressions such as al-'išrūna d-dirhama, al-xamsatu d-darāhimi and al-mi'atu d-dirhami ('U. II, 14.11–12), while the Baṣrans reject them and prefer to say xamsatu d-dirhami and mi'atu d-dirhami as well as al-'išrūna dirhaman and al-xamsata-'ašara dirhaman ('U. II, 14.12–16). It is not clear whether it should be understood that Ibn as-Sarrāj follows the Baṣrans.

^{1°}See Baalbaki (1981, 6–7; 20) for an account of this issue between the Kūfan and the Baṣran grammarians, according to Ibn as-Sikkīt's (d. 244/858) 'Iṣlāḥ al-manṭiq.

There is one last possible case, which is not mentioned by Sībawayh, namely the possibility for the counted object to be defined by annexation as in *talātatu 'atwābi-ka* "your three dresses", *mi'atu dirhami-ka* "your hundred dirhams", 'alfu dīnāri-ka "your thousand dinars", which al-Mubarrad accepts (M. II, 178.3–5; 8–10).

Bagdadian grammarians are reported by Ibn as-Sarrāj to have accepted expressions such as *xamsatu darāhimi-ka* and *dirhami-ka* "your five dirhams" in an 'iḍāfah construction ('U. I, 325.15–16). Ibn as-Sarrāj says that this is acceptable as a poetic licence ('U. I, 325.16–17). This passage is very elliptical and one may wonder why he invokes here poetic licence. We will come back to this issue in the larger frame of Ibn as-Sarrāj's theory (see below, p. 260).

6.6.6 Expression of the counted object by a pronoun

The expression of the counted object by a pronoun poses no problem in an appositional construction (in the definite only, as in *hum at-talāṭatu* "the three of them [masc.]" and *naḥnu t-talāṭu* "the three of us [fem.]"), nor in a predicative construction (as in *hum talāṭatun* "they [masc.] are three" and 'antunna ṭalāṭun "you [fem.] are three"). These cases are not discussed by our authors.

In a specifying construction, expression of the counted object by a pronoun is impossible since in these constructions the counted object has to be indefinite (K. I, 85.6–7; M. II, 180.8–11; U. I, 312.5–6) and pronouns are definite by nature.

As for the annexational construction, our authors discuss it in expressions of the type marartu bi-him xamsata-hum "I passed by the five of them" which we have presented above, p. 141. They mention only numerals between "one" and "ten". Since compounds and decades cannot be annexed to their counted object (see above p. 130) expressions like *marartu bi-l-qawmi xamsata-ʿaša-ra-hum "I passed by the tribe, the fifteen of them", or *'axadtu 'išrīna dirhaman wa-ṭalātī-him "I took twenty dirhams and thirty of them" (M. II, 180.8; 11) are rejected. As for mi'ah and 'alf which are annexed to singular counted objects, it is probable that mi'atu-hum "one hundred of them" and 'alfu-hum "one thousand of them" are impossible, because the pronouns are considered plural. Our authors are silent on this point.

In a section devoted to the use of the definite article in lieu of the relative pronoun (${}^{\circ}U$. II, 330–361), Ibn as-Sarrāj deals with these expressions from the perspective of the predication of their second part (see above, p. 82, more details about the predication test). Compare for example $h\bar{a}d\bar{a}$ $t\bar{a}litu$ $tal\bar{a}tatin$

"this one is one of three" and alladīna hādā tālitu-hum talātatun "those of which this one is the third are three" (${}^{2}U$. II, 331.2-3). This section is the last one in a called $b\bar{a}b$ al-ittisā' where Ibn as-Sarrāj deals with cases that are correct although they cannot be considered to be analogical. ²¹

He says that the expression *al-ḥādiya-ʿašara-hum ʾanā* "I am one of the eleven", where the relative pronoun is replaced by the definite article, is not analogical although it is actually used in the language; the reason given by Ibn as-Sarrāj is that *ḥādiya-ʿašara* cannot behave like a verb in this position because it is a compound (*'U.* II, 331.12–332.3). He quotes al-ʾAxfaš as saying that this construction is acceptable below "ten" because numerals can be built like verbs, although it is clear that these verbs do not actually exist (*'U.* II, 332.5–9).

Later in the same section, Ibn as-Sarrāj gives more insight into these cleft expressions, introducing a semantic criterion. It is not correct to say *at-tānī-himā 'anā tnāni "those of which I am the second [masc.] are two [masc.]" because it is redundant if a man says it. In the opposite, a woman could say at-tāniyatu-humā 'anā tnatāni if she is the second of a group of two women, as opposed to at-tāniyatu-humā 'anā tnāni if she is the second of a group of a man and a woman (herself); and in the same manner it is redundant for a woman to say *at-tālitatu-hunna 'anā talātun "those of which I am the third [fem.] are three [masc.]" ('U. II, 334.18–20). Thus, ultimately, the issue is related to the rules that stipulate that the masculine supersedes the feminine, and to the communicative purpose (fā'idah) that lies in the utterance.

6.6.7 The number of the counted object

The case of "one" is as follows. Quantity can be expressed overtly in the appositional construction, as in *waladun wāḥidun* "one boy", and in the predicative construction, as in *al-waladu wāḥidun* "the boy is one". In the annexational construction the only possibility is to say 'aḥadu l-'awlādi "one of the boys", but in this case the meaning of the construction is not the counted object, but a partitive.

As for "two", the following two forms are possible: *waladāni ṭnāni* "two boys" and *al-waladāni ṭnāni* "ther boys are two", the only case of an annexational construction being found in poetic *ṭintā ḥanḍalin* "two colocinths" (see above p. 92).

²⁰See above, p. 132, on the translation of this expression.

 $^{^{21}}$ See Versteegh (1990b) for an account of the history of the concept of $ittis\bar{a}^{\epsilon}$ in the Arabic grammatical tradition.

The counted object of numerals between "three" and "ten" is in the plural. This is true of cardinals in appositional, annexational and predicative constructions with their counted object, with or without the definite article, as in *al-'awlādu t-talātatu* "the three boys", *talātatu 'awlādin* "three boys" and *al-'awlādu talātatun* "the boys are three" (K. I, 86.8–11; M. II, 164.4–5; 'U. I, 311.5–8).

Above "ten", the situation is not as simple as it seems. In the appositional and predicative constructions, the counted object is in the plural, as in *al-'awlādu l-'išrūna* "the twenty boys", *'awlādun mi'atun* "a hundred boys", *al-'awlādun 'išrūna* "the boys are twenty" and *al-'awlādu 'alfun* "the boys are a thousand". These expressions are not commented on by our authors.

In the annexational and specifying constructions, the counted object is in the singular above "ten", as in *mi'atu waladin* "a hundred boys", *'alfu waladin* "a thousand boys", *ṭalāṭata-ʿašara waladan* "thirteen boys" and '*išrūna waladan* (K. I, 86.13; 15–18; M. II, 164.5–6; III, 32.7–8; 58.8; 'U. I, 312.8–10).

The case of ordinals is different. Their "counted" object is always in the singular whatever the numeral, as in *al-waladu t-tālitu*, *al-waladu t-tālita—* 'ašara and *al-waladu l-*'išrūna. This fact is not mentioned by our authors.

The only issue linked with the number of the counted object that is discussed by our authors can be reformulated as follows: Why should the counted object be in the singular above "ten" in the annexational and specifying constructions? The answer they give to this question depends on the general frame in which they interpret numerals at large and will be presented in more detail in the next part of this study. See below, p. 207 for Sībawayh's theory, p. 216 for al-Mubarrad's, and p. 248 for Ibn as-Sarrāj's.

6.6.8 Different plural forms of the counted object

We will not enter into the morphological study of the plural because it would take us too far from the grammar of numerals. All we need to recall here is that Arabic knows three different plural forms that can be built through inner morphological changes ("broken plurals"): lesser plural, greater plural, and plural of plural. Here is an example of these morphological changes for the word kalb "dog". Its lesser plural form is 'aklub (K. II, 181.15); its greater plural form is $kil\bar{a}b$ (K. II, 181.17); and its plural of plural is $kil\bar{a}b\bar{a}t$ (K. II, 208.1).²²

 $^{^{22}}$ See Ratcliffe (1998) and Ferrando (2002) for a survey of these three plural forms in Classical Arabic grammars and other Semitic languages.

Next to these forms, plurals can also be formed "externally" by the addition of the suffixes $-\bar{u}na$ and $-\bar{a}t$. These plural forms are considered by Sībawayh and al-Mubarrad²³ to be lesser plural forms because they share common features with the dual (K. II, 144.11–12; M. II, 156.10–12). The position of Ibn as-Sarrāj seems to be different. While he mentions many times the plural form in $-\bar{a}t$ as a lesser plural form (^{2}U . II, 439.9–10; 14–15; III, 9.17–10.2; 4–6; 10–11; 11.14–15) he never associates the plural form in $-\bar{u}na$ to lesser numbers but to "humans" ($man\ ya^{c}qilu$; ^{2}U . I, 47.7).

The general rule that all three authors mention is that the counted object of cardinals between "three" and "ten" should be in the lesser plural form (K. II, 181.15-16; M. II, 156.4-9; 'U. I, 311.5-8).²⁴

Sībawayh says that in some cases it is permissible to use the greater plural form instead of the lesser plural form, as in xamsatu $kil\bar{a}bin$ "five dogs" (instead of xamsatu 'aklubin), which stands for xamsatun min al- $kil\bar{a}bi$ (K. II, 182.16). He compares this use to other cases where the $mud\bar{a}f$ 'ilayh is a greater plural or a collective noun as in $h\bar{a}d\bar{a}$ sawtu $kil\bar{a}bin$ "this is the sound of dogs" (K. II, 182.16) and habbu $rumm\bar{a}nin$ "a seed of [the species of the] pomegranate" (K. II, 182.17).

Both expressions are semantic equivalents of the partitive particle *min* followed by the noun in the oblique form: *min al-kilābi* or *min ar-rummāni*.

Later in the same chapter, Sībawayh gives other examples of greater plural forms that are used instead of lesser plural forms as *qiradah* "monkeys" which is used instead of *'aqrād; šusūx "sandal thongs" instead of *'ašsāx; qurū' "menstruations" instead of *'aqru' (K. II, 185.12–13). This is apparently only a matter of linguistic use for Sībawayh, who adds that in the dialect of Tamīm, greater plural forms are generally used instead of lesser plural forms (K. II, 198.10–12).

He says that he asked al-Xalīl about the expression *talātatu kilābin*, and his answer is that it is a poetic license (K. II, 210.10–11). Sībawayh then

 $^{^{23}}$ In his commentary of the $Kit\bar{a}b$, ar-Rummānī (d. 384/994), a disciple of Ibn as-Sarrāj, gives a different account of the position of al-Mubarrad concerning feminine external plurals. According to ar-Rummānī, al-Mubarrad considers that plurals in $-\bar{a}t$ are equally correctly used for lesser and greater plural forms ($\bar{S}arh$ ar-Rummānī, 84.4–6). Other grammarians say that these external plural forms primarily express a lesser plural form, and that they can be used to express greater plurals, just like $\bar{s}us\bar{u}$ can express a lesser plural ($\bar{S}arh$ ar-Rummānī, 6–7). Ar-Rummānī says that the best position is that of al-Mubarrad because plurals in $-\bar{a}t$ are equivalent to plurals in $-\bar{u}na$ ($\bar{S}arh$ ar-Rummānī, 7–9). The problem is that the teaching of al-Mubarrad in his Muqtadab does not correspond to ar-Rummānī's account. The position of az-Zajjājī (d. 337/949) is that masculine external plurals apply both to lesser and greater plurals ($^{7}\bar{I}d\bar{a}h$, 122.6–9), but external feminine plurals are lesser plural forms that can be used for greater plurals ($^{7}\bar{I}d\bar{a}h$, 122.16–18).

²⁴Cf. Howell (1883/2003, IV, 1454-1457).

adds (always quoting al-Xalīl?) that another possibility is to say <u>talātatun</u> kilābun, in an appositional construction, ka-'anna-ka qulta <u>talātatun tumma</u> qulta kilābun ("as if you said <u>talātatun</u> and then kilābun"; K. II, 210.12).

In his *Radd*, al-Mubarrad says that it is not a poetic license but a valid option to use the greater plural forms after numerals between "three" to "ten", as in Qur'ānic <u>{talāṭatu qurū'in}</u> (*Q.* 2, 228; *Radd*, 169.11–12). His point is probably here to clearly distinguish Qur'ānic use from poetry, by refuting the occurrence of any kind of poetic license in the Qur'ān.

In the *Muqtaḍab*, his teaching is slightly different since he says that only if the lesser plural form does not exist it is possible to replace it by the greater plural form (*M*. II, 158.4–160.2). The opposite is also true (*M*. II, 160.4). The lesser plural forms 'aydin "hands" and 'arjul "feet" can be used to express greater numbers, because the greater plural form of yad and rijl do not exist.²⁵ As for the lesser plural form of proper names like talāṭatu Muḥammadīna "three Muḥammads" and xamsatu Ja'farīna "five Ja'fars", it is also correct to say talāṭatun min al-Maḥāmidi and xamsatun min al-Ja'āfiri, using the greater plural forms instead of the lesser plural forms Muḥammadūna and Ja'farūna (*M*. II, 161.1–3).

In a nutshell, what he called a valid option in the *Radd* is said to be only possible if the regular form is not available. Yet, Sībawayh is wrong to say that it is a poetic license (which anyway is not his position but al-Xalīl's).

It seems that this issue debated in the *Radd* and the *Muqtaḍab* has lost its interest for Ibn as-Sarrāj who says, in the introduction to a section devoted to the broken plurals (*'U.* II, 429–III, 35), that it is not rare for a greater plural form to be used instead of a lesser plural form, as in *ṭalāṭatu šusūʿin* "three sandal thongs" and *ṭalāṭatu qurūʾin* "three menstruations" (*'U.* II, 430.3–9). He adds, later in the *'Uṣūl*, that if one says *xamsatu kilābin* instead of the expected *xamsatu ʾaklubin*, what is intended is the species (*jins*) as in *xamsatun min al-kilābi* (*'U.* II, 434.1–2).

6.6.9 Collective nouns as counted object

Al-Mubarrad is the only one to mention that if a noun refers to a "nonhuman genus" (*jins min ġayr al-ʾādamiyyīna*; *M.* II, 185.10), numerals cannot be annexed to it, but the "annexation particle" should link them (*M.* II, 185.10), as in 'indī ṭalāṭun min al-ʾibli wa-ṭalāṭun min al-ġanami ("I have three camels

²⁵It seems that al-Mubarrad does not know the greater plural form 'ayādin.

and three [heads] of livestock"; *M.* II, 186.6–7). In other words, according to al-Mubarrad, numerals cannot be annexed to collective nouns.²⁶

Would al-Mubarrad also forbid the expression of the counted object by a collective noun in the other possible constructions? How would he judge 'išrūna ġanaman, al-ġanamu t-talātu and al-ġanamu talātun? We have no clue about the answer in the Muqtaḍab.

6.6.10 Counted objects and conjoined numerals

The counted object that is expressed with conjoined numerals follows the syntactic rules of the decades, i.e., of the closest numeral in the sentence, as in *xamsatun wa-'išrūna waladan* "twenty-five boys". In this case *xamsatun* is in the feminine because *walad* is masculine, and *walad* is in a specifying construction with *'išrūna* because it is the closest to it in the sentence.

Just like decades, conjoined numerals can be in different types of construction with their counted objects: appositional, either definite as in al-'awlādu l-xamsatu wa-l-'išrūna "the twenty-five boys" or indefinite as in 'awlādun xamsatun wa-'išrūna "twenty-five boys"; predicative, as in al-'awlādu xamsatun wa-'išrūna "the boys are twenty-five"; and specifying, either in definite as in xamsatun wa-'išrūna waladan "twenty-five boys" or definite as in al-xamsatu wa-l-'išrūna waladan "the twenty-five boys".

None of our authors mentions the expression of the counted object with conjoined numerals. We can however safely extrapolate that all their remarks that apply to the syntax of decades apply to conjoined numerals as well.

Al-Mubarrad is the only one to mention annexation of conjoined numerals to their possessor, as in *talātatu-ka wa-talātū-ka* "your thirty-three". See above, p. 132.

6.6.11 "One hundred" and "one thousand" as counted objects

All grammarians comment on the fact that, against the general rule, *mi'ah* remains in the singular after numerals between "three" and "nine",²⁷ as in *ṭa-lāṭu mi'atin*²⁸ "three hundreds", instead of the expected plural *mi'ūna* or *mi'āt* (*K*. I, 87.11; *M*. II, 169.4–5;²⁹ '*U*. I, 313.1–2).

²⁶Cf. Howell (1883/2003, IV, 1439-1441).

²⁷Cf. Howell (1883/2003, IV, 1444-1447).

²⁸See above, note 22, p. 87, about this transliteration.

²⁹See above footnote 17, p. 109.

For al-Mubarrad, this behaviour of *mi'ah* does not contradict the way numerals behave (*dālika qiyāsun* "it is analogical") because what is true of "basic" numerals, i.e., "one" to "ten", is not true of "subsidiary" numerals, i.e., all other numerals (*M.* II, 169.4–5). This assertion will need further inquiry (see below, p. 223). As for his commentary on the expression *talāṭa mi'atin sinīna* in *Q.* 18, 25 where *mi'ah* is not annexed to its counted object *sinīna*, see above p. 87.

Sībawayh explains the singular of *mi'ah* after numerals from "three" to "nine" by comparing it to the singular of the counted noun after decades and numerals between "eleven" and "nineteen" (*K.* I, 87.11–12).³⁰ He adds that it is not rare in Arabic for a singular to refer to a plural, especially in the field of numerals (*K.* I, 87.13).

Ibn as-Sarrāj quotes Sībawayh's opinion that mi'ah should have been put in the plural after "three" to "nine" but it was treated like "eleven" and "twenty". This explanation is difficult to understand without going back to the $Kit\bar{a}b$, otherwise the text of the ' $U\!s\bar{u}l$ remains unclear. Compare both quotations:

(٧) وأمّا ثلاث مائة إلى تسع مائة فكان ينبغي أن يكون مئين أو مئات ولكنّهم شبّهوه بعشرين وأحد عشر حيث جعلوا ما يبيّن به العدد واحدا لأنّه اسم لعدد كما أنّ عشرين اسم لعدد وليس بمستنكر في كلامهم أن يكون اللفظ واحدا والمعنى جميع. (في الكتاب ٢، ٨٧.٨ ١١--١١)

 (٨) قال سيبويه وثلاث [هكذا] وأمّا تسع مائة وثلاث مائة فكان حقّه مئين أو مئات ولكنّهم شبّهوه بعشرين وأحد عشر. (في الأصول ١، ٣١٣. ١-٢)

- (7) [...] and concerning <u>talātu</u> mi'ah and tis'u mi'ah, it ought to have been mi'īna or mi'āt, but they treated it like 'išrūna and 'aḥada-'ašara inasmuch as they put the specifier of the numeral in the singular since it is a numeral, just like 'išrūna is a numeral and it is not odd in their language for the surface form to be in the singular whereas the meaning is a plural (K. II, 87.11–13).
- (8) Sībawayh said: And talāt [sic] and concerning tis'u mi'ah and talātu mi'ah, it ought to have been mi'īna or mi'āt, but they treated it like 'išrūna and 'aḥada-'ašara ('U. I, 313.1-2).

The new numerals formed with *mi'ah* present little flexibility when used to count objects, because of their shape of *muḍāf* and *muḍāf 'ilayh* and the definiteness issues linked with annexation. The annexational and predicative constructions are the only one to be straightforward, as in *talātatu mi'ati waladin* "three hundred boys", in a double annexation, and *al-'awlādu talātu mi'atin* "the boys are three hundred", where the *muḍāf (talātatu)* remains

³⁰As-Sīrāfī gives a clearer explanation of this obscure passage in the Kitāb (Šarh IV, 175.8–9).

indefinite after its annexation to an indefinite term (*mi'atin*). Theoretically, it should also be possible to say "the three hundred boys", by making the second annexation definite, as in *talātu mi'ati l-waladi*, but no author mentions it. However, it seems unusual to say, in a appositional construction, "the three hundred boys" (**al-'awlādu talātu l-mi'ati?*), although it is structurally correct. None of these issues is mentioned in our treatises.

The case of 'alf is different from that of mi'ah since it follows the general rule for the counted object after any numeral, as in talāṭatu 'ālāfin "three thousands", 'aḥada-ʿašara 'alfan "eleven thousands", 'išrūna 'alfan "twenty thousands" or xamsu mi'ati 'alfin "five hundred thousands".

These new numerals formed with 'alf can also apply to counted objects, as in xamsu mi'ati 'alfi waladin "five hundred thousand boys". The only author to mention these expressions is al-Mubarrad (M. II, 169.9–10). He clearly compares 'alf to the counted object tawb "garment" in the following expressions: 'ašaratu 'ālāfin and 'ašaratu 'aṭwābin, 'aḥada–'ašara 'alfan and 'aḥada–'ašara ṭawban (M. II, 169.10–170.1). For him, it seems to be normal for 'alf and mi'ah to behave differently, just because they are different series of numerals (M. II, 169.9). Ibn as-Sarrāj does not comment on the behaviour of 'alf as a counted object after any numeral, however, he quotes the line sab'ūna 'alfa mudajjajin "seventy thousand armored [soldiers]", in which such a case is found (K. I, 258.3).

It seems that only the annexational construction is possible between these greater numerals and their counted object, as in *al-'awlādu xamsu mi'ati l-'alfi* "the five hundred thousand boys" or *al-'awlādu xamsu mi'ati 'alfin* "the boys are five hundred thousands". However, our authors do not mention these expressions.³²

As for 'alf used alone, all types of constructions are possible: al-'awlādu l-'alfu "the thousand boys", 'awlādun 'alfun "a thousand boys", al-'awlādu 'alfun "the boys are a thousand", 'alfu waladin "a thousand boys", 'alfu l-waladi "the thousand boys". These possibilities are not mentioned by our authors.

The case of ordinals is not dealt with by our authors. They do not mention the forms $t\bar{t}an\bar{t}$ mi'atin "two hundredth", $t\bar{t}alitu$ mi'atin "three hundredth", and so on. The corresponding definite forms should be also possible: $t\bar{t}an\bar{t}$ t-t i" the two hundredth", $t\bar{t}alitu$ t-t "the three hundredth", as well as

³¹Cf. Howell (1883/2003, IV, 1447).

³²Baalbaki (1981, 6) mentions that in his *Iṣlāḥ al-manṭiq* Ibn as-Sikkīt (d. 244/858) quotes al-Kisāʾīʾs (d. 189/805) following example: mā faʿalat al-ʾaḥada l-ʿašara l-ʾalfa d-dirham "what have the eleven thousand dirhams yielded?" Ibn as-Sikkīt adds that Baṣrans add the definite article only to the first part of the compound as in mā faʿalat al-ʾaḥada-ʿašara ʾalfa dirhamin (ʾIṣlāḥ al-manṭiq, 302.15–18).

the annexation to a counted object, as in "the three hundredth chapter" (al-bābu tāliṭu l-mi'ati?) or the "fifteen thousandth year" (as-sanatu l-xāmisa-'ašara 'alfan?) The orientalist grammar we consulted do not mention these issues.

6.6.12 The expression of complex numerals

Lastly, our authors do not deal with the expression of complex numerals, as in "three thousand five hundred and thirty-nine". The only occurrence of such a numeral is found in the colophon of Ibn as-Sarrāj's 'Uṣūl: furiġa min intisāxihi tāliṭa-ʿašara šahri Ramaḍāni sanati 'iḥdá wa-xamsīna wa-sitti mi'atin "its copy was finished on the thirteenth of the month of Ramaḍān of the year six hundred and fifty-one", in an annexational construction ('U. III, 481).

³³Cf. Fleisch (1990, I, 515-516; §106y) and Wright (1967, I, 259; §327).

Chapter 7

Conclusion

The number of issues that are related to numerals is quite amazing. It is now clear that numerals are not a straightforward category, at least syntactically and morphologically. As is the case for nouns in general, one finds all types of words in this category, in terms of declension, syntactic "strength", flexibility. Some numerals actually behave like active participles ($x\bar{a}misun$) and may operate on a $maf^*\bar{u}l$ bi-hi in certain occasions, while others are indeclinable and have very limited syntactic possibilities (xamsata-' $a\bar{s}ara$). Some numerals are fully declinable, in both genders, they can be put in the dual and the plural, and can be annexed (xamsatun), while others are indeclinable (xamsata-' $a\bar{s}ara$) or have limited declinability, have no dual nor plural form, have a common form for both genders and are not annexable (' $i\bar{s}r\bar{u}na$). Lastly, some numerals stand alone and behave like no other one ($i\bar{t}n\bar{a}$ -' $a\bar{s}ara$).

Moreover, all types of numerals should operate on—or be in a syntactic construction with—any type of countable substantive. This implies that, despite their differences, numerals should be interchangeable so that one can express any quantity of any counted object. This point is the source of an illimited number of grammatical issues. And in the same manner, the nominal groups constituted of a numeral and its counted object should also theoretically be found in all types of constructions where these counted objects can be found. The result is that the number of possible distinct cases is potentially infinite.

It is clear that, given all these constraints, the morphology and morphosyntax of numerals is linked with the wider grammatical system of each

author. We will now see how numerals are inserted in each of the three treatises we focus on in this study.

Part III

Three different frames to tackle numerals

Introduction

In the previous part, we have come across a great number of issues linked with numerals in Classical Arabic morphology, syntax, and semantics. We have also pointed out the issues that are dealt with by our authors, and those that are not. In some cases, we have mentioned divergent opinions between them. However, this factual overview is not enough to understand the grammar of numerals that each grammarian has developped. Indeed, what we have presented in the previous part is cut off from the wider frame in which each grammarian interprets numerals. Thus, we were able to gather information on numerals, and on our grammarians' opinion about specific grammatical rules, but we were not able to understand how these issues connect together, if they do.

If we want to have a deeper view of numerals as a unified grammatical phenomenon, it is necessary to read anew the chapters linked with numerals in each treatise, not trying to answer specific questions that we would have—many of them remaining unanswered—but entering into each grammarian's logic.

In the three grammatical treatises we focus on in this study, we will first recall the general outline of each treatise and the chapters where grammatical information on numerals is found. Then, we will analyse in detail the chapters that are devoted to numerals in order to understand each grammarian's logic.

In order to avoid forcing our questions on the texts, we have followed a linear reading path, from the beginning to the end of each of the three treatises. Although we tried to present the issues synthetically in the following pages, this flat, linear reading is surely still preceivable.

Chapter 8

Sībawayh's approach to numerals

8.1 Introduction

As Baalbaki puts it,1

Sībawayhi's *Kitāb* is roughly divided into two parts, *naḥw* (in this sense, syntax, rather than the general meaning of "grammar"), which deals with the relations between the different parts of the structure and with the declensional endings which are associated with these relations, and *sarf* (morphology), which examines words in isolation of structure and includes derivational morphology as well as morphophonology. Phonological issues are treated under morphology—hence, phonology does not represent an independent level—whereas phonetics are briefly discussed toward the end of the book (Baalbaki 2007b, xxxi).

If one had to clearly delimit these two parts, one should probably say that they correspond to Derenbourg's two volumes, chapters 1-284 (K. I, 1-441) have a more syntactic approach whereas chapters 285-571 (K. II, 1-481) deal with morphosyntactic issues as well as derivational and morphophonetic issues.

There are two main chapters in the *Kitāb* that deal with the syntax of numerals, chapter 41 (*K.* I, 81.19–88.8) and chapter 412 (*K.* II, 176–177). In chapter 41, devoted to the *ṣifah al-mušabbahah bi-l-fāʻil*, Sībawayh presents the general semantic and syntactic frame in which he interprets both an-

¹See Baalbaki (2008, 31) for a different formulation of the same idea.

nexational and specifying constructions for all numerals and their counted object. Chapter 412 deals with the syntax of numerals and their counted object between "three" and "nineteen" at a lower level (compound morphology, gender agreement, number, and so on).

Other issues related to numerals are dispersed in the $Kit\bar{a}b$, according to the chapter they belong to. This is especially true of morphological issues but also of syntactic issues where numerals are tested for their peculiar behaviour. We will briefly recall them here, in a tabular form, in order to see how they are organised in the $Kit\bar{a}b$.

| Kitāb | Issues | Pages | | |
|--------------------------|---|----------------------------|--|--|
| In syntactic chapters | | | | |
| Ch. 18, K. I, 20- | In some cases it is possible to predicate an indefinite noun of another indefinite noun, as is the case with the word 'aḥad. | p. 159 | | |
| Ch. 41, K. I, 81– 88 | On şifāt mušabbahah bi-smi l-fāʿil. Will be analysed below. | pp. 194ff. | | |
| Ch. 85, K. I, 157 | The issue at stake is the grammatical interpretation of the expression $wahda-hu$, and of the final $fathah$ on $wahda-$ in particular. | p. 141 | | |
| Ch. 87, K. I, 158–159 | It explores constructions like <i>marartu bi-him jamīʿan</i> where <i>jamīʿan</i> —which is morphologically an <i>ism</i> —is considered a <i>ḥāl</i> applying to the <i>xabar</i> (<i>-him</i>) and to distinguish them from constructions like <i>marartu bi-him xamsata-hum</i> that were dealt with in chapter 85 and where <i>xamsata-hum</i> is treated like a <i>maṣdar</i> , although it is morphologically an <i>ism</i> . | p. 176 | | |
| Ch. 99, K. I, | Sibawayh deals briefly with the syntactic pattern of the names of the days, annexational vs. appositional (<i>K</i> . I, 176.22–24). | p. 150 | | |
| Ch. 101, K. I, 178–185 | Sībawayh comments on the poetic line xawwá 'alá mustawayātin xamsin kirkiratin wa-ṭafinātin mulsin ("It [the camel] laid down on five [equal] levels, the chest and [the four other] bald callosities"; I, 183.2). | pp. 92 and 157 | | |
| Ch. 110, K. I, 197–200 | This chapter is devoted to constructions of the type marartu bi-ḥayyatin dirā'un ṭūlu-hā, marartu bi-tawbin sab'un ṭūlu-hu and marartu bi-rajulin mi'atun 'iblu-hu (K. I, 197.14–15). | pp. 93, 99, 157 and 165 | | |
| Ch. 123, K. I, 227-229 | On common nouns that have been used as proper names, as is the case for the days of the week. | p. 150 | | |
| Ch. 141, K. I, 250-256 | On the analogy between <i>kam</i> and the numerals. | p. 147 | | |
| Ch. 157, K. I, 281 | Sībawayh mentions wā Ţnā-ʿAšarāh!, the "mourning form" of the proper name Iṭnā-ʿAšara (K. I, 281.12-13). | p. 149 | | |

8.1. Introduction

| Ch. 159, K. I, 282–283 | Sībawayh mentions wā Talāṭatan-Wa-Ṭalāṭīnāh!, the "mourning form" of the proper name Talāṭatun-Wa-Ṭalāṭūna, and yā Ṭalāṭatan-Wa-Ṭalāṭīna!, its vocative form (K. I, 282.9). | p. 149 |
|--|---|-------------------------|
| Ch. 173, K. I, 298–299 | Sībawayh mentions <i>yā Xamsata!</i> , the apocopated form of the proper name <i>Xamsata-ʿAšara</i> in the vocative (K. I, 298.20). | p. 149 |
| Ch. 222, K. I, 350-352 | This chapter deals with 'ayy and compares its behaviour to the behaviour of xamsata-'ašara. | p. 78 |
| In morphosyntac | tic chapters | |
| Ch. 297, K. II, | Sībawayh presents the $ma^{c}d\bar{u}l$ forms of numerals. | p. 117 |
| Ch. 336, K. II, 84; ch. 368, 115-119; ch. 386, 123-125; ch. 389, 137- 138 | He presents the formation of relative adjectives. Numerals are dealt with in these chapters according to their morphology. | p. 113 |
| Ch. 412, K. II, 176–177 | On the expression of the counted object for numerals between "three" and "nineteen". Will be analysed below. | pp. 203ff. |
| Ch. 413, K. II, 177–179 | This chapter deals with expressions of the type $x\bar{a}misu\ xamsatin,\ x\bar{a}misu\ 'arba'atin,\ and\ ordinals\ in general. In this chapter, Sībawayh also deals with elements of different gender counted together.$ | pp. 132 and 170 |
| Ch. 414, K. II, 179–181 | Chapter 414 deals with the cases when there is a discrepancy between the grammatical gender and the biological sex. | p. 171 |
| Ch. 415, K. II, 181 | Chapter 415 forbids annexation of adjectives to numerals between "three" and "ten" like <i>talāṭa-tun qurašiyyūna</i> "three Qurayshites" (and not * <i>talā-tatu qurašiyyīna</i>), because adjectives should not be treated like nouns. | p. 172 |
| Ch. 416-431, K. II, 181-224 | These chapters are devoted to "broken plurals", which Sībawayh tackles almost exculsively from a morphological perspective. In chapter 430 (K. II, 211.17–214.6), devoted to <i>şifāt</i> that have a "broken" form in the plural, Sībawayh gives the following exemple of a masculine noun to which a feminine <i>şifah</i> applies: <i>rijālun xamsatun</i> (K. II, 212.10–11). | pp. 157, 164 and 177 |

Table 8.1: Numerals in the Kitāb

In the following pages, we will analyse chapters 41 and 412 in more detail.

8.2 The link with the counted object

Chapter 41 (K. I, 81.19–88.8) is devoted to the *şifah mušabbahah bi-l-fā'il* "adjectives that resembles the active participle", its syntax and the meaning of its relationship with the noun to which it applies. After general explanations where syntactic rules are explained in detail (K. I, 81.19–84.14), Sībawayh intends to explain apparently inconsistent constructions, such as *xayrun min-ka 'aban* "better than you [in terms of] father" (K. I, 84.16), '*išrūna dirhaman* "twenty dirhams" (K. I, 85.5), *imtala'tu mā'an* "I got filled of water" (K. I, 85.18) and the syntactic link between other numerals and their counted object (K. I, 86.6–88.8), which he decides to gather under this heading, despite some difficulties that we will consider here.

In chapter 27, Sībawayh gives a first clue of what will become a prime example in his grammatical theory, i.e., the expression of the counted object after 'išrūna "twenty":²

(1) It ['inna] has the status of the verb, just like 'išrūna rajulan and talātūna rajulan have the status of dāribūna 'Abda l-Lāhi, although it is not a verb nor an active participle (K. I, 38.18–19).

This is what chapter 41 is about: the broad analogy between 'išrūna and the active participle, but with much more details as in (1) and many intermediate steps. As Carter (1972b) puts it, 'išrūna dirhaman is a locus probans in the Kitāb, which Sībawayh uses in order to describe various grammatical cases where a non-verbal noun has a verb-like action on a noun and puts it in the dependent form.

Carter (1972b, 486) believes that Sībawayh attempts to fill the gap of the specifying construction,³ left empty because of the impossibility of the expression hasanun wajhan, to which 'išrūna dirhaman supposedly corresponds analogically. Carter builds his whole interpretation of this chapter on the fact that hasanun wajhan does not exist in Arabic and that Sībawayh endeavours to prove that 'išrūna dirhaman fills the empty space left by the non-existing hasanun wajhan. This interpretation is powerful, yet, it unduly systematises Sībawayh's thought. Moreover, when one knows how elliptic the Kitāb can be, the mere absence of an expression has very little convincing power. And as

²See above, p. 78, other cases of prime examples.

³Carter calls the specifying construction *tanwīn-naṣb*. See above, p. 166.

Carter (1972b, 486, note 3) mentions himself, *ḥasanun wajhan* is found indeed in later grammarians. See for example in Ibn Wallād's *Intiṣār* (25.7).

The way Sībawayh presents things is slightly different. He proceeds by successive analogies, considering the "strength" (quwwah) that each word has. To put it simply, the verb (fi'i) has the maximum strength, then comes the active participle ($ism\ al-f\bar{a}$ 'il), then the "adjective that resembles the active participle" ($as-sifah\ al-mušabbahah\ bi-l-f\bar{a}$ 'il). After this, come the following problematic expressions: $xayrun\ min-ka\ 'aban$, ' $išr\bar{u}na\ dirhaman$, imtala' $tu\ m\bar{a}$ 'an and numerals, where "something" of the initial verbal strength remains.

"To have more strength" can mean different things: to have the meaning of the unaccomplished verb (K. I, 81.20); to put the following noun into the dependent form instead of the oblique form (K. I, 82.7); to have an effect on definite words (K. I, 82.17; 85.19); to agree in gender and number (K. I, 85.7–8); to have more than one possible construction (K. I, 84.21; 85.18; 86.20–21); to perform two syntactic roles at the same time (K. I, 85.10–11); to have a retroactive syntactic effect (K. I, 85.20). In the description of *quwwah* given by Baalbaki (1979, 15–19) it is clear that this "anthropomorphic metaphor" (Carter 1972b, 487, in note) is primarily linked with the theory of '*amal* "operation, government, regimen", which is clearly the case here. See also Ayoub (1991, 51).

Sībawayh is always extremely careful in assigning a relative strength to the words (and sometimes to morphemes within words). Depending on their nature, morphology, syntax, and meaning in the sentence, words are assigned a specific relative strength, which is compared to the neighbouring words. Each word can either have more or less or the same strength as any other word. At the top end of the scale are transitive verbs and at the lower end are isolated consonants and vowels. Between these two extremes is an infinity of possibilities and what is important is the relative strength that each element has in a word or in a sentence. Analogy is the tool used by Sībawayh to compare the relative strength of words and morphemes.

To understand this chapter, it is very important to distinguish between two levels of interpretation: the semantic level and the syntactic level. At the semantic level, the link between the *ṣifah mušabbahah* and its complement is called *sabab* or, as Sībawayh puts it, the *ṣifah mušabbahah* "has a syntactic

⁴Manuscript A has a different reading that has the opposite meaning, and Derenbourg relies on C here, probably because of the context, which pleads for a mistake in A, not in C.

⁵In the same manner as above, manuscript C has a reading with an opposite meaning but Derenbourg has chosen the reading in A with is more consistent with the context.

effect on what has a semantic link to it" (ta^c malu $f\bar{\imath}$ - $m\bar{a}$ $k\bar{a}na$ min $sababi-h\bar{a}$; K. I, 82.1).

Carter (1985, 60) proposes to translate *sabab* as "semantic link", and shows that this term is used to describe the link between two words in more than one syntactic relation. He distinguishes three levels of possible semantic link according to Sībawayh: "a. semantically linked with the antecedent (*min sababihī*); b. involved with the antecedent (*iltabasa bihī*); c. involved with something semantically linked with the antecedent (*iltabasa bi-šay'in min sababihī*)" (Carter 1985, 57).

There are five different types of semantic relations that are called *sabab* by Sībawayh, the fifth type being the one under discussion in our present chapter of the *Kitāb*. This type involves either a *ṣifah mušabbahah* or an active participle or a comparative.

In this fifth type, the *sifah mušabbahah* (or the active participle or the comparative) can occupy different slots. In the type Va, it is a predicate: huwa xayrun min-ka 'aban "he is better than you [in terms of] father", 'Abdu l-Lāhi fārihu l-'abdi "'Abd Allāh is gifted [in terms of] slave"; in the type Vb, it is an attribute: 'marartu bi-rajulin dāribin 'abū-hu rajulan "I passed by a man whose father was beating a man", marartu bi-rajulin hasanin 'abū-hu "I passed by a man whose father is handsome"; in type Vc, it is a hāl: marartu bi-rajulin hasanan 'abū-hu "I passed by a man whose father is handsome"; in type Ve, it is a vocative: yā dā d-dāmiru l-'ansi "you, who put the strong she-camel on diet!" "8

At the syntactic level, the *şifah mušabbahah* can be in more than one construction with the word with which it is linked semantically. The preferred construction is an $id\bar{a}fah$ (K. I, 82.2) whose second term carries the article (K. I, 82.17) as in $hasanu\ l$ -wajhi (fem. $hasanatu\ l$ -wajhi). In the expression huwa

 $^{^6}$ Manuscript A has š $ababi-h\bar{a}$ instead of $sababi-h\bar{a}$ but Derenbourg has corrected this obvious misspelling.

⁷Later grammarians reserved the term sabab to this type (Carter 1985, 55). The slot of the $sifah \ mu\bar{s}abbahah$ (or the active participle or the comparative) is called $na't \ sabab\bar{\iota}$ (Carter 2009, 101).

^{*}Other types of sabab are I, mā Zaydun 'āqilan 'abū-hu "Zayd, his father is not rational", where there is a semantic link between 'āqilan and Zaydun through 'abū-hu; type II, 'anta fa-ndur!" you, look!", where there is a semantic link between the pronoun 'anta and the implicit pronoun in the imperative verb; type III, Zaydan laqītu 'axā-hu "Zayd, I found his brother", where the preposed object optionally agrees with the word with which it is semantically linked; type IV, ra'aytu Zaydan 'abū-hu 'afḍalu min-hu "I saw Zayd, whose father is better than him", where the word which is semantically linked with Zayd is in an adjectival sentence. The last type, Vd, marartu birajulin ma'a-hu mra'atun ḍāribu-hā 'abū-hu "I passed by a man who was with a woman whom his father beats", can be optionally interpreted as type IV (dāribu-hā), Vb (dāribi-hā) or Vc (dāriba-hā).

hasanu l-wajhi "he is handsome [in terms of] face", hasan is semantically linked with al-wajh (it is the face that is handsome), and it is syntactically linked with the pronoun huwa, as its xabar. In Sībawayh terms, hasan operates on al-wajh, to which it is semantically linked (cf. K. I, 82.1 quoted above). In his commentary, as-Sīrāfī says that the expression hasanu l-wajhi is a sub-case of hasanun wajhu-hu. The role of the definite article in al-wajhi is to replace the definiteness of the suffix pronoun -hu in wajhu-hu (Šarh IV, 100.16–18).

It is correct to add the definite article to the *mudāf* (*K*. I, 83.15) as in *al-ḥasanu l-wajhi* (*K*. I, 83.16). The reason given by Sībawayh is that in the *sabab* complement the second term does not make the first one definite (*K*. I, 83.17). In order to make the expression definite one adds the definite article to the first term.

Syntactically, it is also possible to express the *sabab* by an indefinite noun. In this case, one should add the article to the first term, as in *al-ḥasanu wajhan* "the beautiful of face" (*K.* I, 83.18) and, by extension, *al-ḥasanu l-wajha* (*K.* I, 84.4). In *al-ḥasanu wajhan*, the construction is not named by Sībawayh.

It is also possible to elide the article from the second term if the meaning is clear, as in <code>hadītu</code> 'ahdin "inexperienced" and <code>karīmu</code> 'abin where <code>al-'ahd</code> and <code>al-'ab</code> are intended. In Sībawayh's words, "you have not disturbed the first term at all" (<code>lam tuxlil bi-l-'awwali fī šay'in; K. I, 83.19–20).¹¹</code> Since the first term does not acquire the definiteness of the second term in this type of annexation, modifying the definiteness of the second term does not disturb the definiteness of the first term.¹²

The reason why the second term should be put in the dependent form is that the *şifah mušabbahah* resembles the active participle, which can be constructed as *aḍ-ḍāribu Zaydan* "the one who hit Zayd" (*K.* I, 84.3). If the *şifah mušabbahah* is put in the dual or in the plural, then the second term is either in the dependent form as in *al-ḥasanāni l-wujūha* "the two beautiful ones [in terms of] faces" and *al-ʾaxsarūna ʾaʿmālan* "the losers [in terms of] deeds" (*K.* I, 84.9–10) or in the oblique form, as in *aṭ-ṭayyibū ʾaxbārin* "the good ones [in terms of] news" (*K.* I, 84.14).¹³

 $^{^{9}}$ Aoun (1978) shows that the 2 alif $l\bar{a}m$ cliticised to the sifah mušabbahah does not mean the definite article but the reduced definite specifier of a reduced relative clause. Its full counterparts are $allad\bar{a}$, $allat\bar{a}$, and so on.

¹⁰Manuscript A reads *al-ḥasanu l-wajhi* which is inconsistent with the context.

¹¹ The reading of C is as follows: فلم تُنِخلُ بالآخر which could be ambiguous since فلم تُنِخلُ بالآخر which could be ambiguous since فلم تُنجلُ بالآخر be read either al-'āxar "the other one" or al-'āxir "the last one". The context suggests to read "the other one" or, as interpreted by A: "the first one".

¹²See as-Sīrāfī's commentary, Šarḥ IV, 111.4–8.

¹³Manuscript C reads at-tayyibū al-'axbāri.

Another evidence that the active participle has more strength than the $sifah\ mu\check{s}abbahah$ is that it has more freedom of behaviour, as in the peculiar $al-h\bar{a}fid\bar{u}$ 'awrata l-'as $\bar{i}rati$ "the ones who protect the modesty of their relatives", where the first term $(al-h\bar{a}fid\bar{u})$ has lost its $n\bar{u}n$ —just like a $mud\bar{a}f$ —and where the second term ('awrata) is in the dependent form, unlike a $mud\bar{a}f$ 'ilayh (K. I, 84.13–14).

In an expression like *xayrun min-ka 'aban* "better that you [in terms of] father", where *min* separates the two terms which are linked, the annexational construction is not an option because the particle *min* cannot be elided, and there is no choice but to use the specifying construction (*K*. I, 84.16). In the same manner, in the expression *'išrūna dirhaman* (*K*. I, 85.5), there is no other choice but to put the complement in the singular indefinite dependent form. The reason given by Sībawayh is that the singular is "lighter" than the plural, and the indefinite is "lighter" than the definite (*K*. I, 85.6–7), so it is "lighter" to say *'išrūna dirhaman* than *'išrūna min ad-darāhimi* (*K*. I, 85.5–6).

Sībawayh draws a parallel between the expression 'awwalu rajulin "the first man"—which has the same meaning as 'awwalu r-rijāli—and the expression 'išrūna dirhaman (K. I, 85.1–7). Arabs have "lightened" the expression 'awwalu r-rijāli by suppressing the article and the plural. He then says that in the same manner in the expression 'išrūna min ad-darāhimi "the addition of the definite article does not change the indefiniteness of 'išrūna, therefore they lightened it by dropping what was unnecessary" (wa-lam yakun duxūlu l-'alifi wa-l-lāmi yuġayyiru l-'išrūna 'an nakirati-hi fa-staxaffū bi-tarki mā lam yuḥtaj 'ilay-hi; K. I, 85.6–7), so that they simply say 'išrūna dirhaman.

Sībawayh gives two pieces of evidence that 'išrūna and xayrun min have less strength than the ṣifah mušabbahah (K. I, 85.7–8).¹⁴ The first one is that they are invariable in number, gender and form (K. I, 85.8). In the following expression, the ṣifah mušabbahah agrees in form with the mawṣūf: marartu bi-rajulin ḥasani l-wajhi 'abū-hu "I passed by a man whose father is beautiful of face" (K. I, 85.8–9). This is not possible with 'išrūna and xayrun, because they remain in the independent form (K. I, 85.10). In his commentary on the Kitāb, as-Sīrāfī gives examples of this use of 'išrūna that remains in the independent form: marartu bi-rajulin 'išrūna dirhaman mālu-hu "I passed by a man whose money is twenty dirhams", marartu bi-rajulin xayrun min-ka 'abū-hu "I passed by a man whose father is better than you" (Šarḥ IV, 132).

To put it another way, 'išrūna and xayrun min cannot perform two roles at the same time, but only one. In marartu bi-rajulin ḥasani l-wajhi 'abū-hu, the word ḥasani has two different roles. It is syntactically the attribute

¹⁴See footnote 4, p. 195.

of rajulin and semantically the *xabar muqaddam* of 'abū-hu. In *marartu bi-rajulin* 'išrūna dirhaman mālu-hu, on the other hand, the word 'išrūna is only the fronted predicate (*xabar muqaddam*) of mālu-hu in the nominal sentence 'išrūna dirhaman mālu-hu, which is itself the qualifier of *rajulin*.

The second piece of evidence that 'išrūna and xayrun min have less strength than the sifah mušabbahah is that they must keep their compensatory nūn¹⁵ (K. I, 85.13–14), and the specifier cannot be made definite (K. I, 85.6–7), as in the following possible constructions: xayrun min-ka 'aban (K. I, 84.16), xayrun 'amalan (min-ka) "better (than you) [in terms of] work" (K. I, 84.17), xayrun min-ka 'a'mālan (K. I, 85.1), 'išrūna dirhaman (K. I, 85.5). In other words, it is both possible to say al-ḥasanu wajhan and ḥasanu l-wajhi, whereas the specifier of 'išrūna has to surface in the indefinite dependent form dirhaman because it is not possible to annex 'išrūna to its counted object.

Sībawayh does not deal explicitly with the possibility to add the definite article to 'išrūna, as in al-'išrūna dirhaman "the twenty dirhams", but nothing seems to forbid it.

Lastly, there is one more case where the verb is weak and has limited action: intransitive verbs like imtala imtala

Can we still talk of a semantic *sabab* relationship between *'išrūna* and *dirhaman*, or between *imtala'tu* and *mā'an*? Carter (1985, 55) mentions *xayrun min-ka 'aban* as one possible case of *sabab* complement, but does not mention *'išrūna dirhaman* nor *imtala'tu mā'an*. Is it evident for Carter that these are *sabab* complements? Sībawayh is not very clear either on this point. It seems obvious for him that *'aban* in *xayrun min-ka 'aban* expresses the *sabab* (K. I, 84.16–17), but this is the last occurrence of the term *sabab* in this chapter, and it is not used in any of the other chapters concerned with

¹⁵See above, note 1, p. 155.

¹6See Baalbaki (1988/2004, 166–167) for the five main meanings of 'aṣl in Sībawayh's Kitāb: 1) the form that agrees with analogy, 2) the origin from which a certain usage has developed, 3) the reconstructed origin of a certain usage, 4) the form that is characteristic of a certain function, and 5) the supposed root of a word. Here, the 'aṣl refers to the reconstructed origin of the expression imtala'tu mā'an.

numerals. The expressions 'išrūna dirhaman and imtala'tu mā'an are treated here along with clear sabab complements, as if they were the same. However, there are differences in the syntactic possibilities of each construction, which surely point to semantic differences. This way of presenting things is very typical of Sībawayh and he leaves us without further explanation.

In this chapter, nothing is said either about *iltibās* as a weaker *sabab*. However, we are probably not far from the truth if we say that the *sabab* relationship in '*išrūna dirhaman* and *imtala'tu mā'an* is not as strong as in the clear examples (*ḥasanu l-wajhi*, and so on) but that there is "something" of the *sabab* expressed by *dirhaman* and *mā'an* in '*išrūna dirhaman* and *imtala'tu mā'an* which explains both the similarities and the differences in syntactic construction. We can probably not go any further if we do not want to systematise Sībawayh's theory more than he did himself.

The *sabab* relationship can be expressed through a much larger range of syntactic links than the specifying construction. In optimum conditions, the *sabab* complement can be masculine or feminine, definite or indefinite, ¹⁷ singular or plural, in the oblique or dependent form.

The fact that, unlike the full-fledged *ṣifah mušabbahah*, *'išrūna* can only surface in one shape with its counted object clearly shows that it shares only very little of its strength.

The rest of chapter 41 deals with all other numerals. From "three" to "ten", the counted object has to be put in the plural and the numeral is connected to it by 'iḍāfah (K. I, 86.8). This counted object can be definite or indefinite, as in talāṭatu 'abwābin ("three garments"; K. I, 86.9) and xamsatu l-'aṭwābi ("the five dresses"; K. I, 86.10) and for Sībawayh there is no other possible construction when the numeral is muḍāf (K. I, 86.10–11).

From "eleven" to "nineteen", the numeral is considered a compound and is "in the position of an indefinite noun" ($f\bar{\imath}$ mawdi'i smin munawwanin). There is only one possible construction for its complement. It has to be indefinite, singular and in the dependent form as in 'aḥada-'ašara dirhaman and iṭnā-'a-šara dirhaman (K. I, 86.13).

There is also only one possible construction for decades from "twenty" to "ninety", as has been explained above for "twenty". The numeral itself behaves like an indefinite plural¹⁸ with its long declension vowel and compensatory

¹⁷See above, p. 194, on the expression *ḥasanun wajhan*.

¹⁸In chapter ³68, Sībawayh has a more precise description of the morphology of decades. See above, p. 136, the discussion on the plural meaning of decades.

 $n\bar{u}n$ (K. I, 86.15–16) and the counted object has to be singular, indefinite and in the dependent form as in 'išr \bar{u} na dirhaman and $tal\bar{a}t\bar{u}$ na 'abdan (K. I, 86.16–18).

For hundreds, the only possible syntactic link between the numeral and its complement is the 'iḍāfah (K. I, 87.2). The complement can be indefinite or definite, as in mi'atu dirhamin and mi'atu d-dirhami (K. I, 87.4), mi'atā dirhamin and mi'atā d-dīnāri (K. I, 87.5). The same rules apply to thousands: 'alfu dirhamin and 'alfā dirhamin (K. I, 87.6).

Nouns referring to hundreds, from "three hundred" to "nine hundred", have a specific behaviour since the word "one hundred" itself remains in the singular, and the rules mentioned above (see p. 200) for counted nouns between "three" and "nine" do not apply. So, instead of the plural forms mi' $\bar{n}a$ and mi' $\bar{a}tin$, the singular mi'atin is used (K. I, 87.11). Sībawayh explains this singular by comparing it to the singular of the counted noun after decades and numerals between "eleven" and "nineteen" (K. I, 87.11–12). He adds that it is not rare in Arabic for a singular to refer to a plural, especially in the field of numerals (K. I, 87.13).

Open issues on sifāt mušabbahah

Among the issues that are not dealt with by Sībawayh in this chapter is the morphology of sifat mušabbahah and their morphological link to the verbs, whose ism al-fa il they resemble. For example, is xayr a sifah mušabbahah morphologically derived from the verb $x\bar{a}ra$ "to choose", or is it only in the same semantic sabab relationship with its complement as the sifah mušabbahah is with its complement? The same is valid for numerals: They could easily be morphologically related to verbs, which could reinforce their comparison with sifat mušabbahah (see above, p. 105). Yet, Sībawayh does not follow this path.

¹⁹As-Sīrāfī (Šarḥ IV, 175.8-9) gives a clearer explanation of this obscure passage in the Kitāb.

In the same manner, the fact that ordinals are not morphologically linked with <code>sifāt mušabbahah bi-l-fā'il</code> makes it all the more striking since they do have a <code>fā'il</code> pattern. Sībawayh quotes the expression <code>hādā'awwalu rajulin</code>, but apparently for the only purpose of giving an example where a singular (<code>rajul</code>) can stand for a "lighter" version of a plural (<code>rijāl</code> in <code>hādā'awwalu r-rijāli</code>), as in the singular 'išrūna dirhaman, which stands for the plural 'išrūna min <code>ad-darāhimi</code>. Could it be that through this single example Sībawayh draws a parallel with ordinal numerals in general, and not only with the syntax of 'awwal? This would be quite far-fetched since 'awwal itself is a particular case among ordinal numerals.

In chapter 41, Sībawayh only deals with annexational (hasanu l-wajhi "handsome of face") and specifying constructions (hasanun wajhan "handsome [in terms of] face"),²⁰ which he gathers under the wider semantic umbrella of sabab relationship. He does not mention predicative and appositional constructions, which are otherwise only briefly mentioned in the $Kit\bar{a}b$.²¹ The reason for this is probably that both predicative and appositional constructions are straightforward and do not need much explanation.

Interestingly, these two constructions are also very natural for *ṣifāt mu-šabbahah*, as in *al-wajhu l-ḥasanu* "the handsome face" et *wajhu-hu ḥasanun* "his face is handsome". So if numerals can be linked with *ṣifāt mu-šabbahah* for annexational and specifying constructions, they can *a fortiori* be linked with them for appositional and predicative constructions. This is maybe the reason why Sībawayh does not consider them separately in the *Kitāb*.

In this chapter, Sībawayh links the dependent form of *dirhaman* in 'išrūna *dirhaman* to the strength of the *ṣifah mušabbahah bi-l-fā'il*, which is a verbal strength. He is clear that 'išrūna has no verbal value itself, but it is difficult to say, as does Owens (1990b, 255), that the dependent form of *dirhaman* has absolutely nothing to see with transitivity.

Owens (1990a, 109) calls SNIP, separation and non-identity principle, the reason why some complements surface in the indefinite dependent form, as in 'išrūna dirhaman. Dirhaman is separated from 'išrūna by the compensatory $n\bar{u}n$ which prevents annexation, and the two terms are in a non-identity relationship, i.e., one is not semantically included in the other. This SNIP accounts for the dependent form of certain complements that are not subjected to verbal transitivity. We have seen above the separation role of the $tanw\bar{u}n$ (the $n\bar{u}n$ in the case of 'išrūna). As for the non-identity principle, it is expressed by Sībawayh in chapter 128, entitled "concerning that which takes dependent

²⁰See p. 194, about this construction which is not found literally in the *Kitāb*.

²¹See above pp. 164ff. for more details about these constructions in the *Kitāb*.

form because it is not part of the noun preceding it nor identical with it"²² (bāb mā yantaṣibu li-'anna-hu laysa min ismi mā qabla-hu wa-lā huwa huwa; K. I, 235–236).

This presentation of Owens has been criticised by Ayoub (1991, 55–59). She refutes the idea that there are two different types of operation that assign the direct form, namely transitivity and SNIP. The separation principle is rather the regular idea that if elements occupy a syntactic position they prevent others to do so (the compensatory $n\bar{u}n$ prevents 'išr $\bar{u}na$ to be annexed to dirham, just like in $f\bar{i}$ - $h\bar{a}$ 'Abdu l-L $\bar{a}hi$ $q\bar{a}$ 'iman, the expression $f\bar{i}$ - $h\bar{a}$ prevents the independent form $q\bar{a}$ 'imun) and the non-identity principle is "tellement un primitif de l'analyse qu'elle n'est jamais énoncée comme telle" (Ayoub 1991, 57). It is however necessary to establish what the referential relation between the two words is, because if it is identity, a qualifying construction would surface.

Rather than saying with Owens that the dependent form of *dirhaman* in 'išrūna dirhaman has nothing to do with verbal transitivity, we prefer to consider that there is a syntactic operation ('amal) of 'išrūna on dirhaman, which is analogous to the operation of the ṣifah mušabbahah on its complement in the dependent form, which is itself analogous to verbal transitivity.

Lastly, it is clear that the alternation of annexational and specifying constructions in <u>talāṭatu</u> 'awlādin, xamsata-'ašara waladan, 'išrūna waladan, mi'atu waladin and 'alfu waladin is a striking feature. Here in chapter 41, Sībawayh presents a unified semantic frame that gathers them both, thanks to their syntactic similarities with the <u>ṣifah al-mušabbahah bi-l-fā'il</u>.

A closer look at this series shows that the other problematic issues are the invariability of compound numerals, and the final $n\bar{u}n$ in decades, which cannot be elided in a specifying annexation. The first point is dealt with by Sībawayh in chapter 412 (K. II, 176–177), which be analysed now. The second issue is dealt with in chapter 141 (K. I, 250–256; see above, p. 147).

8.3 Between "three" and "nineteen"

Chapter 412 (K. II, 176–177) is entirely devoted to numerals, and is immediately followed by three other chapters also explicitly concerned with numerals. In chapter 412, Sībawayh considers the series from "three" to "nineteen". Strikingly, he does not quote any other grammarian nor any poet,

²²Carter's translation (Carter 1972b, 492).

unlike in many other chapters. He clearly speaks here on his own authority, and the imperative *i'lam 'anna* ... "know that ..." is probably the best marker for this.

8.3.1 From "three" and "ten"

Sībawayh begins this chapter by mentioning the counted object expressed after cardinals from "three" to "ten". These numerals are feminine, with or without the final $t\bar{a}$ 'marb \bar{u} tah, see above, p. 96.

8.3.2 Contradictory teaching in chapters 314, 336 and 412

The morphology of compound numerals is a tricky issue in the *Kitāb*, because it is dealt with in different chapters, but it is only here in chapter 412 that Sībawayh explicitly gives his opinion. In chapters 314 and 336, where this issue is discussed, Sībawayh quotes other grammarians, and does not express his own view. It is only in chapter 412 that he clearly gives his own opinion about the morphology of compound numerals.

To put it in a nutshell, ²³ Sībawayh chooses not to follow al-Xalīl on the syntactic status of the second part of compound numerals. According to al-Xalīl, as quoted by Sībawayh, -'Ašar is interpreted as a compensatory $n\bar{u}n$ in the proper name $I\underline{t}n\bar{a}-$ 'Ašar and as a $t\bar{a}$ ' $marb\bar{u}tah$ in the proper name Xamsata-'Ašar (K. II, 84.14–15). Not only was Sībawayh evasive about this issue in earlier chapters, but he even quotes al-Xalīl without discussing him in chapter 336. In chapter 412, Sībawayh is very clear on this point. The second part in all compound numerals is similar to the compensatory $n\bar{u}n$ in $muslim\bar{u}na$, not to the $t\bar{a}$ ' $marb\bar{u}tah$ in Talhah (K. II, 177.13–18). This decision is explicitly made for the sake of consistency among numerals.

The difference between Sībawayh's and al-Xalīl's interpretation of the lexical category ($\hbar \bar{a}l$) of the second part of compound numerals lies in the fact that al-Xalīl considers - 'ašara and - 'aš(i)rata to have the status of a $t\bar{a}$ ' marb $t\bar{a}u$ in all compound numerals except in $t\bar{a}u$ - 'ašara and $t\bar{a}u$ - 'aš(i)rata, where they have the status of the compensatory $n\bar{u}n$; whereas Sībawayh considers that this last frame applies to all compound numerals.

As for the second part of compound numerals, $(-'a\check{s}ara, -'a\check{s}(i)rata)$, Sībawayh says that its pattern $(bin\bar{a}')$ has changed because its lexical category $(h\bar{a}l)$ has changed (K. II, 177.3–5), and that it is not rare in the language that a

²³See Druel (forthcoming) for a detailed account of these chapters.

noun changes its $bin\bar{a}$ ' when its $h\bar{a}l$ changes. To make his point understood, Sībawayh quotes other examples where a change in lexical category ($h\bar{a}l$) goes along with a change in pattern ($bin\bar{a}$ ').

For example, 'ufuq "horizon" is an ism and its pattern is fu'ul. Its relative adjective is 'afaqiyyun "horizontal", pattern fa'aliyyun. In the same manner, the proper name $Zab\bar{\imath}nah$ is an ism 'alam. Its pattern fa' $\bar{\imath}lah$ is changed into fa' $\bar{\imath}liyyun$ in the relative adjective $Zab\bar{\imath}niyyun$ (K. II, 177.11–13). In these two cases, a change in $h\bar{\imath}a$ (from ism to nisbah) goes along with a change in $bin\bar{a}$ ' (from fu'ul and fa' $\bar{\imath}lah$ to fa' $\bar{\imath}aliyyun$).

What is at stake with compound numerals is that the second part of the compound does not have the status of a substantive (ism) anymore, as was the case when it meant "ten" (pattern $fa^calatun$ and fa^clun), but to the compensatory $n\bar{u}n$ in $it\bar{u}-\bar{a}-ni$ (pattern $-fa^cala$ and $-fa^c(i)lata$).

Like all compounds "that are made one noun", compound numerals are not fully declinable (\dot{g} ayr mutamakkinah), they do not take the $tanw\bar{i}n$ at- $tamk\bar{i}n$. Since the second term of the compound is already added ($z\bar{a}$ 'idah) to the first term, a $tanw\bar{i}n$ cannot be added to it (K. II, 47.7-12).

8.3.3 "Eleven"

For "eleven", the numeral applying to masculine nouns is 'aḥada-'ašara.²¹ It is a "one noun" compound (ḥarfāni ju'ilā sman wāḥidan ḍammū 'aḥada 'ilá 'ašara; K. II, 176.20–21). In this construction, 'aḥada- is said to have the same pattern (binā') as in the expression 'aḥadun wa-'išrūna 'āman (K. II, 176.22), whereas –'ašara does not have the same binā' as when it was referring to "ten" (K. II, 176.22–23). Its binā' has changed from fa'alah (in 'ašarah, "ten") to fa'al (in –'ašara, "-teen").

If "eleven" applies to a feminine noun, the numeral has the form 'ihda–'ašrata in the dialect (lugah) of Ḥijāz, or 'ihda–'aširata in the dialect of Tamīm²⁵ (K. II, 176.23–177.2). The analysis for the two parts of this feminine

²⁴Sībawayh says a bit obscurely that there is no 'alif in 'ašara (laysat fī 'ašara 'alifun). This 'alif most probably refers to the pausal form -ā, meaning that the pausal form of 'aḥada-'ašara is 'aḥada-'ašar, not *'aḥada-'ašarā.

 $^{^{25}}$ The Ḥijāzī form is sometimes considered to be more correct. On this point, see Rabin (1951, 98, § e).

²⁶The expression *'aḥada jamala, *'iḥdá nabiqata and *'iḥdá tamrata are clearly uncorrect. The expected vocalisation is rather 'aḥada jamalin, 'iḥdá nabiqatin and 'iḥdá tamratin. Why would Sībawayh compare the expression 'aḥada-'ašara (which is correct) to the expression *'aḥada jamala (which is not correct)? The answer is probably that he did not mean the comparison for the final forms but only for the inner pattern (binā'). The editor should have dropped the

compound noun, ' $ihd\acute{a}$ - and -' $a\check{s}(i)rata$, is the same as for the masculine 'ahada- and -' $a\check{s}ara$: ' $ihd\acute{a}$ - has not changed its lexical category ($h\bar{a}l$) if compared to the expression ' $ihd\acute{a}$ wa-' $i\check{s}r\bar{u}na$ sanatan, whereas -' $a\check{s}(i)rata$ has (K. II, 177.2-3).

8.3.4 "Twelve"

For "twelve", the numeral applying to masculine nouns is $i\underline{t}n\bar{a}$ –'ašara in the independent form and $i\underline{t}nay$ –'ašara in the dependent and oblique forms (K. II, 177.4).²⁷ As was the case for 'aḥada–'ašara and 'iḥdá–'aš(i)rata, the first part of the compound has not changed its $h\bar{a}l$ if compared to its situation when alone, except that its $n\bar{u}n$ has been deleted. This, because –'ašara has the status of this compensatory $n\bar{u}n$ (K. II, 177.5). As for the first part of the compound, $i\underline{t}n\bar{a}$ –, it carries the declension, which is not the case in xamsata–in the compound xamsata–'ašara (K. II, 177.5–6).

The fact that, unlike all other compound numerals, "twelve" is declinable is explained as follows by Sībawayh: Since - 'ašara has the status of the compensatory $n\bar{u}n$ in $i\underline{t}n\bar{a}ni$, the letter that is before - 'ašara is a harf 'i' $r\bar{a}b$ "letter carrying the declension", just like the letter that is before the compensatory $n\bar{u}n$ in $i\underline{t}n\bar{a}ni$ (K. II, 177.5–6).

This explanation refers to the fact that unlike other numerals, "two" is the only one to carry a harf 'i'r $\bar{a}b$, i.e., a glide that carries declension. In other compounds, the $tanw\bar{n}n$ of the first term is also elided, as in xamsat-u-n which becomes xamsat-a- in compound xamsat-a- ' $a\bar{s}ara$. The invariable -a- replaces the declensional -u-. If the same applies to "two" itn- \bar{a} -ni, the declensional glide - \bar{a} - is not replaced by an invariable one before the addition of -' $a\bar{s}ara$. In other words, the fact that in "two" the declension is carried by a harf and not a harakah forbids its invariability, but not the replacement of the $n\bar{u}n$ by -' $a\bar{s}ara$. This answers to an issue left open above, see p. 125.

Sībawayh refers here to his chapter entitled "the declinable and the non-declinable" ($m\bar{a}$ yanṣarifu $wa-l\bar{a}$ yanṣarifu, chap. 285–315; K. II, 1–56). In this chapter—or rather group of chapters—he deals only once with the elision of the compensatory $n\bar{u}n$ (K. II, 18.11), saying that in the case of the dependent and oblique plural $muslim\bar{a}tin$, the $t\bar{a}$ resembles ('ašbahat) the $y\bar{a}$ ' in the

final vowels and vocalised 'aḥada-ʿašar like 'aḥada jamal, 'iḥdá-ʿaširah like 'iḥdá nabiqah, and 'ihdá-ʿašrah like 'ihdá tamrah.

²⁷Manuscript A mistakingly reads: wa-'inna la-hu tnā-'ašara.

²⁸See Versteegh (1985, 159) on the issue of the glide as being $harf\ al$ -'t' $r\bar{a}b$ in the $Kit\bar{a}b$, and its problematic reception in later tradition.

plural $muslim\bar{n}na$ and in the dual rajulayni, whereas the $tanw\bar{n}$ in $muslim\bar{a}tin$ has the status of the (compensatory) $n\bar{u}n$ in $muslim\bar{n}na$. Thus, $muslim\bar{a}-t-in$ is to be analysed like $muslim-\bar{i}-na$ and rajula-y-ni. The consequence of this for the numeral "twelve" is that $i\underline{t}n\bar{a}-\acute{a}sara$ should be analysed $i\underline{t}n-\bar{a}-\acute{a}sara$ like $i\underline{t}n-\bar{a}-ni$. The same goes for $i\underline{t}nay-\acute{a}sara$ which is to be analysed $i\underline{t}na-y-\acute{a}sara$, like $i\underline{t}na-y-ni$.

The same analysis is given for the feminine forms of "twelve", $i\underline{t}nat$ -a-as(i)rata and $i\underline{t}nata$ -y-as(i)rata. The following alternative forms are also mentioned: $\underline{t}int$ -a-as(i)rata and $\underline{t}inta$ -y-as(i)rata, so that "twelve" can take eight different forms altogether (K. II, 177.7–8). The same analysis for the status of both parts of the compound and the final $n\bar{u}n$ is also mentioned here (K. II, 177.8–9).

8.3.5 "Thirteen" to "nineteen"

Sībawayh explains that the analysis for compound numerals "eleven" and "twelve" is also true of all compound numerals, from "thirteen" to "nineteen", both in the masculine and the feminine (*K*. II, 177.13–18). This answers a question that was left open above, see p. 119. He also notes here that all numerals from "three" to "nineteen" have different forms in the masculine and the feminine (*K*. II, 177.18–19).

8.3.6 Open issues in the grammar of numerals in the $Kit\bar{a}b$

Are all numerals feminine or only numerals from "three" to "ten"? According to the analysis of numerals, where the second part of the compound is similar to the $tanw\bar{\imath}n$, and the first part does not change its lexical category ($h\bar{\imath}al$), compound numerals should logically be feminine as well. But this is not stated clearly by Sībawayh.

Lastly, since in chapter 314 Sībawayh explicitly treats ordinal compound numerals like the corresponding cardinals (K. II, 47.8–11), we can most probably infer that he interprets –'ašara and –'aš(i)rata in $x\bar{a}misa$ –'ašara and $x\bar{a}misa$ –'aš(i)rata as analogous to a compensatory $n\bar{u}n$ in $muslim\bar{u}na$.

Another issue that remains unclear is the following. Why should the counted object be in the singular above "ten" in the annexational and specifying constructions? See above, p. 177, for a presentation of this issue. Sībawayh describes this phenomenon, and he draws a parallel with other expressions were a singular has a plural meaning, but he does not address the question as

such. He says that the singular is "lighter" than the plural, and the indefinite is "lighter" than the definite, so it is "lighter" to say 'išrūna dirhaman than 'išrūna min ad-darāhimi (K. I, 85.5–7). But why should this be true only above ten?

Another possible way to consider this question is that while the complement of the *ṣifah mušabbahah* can be put in the dual or in the plural, as in *al-ḥasanāni l-wujūha* and *al-ʾaxsarūna ʾaʿmālan* (K. I, 84.9–10), it is normal for numerals to have less possibilities. But this is not said explicitly by Sībawayh.

8.4 The logic at stake in the *Kitāb*

As Baalbaki (2008, 81) puts it, one of Sībawayh's far-reaching aims is "to demonstrate that linguistic phenomena are not haphazard and that they conceal an underlying harmony which grammatical analysis can disclose."

Sībawayh may have considered the case of 'išrūna first because it is the most difficult one. Unlike muslimūna, 'išrūna keeps its compensatory ending nūn, and the second term (dirhaman) is put in the dependent form just like a verbal complement, although 'išrūna has no verbal origin. Indeed, the problematic point at stake in the syntax of numerals is not their slot in the sentence, since they comply with regular rules for substantives (according to their morphosyntactic limitations). It is not their relationship with their counted object when in appositional, predicative or annexational constructions either. As substantives, numerals can be found in these constructions. The most problematic issue is thus the specifying construction 'išrūna dirhaman. For Sībawayh the problem is apparently twofold: In what frame to interpret 'išrūna dirhaman and why do not all numerals behave the same?

Sībawayh chooses the *ṣifah mušabbahah bi-l-fāʿil* as a starting point for his reflexion and proceeds then by successive analogies. Interestingly, the *ṣifah mušabbahah bi-l-fāʿil* and its complement can be found in all the same constructions as numerals with their counted object, appositional, predicative, annexational and specifying. However, numerals are not considered *ṣifāt mušabbahah*, but they resemble them semantically and syntactically, just like the *ṣifāt mušabbahah* resemble active participles to some extent (K. I, 86.20–21).

At this point, it is important to understand that the syntactic strength is not something "present or not present" but a graded phenomenon. Carter (1985, 54) shows that the *sabab* relationship can be stronger or weaker, depending on the degree of "involvement" (*iltibās*) between the words. In

other words, the semantic relationship between numerals and their counted object is a *sabab* relationship, just like with sifat mušabbahah, but it is quite weak, hence all the limitations on the possible syntactic constructions. The same goes for other numerals (K. I, 86.6–7).

Ṣifāt mušabbahah share "something" of the twofold strength of active participles (verbal and nominal), which explains that they can be found in similar constructions with their complement. However, not everything that is possible with active participles is possible with *ṣifāt mušabbahah*. Passive verbs like *imtala'a*, and expressions like *xayrun min* share "something" of the strength of the *ṣifah mušabbahah*, but with less power. At the end of the analogical chain are *ka-dā*, '*išrūna* and compound numerals, which seem to have lost all verbal strength of the active participle, except for the "surface strength" to put their counted object in the dependent form. As for annexable numerals, they do not even have this strength.

At a syntactic level, Sībawayh aims to prove that the annexational and specifying constructions are structurally equivalent (Carter 1972b, 489). This enables him to harmonise numerals' behaviour, which is clearly his aim, along with the mere explanation of the linguistic phenomena (Versteegh 1997b, 246).

At the semantic level, it is not clear what remains from the *sabab* relationship between *ṣifāt al-mušabbahah* and their complement. There must be "something" of the *sabab* in the semantic link between numerals and their counted object, but Sībawayh does not mention it explicitly. Is it really possible to go beyond this without forcing his thought?

He describes this process of comparison where "something" gets lost *en route* and attributes this phenomenon to native speakers themselves:

(2) They may compare something to something else even if it is not the same in everything; you will see this a lot in their language (K. I, 77.12–13).

Sībawayh does not know the grammatical category of *tamyīz*, a construction involving a singular indefinite noun in the dependent form used to "specify" the meaning of an "unspecified" term. Such a construction would have been a practical category to analyse *dirhaman*, although there would still have been a consistency issue: Why should certain numerals be in an annexational construction with their complements, and others in need of a specifier?

Sībawayh's logic may be puzzling because he tries to do two opposite things at the same time. On the one hand, he proceeds through successive analogies, where "something" of the initial "syntactic strength" is lost in the process, but on the other hand he aims at a global consistency of grammatical phenomena. These two logics are incompatible because an analogy is not an equality, and since something is lost in the analogy, the resulting grammatical rule does not apply fully and loses part of its consistency. Since an analogy is not an equivalence, all the rules that apply to the first element in the analogy do not apply to the second element, and what is lost is not always obvious. The reader can only deduce from the many examples quoted what is lost and what remains.

Baalbaki (2008, 113) lists a series of factors that are compared in order to assign a relative status to words in comparison with one another: *xiffah* "lightness" vs. *tiqal* "heaviness"; being 'awwal "first" or not, i.e., whether they have been modified by affixation or not; being 'aṣl "basic forms" vs. far' "subsidiary forms"; being mutamakkin "fully declinable" or not. In the chapters devoted to numerals, which we have examined here in detail, quwwah "syntactic strength" is central in the evaluation of the behaviour of numerals.

A simple example of the trade-off between analogy and consistency lies in the problem of the addition of the article to compound numerals and decades, which does not make them definite in a specifying construction. Sībawayh draws an analogy between compound numerals and duals, treating syntactically - 'ašara in $i t n \bar{a} -$ 'ašara like the compensatory $n \bar{u} n$ in $i t n \bar{a} n i$ (K. II, 177.3–6). This solution accounts for the declension of $i t n \bar{a} -$ in the middle of the compound. But when it comes to the addition of the definite article, it does not work anymore. It is correct to say $a l - i t n \bar{a} n i$ but the expression a l - x a m s a t a - 'ašara is doubtful (K. II, 47.17–18), although it is widespread in the language. What was gained through analogy is lost in terms of consistency. In other words, - 'ašara is comparable to the compensatory $n \bar{u} n$, but it also differs from it in some aspects.

Most interestingly, Sībawayh does with compound numerals the same thing as he did for decades. He chooses to explain first the most difficult case (declinable "twelve") before considering other, easier cases, to which he applies his solution for the difficult case.

A more difficult example of the trade-off between analogy and consistency lies in the question of the invariability of both parts of all compound numerals, except "twelve". Normally, the addition of the compensatory $n\bar{u}n$ does not prevent the noun from receiving declension, which is added before the $n\bar{u}n$. Analogically, this works perfectly with "twelve", interpreted in the

²⁹See above, p. 195, what it means to have more or less "strength".

compensatory $n\bar{u}n$ -like frame. Compare $i\underline{t}n$ - \bar{a} -'ašara (independent form) and $i\underline{t}n$ -ay-'ašara (dependent and oblique forms). But regarding other compound numerals, this analogy does not work anymore because the first part of the compound is always $mabn\bar{\imath}$ on a fathah, as in xamsat-a-'ašara. Here, consistency is lost, and al-Xalīl has a point when he "claims" that "twelve" does not behave like other compound numerals (K. II, 51.4-6). However, Sībawayh does his best to interpret all compound numerals in the same frame (K. II, 177.13-18), instead of following al-Xalīl, who chooses two different frames (K. II, 84.14-15). In the end, both solutions are interesting, but none is completely consistent.

To sum the whole process up, - 'ašara is "like" $n\bar{u}n$ al- $i\underline{t}nayni$ wa-l- $jam\overline{t}$ "the [ending] $n\bar{u}n$ in the dual and the plural" but not everything that applies to $n\bar{u}n$ al- $i\underline{t}nayni$ wa-l- $jam\overline{t}$ applies to - 'ašara, and $n\bar{u}n$ al- $i\underline{t}nayni$ wa-l- $jam\overline{t}$ itself is "like" the $tanw\bar{t}n$, but not everything that applies to the $tanw\bar{t}n$ applies to it, and what is lost at each step can only be deduced by the reader.

Similar examples are very numerous. See for example all the limitations on the specifying construction when it comes to 'išrūna and other numerals (K. I, 86.6–7); see also the questions posed by the partial analogy between kam and 'išrūna (see above, p. 147.) One should remember that Sībawayh is not aiming at a system where each element would have a fixed status, but, as Ayoub (1990, 6) puts it, he explores the relative position words occupy in relation with one another.

8.5 Beyond Sībawayh ...

Although Sībawayh says that some words are "unspecified" (mubhamah), see above p. 145, he does not follow this possible track of interpretation for numerals. He could have considered that all numerals are 'asmā' mubhamah "unspecified substantives". All substantives should refer to something precise, and this comes from the classification of the different parts of speech according to Sībawayh himself (Mosel 1975, 11): verbs ('af'āl), substantives ('asmā') and particles (ḥurūf). The problem is that numerals hardly fit this classification and, as many other 'asmā', they refer to something "unspecified", as was pointed out only once by Sībawayh (K. II, 47.10–11). Among other "unspecified nouns" are 'awwalu, kam, 'ayyun, ba'da, ba'du, bayna, tijāha, jamī'u, 'inda, kullu, ladun, ladá, la-'amru, miṭla, ma'a, naḥwa, and many more, which are grammatically substantives but behave like ḥurūf in many aspects. Their meaning as nouns is far from clear, hence their specific problems. All

³⁰See above, note 1, p. 155.

these nouns are in need of a specifier, be it a *muḍāf 'ilayh*, a *tamyīz* or the particle *min* followed by a *majrūr*.

Sībawayh often mentions these 'asmā' mubhamah in his interpretation, yet, he does not link them all into a wider theory of semantically deficient substantives, in need of a semantic complement. The solution proposed by Sībawayh is a semantic complement, which is analogous to the sabab complement of the şifah mušabbahah. This again is a good example of a negotiation between consistency and analogy. It is the definition of what a noun is that causes later inconsistencies, because some nouns are analogically treated as if they belonged to this category without sharing all the characteristics of the category.

Among these three categories of words, 'af'āl, 'asmā' and ḥurūf, the second one is certainly the wider one. In this category, one finds almost everything in terms of "strength". Some 'asmā' have only a little less strength than verbs, such as 'asmā' al-fi'l or 'asmā' al-fā'il, whereas other 'asmā' have barely more strength than particles, such as 'inda and ma'a.

Most of the problems are found in the syntactic and semantic relations between two nouns, especially if one wants to maintain some global consistency to the system. Ultimately, the issue here is that of nominal government: Can nouns operate on other nouns directly or should an elided particle be supposed at an underlying level? Numerals and their counted object are found in the three possible constructions that involve a possible operation of a noun on another noun, predicative (al-'awlādu talāṭatun), annexational (talāṭatu 'awlādin) and specifying ('išrūna waladan). The first case is not explicitly dealt by Sībawayh. For the two other constructions, the underlying structure / meaning is talāṭatun min al-'awlādi and 'išrūna min al-'awlādi.

However, Sībawayh is not clear whether he is considering the possibility that numerals "operate" on their counted objects. His presentation of numerals as a subcase of *ṣifah mušabbahah* gives the impression that he is following this track and, in terms of syntactic "strength", numerals are somewhere between *aṣ-ṣifāt al-mušabbahah bi-l-fā'il* and *ka-dā*. But it is not possible to go beyond this without forcing Sībawayh's views.

Chapter 9

Al-Mubarrad's approach to numerals

9.1 Introduction

It is already clear from chapters 4 to 6 that al-Mubarrad is much more specific than Sībawayh in his grammar and that he deals with a great number of issues on which Sībawayh remains silent. In many cases indeed, al-Mubarrad is the only one to mention particular issues. At first glance, his approach seems to be more factual than that of Sībawayh.

The most striking innovation in the grammar of numerals in the Muqtadab, is that, unlike Sībawayh, al-Mubarrad does not try to reconcile the specific behaviour of all numerals into one comprehensive frame. Instead, he draws a clear separation between basic and subsidiary numerals (M. II, 165.13-14); he does not consider "twelve" to be a compound noun, unlike other compound cardinals (M. II, 167.3-4); he considers the second part of other compound cardinals to have the status of a $t\bar{a}$ ' $marb\bar{u}tah$, not of a compensatory $n\bar{u}n$ (M. IV, 29.4-5); he justifies the different behaviour of "one hundred", as compared to compounds and decades, by the fact that it begins a new series (M. II, 167.9-10).

Al-Mubarrad uses the same tools and the same linguistic corpus as Sībawayh but he differs from him in that he does not seem to be interested into a general consistency, as far as numerals are concerned. This point is a good illustration of what Baalbaki (2008, 235) writes of al-Mubarrad's approach to

grammar who "differed from that of his predecessor's in many aspects but did not introduce any significant change to his overall grammatical theory".

When one considers these two observations together, a more factual approach than Sībawayh and no quest for a general consistency but a differenciated approach, one gets the impression that al-Mubarrad's grammar is "atomistic".

The second most striking innovation is the category of *tamyīz*. Al-Mubarrad does not use a single terminology to name this complement and he seems to use the words *tabyīn* "explanation", *tamyīz* "specification" and *tafsīr* "commentary" indiscriminately. Since the *tamyīz* surfaces in different shapes (dependent form or *mudāf 'ilayh*), it is clear that this terminology does not apply to the construction as such, but to the meaning of the complement that expresses the species.

In the following pages, we will analyse the chapters in his Muqtadab that deal with numerals. As we did for Sībawayh's $Kit\bar{a}b$, we will first browse the Muqtadab in order to see where the factual issues that we presented in chapters 4 to 6 are treated and how they relate to one another.

| Muqtaḍab | Issues | Pages |
|----------------|---|---------------------------------|
| M. II, 92-94 | This chapter deals with the morphology of nouns that begin with an hamzat al-waṣl like ibn "son", ism "noun", and the numeral iṭnāni "two" (M. II, 92.7–9). Al-Mubarrad applies different morphological tests to these words. He also comments on the meaning of the names of the days of the week. | pp. 112 and 150 |
| M. II, 140-152 | In this chapter al-Mubarrad draw a comparison between 'išrūna rajulan (M. II, 144.6) and expressions like ni'ma r-rajulu Zaydun! "what an excellent man Zayd is!" and bi'sa r-rajulu 'Abdu l-Lāhi! "what an evil man 'Abd Allāh is!" (M. II, 141.5). In the expression 'indī min ad-darāhimi 'išrūna dirhaman, the word dirhaman is a "confirmation" (tawkīd; M. II, 150.5–6). | p. 145 |
| M. II, 154-187 | Four chapters entirely devoted to the morphology and syntax of numerals. The first two of them (<i>M</i> . II, 154–180) will be analysed below. | pp. 216 |
| M. II, 181–184 | This chapter is the third of the previous series. It is devoted to the <code>ism al-fā'il</code> built on numerals, and used in expressions of the type <code>rābi'u 'arba'atin</code> "one of four" and <code>rābi'u talāṭatin</code> "the fourth of three". Decades have no proper <code>ism al-fā'il</code> . The verb 'am'ā (Form IV) means "to make something a hundred"; 'allafa (Form II) or 'ālafa (Form IV) mean "to make something a thousand". | pp. 88, 91, 107, 138 and 145 |

9.1. Introduction 215

| M. II, 185–187 | This chapter is the last one of the series devoted to numerals. It deals with the annexation of lesser numerals to "nonhuman genus", to "qualifiers that resemble the nouns", as well as with issues related to gender discrepancies. These issues seem to have been gathered here only for the sake of exhaustivity. | pp. 170, 172 and 180 |
|-------------------------|---|------------------------------|
| M. II, 255-256 | In this chapter, which is part of a series devoted to the diminutive ($tahq\bar{\imath}r$), al-Mubarrad deals with the case of $\underline{t}am\bar{a}nin$ "eight" (M . II, 255.5–6; 8–9). | pp. 108 and 112 |
| M. II, 275-278 | This chapter is devoted to the diminutive forms of adverbs of time ($tahq\bar{t}r$ ad - $dur\bar{u}f$ min al - $azminah$; M . II, 275.2). The names of the days of the week are "proper names" (M . II, 276.1). | pp. 113, 118, 140 and 150 |
| M. III, 32-38 | This chapter is entitled <i>bāb at-tabyīn wa-t-tamyīz</i> "chapter of the explaining and specifying [constructions]". We will analyse this chapter below. | pp. 229ff. |
| M. III, 55-63; 64-67 | Two chapters dealing with the comparison between <i>kam</i> and the numerals. ' <i>Išrūna dirhaman</i> means ' <i>išrūna min ad-darāhimi</i> , and this "because 'twenty', and what is like it, is a numeral" (<i>li-'anna 'išrūna wamā 'ašbaha-hu smu 'adadin</i> ; M. III, 66.9–10). | p. 147 |
| M. III, 91–92 | At the end of this chapter devoted to transitive verbs, al-Mubarrad says that it is not possible to predicate of "'aḥad and its sisters" (wa-lā yuxbaru 'an 'aḥadin wa-'axawāti-hi; M. III, 92.7). | p. 159 |
| M. III, 239–247 | In the first part of this chapter (<i>M</i> . III, 239.1–242.7), al- Mubarrad deals with expressions of the type <i>marartu</i> <i>bi-Zaydin waḥda-hu</i> "I passed by Zayd alone". | p. 141 |
| M. III, 319–312 | In this chapter devoted to the triptote and diptotic declensions, al-Mubarrad comments on the $ma^id\bar{u}l$ "deflected" numerals $ma\underline{t}n\hat{a}$, $\underline{t}ul\bar{a}\underline{t}$ and $rub\bar{a}^i$ (M . III, 319.13). | pp. 117 and 124 |
| M. III, 339-343 | This chapter is devoted to the declinability of words of the pattern 'afʿal that can be in the position of na ʿt "qualifier". Al-Mubarrad analyses here the numeral 'arbaʿ in the expression $h\bar{a}$ 'ulāʾi niswatun 'arbaʿun ("these are four women"; M . III, 341.4). | p. 95 |
| M. III, 368-382 | In this chapter devoted to the meaning and declinability of $ma^cd\bar{u}l$ nouns, al-Mubarrad comments on the names of the days of the week, their meaning and their patterns, which he says are not $ma^cd\bar{u}lah$ (M . III, 382.1). | p. 150 |
| M. IV, 29-31 | This chapter is devoted to the morphology of compound numerals and its implication on their inflection. We will analyse this chapter below. | p. 218 |
| M. IV, 36-39 | Chapter devoted to masculine proper names that have a dual or an external plural surface form, like <i>Rajulāni</i> , <i>Muslimāt</i> or <i>Tšrūna</i> . | p. 149 |

| M. IV, 50-71 | Numerals can occupy the slot of the <i>maṣdar</i> as in <i>darabtu Zaydan miʾata sawṭin</i> "I gave Zayd a hundred lashes" (<i>M</i> . IV, 51.9) and in <i>duriba bi-Zaydin</i> 'iśrūna <i>sawṭan</i> "he was given twenty lashes because of Zayd" (<i>M</i> . IV, 51.15). | p. 158 |
|--------------|--|--------|
| M. IV, 86-97 | With verbs like kāna, ṣāra, or ʾaṣbaḥa, it is possible to make an indefinite noun a mubtadaʾ, as in mā kāna ʾaḥadun miṭla-ka "nobody was like you" or mā kāna ʾaḥadun muṭtariʾan ʿalay-ka "nobody was bold with you" (M. IV, 90.4). | p. 159 |

Table 9.1: Numerals in the Muqtadab

Most of the information on numerals is thus found in the four chapters in M. II, 154–187, the first two of which we will comment now. In addition to these chapters, we will also focus on the two following chapters, M. III, 32–38 dealing with the $tamy\bar{\imath}z$, and M. IV, 29–31 dealing with morphosyntactic issues linked with compound nouns.

9.2 Morphology and syntax of numerals

The first chapter to be entirely devoted to numerals is entitled $h\bar{a}d\bar{a}$ $b\bar{a}bu$ l-'adadi wa-tafsīri wujūhi-hi wa-l-'illati fī-mā waqa'a min-hu muxtalifan ("chapter on numerals, the commentary of their forms and the cause behind that, which has a different shape"; M. II, 153–174). Al-Mubarrad deals here with many issues, morphological as well as syntactic. The only grammarians quoted by name are Sībawayh (d. 180/796), 'Abū l-Ḥasan al-'Axfaš al-'Awsaṭ (d. 215/830) and 'Abū 'Umar al-Jarmī (d. 225/839). Other grammarians are mentioned anonymously.

9.2.1 Differences between the singular, the dual and the plural

After a discussion on the morphology of the dual (M. II, 153.4–155.9), al-Mubarrad says that singular and dual forms have in common that they express at the same time the species (an-naw) and the numeral ("one" or "two"), as in rajulun "[one] man" and $rajul\bar{a}ni$ "two men"; in order to express other quantities, one has to express the number separately as in $\underline{tal\bar{a}\underline{t}atu}$ ' $afr\bar{a}sin$ "three horses" (M. II, 155.10–13).

Interestingly, al-Mubarrad considers that the overt expression of the number is the base form (al- ^{2}a sl) and that analogically one should say $^{*}w\bar{a}hidu$ $rij\bar{a}lin$ and $^{*}tint\bar{a}$ $rij\bar{a}lin$ (M. II, 155.14), which are possible forms in poetry (M. II, 156.1–2).

As for the dual, another reason to justify expressions like *tintā rijālin is that for al-Mubarrad the dual is a plural, since the definition of the plural is simply 'anna-hu dammu šay'an 'ilá šay'in ("it is adding something to something"; M. II, 156.2), which makes rajulāni a subcase of *tintā rijālin and talāṭatu 'afrāsin.

9.2.2 The lesser plural, from "three" to "ten"

The lesser plural is expressed by three different patterns: 1. If the noun is made up of three consonants ($min \underline{d}aw\overline{a}t \underline{a}t$ - $\underline{t}al\overline{a}t\underline{a}h$), it takes one of the specific patterns ('abniyah) that refer to the lesser plural (' $aqall \ al$ -'adad), like 'af'ul, 'af'al, 'af'ilah or fi'lah (M. II, 157.4–9). 2. Masculine plurals in $-\overline{u}na$ also refer to lesser numbers, because their pattern "has taken the way of the dual" ('alam $minhaji \ t$ -tatniyah; <math>M. II, 156.10–11); 3. their equivalent in the feminine are the plurals in $-\overline{a}t$ (M. II, 156.12).

In order to express the (lesser) plural of a masculine noun, the numeral is annexed to the counted object. The feminine ending ('alāmat at-ta'nīṭ) is added to the numeral (M. II, 157.8–9). This 'alāmah is not added to a masculine word, as in the feminine dāribah or qā'imah, but it is part of the pattern, as in 'allāmah "most erudite", nassābah "genealogists", rab'ah "medium-sized" or yafa'ah "pubescent", which are masculine (fa-daxalat hādihi l-hā'u 'alá ġayri mā daxalat 'alay-hi fī dāribatun wa-qā'imatun wa-lākin ka-duxūli-hā fī 'allāmatun wa-nassābatun wa-rajulun rab'atun wa-ġulāmun yafa'atun; M. II, 157.9–10). See above, p. 96, on the gender of numerals.

Al-Mubarrad inserts here a paragraph about the use of numerals as proper names, saying that when $\underline{T}al\bar{a}\underline{t}$ is used as a masculine proper name ('in sammayta rajulan bi- $\underline{T}al\bar{a}\underline{t}$; M. II, 157.13), it is diptotic if it comes from $\underline{t}al\bar{a}\underline{t}$ and not if it comes from $\underline{t}al\bar{a}\underline{t}ah$. This distinction is surprising, because once used as a proper name, the gender of $\underline{t}al\bar{a}\underline{t}$ or $\underline{t}al\bar{a}\underline{t}ah$ should not have an effect on $\underline{T}al\bar{a}\underline{t}$ any more. We would rather expect that if $\underline{T}al\bar{a}\underline{t}$ is a feminine proper name (coming from $\underline{t}al\bar{a}\underline{t}ah$). But this interpretation would be possible only if the

^{&#}x27;There are many chapters in the *Muqtadab* that deal with the morphology of the plural (two chapters in *M.* I, 256–261; three chapters in *M.* I, 266–270 only to mention those that precede the chapter we consider here, *M.* II, 153–174), but this is not the focus of this study.

expression 'in sammayta rajulan bi-Talāt (M. II, 157.13) referred to both "men" and "women", which is quite unlikely.

All these rules apply to numerals between "three" and "ten" (*M.* II, 157.15–16).

Then, al-Mubarrad says that it is possible to use greater number plurals after "three" to "ten". This point has been presented above, p. 178.

9.2.3 Compound numerals from "eleven" to "nineteen"

Above "ten", the numeral is a compound noun (<code>jaʿalta-humā</code> sman wāḥidan; M. II, 161.6) made up from the unit and the noun "ten". The <code>lafd</code> "surface form" of both terms of this compound has been modified for the sake of the new pattern (<code>li-l-binā</code>') as in 'aḥada—'ašara; the underlying forms (<code>al-ʾaṣl</code>) of these compounds are of the type 'aḥadun wa-ʿašaratun (M. II, 161.4–6). Both terms of the compound carry an invariable <code>fatḥah</code> because "it is the lightest of the vowels" (<code>li-ʾanna-hu [al-fatḥ]</code> 'axaffu <code>l-ḥarakāti</code>; M. II, 161.8).

Should not compound numerals be declined, just like Ḥaḍra-Mawtu and Baʿla-Bakku? (M. II, 162.1) The answer of al-Mubarrad is that in these compounds, the second part is regarded as a hāʾ at-taʾnīṭ (juʿilā sman wāḥidan ka-mā faʿalū bi-mā fī-hi hāʾ u t-taʾnīṭi; M. II, 162.2), and they are proper names, so that they do not "deviate from [their] normal state" (lam yakun la-hu ḥaddun ṣurifa ʿan-hu; M. II, 162.3). As for compound numerals, the reason not to decline them is that they have been "deviated" (ʿudila) from their surface form (al-ʿadadu allaḍī ḍakartu kāna la-hu ḥaddun ṣurifa ʿan-hu ka-mā ḍakartu la-ka fa-lammā ʿudila ʿan wajhi-hi ʿudila ʿan al-ʾiʿrāb; M. II, 162.3-4).

In a chapter that bears no title, al-Mubarrad deals with the morphology of compound numerals and its implication for their inflection (M. IV, 29–31). The last paragraph sums up the possible cases for compound nouns. There are two possible coalescence frames, either an 'iḍāfah or a one-word compound, and three possible declensional patterns, either fully declinable (triptotic), partially declinable (triptotic), or indeclinable.

Compound numerals like xamsata—'ašara are indeclinable nouns, with a fathah at the end of both terms. The first fathah indicates that it is not the end of the noun ('anna-hu laysa muntahá l-ismi; M. IV, 29.4) but that it is like the $d\bar{a}l$ in Hamdah or the $h\bar{a}$ ' in Talhah (M. IV, 29.4–5). This comparison suggests that the second term of the masculine compound xamsata—'ašara has the status of the $t\bar{a}$ ' $marb\bar{u}tah$ in the male proper names Hamdah and Talhah, which was already mentioned in M. II, 162.2.

The final *fatḥah* on the second term is because of its indeclinability (*li-lbinā*'; *M*. IV, 29.6). It was chosen over the other vowels for two reasons. In the first place, it is "lighter" (*li-'anna-hu [al-fatḥu] 'axaffu l-ḥarakāti*; *M*. IV, 29.6). This was already stated in *M*. II, 161.8 and *M*. III, 182.2. The second reason why the *fatḥah* was chosen is that both parts of the compound are Arabic words (*'arabiyyun dammamta-hu 'alá 'arabiyyin*; *M*. IV, 29.6–7). Al-Mubarrad says that in compounds like *'Amra-Wayhi*, which are of foreign origin, the final vowel is an indeclinable *kasrah* (*M*. IV, 31.7).

When compound numerals are used as proper names, it is possible to interpret them either in the "integrated" frame or in the 'iḍāfah frame (M. IV, 30.11). Yet, one has to remember that what is said by al-Mubarrad to be indeclinable in the "integrated" frame is only the first term. Its second term could be indeclinable or declinable, fully or partially, but al-Mubarrad does not mention it here.

Al-Mubarrad then quotes the opinion of al-'Axfaš, who is said to have accepted the interpretation of compound numerals—when used as numerals—in the 'iḍāfah frame and considered them to be declinable (wa-kāna l-'Axfaš yujīzu fī-hi [sc. xamsata-'ašara] l-'iḍāfata wa-huwa 'adadun wa-yu'ribu-hu; M. IV, 30.12). Al-Mubarrad comments on this opinion by saying that is it correct to interpret compound numerals in the 'iḍāfah frame (fa-'ammā l-'iḍāfatu fa-jayyidatun; M. IV, 30.13),² but the declension is erroneous (wa-'ammā l-'i'rābu fī-hi fa-radī'un; M. IV, 30.13). According to him, it is not correct to decline a noun in 'iḍāfah if it is not declined in the indefinite (M. IV, 30.13–14).

The following paragraph (M. IV, 30.15–19) is a bit puzzling since it seems to repeat what al-Mubarrad already expresses earlier in the $Muqta\dot{q}ab$ (M. II, 164.3–4 and M. II, 178.10–11), namely, that compound numerals contain a "meaning of $tanw\bar{l}n$ " ($ma\dot{l}n\dot{a}t-tanw\bar{l}n$; M. IV, 30.16), which can be deleted when the compound is in the position of $mu\dot{q}\bar{a}f$ as in $h\bar{a}dihi\ xamsata-\dot{l}asara-kum$ "these are your fifteen".

However, the formulation in *M*. IV, 30.15–19 is slightly different from the two previous occurrences of the same idea:

²See above, footnote 8, p. 227, for a discussion of this issue between Kūfans and Baṣrans, as quoted by Baalbaki (1981, 20).

(3) So if you say $h\bar{a}d\bar{a}$ xamsata-'ašara-kum "these are your fifteen", the meaning of tanwīn is gone and in both forms it has the status of the expression $h\bar{a}dihi$ 'išrūna dirhaman "these are twenty dirhams", and $h\bar{a}dihi$ 'išrū-ka "these are your twenty", and 'išrū 'Abdi l-Lāhi "'Abdallāh's twenty". This is how it is, in intention (M. IV, 30.16–17).

A clue to the interpretation of this passage probably lies in the expression fī l-wajhayni ("in both forms"; M. IV, 30.16), which could either refer to the two constructions (xamsata-ʻašara dirhaman and xamsata-ʻašara-kum, which behave like 'išrūna dirhaman and 'išrū-ka), or to the two interpretations (the "integrated" frame and the 'iḍāfah frame). In the former case, this paragraph does not add anything to M. II, 164.3–4 and M. II, 178.10–11. In the latter case, it means that whatever the frame in which compound numerals are interpreted (fī l-wajhayni), they lose their "meaning of tanwīn" when in the position of muḍāf.

9.2.4 "Twelve"

"Twleve" behaves differently from all the other compound numerals, because it carries an "indication of 'i'rāb" which prevents it from forming one word with another noun (li-'anna-hu mim-mā fī-hi dalīlu l-'i'rābi [...] lam yajuz 'an yuj'ala ma'a ġayri-hi sman wāḥidan; M. II, 162.5–6). This behaviour is different from the behaviour of Ḥaḍra-Mawtu (where the second part is regarded as a hā' at-ta'nīt) and from the behaviour of kaffata-kaffata (where both parts are indeclinable and which seems to be the pattern chosen for compound numerals except "twelve").

In $i\underline{t}n\bar{a}$ —'ašara the second part (—'ašara) has the status (manzilah) of the final $n\bar{u}n$ in $i\underline{t}n\bar{a}$ –ni, "except that it has the meaning from which it is distinguished among numerals" ('illā 'anna la-hā l-ma'ná lladī 'abānat 'anhu min al-'adadi; M. II, 162.8). In the vocative, the proper name $l\underline{t}n\bar{a}$ —'Ašara loses its second part as in $y\bar{a}$ $\underline{T}na$ 'aqbil! which shows that —'Ašara is treated exactly like the final $n\bar{u}n$ in $i\underline{t}n\bar{a}$ –ni (M. II, 162.9–10). It also shows that its numerical meaning ("—teen") is not important anymore and it can be erased without a risk of confusion.

In this frame, the declinability of "twelve" is not problematic, as it was in Sībawayh's theory. Al-Mubarrad poses the question the other way round: Since $i\underline{t}n\bar{a}ni$ carries a harf 'i' $r\bar{a}b$, it cannot coalesce like other compounds, hence the form $i\underline{t}n\bar{a}-$ 'ašara which also carries a harf 'i' $r\bar{a}b$. This clarifies a point that was left unanswered above, p. 125.

Then, al-Mubarrad discusses the case of compound cardinals between "thirteen" and "nineteen", which can only carry one $h\bar{a}$ ' at-ta' $n\bar{t}t$, either on

the first term or on the second one. This point has been presented above, p. 120.

The difference between Sībawayh and al-Mubarrad is thus twofold. Firstly, unlike Sībawayh, al-Mubarrad does not consider that $i\underline{t}n\bar{a}$ –' $a\check{s}ara$ is a compound noun although he agrees with him on the status of –' $a\check{s}ara$ as that of a compensatory $n\bar{u}n$, and secondly, he suggests a parallel between the second part of other compound numerals and the $t\bar{a}$ ' $marb\bar{u}tah$ in the male proper names Hamdah and Talhah. This interpretation is that attributed to al-Xalīl by Sībawayh (see above, p. 204). It is consistent with what we know about al-Mubarrad theory that he interprets "twelve" and the other compound cardinals differently since they behave differently.

9.2.5 "One hundred" and "two hundred"

Mi'ah begins a new series. It is morphologically different from decades, and this for two reasons. "Because—according to what precedes concerning numerals—a series has the right to be different from the noun before it" (wali-'anna l-'iqda' ḥaqqu-hu 'an yakūna fī-mā faraṭa⁴ min al-'a'dādi xārijan min ismin qabla-hu; M. II, 167.10). In other terms, a new series is entitled to have a different behaviour. The other reason is that, in the first place, it could not be derived from 'ašarah (forming a hypothetical *'ašarūna "ten decades", just like talāṭūna "three decades" and 'arba'ūna "four decades"), and this, in order to avoid any confusion with 'išrūna "twenty" (M. II, 167.9–10; see above pp. 137f.)

"One hundred" is annexed to its counted object, with or without the article, as in mi atu dirhamin or mi atu d-dirhami, just like after numerals from "three" to "ten" (M. II, 167.10–12) as in \underline{talat} atu \underline{tawa} awl \underline{talat} and \underline{talat} atu \underline{tawa} . This construction differs from the construction of ' \underline{israma} because its \underline{tamyz} "specifier" is separated from it (M. II, 168.1–2). It is clear that al-Mubarrad means the compensatory \underline{nun} , which he calls a \underline{tanwa} . This \underline{nun} separates between the numeral and its complement and thus prevents annexation.

³This vocalisation is unexpected. Obviously the word at here does not mean "decade" ('aqd) in the narrow sense, but "series". Ibn Manḍūr (d. 711/1311) does not mention the meaning of "decade" for 'aqd but he mentions the meaning of "necklace" for 'iqd, pl. 'uqūd (Lisān, III, 296). The meaning of "decade" for 'aqd, pl. 'uqūd is found in 'Abū Ḥayyān's (d. 745/1344) al-Baḥr al-muḥūṭ (III, 1437). The verb 'aqada / ya'qidu is well attested in the meaning of "counting on one fingers" (Kazimirski 1860, II, 311; Lane 1863–1893/1955–1956, V, 2105–2106). As for the singular of 'uqūd in the sense of "decades", Lane adds that he found "no satisfactory authority for the orthography of the word in this sense", adding that the vocalisation 'iqd is found only in one manuscript of az-Zamaxšarī's (d. 538/1144) Muqaddimat al-'adab.

⁴Sic.

⁵See above, p. 155, more details on the compensatory $n\bar{u}n$.

Since it is not possible to put the "species" complement (naw or "specifier" $tamy\bar{\imath}z$) in the definite when it comes in the dependent form, al-Mubarrad says that one can express quantity in the definite by adding the article to the numeral, as in al-'išrūna rajulan (M. II, 168.3-4). This construction is parallel to the expression ad- $d\bar{a}rib\bar{u}na$ Zaydan because the $tanw\bar{\imath}n$ (understand, the compensatory $n\bar{u}n$) acts as a separator (li-'anna $m\bar{a}$ ba'da t-tanw $\bar{\imath}ni$ munfasilun mim- $m\bar{a}$ qabla-hu; M. II, 168.4). This separator prevents annexation, leaving no other option than to put the article to the numeral in order to make it definite as in al-'išrūna rajulan (M. II, 168.3).

The syntactic differences between mi'ah and 'išrūna can be explained by the difference between the $tanw\bar{n}$ in mi'ah and the $n\bar{u}n$ in 'išrūna (M. II, 168.5). At the pause, the $tanw\bar{n}n$ is elided whereas the $n\bar{u}n$ is not; in the same way, if the article is added to the noun, the $tanw\bar{n}n$ is elided but not the $n\bar{u}n$ (M. II, 168.5–6), as in al-mi'atu and al-'išrūna.

As for the difference between $\underline{talatah}$ and $\underline{mi'ah}$ —which are both annexable—it lies in the number of their \underline{mudaf} ' \underline{ilayh} : a lesser plural form after $\underline{talatah}$, a singular after $\underline{mi'ah}$ (\underline{M} . II, 168.7–8).6 In all this, al-Mubarrad is keen to point out the differences between numerals. There are syntactic and morphological common points between numerals but in the end each series behaves differently.

Mi'ah is used for both the masculine and the feminine (M. II, 168.10–11), as was the case for decades. Al-Mubarrad notes that compound numerals have a masculine and a feminine form although they are not lesser numerals. However, they are made up of two numerals that both apply to lesser plural forms ($k\bar{a}na\ w\bar{a}qi$ 'an li-'adná l-'adadi; M. II, 168.10–12) and this is the reason why they have a masculine and a feminine form. See above, p. 120.

Under poetic licence, it is possible to put the counted object after mi'ah—as well as after numerals from "three" to "ten"—in the dependent form, indefinite and singular, as in $\underline{tal\bar{a}\underline{t}atun}$ ' $\underline{a}\underline{t}w\bar{a}ban$ and $mi'at\bar{a}ni$ ' $\bar{a}man$ in which case the counted object behaves exactly as after ' $\underline{i}\underline{s}\bar{r}\bar{u}na$, "because it is a $\underline{tamy}\bar{\iota}z$ " ($\underline{l}\underline{i}-anna-hu$ $\underline{tamy}\bar{\iota}z$; \underline{M} . II, $\underline{1}68.13-169.3$). It is understood from this passage that the dual $\underline{m}i'at\bar{a}ni$ is the regular dual form of $\underline{m}i'ah$ and is normally in the position of $\underline{m}\underline{u}d\bar{a}f$ with the counted object, although in poetry it may operate on a $\underline{tamy}\bar{\iota}z$.

^{&#}x27;Here again, it is thanks to a correction by as-Sīrāfī that the text is understandable.

9.2.6 From "three hundred" to "nine hundred"

The singular of mi'ah in the forms $\underline{tal\bar{a}tu}$ mi'atin, 'arba'u mi'atin, and so on, needs an explanation. Al-Mubarrad says that the Arabs prefer it to the plural $mi'\bar{u}na^7$ or $mi'\bar{a}t$ and that this does not contradict the way numerals behave ($\underline{d}alika\ qiy\bar{a}sun$; M. II, 169.4).

The explanation given by al-Mubarrad would be difficult to understand without the clear distinction he draws between "base form numerals" (al-'aṣl), i.e., "one" to "ten", and "subsidiary numerals" (al-far'), i.e., all other numerals. The singular form of mi'ah after numerals between "three" and "nine" is, in al-Mubarrad's own words, "analogous to what was presented before concerning numerals, because it was the base form and what is after this is subsidiary" (fa-'innamā dālika qiyāsun 'alá mā maḍā li-'anna l-māḍī min al-'adadi huwa l-'aṣlu wa-mā ba'da-hu far'un; M. II, 169.4–5). In other words, it is normal that hundreds behave differently from other numerals because they belong to a different series. This distinction between "base form" and "subsidiary" numerals is not found in the Kitāb. Al-Mubarrad uses it to justify the difference of behaviour between the numerals.

According to him, talatu in talatu mi'atin behaves exactly like 'išrūna, inasmuch as its complement mi'ah is in the singular (M. II, 169.5–8). This is the qiyats for "subsidiary" far numerals because they are in need of a "species" complement (naw), be it a tamytz or a mudat 'ilayh. This interpretation is valid up till tis 'u mi'atin "nine hundred" (M. II, 169.8).

9.2.7 "Thousands"

The next series is built with the word 'alf "one thousand": 'alfun, talāṭatu 'ālāfin, 'aṣaratu 'ālāfin, 'aḥada-'aṣara 'alfan (M. II, 169.9–10) and nothing forbids expressions like 'iṣrūna 'alfan, mi'atu 'alfin, xamsatu mi'ati 'alfin. Here the word 'alf behaves like any counted object and not like mi'ah. Indeed, al-Mubarrad clearly compares 'aṣaratu 'ālāfin to 'aṣaratu 'aṭwābin and 'aḥada—'aṣara 'alfan to 'aḥada—'aṣara ṭawban (M. II, 169.10–170.1).

Once more, the explanation given by al-Mubarrad points out the differences of treatment: <u>tumma taqūlu talātatu</u> 'ālāfin li-'anna l-'adada lladī ba'dahu ġayru xārijin min-hu ("then you say <u>talātatu</u> 'ālāfin [and not *talātatu 'alfin, like <u>talātu</u> mi'atin] because the numeral ['alf] that is after it [mi'ah] is not derived from it [mi'ah]"; M. II, 169.9). For al-Mubarrad, it seems to be normal

⁷See above, footnote 17, p. 109.

that 'alf and mi'ah behave differently, just because they are different series of numerals.

9.2.8 More issues about "one hundred" and "one thousand"

If 'alf is put in the plural after "three" to "ten", why should not this be applied to mi'ah, which remains in the singular? Al-Mubarrad says that it is actually correct ($j\bar{a}za$) to annex mi'ah in the plural to numerals between "three" and "ten" as in $tal\bar{a}tu$ mi' $tal\bar{a}tu$ $tal\bar{a}tu$ ta

This type of reasoning is somewhat strange. It seems in the end that the point of al-Mubarrad is only to say that whereas <u>talātu mi'īna</u> or <u>talātu mi'ātin</u> are possible variants (especially in poetry), *'ašru mi'īna and *'iḥdá-'aš(i)rata mi'atan are not. But why should the annexation of "ten" to the plural form of mi'ah, or its use as a tamyīz after "eleven", make it compulsory to annex "three" to "ten" to its plural form, and why should the opposite not be true? The answer to this question probably lies in the fact that *'ašru mi'īna and *'iḥdá-'aš(i)rata mi'atan are redundant with 'alfun and 'alfun wa-mi'atun and if these expressions were correct, they would indeed make mi'ah a mere counted object and not a numeral, just like 'alf, thus making it compulsory to say <u>talātu mi'īna</u> or <u>talātu mi'ātin</u>, just like <u>talātatu</u> 'ālāfin.

Another issue discussed by al-Mubarrad is the fact that both 'alf and mi'ah apply indifferently to masculine and feminine nouns, as in mi'atu dirhamin, mi'atu jāriyatin, 'alfu ģulamin and 'alfu jāriyatin (M. II, 170.8). Al-Mubarrad says that 'alf and mi'ah do not behave like numerals from "three" to "ten" and the reason he gives is that "talāt and talātah, when applied to 'alf or mi'ah or other [nouns], indicate lesser quantities of what they count" (li-'anna t-talāta wa-t-talātata 'alá mi'īna waqa'a 'aw 'alá 'ulūfin 'aw ġayri dālika fa-fī-hinna 'aqallu l-'adadi mim-mā waqa'na 'alay-hi; M. II, 171.1-2). The second part of the reason given here is the same as for decades: Greater numerals apply to both masculine and feminine counted objects. Al-Mubarrad repeats here the justification for the fact that compounds have both a masculine and a feminine form although they belong to greater numerals: They are made of two lesser numerals (M. II, 171.3).

9.3 Expression of definiteness

The chapter entitled $h\bar{a}d\bar{a}$ $b\bar{a}bu$ ' $id\bar{a}fati$ l-'adadi wa-xtil $\bar{a}fi$ n-nahwiyy \bar{i} na $f\bar{i}$ -hi ("this is the chapter on the annexation of numerals and the disagreement of grammarians about them"; M. II, 175–177) is devoted to the addition of the article to either the numeral or the counted object, which is only possible in a few cases. We have seen above, pp. 174f., that al-Mubarrad is very critical of the actual language of Arabs who use expressions such as *at- $tal\bar{a}tatu$ d- $dar\bar{a}him$, *al-xamsata-'asara d-dirham (or *al-xamsata l-'asara d-dirham) and *al-'asara d-asara d-as

Al-Mubarrad first recalls that only a noun derived from a verb can carry the definite article in the position of $mud\bar{a}f$. He gives no example here, but in a chapter devoted to the ' $id\bar{a}fah$ (M. IV, 136–147), he explains in much detail expressions such as $hum\ ad-d\bar{a}rib\bar{u}\ Zaydin$ "they are the ones who hit Zayd" (M. IV, 145.4). The analogy that forbids the addition of an article to numerals differs in the case of lesser numerals, compound numerals, and decades.

For lesser numerals, al-Mubarrad compares talāṭatu 'atwābin to ṣāḥibu 'atwābin "owner of clothes" saying that the only possible way to make this expression definite is hāḍihi ṭalāṭatu l-'atwābi just like hāḍā ṣāḥibu l-'atwābi, and that *hāḍihi ṭ-ṭalāṭatu l-'atwābi is incorrect (M. II, 175.12–14). The expressions hāḍihi ṭalāṭatu l-'atwābi and xamsatu d-darāhimi are also mentioned in M. IV, 144.3.

For compound numerals, he says that xamsata-'ašara has the status of Haḍra-Mawtu, Ba'la-Bakku, Qālī-Qālā, 'Ayādī-Sabā and "all other comparable nouns that have been made one noun" (wa-mā 'ašbaha ḍālika min alismayni llaḍayni yuj'alāni sman wāḥidan; M. II, 176.7). The explanation given by al-Mubarrad is that "if one of these [compounds] is indefinite and has to be put in the definite, the article is added to the first term because the second term has become integrated in the first one, but this [to add the article to the first term] is even uglier and more disgraceful" (fa-'iḍā kāna šay'un min ḍālika nakiratan fa-'inna ta'rīfa-hu 'an taj'ala l-'alifa wa-l-lāma fī 'awwali-hi li-'anna t-ṭāniya qad ṣāra fī daraji l-kalāmi al-'awwali fa-hāḍā 'aqbaḥu wa-'ašna'u; M. II, 176.8–9). If the compound nouns listed above are definite—because they are proper names—then the question of adding the definite article is purely theoretical; but if they were not—which is the case of xamsata-'ašara—then it is possible to add the definite article to the first term. It would be "uglier and more disgraceful" to add the article to both terms and to the counted object.

For decades, it is not permitted to say *al-'išrūna d-dirham because the definiteness of the numeral has already been properly expressed ('uḥkima wa-buyyina; M. II, 176.10) and it is simply in need of a "species" (naw'), i.e., dirhaman, not a specific definite ad-dirham. The correct expression is thus al-'išrūna dirhaman (M. II, 176.12), just like aḍ-ḍāribūna Zaydan (M. II, 168.4) mentioned above.

9.4 Numerals in annexation

The chapter entitled $h\bar{a}d\bar{a}$ $b\bar{a}bu$ $m\bar{a}$ $yud\bar{a}fu$ min al-'a' $d\bar{a}di$ l-munawwanati ("this is the chapter on numerals that carry a $tanw\bar{n}$ [or a compensatory $n\bar{u}n$] and that are annexable"; M. II, 178–180) deals with numerals in the position of $mud\bar{a}f$ as in $tal\bar{a}tatu$ -ta and $tal\bar{a}tu$ -ta "your three" (both genders), 'išr \bar{u} -ta "your twenty", mi'atu-ta "your hundred", 'alfu-ta "your thousand". In some cases (which correspond to cases where the counted object can be definite), it is also possible to express a counted object as in $tal\bar{a}tatu$ 'atatu-tatu "your three dresses", tatu tatu

There is no difficulty in all these expressions, where the numeral is treated exactly like any other declinable non-diptotic noun in the position of $mud\bar{a}f$. As al-Mubarrad puts it, the ending $tanw\bar{u}n$ (or compensatory $n\bar{u}n$ in 'išr $\bar{u}na$ and other decades) is simply deleted (M. II, 178.3). The declension rules of these numerals do not change, as in ra 'aytu $tal\bar{a}t\bar{t}$ -ka (M. II, 178.4). In the same manner, for conjoined numerals, each part follows its own rules. See above, p. 132. In all these cases, however, numerals are not annexed to their counted object but to their possessor.

9.4.1 Annexation of compound numerals

In order to annex a noun to another one, the first noun should be deprived of both the definite article and the *tanwīn*. The issue at stake with the annexation of coumpound numerals is that it is not possible to annex compound numerals without removing this second part. However, when the second part is removed, nothing distinguishes between the compound numeral and its corresponding unit, and the original meaning is lost.

The innovation of al-Mubarrad, if compared to Sībawayh, lies in the fact that he considers that compound numerals between "eleven" and "nineteen" carry an "intention of *tanwīn*" (*niyyatu t-tanwīn*; *M.* II, 164.3–4) and that this

intention that prevents annexation can be deleted: $tuqaddiru \, ha\underline{d}fa \, m\bar{a} \, f\bar{i}$ - $hi \, min \, at$ - $tanw\bar{i}ni \, f\bar{i} \, n$ - $n\bar{i}yyati \, ("you imply the elision of the intention of <math>tanw\bar{i}n"$; $M. \, II, \, 178.10-11). \, In other words, an expression like <math>xamsata$ -asara-asara-asara-asara is deleted in order to annex the numeral to the pronoun.

This interpretation of al-Mubarrad differs from that of Sībawayh and Ibn as-Sarrāj who both qualify the expression xamsata–'ašara-ka of "bad language" (*luġah radīʾah*; *K.* II, 47.19; '*U.* II, 140.8). See above, p. 130.

Al-Mubarrad justifies this deletion by comparing it to the following two expressions:

(4) hunna ḥawājju bayta l-Lāhi.

They [fem. pl.] are pilgrimaging to the house of God (M. II, 178.11).

and

(5) hunna ḥawājju bayti l-Lāhi.

They [fem. pl.] are pilgrims of the house of God (M. II, 178.11).

The word $haw\bar{a}jj$ is the feminine plural form of $h\bar{a}jj$ and it is diptotic. In (4), al-Mubarrad says that it carries an "intention of $tanw\bar{n}$ " as in $h\bar{a}d\bar{a}$ $d\bar{a}ribun\ Zaydan\ (M.\ II, 178.12-13)$, whereas in (5) this intention is deleted, as in $h\bar{a}d\bar{a}\ d\bar{a}ribu\ Zaydin\ (M.\ II, 178.13)$. In the same way, xamsata—'ašara carries an "intention of $tanw\bar{n}$ " which is deleted in xamsata—'ašara-ka (M. II, 178.10-11).

In the rest of this chapter (M. II, 178.10–180.12), al-Mubarrad discusses the possibility for compound numerals to be declinable in the position of $mud\bar{a}f$ as in xamsata–' $a\bar{s}aru$ -ka, xamsata–' $a\bar{s}ara$ -ka and xamsata–' $a\bar{s}ari$ -ka, which is the case in the language of some Arabs (M. II, 179.6).8 Al-Mubarrad acknowledges that in some way there are elements that could justify this declension (la-hu wujayhun min al- $qiy\bar{a}si$; M. II, 179.6–7). For example, 'amsi "yesterday" and min qablu "before" are indeclinable, however they become declinable when in the position of $mud\bar{a}f$, as in 'amsu-ka and min qabli-ka (M. II, 179.8); as well as after the addition of the definite article (M. II, 180.2); and also when put in the indefinite, as in some readings of Qur' $anic \in li$ -l- $L\bar{a}hi$ l-'amru min qablin wa-min ba'din (Q. 30, 4; M. II, 180.3).9

^{*}The discussion here is not about the possibility of -'asar to be the $mud\bar{a}f$ 'ilayh of xamsata—as apparently understood by Baalbaki (1981, 20) but of xamsata—'asara to become declinable when in the position of $mud\bar{a}f$. For the issue presented by Baalbaki see M. IV, 30.12—13.

[°]Instead of the canonical *min qablu wa-min baʿdu*. In the footnote (M. II, 180) ʿUḍaymah says that the reading *min qablin wa-min baʿdin* is "irregular" (*min aš-šawāḍḍ*). He refers to ʾAbū Ḥayyānʾs *al-Baḥr al-muḥīṭ* (VII, 162; VII, 210 in our edition).

In the same manner, al-Mubarrad explains that the *munādá* (which carries an indeclinable *dammah* when alone, as in *Yā Zaydu!* "O Zayd!") finds its declension again when in the position of *muḍāf* or when put in the indefinite, as in *Yā 'Abda l-Lāhi!* "O 'Abd Allāh!" and *Yā rajulan!* "O man!" (*M.* II, 180.4–5). In this case, the '*iḍāfah* (in 'Abd al-Lāh) and the *tankīr* (in *rajulan*) have caused the otherwise indeclinable *munādá* to be declinable.

The behaviour of 'ams, qabl and the $mun\bar{a}d\acute{a}$ could be an argument for those who justify the declension of $xamsata-\'a\~sara$ when in the position of $mud\bar{a}f$, however al-Mubarrad sees some differences between them.

Unlike 'ams and qabl which are ma'ārif, xamsata-'ašara is nakirah (M. II, 180.1). What is meant exactly by al-Mubarrad is not very clear. It seems to be another level than the mere syntactic "definiteness" and "indefiniteness". It could refer to the meaning of these words, and the difference with what classical grammarians call maqṣūd "deliberate" and ġayr maqṣūd "undeliberate" words, or with the opposition between "specified" (maxṣūṣ)¹¹ and "unspecified" (mubham) which seems to be merely semantic. The implication of this, for al-Mubarrad, is that the behaviour of 'ams (and qabl) and xamsata-'ašara is not analogical. For example, the addition of the definite article to 'ams and qabl turns their declinability on (M. II, 180.1-2), whereas for xamsata-'ašara it does not, as in jā'ani l-xamsata-'ašara rajulan (M. II, 180.5-6). The other difference between 'ams, qabl and xamsata-'ašara is that being a nakirah ("by essence", as opposed to syntactic indefiniteness), xamsata-'ašara cannot be put in the indefinite, unlike 'ams or qabl (M. II, 180.3).

As for the difference between the *munādá* and *xamsata-'ašara*, it also lies in the fact that the *munādá* can be turned into an indefinite (*M.* II, 180.4–5) whereas *xamsata-'ašara* cannot, because it is already an indefinite. Although al-Mubarrad does not express it here, this is due to the fact that the *munādá* is definite "by essence", although it can be turned into an indefinite. Compare for example *Yā rajulu!* "O [you,] man!" to *Yā rajulan!* "O man [in general]!" This *tankīr* is impossible with *xamsata-'ašara*, whose "intention of *tanwīn*" can only be deleted but not superadded.

This discussion is very typical of al-Mubarrad's method. Different things must behave differently. In other words, there must be a difference between 'ams, the munādá and xamsata-'ašara that justifies their different behaviour. Why do 'ams becomes fully declinable after the addition of the definite article and not xamsata-'ašara? He answers by introducing a semantic distinction between 'ams, which is definite by essence and xamsata-'ašara, which is indefinite by essence. In the same manner, why does the munādá becomes

¹⁰See Versteegh (1993a, 158).

fully declinable when the indefinite is intended and not *xamsata-'ašara*? He also answers with the same semantic distinction between the *munādá* which is essentially definite and *xamsata-'ašara* which is essentially indefinite.

In the end, we have three different cases: 'ams is essentially definite, and can carry the definite article, which turns its full declinability on; the munādá is also essentially definite, but indefiniteness can be intended, which turns its full declinability on; compound numerals are essentially indefinite, and neither the addition of the definite article nor the deletion of their intention of tanwīn make them fully declinable.

Al-Mubarrad claims here that Sībawayh permits the declension of xam-sata-'ašara after the addition of the article as in $j\bar{a}$ 'ani l-xamsata-'ašaru rajulan or in the position of $mud\bar{a}f$ (M. II, 180.7). See above, p. 130.

9.5 The specifier complement *tamyīz*

In a chapter entitled $b\bar{a}b$ at-taby $\bar{i}n$ wa-t-tamy $\bar{i}z$ "chapter of the explaining and specifying [constructions]" (M. III, 32–38), al-Mubarrad teaches that the tamy $\bar{i}z$ is operated on by a verb, or what resembles the verb on an underlying level (i'lam'annat-tamy $\bar{i}za$ ya'malu f \bar{i} -hi l-fi'lu wa-m \bar{a} yušbihu-hu f \bar{i} taqd \bar{i} ri-hi; M. III, 32.3). The meaning of the dependent form (inti \bar{i} ab) of the tamy $\bar{i}z$ is the same, whatever its "operator" (' \bar{a} mil). It sheds light on the "species" (naw') of the operator (wa-ma'n \bar{a} -hu f \bar{i} l-inti \bar{i} abi wāḥidun wa-'in ixtalafat 'awāmilu-hu fa-ma'n \bar{a} -hu 'an ya'tiya mubayyinan 'an naw'i-hi; M. III, 32.3–5).

The first example of *tamyīz* given by al-Mubarrad is extremely interesting: 'indī 'išrūna dirhaman "I have twenty dirhams" (M. III, 32.5) because there is clearly no verbal operator, and it must be supposed that for al-Mubarrad 'išrūna resembles the verb fī taqdīri-hi "on an underlying level".

There are many words indeed that resemble the verb on an underlying level ($taqd\bar{\imath}r$). Al-Mubarrad gives three types of such words, depending on whether they resemble the verb li-lafd "because of [their] surface level"; or li-t-tasarruf "because of [their] behaviour"; or li-l-ma "na" "because of [their]

¹¹However, in the expression used by al-Mubarrad wa-ʾinnamā ʾajāza Sībawayhi ḍ-ḍamma ʿalá buʿdin the meaning of ʿalá buʿdin is not very clear. This expression is found eleven times in the Muqtaḍab (and not in the Kitāb) and the most frequent constructions are hāḍā jāʾizun ʿalá buʿdin (M. I, 228.16; II, 148.4), huwa ʾajāza-hu ʿalá buʿdin (M. II, 180.7; III, 57.2; IV, 185.11), hāḍā yajūzu ʿalá buʿdin (M. II, 351.3-4; III, 44.2; III, 221.7; IV, 341.4). It most probably refers to expressions that are "accepted although they are far-fetched". Compare to the expression hāḍā min al-buʿdi bi-makānin "this is improbable, or extraordinary, or strange" (Lane 1863–1893/1955–1956, I, 225). The equivalent expression in the Kitāb could be ʿalá ġayrī qiyāsin.

meaning" (*M.* III, 33.8). Owens (1990b, 256) says that al-Mubarrad has not understood the separation and non-identity principle (SNIP) in Sībawayh's grammar. See above, p. 202, for a presentation of this theory.

Here are examples of all three categories quoted by al-Mubarrad: 'inna "indeed", la'alla "perhaps" and 'išrūna "twenty" resemble the verb "because of [their] surface level" (li-l-lafā) inasmuch as their complement is in the dependent form, as in 'inna Zaydan munṭaliqun "Zayd is leaving indeed", la'alla Zaydan 'axūka "perhaps is Zayd your brother" and 'išrūna rajulan "twenty men" (M. III, 33.2-4).

Kāna resembles the verb "because of [its] behaviour" (li-t-taṣarruf), inasmuch as it has a verbal pattern (wazn) and behaviour (taṣarruf), but it is not a real verb (wa-laysat fiʿlan ʿalá l-ḥaqīqati; M. III, 33.4–5). A real verb "tells that an action of Zayd has reached 'Amr" (fa-tuxbiru bi-ʾanna fiʿlan waṣala min Zaydin ʾilá 'Amrin) as in ḍaraba Zaydun 'Amran "Zayd has hit 'Amr" (M. III, 33.5–7).

Lastly, the negative particule $m\bar{a}$ resembles the verb li-l-ma' $n\acute{a}$ because it has the same meaning as laysa, which is a verb (M. III, 33.9).

By comparison with the other categories, one can say that 'išrūna has no verbal "meaning" $(ma \circ na)$ nor "behaviour" $(ta \circ arruf)$, but that its verbal underlying level $(taqd\bar{u}r)$ is due to its surface level (li-l-lafa), just like 'inna and $la \circ alla$, not to its meaning nor to its behaviour.

In the rest of the chapter, al-Mubarrad gives more examples of expressions with a *tamyīz* operated on by words that resemble the verb *li-l-lafḍ*: $h\bar{a}d\bar{a}$ 'afḍalu-hum rajulan "he is the best of them [in terms of] man" (M. III, 33.17), $l\bar{\imath}$ mitlu-hu rajulan "I have the same [in terms of] man" (M. III, 34.1), wayha-hu rajulan! "woe unto him!" (M. III, 35.1), li-l- $L\bar{a}hi$ darru-hu $f\bar{a}risan$! "what a fine rider he is!" (M. III, 35.1).

In all these expressions, the $tamy\bar{t}z$ is operated on by a ' $\bar{a}mil$ "operator" of which it expresses the naw "species" (M. III, 32.3–5).

The terminology, however, is not fixed clearly and in this chapter al-Mubarrad uses indifferently the words $tamy\bar{\imath}z$ (7 times, plus once in the title of the chapter), $taby\bar{\imath}n$ (3 times, plus once in the title) and $tafs\bar{\imath}r$ (once). It seems that what al-Mubarrad refers to here is the complement itself, not the construction, which he does not name.

9.5.1 The case of 'išrūna dirhaman

Normally, the *tamyīz* is indefinite, in the singular and in the dependent form (*M.* III, 32.6–11), just like in 'išrūna dirhaman, which thus serves as a good example of *tamyīz*. As we will see below however, there are other possibilities.

At the semantic level, al-Mubarrad explains that 'išrūna is in need of a tamyīz because it is an "unspecified numeral":

(6) When you say: 'indī 'išrūna and talātūna you mention an unspecified numeral that applies to any counted [object] so when you add dirhaman you define the thing that you intend by mentioning one of it, which refers to all the rest (M. III, 32.6–7).

What is somewhat confusing in the beginning of this chapter devoted to the $tamyar{z}$ is that al-Mubarrad compares 'indī 'išrūna dirhaman" I have twenty dirhams" to $h\bar{a}$ 'ulā'i dāribūna Zaydan "those are the hitters of Zayd" (M. III, 32. 11–12), as if there were a semantic parallel between both expressions. However, one understands from the rest of the chapter that the only common point between these two expressions is that the ending $n\bar{u}n$ in 'išrūna and dāribūna forbids the annexation to dirham and Zayd. About the effect of the $n\bar{u}n$ as a separator between the mumayyaz (what is specified) and the $tamyar{z}$ (specifier), al-Mubarrad says that "this is the behaviour of each $tabyar{v}n$, in which a $n\bar{u}n$ is involved" ($fa-h\bar{a}d\bar{a}$ $sab\bar{v}$ tulli tulli

According to al-Mubarrad, 'išrūna resembles the verb because of its surface level inasmuch as it operates on a noun in the dependent form (dirhaman, just like Zaydan), but he is very clear that for 'išrūna, 'inna and la'alla, the comparison stops here:

(7) [...] and to this [sc. 'išrūna rajulan, 'inna Zaydan munṭaliqan and la'alla Zaydan 'axū-ka] belongs no fa'ala nor yaf'alu nor any other pattern of the verb (M. III, 33.4).

In the rest of the chapter, al-Mubarrad discusses different topics related to the *tamyīz*: its number, its use with the particle *min*, its fronting, its construction as a *muḍāf 'ilayh* and, lastly, expressions of the type *al-ḥasanu wajhan* which seem to surface like the *tamyīz*.

9.5.2 The number of the $tamy\bar{t}z$

In general, the $tamy\bar{\imath}z$ surfaces in the singular, because it expresses the whole species and not specific items. This is particularly true after numerals, like 'išrūna (M. III, 32.7; 34.12–13) where no other possibility is given.¹²

9.5.3 The particle *min* and the *tamyīz*

If the first term contains a reference—such as a pronoun—to the noun that expresses the *tamyīz*, it is preferable to use the particle *min* as an "emphasis" (*tawkīd*), as in *wayḥa-hu min rajulin!* instead of *wayḥa-hu rajulan!* and in *li-l-Lāhi darru-hu min fārisin!* instead of *li-l-Lāhi darru-hu fārisan!* (*M.* III, 35.2–3). However, it is not possible to say *'išrūna min dirhamin because min dirhamin does not refer to something mentioned in the first part of the expression, which it would "confirm" (*M.* III, 35.3–4).

Curiously, al-Mubarrad does not mention in this chapter the semantic equivalence between 'išrūna dirhaman and 'išrūna min ad-darāhimi. His point here is simply to say that on the one hand there is no embedded pronoun in 'išrūna and that on the other hand it is better to replace the tamyīz by the particle min and its majrūr if the "operator" is constructed with a pronoun as in wayḥa-hu min rajulin!

Later in the *Muqtaḍab*, in a chapter where he compares *kam* and the numerals, al-Mubarrad states that *'išrūna dirhaman* means *'išrūna min addarāhimi*, and this "because 'twenty', and what is like it, is a numeral" (*li-'anna 'išrūna wa-mā 'ašbaha-hu smu 'adadin*; *M.* III, 66.9–10). Al-Mubarrad infers here that the *tamyīz* has this specific meaning after numerals.

9.5.4 Fronting the *tamyīz*

If the "operator" ('āmil) of the tamyīz is a verb (and not a word resembling the verb), it is possible to front tamyīz, as in šaḥman tafaqqa'tu "I exploded [in terms of] grease" and 'araqan taṣabbabtu "I broke into a sweat" (M. III, 36.2). This fronting is possible only with verbs, because of their freedom of behaviour (li-taṣarrufi l-fi'li; M. III, 36.1). Al-Mubarrad notes that Sībawayh did not accept the fronting of the tamyīz, even when its "operator" was a verb

¹²In some cases, and only if the first term does not refer to a numeral, it is possible to express the *tamyīz* by a plural as in *huwa 'afrahu n-nāsi 'abdan* or *'abīdan* "he is the most gifted of men [in terms of] slave" or "[in terms of] slaves" (*M.* III, 34.13–14); and the Qur'ān contains examples of plural *tamyīz* (*M.* III, 34.14–15).

(*M*. III, 36.3), because—according to al-Mubarrad—Sībawayh sees no difference between these verbal constructions and *'išrūna dirhaman* or *hāḍā 'afrahu-hum 'abdan* (*M*. III, 36.3).

In a chapter dealing with "issues of the agent" $mas\bar{a}$ 'il al- $f\bar{a}$ 'il, and with expressions of the type marartu bi-rajulin $q\bar{a}$ 'imin ' $ab\bar{u}$ -hu (M. IV, 155–157), al-Mubarrad makes it clear that ' $i\bar{s}r\bar{u}na$ cannot be separated from dirhaman as in the uncorrect *' $ind\bar{\imath}$ ' $i\bar{s}r\bar{u}na$ l-yawma dirhaman:

(8) [...] the operator is not fully declinable so that it does not behave like the verb as in: *'indī 'išrūna l-yawma dirhaman, *'inna munṭaliqun Zaydan or *Zaydan 'inna munṭaliqun; this is not correct (M. IV, 156.15-16).

Al-Mubarrad links here full declinability with verbal strength.

In the chapter devoted to the $tamy\bar{\imath}z$, he adds that it is possible to say $r\bar{a}kiban j\bar{a}^{2}a Zaydun$ because the operator of $r\bar{a}kiban$ is a verb $(j\bar{a}^{2}a)$, whereas it is not possible to say $q\bar{a}^{2}iman h\bar{a}d\bar{a} Zaydun$ because here the operator of $q\bar{a}^{2}iman$ (namely $h\bar{a}d\bar{a}$) is not a verb (M. III, 36.5–6). He adds that this is also al-Māzinī's opinion (M. III, 36.7).

The comparison used by al-Mubarrad is somewhat puzzling because $r\bar{a}kiban$ and $q\bar{a}$ 'iman are not $tamy\bar{\imath}z$ but $h\bar{a}l$. His point here is only to show that in general the verb is a "stronger" operator than the noun.

9.5.5 The construction of the tamyīz as a muḍāf 'ilayh

Al-Mubarrad says that in some cases the *tamyīz* can surface in the oblique form and not in the dependent form (*M.* III, 37.3). In this construction, the noun is specified by a *tamyīz* to which it is annexed ('aḍafta 'ilá l-mumayyazi; *M.* III, 38.4).

This is the case of the expression kullu rajulin jā'a-nī fa-la-hu dirhamun "let each man who came to me receive a dirham" (M. III, 38.1). This expression means kullu r-rijāli 'iḍā kānū rajulan rajulan "all the men if they are one by one" (M. III, 38.1). In this case, al-Mubarrad says that rajulin is the tamyīz of kull and, in the same manner, dirhamin is the tamyīz of mi'ah and 'alf, and that its meaning is the same as in 'išrūna dirhaman. The only difference between 'išrūna dirhaman and mi'atu dirhamin is that in 'išrūna the ending nūn cannot be deleted so that the oblique form is forbidden, or in al-Mubar-

rad's words, "because the *tanwīn* is not compulsory, whereas the *nūn* in 'išrūna is" (*li-'anna t-tanwīn ġayr lāzim wa-n-nūn fī* 'išrūna *lāzimah*; *M*. III, 38.3–5).¹³

However, this is not completely true since it is possible to say $h\bar{a}dihi$ 'išr \bar{u} Zaydin "these are Zayd's twenty" (M. III, 32.12). This was already stated for the annexation of a numeral to a pronoun (M. II, 178.4–5; 10–11). But in this case, the 'idafah expresses the possession ('alá jihat al-milk; M. III, 33.12) and not the tamy $\bar{\imath}$ z. Because of the possible confusion between the two, it is not possible for the tamy $\bar{\imath}$ z to surface as a mudāf 'ilayh after decades (M. III, 33.15–16).

In a chapter devoted to annexation (M. IV, 136–147), al-Mubarrad distinguishes two types of annexation, either with a particle (min, ${}^{i}l\acute{a}$, rubba, $f\bar{\imath}$, ka-, bi-, li-, and mund), or without a particle. He then comments on the different meanings these particle convey, and he says that the annexation without a particle has the meaning of the particle li-(ma' $n\acute{a}$ l- $l\bar{a}m$; M. IV, 143.4). He does not mention other possible meanings for the annexation without particle.

There are other expressions where the *tamyīz* surfaces as a *muḍāf ʾilayh*. After a comparative, as in *ʾanta ʾafrahu ʿabdin fī n-nāsi* "you are the most gifted slave among people" which al-Mubarrad says means *ʾanta ʾaḥadu hāʾulāʾi lladīna faḍḍaltu-hum* ("you are one of those I preferred"; *M*. III, 38.10).

In order to be correct, the comparative has to be semantically included in the *tamyīz* to which it is annexed, so that it is correct to say *al-xalīfatu* 'afḍalu Banī Hāšima "the caliph is the best of the Banī Hāšim" but not *al-xalīfatu 'afḍalu Banī Tamīma "the caliph is the best of the Banī Tamīm" (M. III, 38.11–12) because the caliph does not belong to the Banī Tamīm. In this last case, the only correct utterance is *al-xalīfatu* 'afḍalu min Banī Tamīma "the caliph is better than the Banī Tamīm" (M. III, 38.14), but it is not a *tamyīz* meaning any more, i.e., Banī Tamīm does not express the naw "species" of xalīfah.

Lastly, the fact that the *tamyīz* can surface as a *muḍāf 'ilayh* changes its syntactic definition into a semantic definition because it is not defined by a syntactic structure anymore but by its meaning. What remains as its specific syntactic properties is its being singular and indefinite. This shift in definition does not seem to bother al-Mubarrad.

 $^{^{13}} See$ above, footnote 1, p. 155, on the difference between the $tanw\bar{t}n$ and the compensatory $n\bar{u}n$.

9.5.6 Is wajhan a tamyīz in the expression al-ḥasanu waj-han?

Al-Mubarrad clearly says that expressions of the type Zaydun al-ḥasanu wajhan "Zayd the beautiful of face" and al-karīmu 'aban "the generous of father" (M. III, 38.6) belong to another chapter, namely min bābi d-dāribi Zaydan (M. III, 38.6), i.e., the syntax of 'asmā' al-fā'il. For al-Mubarrad, this appears clearly in the following expressions: huwa l-ḥasanu l-wajha and huwa ḥasanun al-wajha (M. III, 38.7). He most probably means that in these expressions the word wajh is determined by the article, which clearly shows that it is not a tamyīz. All the details about these constructions are found in a chapter devoted to the ṣifah al-mušabbahah bi-l-fā'il (M. IV, 158–165), which is thus not connected to the syntax of numerals, unlike in the Kitāb.

9.5.7 Unsolved issues linked with the *tamyīz*

Munawwanah numerals (carrying an "intention of *tanwīn*", just like compound numerals and decades; *M.* II, 164.3–4) also correspond to the *mubhamah* "unspecified" numerals, which are thus in need of a *tamyīz* (see *M.* II, 165.2 for compound numerals; *M.* II, 144.7 and *M.* III, 32.6–7 for decades).

If there is a link between being *munawwan*, being *mubham* and being in need of a *tamyīz*, how come *mi'ah* and *'alf* operate on a *tamyīz* (*M.* III, 37.3–38.5) although they are apparently not *munawwanah*? Are they also *mubhamah*?

The case of hundreds and thousands is not clear. It would be consistent with other annexable cardinals for them to be "specified", but it would be consistent with other greater cardinals for them to be "unspecified". Al-Mubarrad is silent on this issue. He says that all numerals above "ten" need a complement that expresses their species (*M.* II, 164.5–6). Does this mean that hundreds and thousands are "unspecified"? Probably yes, but this is an extrapolation. See above, p. 145, for a general view on this issue in our three treatises.

Another question that is not addressed by al-Mubarrad is the following. It is clear that in *mi'atu dirhamin* and *'alfu dirhamin*, the word *dirham* is a *tamyīz* that surfaces as a *muḍāf 'ilayh*, but what is it in *mi'atu d-dirhami* and *'alfu d-dirhami*? We only know that al-Mubarrad would probably not call it a *tamyīz* because it is definite (*M.* III, 32.9–10).

9.6 The logic at stake in the *Muqtaḍab*

Throughout the chapters that deal with numerals al-Mubarrad draws a clear line between "basic numerals" $(al-\dot{a}s\dot{l})$ from "one" to "ten", and "subsidiary numerals" (al-far'), above "ten", which he says are all "derived" $mu\dot{s}taqqah$ from basic numerals, either in "surface" $(laf\dot{q})$ or in "meaning" $(ma'n\dot{a})$ (M. II, 165.13-14).

Numerals between "twenty-one" and "ninety-nine" are simply conjoined by a waw al-'atf (M. II, 166.16–17) and they behave separately according to their respective rules, so that one might say that they neither belong to lesser nor to greater numerals but that the unit behaves like basic numerals and the decade behaves like subsidiary numerals.

Above "two", number and species have to be expressed separately. Al-Mubarrad says that this is the 'aṣl "origin", hence "one" and "two" must be regarded as a subcase of the other small numerals. Incidentally, this is also why the dual is considered by al-Mubarrad to be a subcase of the plural (*M*. II, 156.2).

Among the different possible ways to express the counted object, al-Mubarrad focuses on the annexational and specifying constructions. The first one characterises "basic" numerals (*M.* II, 164.4–5) and the second one characterises "subsidiary" numerals. For al-Mubarrad, a distinctive feature of subsidiary numerals is that their counted object is in the singular in the annexational and specifying constructions because it expresses a whole species (*M.* II, 164.5–6). With this definition, what seemed to be a problem in Sībawayh's theory simply disappears as an issue. See above, p. 177, for a presentation of this issue in our three treatises. Base form numerals are not in need of a "species" complement whereas "derived" numerals are. What is somewhat puzzling is that al-Mubarrad calls *tamyīz* the counted object after hundreds and thousands, which surfaces as a *muḍāf 'ilayh*.

Subsidiary numerals all have in common that they are "unspecified" *mubhamah* and as such in need of a complement that expresses their *naw* "species", as in *xamsata-'ašara tawban* (*M.* II, 164.5–6) and 'išrūna dirhaman (*M.* II, 144.7; 165.2; 13; III, 32.6–7).

Al-Mubarrad explicitly says that $i\underline{t}n\bar{a}$ –' $a\bar{s}ara$ is not a compound (a word that has been made "one word") and that –' $a\bar{s}ara$ has the status of a compensatory $n\bar{u}n$ (M. II, 162.5–8). Other compound cardinals have been made "one word" and he draws a parallel between their second part and the $t\bar{a}$ ' $marb\bar{u}tah$ in the male proper names Hamdah and Talhah (M. IV, 29.4–5).

Al-Mubarrad explains that decades resemble the verb *li-l-lafā* "because of the surface level", inasmuch as their complement is put in the dependent form (M. III, 33.2–4). However, he makes it clear that decades have no verbal value so that for example it is not possible to front the *tamyīz* and say *dirhaman 'išrūna whereas this is possible in šaḥman tafaqqa'tu, because the "operator" 'āmil of the tamyīz is a verb (M. III, 36.1–2). In the same way, 'išrūna cannot be separated from its tamyīz as in *'išrūna la-ka dirhaman (M. III, 55.8).

"One hundred" and "one thousand" are not munawwanah so that their tamyīz can surface as a muḍāf 'ilayh, in the indefinite as in mi'atu dirhamin, ṭalāṭu mi'ati dirhamin, 'alfu dirhamin, ṭalāṭu 'ālāfi dirhamin, or in the definite as in mi'atu d-dirhami, ṭalāṭu mi'ati d-dirhami, 'alfu d-dirhami, ṭalāṭu 'ālāfi d-dirhami (M. II, 167.10–12; III, 38.3–5). In all these expressions, the semantic link between numerals and their counted object is a specifying relationship although it surfaces syntactically as an annexational construction. The only limitation to regular 'iḍāfah rules is that the tamyīz has to be in the singular, and this because the quantity is already expressed by the numeral.

Finally, according to al-Mubarrad, the only common point between all numerals is that their counted object has a semantic link with the meaning of the partitive *min*, at least in the annexational and specifying constructions. More precisely, this semantic link is [m. 13], the underlying structure.

Al-Mubarrad's grammatical method has been studied less intensively than that of Sībawayh and it is difficult to extrapolate it from his grammar of numerals. In the introduction to his edition of the *Muqtaḍab*, 'Uḍaymah has a section devoted to al-Mubarrad's use of *qiyās* in balance with attested data ('Uḍaymah 1966–79, I, 113–117), based on the *Muqtaḍab* and the *Kāmil*, another work by al-Mubarrad. Unfortunately, he does not comment on the occurrences he quotes where al-Mubarrad has a specific use of *qiyās*, which he either rejects, or bases on minority usage and exceptions.

Two severe accusations were levelled at al-Mubarrad, one by Ibn Wallād (d. 332/944) and the other by al-Baṣrī (d. 375/985). Al-Mubarrad is accused by Ibn Wallād to be الما يتعلل كلامه في النحو أصلا وكلام العرب فرعا فاستجاز أن يخطئها إذا a man who makes his own language in grammar the base form and the language of the Arabs subsidiary, allowing himself to falsify them when they utter forms that contradict his base form"; Intiṣār, 71.)14

ولو :The other accusation is formulated by al-Baṣrī in his Kitāb at-tanbīhāt مواله على كلام العرب تشاغل أبو العباس بمُلَح الأشعار ونتُف الأخبار وما يعرفه من النحو كان خيرا له من القطع على كلام العرب

¹⁴ Abū Janāḥ (1980, 60) quotes this sentence from 'Udaymah (1966-79, I, 117 and not 109 as indicated in note). 'Udaymah does not mention the reference in the *Intiṣār*, which was not yet edited at the time.

("had 'Abū l-'Abbās been attentive to the poets' anecdotes, the biographies' valuable information, and his own knowledge in grammar, it would have been better for him than to interrupt the Arabs when they talk"; $Tanb\bar{t}h\bar{a}t$, 124).¹⁵

According to 'Abū Janāḥ (1980, 60–61), al-Mubarrad relies more on "intellectual criteria" *maqāyīs dihniyyah* than on attested data in poetry and in Qur'ānic readings, which he does not hesitate to refute at times (*radd arriwāyāt* "refutation of attested data"; 'Abū Janāḥ 1980, 53). These two points are presented in more detail—although without analysis—by 'Uḍaymah (1966–79, I, 117–123). The grammatical tradition reports of al-Mubarrad that he defended his method against his Kūfan accusators:

[...] al-Mubarrad scornfully accuses Taʻlab of abandoning Qur'ānic and majority usage in favour of the word of "some stupid old bedouin woman"! Even if inauthentic, the anecdotal evidence gives a good picture of what it was the Baṣrans found so objectable about Kūfan attitudes (Carter 2000, 266 quoting az-Zajjājī's *Majālis*, 121).

Indeed, we have seen above in the grammar of numerals, p. 225, that al-Mubarrad does not hesitate to reject actual use in order to go back to the "truth of analogy", even if it contradicts actual use. This attitude of al-Mubarrad towards $qiy\bar{a}s$ is pointed out by Baalbaki (1995, 130), who mentions four main shifts in al-Mubarrad's grammatical method. The first of these shifts is that he changes the subtle equilibrium that Sībawayh had achieved between $qiy\bar{a}s$ and $sam\bar{a}^c$ by granting more weight to the former, in a way that makes it "a purely intellectual process". The result of this use of $qiy\bar{a}s$ is that it leads al-Mubarrad to reject attested forms when they contradict his theory. The three other shifts mentioned by Baalbaki are the autonomisation of the concept of 'amal' "operation", which is considered for itself; the subdivision of categories that were hold together by Sībawayh; and the introduction of new types of logical reasoning.

9.7 Beyond al-Mubarrad ...

It seems that for al-Mubarrad the only "true" numerals are the "masculine" numerals between "three" and "ten", i.e., the forms carrying a $t\bar{a}$ ' $marb\bar{u}tah$: $tal\bar{u}tatun$, 'arba'atun, until ' $a\bar{s}aratun$. All other numerals are explained by comparison to these basic numerals.

The category of the *tamyīz*, which originates in a syntactic construction, enables al-Mubarrad to describe very easily the counted object after compound numerals and decades. They are in the position of *tamyīz* and they

¹⁵ Udaymah (1966-79, I, 117) does not give the reference of this quotation.

express the "species" of "unspecified" numerals. As for "one hundred" and "one thousand", al-Mubarrad expands the syntactic category of *tamyīz* and says that in *mi'atu ṭawbin* and *'alfu ṭawbin* the counted object also expresses the "species" of the numerals. However this *tamyīz* surfaces as a *muḍāf 'ilayh*. What remains of the characteristics of the syntactic *tamyīz* is its meaning and its singular.

As for the expression $mi^{2}atu\ \underline{t}$ - $\underline{t}awbi$, it is not clear whether al-Mubarrad would call it a $tamy\overline{t}z$ since he dislikes the expression of the $tamy\overline{t}z$ with a definite noun (M. III, 32.9-10).

In the end, the *tamyīz* is practically reduced to a semantic category that can be expressed by two different constructions, annexational and specifying.

What is unclear as well is the nature of the 'iḍāfah relationship between basic numerals and their counted object. Al-Mubarrad says that it also expresses the "species" naw' of the basic numerals although he does not say that they are "unspecified" numerals nor that their complement is a tamyīz.

In a nutshell, basic numerals are neither *mubhamah* nor *munawwanah* so that they do not need a *tamyīz* but a complement that has the same meaning (the *naw*, i.e., partitive *min*); compound numerals and decades are both *mubhamah* and *munawwanah* so that they need a *tamyīz* in the dependent form; "one hundred" and "one thousand" are not *munawwanah* and are in need of a *tamyīz* in the oblique form which most probably makes them *mubhamah* in the eyes of al-Mubarrad.

Al-Mubarrad does not address the issue of consistency among numerals. Each series of numerals has a different morphological shape and a different syntactic behaviour. There are common points to all the numerals, but he prefers to focus on the differences between them. It even seems to be part of his theory that each series is due to behave differently, which is another type of consistency than Sībawayh's. If one adds to this picture the fact that he studies many more issues than Sībawayh, we get an overall impression of an "atomistic grammar". A great variety of issues are dealt with and no global consistency is aimed at, except that different behaviours are due to be interpreted differently, as is clearly the case with numerals.

Chapter 10

Ibn as-Sarrāj's approach to numerals

10.1 Introduction

The most striking characteristic of the 'Uṣūl is its outline itself and the mere position of any grammatical issue in the general organisation of the treatise tells a lot about the author's opinion. This way of dividing the grammatical matter is known as $taqs\bar{t}m$ "dichotomous classification" (Carter 2000, 270). This systematic presentation is probably found for the first time in Ibn as-Sarrāj's 'Uṣūl (Þayf 1968, 'Ayd 1973, Owens 1990b, and Ṭāhā 1995, 5). This is certainly not the case of the $Kit\bar{a}b$ where similar issues are spread all over the book. The outline of the Muqtadab is not as hectic as in the $Kit\bar{a}b$, but in no way is it as systematic as in the 'Uṣūl.

Ibn as-Sarrāj first presents the "principles" (${}^{\prime}u\bar{s}u\bar{l}$) of grammar in a very organised way, and then quotes many "applied issues" ($mas\bar{a}{}^{\prime}il$), somehow related to the principles exposed. As he says himself:

(٩) قد فرّغنا من ذكر المرفوعات والمنصوبات وذكرنا في كلّ باب من مسائل مقدارا كافيا فيه دربة للمتعلّم ودرس للعالم بحسب ما يصلح في هذا الكتاب لأنّه كتاب أصول ونحن نفرّد كتابا لتفريغ الأصول ومزج بعضها ببعض ونسمّيه كتاب الفروع ليكون فروع هذه الأصول. (9) We have explored all possible branches of [nouns in] the independent and dependent forms and mentioned in each chapter a sufficient number of issues where the learner will find a path and the learned a lesson, according to what befits this book, because it is a book of principles; we will dedicate a separate book to branches of the principles and their mingling with one another, and we will call it the *Book of the branches* in order for them to be branches of these principles. (*'U.* I, 328.3–6)

Unfortunately, this *Book of branches* has not reached us. It would have helped us to understand Ibn as-Sarrāj's grammatical judgments.

As Baalbaki puts it:

The clear-cut distinction which Ibn al-Sarrāj establishes between $u\bar{s}ul$ and $fur\bar{u}^c$ is probably the main reason for the famous saying that Ibn al-Sarrāj, by his $u\bar{s}ul$ (or perhaps $U\bar{s}ul$, i.e., the work itself), has rationalized grammar; $m\bar{a}$ $z\bar{a}la$ 'l-nahw majnūnan hattā 'aqqalahu Ibn al-Sarrāj [bi-'u $\bar{s}ul$ i-hi] (Baalbaki 1988/2004, 173 quoting as-Suyūṭī's Buġyat al-wu'āh, I, 109 and Yāqūt's Mu'jam al-'udabā', XVIII, 198).

Baalbaki (1988/2004, 173) adds that the distinction between 'uṣūl' "principles", furū' "subsidiary issues" and masā'il "applied issues" is not absent in the Muqtaḍab, but it does not determine the organisation of the treatise itself. In a more precise way, it is also possible to say with Baalbaki (2008, 248–249) that masā'il and furū'—both terms are almost synonymous in the Muqtaḍab—receive a technical meaning in the 'Uṣūl. In later grammatical tradition, 'uṣūl an-naḥw will receive another technical meaning, namely the "types of grammatical argumentation" (Bohas and Guillaume 1984, viii–ix).

Undoubtedly, this organisation of the ${}^{2}U_{5}\bar{u}l$ is the most obvious piece of evidence that Greek logic and rational methodology have made their way into Arabic grammar by the late III^{rd}/IX^{th} and beginning of the IV^{th}/X^{th} centuries. This point has been well studied. See above, pp. 49ff.

Numerals are dealt with in many different places in Ibn as-Sarrāj's ${}^{\prime}U_{\bar{y}}\bar{u}lf\bar{p}$ n-nahw, and this from different perspectives: morphology, syntax, semantics and phonetics. Some chapters are explicitly devoted to numerals as such, but these chapters do not gather all the information about numerals in the ${}^{\prime}U_{\bar{y}}\bar{u}l$. We will focus here on Ibn as-Sarrāj's methodology more than on basic facts concerning numerals.

Ibn as-Sarrāj's 'Uṣūl are divided in chapters of unequal length, which can be separated into syntactic issues ('U. I, 36–II, 406), morphosyntactic issues ('U. II, 407–III, 159) and morphological (derivational and morphophonetic) issues ('U. III, 160–480).¹ Each chapter is systematically subdivided into sections and subsections, which are very often followed by a long section of additional "applied issues" (masā'il). See above, p. 57 on these "exhaustive divisions".

 $^{^{1}}$ Baalbaki (2007b, xxxi) states that this division derives from the $Kit\bar{a}b$, which later grammarians have imitated.

10.1. Introduction 243

The phonetic chapter $b\bar{a}b$ al-' $im\bar{a}lah$ ("chapter on fronting the fathah"; 'U. III, 160-171) is not inserted with other phonetic and phonological issues, such as assimilation and metathesis, which are all integrated into a chapter entitled dikr at- $tasr\bar{i}f$ ("morphology"; 'U. III, 231-480). $B\bar{a}b$ al-' $im\bar{a}lah$ is inserted between morphological chapters dealing with word patterns: $b\bar{a}bu$ l- $mas\bar{a}dira$ wa-' $asm\bar{a}$ 'i l- $f\bar{a}$ ' $il\bar{n}a$ ("chapter on verbal nouns and active participles"; 'U. III, 85-159) and dikru 'iddati $m\bar{a}$ $yak\bar{u}nu$ 'alay-hi al-kalimu ("mention of the number [of root consonants] on which words are built"; 'U. III, 171-179).

Interestingly, in the $Kit\bar{a}b$, the chapter on ' $im\bar{a}lah$ is also situated among other morphological issues (K. II, 279–294), showing that it is not seen as a purely phonetic phenomenon. Here in the ' $U\bar{s}\bar{u}l$ it clearly marks the separation between morphosyntax ('U. II, 407–III, 159) and morphophonology ('U. III, 171–480).

Syntactic issues are divided as follows: parts of speech (${}^{2}U$. I, 36–44); declension and indeclinability (${}^{2}U$. I, 45–II, 221); word order (${}^{2}U$. II, 222–247); ellipsis (${}^{2}U$. II, 247–254); "flexibility" (${}^{2}U$. II, 255–361); declension in pausa (${}^{2}U$. II, 361–406).

Then comes bāb al-'imālah ('U. III, 160-171).

The last three chapters deal with the following morphophonological issues: root system (${}^{\prime}U$. III, 171–179); patterns (${}^{\prime}U$. III, 179–231); word formation and morphophonetic changes ($b\bar{a}b$ at-taṣrīf; ${}^{\prime}U$. III, 231–480).

The grammar of numerals is dispatched in the ${}^{\prime}U_{5}\bar{u}l$ according to this outline. Here is a quick overview of the issues linked with numerals. All these issues have been presented in chapters 4 to 6. They will only be recalled here, in order to see where they are located in the ${}^{\prime}U_{5}\bar{u}l$. Sections relevant for the grammatical method of Ibn as-Sarrāj will be analysed in detail after this quick presentation.

| 'Uṣūl | Issues | Pages |
|-----------------------|--|--------|
| In syntactic chapters | | |
| 'U. I, 76–81 | Ibn as-Sarrāj comments on the expression <i>ḍuriba min 'ajli Zaydin 'išrūna sawṭan</i> "because of Zayd, twenty lashes were given" (<i>'U.</i> I, 79.12). | p. 158 |

| | I | |
|----------------|---|-----------------|
| 'U. I, 90–91 | "'Aḥad is not used in the affirmative" (wa-ʾaḥadun lā yustaʿmalu fī l-wājibi; 'U. I, 90.6). | p. 159 |
| °U. I, 150–158 | Issues related to definite and indefinite nouns. The name of the days are proper names, like the names of the stars (<i>ad-Dabarān</i> "Aldebaran" and <i>as-Simāk</i> "Spica"). They are derived from ordinal numerals (' <i>U</i> . I, 158.1–2). | pp. 118 and 150 |
| 'U. I, 159–169 | In this section devoted to <i>al-maf^cūl al-muṭlaq</i> , Ibn as- Sarrāj deals with <i>waḥd-</i> in expressions of the type <i>marartu bi-hi waḥda-hu</i> "I passed by him alone". | p. 141 |
| 'U. I, 190–197 | "Applied issues" linked with the <i>maf^cūl fīhi</i> that expresses time. Unlike the other days of the week, "Friday" and "Saturday" do not have a numerical (ordinal) meaning (<i>'U. I</i> , 194.16–19). | p. 150 |
| 'U. I, 307–310 | Bāb tamyīz al-maqādir "chapter of specifying the measures". Ibn as-Sarrāj mentions the construction 'indī [] 'atwābun xamsatun "I have [] five garments" ('U. I, 308.21–22) where the numeral has the meaning of the badal "appositional substantive". | pp. 164 and 250 |
| 'U. I, 311–314 | Bāb tamyīz al-'a'dād "chapter of specifying the numerals". It is the first section entirely devoted to numerals in the 'Uṣūl. We will analyse this section below. | pp. 246ff. |
| 'U. I, 315–320 | In <i>bāb kam</i> "chapter on <i>kam</i> ", Ibn as-Sarrāj comments on his affirmation in the previous section that <i>kam</i> is an "unspecified numeral" (<i>ism 'adad mubham</i> ; ' <i>U.</i> I, 314.1). This section will be analysed below. | pp. 255ff. |
| 'U. I, 321–328 | This section gathers various "applied issues" $(mas\bar{a}^{\gamma}il)$ related to the measure and numerical specifiers as well as to kam . This section will be analysed below. | p. 257 |
| 'U. I, 344-346 | There is little information in the 'Uṣūl about the use of numerals as proper names. In a section devoted to the vocative form of nouns that "resemble the muḍāf because of [their] length" (al-muḍāri li-l-muḍāf li-ṭūli-hi;), Ibn as-Sarrāj mentions the vocative form yā Talāṭatan-Wa-Ṭalāṭīna! ('U. I, 344.16–17). | p. 149 |
| 'U. I, 359–366 | In a section devoted to the "apocopation of nouns in the vocative" (<i>tarxīm</i>), Ibn as-Sarrāj mentions the form <i>yā Xamsata!</i> built on the proper name <i>Xamsata-'Ašar ('U.</i> I, 363.4–6; 364.1–3). | p. 149 |
| °U. II, 13–19 | This section consists in a series of "applied issues" linked with annexation. In an affirmative context, 'ahad ('ihdá in the feminine) is always in the position of muḍāf, it cannot be put in the dual nor in the plural ('U. II, 17.2–4). | p. 129 |

10.1. Introduction 245

| 'U. II, 19–23 | Numerals other than "one" can be found in expressions of the type marartu bi-hi waḥda-hu. Unlike for waḥd-, which is a maf tīl muṭlaq, the choice is left to the speaker either to treat them like waḥda-hu, or like an appositive complement (tābi') meaning tawkīd ("emphasis"). | p. 141 |
|-----------------|---|-----------------|
| 'U. II, 27–31 | Ibn as-Sarrāj comments on adjectival slots where numerals are found, as in 'axaḍa Banū Fulānin min Banī Fulānin 'iblan mi'atan ("the So-and-so took a hundred camels from the So-and-so"; 'U. II, 27.19–20); marartu bi-ṭawbin sab'in ("I passed by a seven [measure long] garment"; 'U. II, 27.19); and the poetic line fī jubbin ṭamānīna qāmatan ("in an eighty fathom [deep] well"; 'U. II, 27.21). | p. 157 |
| 'U. II, 46-55 | Ibn as-Sarrāj comments on the expression <i>laqītu qawma-ka talāṭata-hum</i> "I found your tribe, three of them" (' <i>U.</i> II, 47.7–8) and on the use of compound numerals in the same slot. | p. 141 |
| 'U. II, 80-93 | The numerals' "deflected" ($ma'd\bar{u}l$) forms are diptotic: ' $uh\bar{a}d$, $tun\bar{a}$ ' or $matha$, $tul\bar{a}t$ and $rub\bar{a}$ ' (' U . II, 83.8–9; 88.11–13). | p. 124 |
| °U. II, 90–91 | The pattern of <i>tamānin</i> "eight" could be assimilated to a diptotic plural, like <i>madā'in</i> or <i>darāhim</i> (' <i>U.</i> II, 91.11–15). | p. 108 |
| 'U. II, 93-103 | There are two cases when numerals are diptotic: compound numerals other than "twelve" used as proper names, and numerals between "three" and "ten" used in an absolute meaning. | p. 123 |
| 'U. II, 139 | Short section on onomatopoeia. Letters of the alphabet used to spell a noun and numerals when merely listed, as in wāḥid iṭnāni ('U. II, 139.7), are diptotic. | p. 143 |
| 'U. II, 139–144 | This section is devoted to compound nouns such as <i>xamsata-'ašara</i> . We will analyse this section below. | p. 262 |
| 'U. II, 330–361 | Ibn as-Sarrāj deals with the cleft form of expressions of the type $x\bar{a}misu\ xamsatin\ and\ x\bar{a}misu\ 'arba'atin,$ as in $allad\bar{u}na\ h\bar{u}d\bar{u}\ t\bar{u}litu-hum\ talatatun$ "those which this one is one of them are three" ('U. II, 331.2–3). | p. 176 |
| In morphosyntac | tic chapters | |
| °U. II, 424–429 | Three short sections on numerals that have different masculine and feminine forms, expressions of the type $x\bar{a}$ misu $xamsatin$ and cases where the grammatical gender of the counted object differs from its biological sex. These sections paraphrase chapters $412-415$ in the $Kit\bar{a}b$ (K . II, $176-181$) | p. 169 |
| 'U. III, 36–63 | Chapter devoted to the diminutive forms: <code>tamāniyah</code> "eight" and <code>talātāna</code> "thirty" ('U. III, 46–49); compound cardinals ('U. III, 60). As for the names of the days, they have no diminutive ('U. III, 62.10–11). | pp. 110 and 140 |

| *U. III, 63–85 | Chapter devoted to the morphology of the relative adjective (nisbah): Xamsiyyun, built on the proper name Xamsata-'Ašar ('U. III, 69.9); Tanawiyyun or Iṭniyyun, built on the proper name Iṭnā-'Ašar ('U. III, 69.10-11); ṭamāniyyun, built on the numeral ṭamānin "eight" ('U. III, 74.8); ṭanawiyyun and iṭniyyun, built on the numeral iṭnāni "two" ('U. III, 77.9-10). | p. 113 |
|--------------------------------|--|--------|
| 'U. III, 146–147 | Section on the pattern <i>mafal</i> applied to assimilated roots. Ibn as-Sarrāj mentions <i>mawḥad</i> as another <i>maʿdūl</i> form of <i>wāḥid</i> (ʾU. III, 147.1–2). | p. 116 |
| In morphophonological chapters | | |
| 'U. III, 270 | The base form of <i>sitt</i> "six" is <i>sids</i> . The diminutive form of <i>sittah</i> is <i>sudaysah</i> . | p. 112 |
| 'U. III, 307–311 | 'Aḥad derives from waḥad after the 'ibdāl "replacement" of its wāw by a hamzah ('U. III, 307.5–10). | p. 103 |
| 'U. III, 316–351 | In this long section devoted to non analogical word formation, Ibn as-Sarrāj discusses the plural form of <i>mi'ah</i> (<i>'U.</i> III, 328.5–329.8). | p. 109 |

Table 10.1: Numerals in the 'Uṣūl

We will now analyse in detail the following sections: $b\bar{a}b \ tamy\bar{\imath}z \ al-'a'd\bar{a}d$ ("chapter of specifying the numerals"; 'U. I, 311–314); $b\bar{a}b \ kam$ ("chapter on kam"; 'U. I, 315–320); and "applied issues" related to non verbal $tamy\bar{\imath}z$ ('U. I, 321–328). In these sections, Ibn as-Sarrāj presents his theory on the numerical specifier. We will also analyse the section dealing with the syntax of compound nouns ('U. II, 139–144). All these sections are subsections of a long chapter dealing with all types of 'i'rāb, declension and indeclinability ('U. I, 45–II, 221).

10.2 Specifying the numerals

The first section devoted to numerals in Ibn as-Sarrāj's 'Uṣūl fī n-naḥw is called bāb tamyīz al-'a'dād "chapter of specifying the numerals" ('U. I, 311–314) and it comes just after a section called bāb tamyīz al-maqādīr "chapter of specifying the measures" ('U. I, 307–310). At this point, Ibn as-Sarrāj calls tamyīz "specifying" the construction that involves a noun in the indefinite dependent form, e.g., 'išrūna dirhaman, and mufassir "commentator" or al-ism al-mumayyiz "specifier" this noun in the dependent form, e.g., dirhaman.

These sections are subsections of a section entitled "mention of the nouns in the dependent form" (dikr al-'asmā' al-manṣūbah), which is it-

self subdivided into two subsections, verbal and non-verbal complements. Verbal complements include $al\text{-}maf^c\bar{u}l$ and $al\text{-}mu\check{s}abbah\ bi\text{-}l\text{-}maf^c\bar{u}l$. Non-verbal complements include measure specifiers, numerical specifiers and the specifier of kam. Unlike in the Muqtadab, the difference between verbal and nominal $tamy\bar{t}z$ is thus very clear.

We will first consider the general form of the $tamy\bar{t}z$ construction, which is a subcase of al- $mu\check{s}abbah$ bi-l- $maf^*\bar{u}l$, i.e., a complement in the dependent form whose operator is a verb but which is not a real $maf^*\bar{u}l$, just like the $h\bar{a}l$.

10.2.1 The general form of the *tamyīz* construction

In ${}^{\prime}U$. I, 222-228, Ibn as-Sarrāj presents the $tamy\bar{\imath}z$, which is—along with the $h\bar{\imath}al$ —a construction that involves an operator (${}^{\prime}amil$). This operator is either a "real verb" ($fi{}^{\prime}l$ $haq\bar{\imath}q\bar{\imath};$ ${}^{\prime}U$. I, 213.5) or a word that has a verbal meaning (${}^{\prime}U$. I, 222.2). In this construction, the complement is said to be "resembling the $maf{}^{\prime}\bar{\imath}ul$ " ($mu\check{s}abbah\ bi-l-maf{}^{\prime}\bar{\imath}ul;$ ${}^{\prime}U$. I, 212.17) because it is in the dependent form and it has a verbal operator.

In expressions like *qad tafaqqa'a Zaydun šaḥmatan* "Zayd exploded [in terms of] grease" and *imtala'a l-'inā'u mā'an* "the container is full of water", Ibn as-Sarrāj makes it clear that *šaḥmatan* and *mā'an* are "operated on by a verb" (*al-'āmil fī-hā fī·l*; '*U.* I, 222.2); they are put in the dependent form, and although they surface in the shape of a complement they are the agent of the verb "in meaning" (*fī l-ma'ná*; '*U.* I, 222.2–3). The term *ma'ná* refers here to [m. 13], the underlying structure of the sentence. In other words, "its surface form is the complement but its "meaning" is the agent" (*fa-lafḍu-hu lafḍu l-maf'ūl wa-huwa fī l-ma'ná fā'il*; '*U.* I, 222.5–6).

The operator can also be "in the meaning of a verb" (fī ma'ná l-fi'l; 'U. I, 222.2) and not a "real verb" (fī ḥaqīqī) as in huwa 'aḥsanu-hum wajhan ("he is the most handsome [in terms of] face"; 'U. I, 222.7). Again in this type of expression, the complement is in the dependent form although, in "meaning", it is the agent: "what is the most handsome is the face" (wa-l-ḥasanu huwa l-wajhu; 'U. I, 222.8).

The specifier "has to be indefinite, referring to genera" (*lā takūnu 'illā nakirātin tadullu 'alá l-'ajnāsi*; '*U.* I, 223.1–2). Whether the specifier is in the

²See Ṭāhā (2009, 412) for an account of <code>haqīqī</code> "real" and <code>ġayr haqīqī</code> "non-real" verbs in Ibn as-Sarrāj's 'Uṣūl, and, more generally, for the introduction of a semantic criterion to verbal transitivity. Al-Mubarrad is probably the one who introduced this distinction among verbs. See Ṭāhā (1995, 90, 100–101) and Ṭāhā (2010, 111).

singular or in the plural is the choice of the speaker (*kunta bi-l-xiyāri fī l-ismi l-mumayyizi 'in ši'ta jamma'ta-hu wa-'in ši'ta waḥḥadta-hu*; 'U. I, 223.3).

Concerning the number of the specifier after numerals, Ibn as-Sarrāj simply quotes al-Mubarrad's position that it is not allowed to say 'išrūna darāhima, putting darāhima in the plural, for the reason that the number is already expressed in the numeral ('U. I, 223.7–10 quoting M. III, 34.11–14).

Ibn as-Sarrāj then mentions the possibility to express the specifier before its operator as in šaḥman tafaqqa'tu or 'araqan taṣabbabtu. He quotes the position of al-Māzinī and al-Mubarrad who accept this possibility if the operator is a verb but reject it otherwise, as in 'išrūna dirhaman, which cannot be uttered *dirhaman 'išrūna. According to Ibn as-Sarrāj, Sībawayh and the Kūfans reject it in all cases ('U. I, 223.10–224.7). In this matter, Ibn as-Sarrāj seems to follow al-Mubarrad and al-Māzinī, but the text is not explicit.

The chapter entitled $b\bar{a}b$ at-taq $d\bar{n}m$ wa-t-ta' $x\bar{x}r$ ("chapter on fronting and postponing"; 'U. II, 222–247) is entirely devoted to the possibility of changing the order of the words and in 'U. II, 229–230 Ibn as-Sarrāj deals with the tamyīz construction. He repeats here the impossibility to put the specifier before its nominal agent as in incorrect *dirhaman 'išrūna ('U. II, 229.9–10). If the agent is a verb, he also repeats that there are different opinions among grammarians but that "analogically to its chapter" (qiyāsu bābi-hi) the mufassir should also be postponed because it is the "real agent" (li-anna-hu fā'ilun fī l-ḥaqīqati) and it cannot follow the rules of the other maf'ūlāt ("complements"; 'U. II, 229.12–17).

10.2.2 Specifying the numerals

In the section devoted to the numerical specifier (${}^{\circ}U$. I, 311-314), Ibn as-Sarrāj uses four different terms to describe the role of the counted object. It is a noun that "specifies" (yumayyizu; ${}^{\circ}U$. I, 311.2; 312.10) the numeral, it is a "need" ($h\bar{a}jah$; ${}^{\circ}U$. I, 311.2) of the numeral, the numeral is "made clear" by it ($yubayyanu\ bi-hi$; ${}^{\circ}U$. I, 312.5), it "comments" (yufassiru; ${}^{\circ}U$. I, 314.1) on the numeral.

In the introduction to these subsections devoted to the nominal *tamyīz*, Ibn as-Sarrāj discusses the difference between the two types of *tamyīz* construction, the first one, which applies to verbal sentences, and the second one, which applies to numerals and measures:

(10) The difference between this kind of *tamyīz* [for numerals] and the previous one [for verbal sentences] is that the complement in the dependent form here takes the dependent form after the completion of a noun whereas the other [complement] takes the dependent form after the completion of a sentence (**U.* I, 306.7–10).

These two types of $tamy\bar{t}z$ construction, verbal and nominal, have very different meanings.³ In $tafaqqa^a Zaydun \, \dot{s}ahmatan$, $imtala^a a \, l$ - $\dot{i}n\bar{a}^a u \, m\bar{a}^a a n$ or $huwa \, \dot{a}hsanu$ - $hum \, wajhan$, the verbal specifier has the meaning of the agent $(f\bar{a}^c il)$ of its operator $(tafaqqa^a a, imtala^a a, and \, \dot{a}hsan)$ although it surfaces in the shape of its complement; whereas the numerical specifier simply specifies the numeral. Its meaning is not the agent of the operator.

Ibn as-Sarrāj mentions two possibilities for the nominal $tamy\bar{\imath}z$: It comes either after a $mud\bar{\imath}af$ and a $mud\bar{\imath}af$ 'ilayh or after a noun carrying an ending $n\bar{\imath}un$ (understand, a compensatory $n\bar{\imath}un$).⁴

(11) This type is any noun that we mention for a [communicative] purpose after an annexed noun or after a noun that carries an overt or an implied $n\bar{u}n$. Both [nouns] are completed by the annexation and by the $n\bar{u}n$, and this $n\bar{u}n$ or the annexation separates between them; otherwise it would have been correct to annex [the first term] to it ($^{\circ}U$. I, 306.6–9).

Ibn as-Sarrāj says that numerals are "in need of a specifier" (taḥtāju ʾilá mā yumayyizu-hā), just like measures:

³Talmon (2009, 208 note 36) writes that "Ibn Sarrāğ's statement wal-mafɛūl huwa fāɛil fī l-maɛ nā indicates that he fell short of perceiving the dynamic dimension of the early SNIP principle". It would be more accurate to say that Ibn as-Sarrāj describes the $tamy\bar{t}z$ on two separate levels, syntactic, where the SNIP principle applies, and semantic, where it has different meanings depending on its operator. See above, p. 202, a presentation of Owens' SNIP.

⁴See above, p. 155, for more details on the compensatory $n\bar{u}n$.

(12) Know that numerals, just like measures, need something that specifies them "as their need"; they [the numerals] come in two types: The first type has the right to be annexed, as is the case for those carrying a $tanw\bar{t}n$, the other type cannot be annexed, as is the case for those carrying a $n\bar{u}n$ or those that have been built with another noun and have the status of one noun (${}^{2}U$. I, 311.2-5).

In the section devoted to the measure $tamy\bar{\imath}z$ (${}^{\prime}U$. I, 307–310), Ibn as-Sarrāj explains that:

(13) if it were not for the $mud\bar{a}f$ or the $n\bar{u}n$ you would have annexed it to it because for any noun that follows a noun which is not its xabar nor a qualifier nor its badal, the $id\bar{a}fah$ is the rule (iU. I, 308.2–4).

From this quotation it seems that the specifying construction is only applied where annexation is not possible. This shows that there is a shift in this section devoted to "specifying the numerals". Although the category of $tamy\bar{t}z$ clearly has a syntactic origin, linked with the dependent form, the numerical specification is described in a semantic category that can be expressed in two different syntactic constructions, annexational and specifying. In the end, the link of the numerical $tamy\bar{t}z$ to dependent form objects $(mans\bar{t}b\bar{t}t)$ is secondary.

Ibn as-Sarrāj does not discuss the dependent form *per se*. It seems to be self-understood that since annexation is not possible, the specifier has no other possibility but to surface in the dependent form. In the outline of the ${}^{\prime}U_{5}\bar{u}l$, the numerical and measure specifiers are inserted as a subcase of nouns in the dependent form, without any other justification, and with no link with any verbal "strength", even at a surface level, as is the case in the $Kit\bar{a}b$ and the Muqtadab.

What does $ka-h\bar{a}jati-h\bar{a}$ exactly mean in the expression $taht\bar{a}ju$ 'ilá $m\bar{a}$ yumayyizu-hā $ka-h\bar{a}jati-h\bar{a}$ ('U. I, 311.2)? It seems to be redundant here. What is it exactly that makes the numerals "need" a specifier? Similar expressions in the 'Uṣūl include a comment on the following two sentences, darabtu wadaraba-nī Zaydun "I hit and Zayd hit me" ('U. II, 315.5), which are semantically connected by the fact that the object of the first verb is elided and expressed only as the agent of the second verb. Ibn as-Sarrāj discusses and rejects the possibility to topicalise the agent of the two verbs. He says that the first sentence "needs" the second sentence as its mandatory comment: min 'ajli 'anna hātayni l-jumlatayni ka-jumlatin wāḥidatin li-hājati l-'ūlá 'ilá mā

⁵The topicalised form is *aḍ-ḍāribu ʾanā wa-ḍ-ḍārib-ī Zaydun* "I am the one who hits and Zayd is he one who hits me" (*'U.* II, 315.22).

yufassiru-hā min aṭ-ṭāniyati "because these two sentences are like one single sentence, due to the need that the first one has of what comments it in the second one" ('U. II, 316.15–17). The argument given by Ibn as-Sarrāj is that transitive verbs need their object just like a *mubtada*' needs its *xabar*.

Another occurence of this <code>hajah</code> is found in <code>fa-halu-hu</code> <code>ka-hali</code> <code>lladadadala dakartu</code> <code>la-ka</code> <code>min</code> <code>al-mubtada'</code> i <code>wa-l-xabari</code> <code>wa-hajati</code> <code>kulli</code> <code>wahidin</code> <code>min-huma'</code> ilá <code>ma</code> <code>yutimmu-hu</code> "its case is like the case of what I mentioned about the <code>mubtada'</code> and the <code>xabar</code> and the need that each has of what completes it" ('U. II, <code>318.12-13</code>). Here again, Ibn as-Sarraj implies that numerals are in the same "need" of a specifier as the <code>mubtada</code> is in need of a <code>xabar</code>.

The end of the section devoted to the numerical *tamyīz* deals with the different shapes it can take. We will consider them now.

10.2.3 The annexation of the numeral to the counted object

The first case of numerical specifier that Ibn as-Sarrāj mentions is not in the dependent form but in the oblique form.

Between "three" and "ten", the numeral is annexed to the counted object in a lesser plural form, as in *talāṭatu 'aṭwābin* "three dresses" or in *xamsatu 'aklubin* "five dogs" (*'U.* I, 311.5–8). In the introduction to a section devoted to broken plurals (*'U.* II, 429–III, 35), Ibn as-Sarrāj says that it is not rare for a greater plural form to be used instead of a lesser plural form, as in *ṭalāṭatu šusūʿin* "three sandal thongs" and Qur'ānic *ṭalāṭatu qurūʾin* "three menstruations" (*'U.* II, 430.3–9) and he adds later that if one says *xamsatu kilābin* instead of the expected *xamsatu 'aklubin*, what is intended is the "genus" (*jins*) as in *xamsatun min al-kilābi* (*'U.* II, 434.1–2).

It is possible to add the definite article to the *muḍāf ʾilayh*, just like in a regular ʾiḍāfah, which in turn makes the first term definite: <u>talāṭatu l-ʾaṭwābi</u> "the three dresses" (ʾU. I, 311.8–10).

The same goes for "one hundred" and "one thousand" because "one hundred" is similar $(na\bar{q}\bar{\iota}r)$ to "ten", which can be in the position of $mu\bar{q}\bar{a}f$, and "one thousand" is equivalent to "one hundred":

(14) and in the same way "one hundred" and "one thousand", because "one hundred" is equivalent to "ten" since it is "ten tens", and "one thousand" is equivalent to "one hundred" since it is "ten hundreds" ('U. I, 311.10–11).

At the end of this paragraph, Ibn as-Sarrāj quotes al-Mubarrad's observation that the $tanw\bar{n}n$ in mi'ah and 'alf is attached like a suffix ("not necessary" $\dot{g}ayr\,l\bar{a}zim$) whereas the $n\bar{u}n$ in ' $i\dot{s}r\bar{u}na$ is attached at a lower level ("necessary" $l\bar{a}zimah$) and cannot be deleted in pausa, nor after the addition of the definite article ('U. I, 311.12–14 quoting M. III, 38.3–5). See above, p. 233, for this issue in the $Muqta\dot{q}ab$, and footnote 1, p. 155, on the difference between the $tanw\bar{n}n$ and the dual and plural $n\bar{u}n$.

However, it is not completely true that the $n\bar{u}n$ in 'išr $\bar{u}na$ cannot be deleted. When the annexation expresses possession (and not the genus) it is possible to annex 'išr $\bar{u}na$ after the elision of the $n\bar{u}n$. Compare to 'išr \bar{u} Zaydin "Zayd's twenty", which cannot mean "twenty Zayds", unlike 'išr $\bar{u}na$ Zaydan. In a section dealing with the transformation of the $w\bar{u}w$ into a $y\bar{u}a$ 'he mentions the expression $h\bar{u}a$ ihi 'išru-ka "these are your twenty", where the u-w in 'išru-va becomes a u-va in 'išru-va "my twenty" ('u-u-va in 'išru-va "my twenty") ('u-u-va in 'išru-va "my twenty")

Another case when the final nūn in 'išrūna can be deleted is found in a section that deals with nouns carrying a final $n\bar{u}n$, which remains after the generic negation $l\bar{a}^6$, as in $l\bar{a}$ ģu $l\bar{a}$ mayni ḍarīfayni la-ka "you do not have two good lads". Ibn as-Sarrāj says that it is correct to say $l\bar{a}$ 'išrīna dirhaman la-ka "you do not have twenty dirhams" ('U. I, 387.7; 391.4) but if one does not mention the dirhams, it is correct to say $l\bar{a}$ 'išrī la-ka' "you have no twenty" ('U. I, 391.4–5).

In exactly the same manner, in a section devoted to "applied issues" linked with the generic negation $l\bar{a}$ ('U. I, 402-408), Ibn as-Sarrāj comments on the expression $l\bar{a}$ $\dot{g}ul\bar{a}mayni$ $wa-l\bar{a}$ $j\bar{a}riyatay$ $la-ka^8$ "you do not have two lads nor two maids", where $j\bar{a}riyatay$ is annexed to la-ka, as if one was saying $wa-l\bar{a}$ $j\bar{a}riyatay-ka$ ('U. I, 402.6).

These examples ($h\bar{a}dihi$ 'išrū-ka, 'išriyya and $l\bar{a}$ 'išrī la-ka) show that the final $n\bar{u}n$ in 'išrūna can be elided but only if the annexation means the possession, and not if the following noun is a numerical specifier.

Ibn as-Sarrāj does not introduce here a distinction between two types of annexation, possessive and generic. However, in a section devoted to the annexation ('U. II, 5–19), he makes a distinction between 'iḍāfah maḥḍah "proper annexation" and 'iḍāfah ġayr maḥḍah "improper annexation" ('U. II, 5.4). The proper annexation can have two meanings: possession (bi-ma'ná l-

⁶See above, footnote 5, p. 78, a brief presentation of the generic negation $l\bar{a}$.

 $^{^{7}}$ This is the reading of Bohas (1993, 96) according to the manuscript of Rabat, instead of al-Fatli's $l\bar{a}$ ' $i\bar{s}r\bar{n}a$ la-ka.

^{*}The edition of al-Fatlī reads *jāriyata-ka* and is again corrected by Bohas (1993, 97). The impression that one gets while reading this section is that its text is far from clear and its very poor edition is not exactly helpful.

 $l\bar{a}m$; 'U. I, 53.8) and specification (bi-ma' $n\acute{a}$ min; 'U. I, 53.8), because the particle min expresses the "genus" (jins; 'U. I, 53.17). The improper annexation consists in four different types that do not concern us here (the $mud\bar{a}f$ is an ism al- $f\bar{a}$ 'il; or it is a qualifier that applies to what precedes it; or a comparative of the form 'af'al; or the $mud\bar{a}f$ 'ilayh is a qualifier that applies to the $mud\bar{a}f$).

As for the two meanings that the proper annexation can have, does Ibn as-Sarrāj intend here the meaning as a reformulation ($tafs\bar{\imath}r$, $ta^{\imath}w\bar{\imath}l$, [m. 3]) or as the syntactic underlying level (${}^{\imath}asl$, $taqd\bar{\imath}r$, [m. 13])? Since the underlying structure is the same in both cases, i.e., the $mud\bar{\imath}af$ 'ilayh is equivalent to a particle and its $majr\bar{\imath}ur$, the only difference between these expressions is their reformulation [m. 3].

10.2.4 Cases where annexation is impossible

Above "ten", cardinal numerals are compound nouns made up of two nouns that both carry an invariable fathah as in 'ahada-'ašara or xamsata-'ašara. The compound itself occupies the position of a numeral carrying an ending $n\bar{u}n$ ($f\bar{\iota}$ mawdi'i 'adadin $f\bar{\iota}$ -hi $n\bar{u}$ nun; 'U. I, 311.15). More precisely, Ibn as-Sarrāj explains that the second part (-'ašara) takes the slot of a $tanw\bar{\iota}n$ (-'ašara qad $q\bar{u}$ mat maq \bar{u} ma at- $tanw\bar{\iota}n$ i; 'U. I, 312.1). For him, the evidence for this assumption is found in the expression $itn\bar{u}$ -'ašara dirhaman where -'ašara has replaced the $n\bar{u}n$ (-'ašara qad ' \bar{u} qabat an- $n\bar{u}na$; 'U. I, 312.2). Ibn as-Sarrāj follows Sībawayh's interpretation of all compounds in one and the same frame, namely, that of the compensatory $n\bar{u}n$. It is remarkable that the case of $itn\bar{u}$ -'ašara serves as an evidence for the analysis of the other compounds, whereas for al-Mubarrad the difference between them encourages him to analyse them differently.

He adds that both terms (the numeral and the counted object) did not "meet" ($lam\ tajtami'\bar{a}$; 'U. I, 312.2). This means that they are separated by $-`a-\check{s}ara$ and that annexation of the numeral is impossible. This is true of cardinals until "nineteen" ('U. I, 312.3). In this case, the specifier is expressed by a noun in the singular dependent form.

In the same manner, the specifier (*alladī yubayyanu bi-hi*) can only surface as an indefinite singular after decades, as in '*išrūna tawban* "twenty dresses" and *tis*'ūna ġulāman "ninety lads" ('U. I, 312.5–6).

Morphologically, "twenty" is derived from "ten", as Ibn as-Sarrāj puts it "if you double the lowest decade, which is 'ten', it has a name derived from

⁹See above, p. 27, the different types of meanings.

its root" (fa-'idā ḍā'afta 'adná l-'uqūdi wa-huwa 'ašarah kana la-hu smun min lafdi-hi; 'U. I, 312.3–4).

10.2.5 The counted object after "one hundred" and "one thousand"

Ibn as-Sarrāj is the only one to point out what seems to be a contradiction in the expression of the counted object after "one hundred" and "one thousand". Why should it surface in the singular, since annexation is possible? In other words, nothing forbids the *muḍāf ʾilayh* to be in the plural, just like after "three" to "ten", so why should the counted object be in the singular, just as it does after decades? His answer is that "one hundred" is both comparable to 'ašarah and 'išrūna, which behave differently.

Since "one hundred" is "ten tens", it must be annexable just like "ten" (fa-wajaba la-hā min hāḍihi l-jihati al-ʾiḍāfata; 'U. I, 312.8). But since "one hundred" immediately follows "ninety", it must have a specifier in the singular just like the decades (fa-wajaba ʾan yakūna mumayyizu-hā wāḥidan; 'U. I, 312.9–10). The result is that "one hundred" is annexed to a noun in the singular. This noun can carry the definite article, as in a regular ʾiḍāfah (ʾU. I, 312.10–11).

"One thousand" behaves exactly like "one hundred" (wa-kaḍālika 'alfun hukmu-hu hukmu mi'atin; 'U. I, 312.11).

In the dual, the ending $n\bar{u}n$ is elided as in $mi^2at\bar{a}$ dirhamin "two hundred dirhams" and ' $alf\bar{a}$ dirhamin "two thousand dirhams" ('U. I, 312.11–12).

After this explanation, Ibn as-Sarrāj writes that in poetry one may find a noun in the indefinite dependent form after "one hundred" as in ' $id\bar{a}$ ' \bar{a} ša l-fatá mi'atayni ' \bar{a} man ("if the boy lived two hundred years"; 'U. I, 312.14). The author does not mention Q. 18, 25 $\{tal\bar{a}ta \ mi$ 'atin $sin\bar{n}na\}$ "three hundred years" which is a traditional crux for grammarians (see above, p. 87).

Then he quotes Sībawayh's opinion that *mi'ah* should have been put in the plural after "three" to "nine" but that it was treated like "eleven" and "twenty". This explanation is difficult to understand without going back to the *Kitāb* where Sībawayh explains that just as the counted object after "eleven" and "twenty" is in the singular, *mi'ah* remains in the singular and that it is not rare for a singular to express a plural (*'U.* I, 313.1–2 quoting *K.* I, 87.11–13). See above, p. 181, for Ibn as-Sarrāj's quotation of the *Kitāb*, and p. 201, for the commentary of this passage in the *Kitāb*.

Then follow other quotations from the $Kit\bar{a}b$ where Sībawayh gives examples of elision of the $tanw\bar{n}$ and use of a singular to express a plural ('U. I, 313.2–8 quoting K. II, 87.19; 88.2–5). The link between this passage of the $Kit\bar{a}b$ and the syntax of mi'ah is quite unclear (see above, footnote 19, p. 201), but here in the 'Uṣ $\bar{u}l$ it is even more elliptic and it would be impossible to understand without the text of the $Kit\bar{a}b$.

The last assertion of Ibn as-Sarrāj in this section is very strange. We will investigate it below.

(15) Know that kam is an unspecified numeral so that its specifier has the same status as the specifier of the numeral and I have devoted a separate chapter to it that follows this chapter (U. I, 314.1-2).

10.3 Kam is an unspecified numeral

Kam has two "positions" (mawdi'; 'U. I, 315.2): interrogative and predicative (or exclamatory). The interrogative kam behaves like 'išrūna as in kam dirhaman la-ka? ("how many dirhams do you have?"; 'U. I, 315.3-4) and the predicative kam behaves like mi'ah as in kam ģulūmin la-ka qad dahaba! ("how many of your lads have gone!"; 'U. I, 317.17-318.1). Both functions are treated differently in order to avoid confusion (xuṣṣa l-istifhām bi-n-naṣb li-yakūna farqan bayna-hu wa-bayna l-xabari; 'U. I, 315.6).

In these expressions, dirhaman is said to "comment" on kam (yufassiru; 'U. I, 315.4). The same verb is used three more times in the same section, at the exclusion of other verbs used in the previous section to describe the link between the numeral and its counted object (bayyana, mayyaza). In an even more specific way, Ibn as-Sarrāj says that kam dirhaman la-ka? means kam la-ka min ad-darāhimi?, just as 'išrūna dirhaman means 'išrūna min ad-darāhimi and that min was elided out of lightness ('U. I, 315.11–13). The only difference between kam and 'išrūna in this matter being—according to al-Xalīl—that it is possible to separate between kam and its "commentary" and say kam la-ka dirhaman? but not between 'išrūna and dirhaman ('U. I, 315.15–316.1).

In this section, Ibn as-Sarrāj explains that "kam is a noun that subsumes all numerals" (kam ismun yantaḍimu l-ʻadada kulla-hu; 'U. I, 315.6) and that, just like numerals that behave in two different ways, in annexational and specifying constructions, kam behaves in two different ways, in its interrogative and predicative function ('U. I, 315.7–8).

In these two functions, kam has to be in the syntactic position of the $mubtada^{\circ}$ but in meaning ($f\bar{\imath}\ l-ma^{\circ}n\acute{a}$, i.e., the underlying structure [m. 13]) it can be the agent ($f\bar{a}^{\circ}il$), as in $kam\ rajulan\ 'at\bar{a}-n\bar{\imath}$? ("how many men came to me?"; 'U. I, 316.6); or the object ($maf^{\circ}\bar{u}l$), as in $kam\ rajulan\ darabta$? ("how many men did you hit?"; 'U. I, 316.7); or the topic of a nominal sentence ($mubtada^{\circ}$), as in $kam\ d\bar{a}niqan\ dirhamu-ka$? ("how many $d\bar{a}niq$ is your dirham?"; 'U. I, 316.7–8); or a circumstantial complement (darf), as in darabta is "like the rest of the numerals at an underlying level" (darabta darabta dara

Then comes a clue to the assertion that *kam* is an "unspecified numeral" (*ism 'adad mubham*; '*U.* I, 314.1):

(16) *Kam* is a numeral and the status of numerals is the same as that of the counted object; if the counted object is time, it is time, and if it is an animal, it is an animal, and if it is something else, its status is the same (*'U.* I, 317.4–6).

Although it is not stated explicitly here, this statement is an explicitation of what Ibn as-Sarrāj says at the end of the previous section: i'lam 'anna kam ismu 'adadin mubhamun fa-mā yufassiru-hā bi-manzilati mā yufassiru l-'adadi ("know that kam is an unspecified numeral and what comments it has the status of what comments the numeral"; 'U. I, 314.1). In other words, saying that kam is an ism 'adad mubham means that kam "subsumes all numerals" (yantaḍimu l-'adada kulla-hu; 'U. I, 315.6) and is treated like a numeral (hukmu-hu hukmu-hu; 'U. I, 317.6).

In Sībawayh's words, as quoted loosely by Ibn as-Sarrāj, kam stands for a numeral: huwa kināyatun li-l-'adadi bi-manzilati fulānin fī <math>l-hayawāni wa-huwa mubham ("it [kam] stands for a numeral, in the same way as fulān [stands] for an animal, being unspecified"; 'U. I, 320.7–8 quoting K. I, 256.10). The teaching of Ibn as-Sarrāj pushes Sībawayh's opinion towards an even tighter analogy between kam and the numerals.

¹⁰This assertion of Ibn as-Sarrāj is strange since the indefiniteness of *kam dāniqan* and the definiteness of *dirhamu-ka* plead for the opposite, namely, that *kam dāniqan* is in the slot of the *xabar*, and *dirhamu-ka* in the slot of the postponed *mubtada*'.

10.4 Issues on the numerical specifier and kam

'U. I, 321–328 is devoted to "applied issues" ($mas\bar{a}$ 'il) related to the measure and numerical specifiers as well as to kam. In this section, Ibn as-Sarrāj quotes a few grammarians, whose opinion he discusses: al-Xalīl (d. 170/786), Yūnus (d. 182/798), al-Kisā'ī (d. 189/805), al-Farrā' (d. 207/822), al-'Axfaš (d. 215/830), 'Abū l-'Abbās (al-Mubarrad, d. 285/898) and 'Aḥmad b. Yaḥyá (Ṭa'lab, d. 291/904). Other grammarians are referred to collectively, like al-Baṣriyyūna and al-Baġdādiyyūna. In three places, Ibn as-Sarrāj himself is referred to as 'Abū Bakr. This happens after other grammarians have been quoted, in order to indicate that the author goes back to expressing his own opinion. It is also a marker of the transmission history of the text, whose final form was not composed by Ibn as-Sarrāj.

The topics dealt with in this section that are related to numerals and their specifier (mufassir) are the following: the expression of definiteness; the possibility to express the specifier in a specifying construction instead of an annexational construction, as in xamsatun ' $a\underline{t}w\bar{a}ban$; the expression of appositive complements ($taw\bar{a}bi$ '); the possibility of expressing the specifier by something identifiable.

There are other issues dealt with in this section. They are related to the differences between *kam* and (other) numerals, such as the elision of its specifier, as well as the interference between the *istiṭna*' construction and the specifier after *kam*. These other issues will not be commented on here because they would take us too far from numerals.

Before taking a look at the issues linked with numerals, it is interesting to note that Ibn as-Sarrāj begins this section by telling the difference between the three possible following constructions for measures: *raṭlun zaytan*, *raṭlu zaytin* and *raṭlun zaytun* "a rotl of oil".

(17) You say 'indī raṭlun zaytan and raṭlu zaytin [which can also be read raṭlun zaytun]. If it is in the dependent form, it is a specifying [construction]; if it is in the oblique form, it is an annexational [construction]; and if it is in the independent form, it is an appositional [construction]. All of this is correct with measures ('U. I, 321.2-3).

These three expressions are built with the three constructions: $tamy\bar{\imath}z$ "specifying", ' $id\bar{a}fah$ "annexational" and ' $itb\bar{a}$ "appositional", respectively.

As for the *tamyīz*, its meaning here is the expression of the measure: *raṭlun zaytan* means *miqdāru raṭlin zaytan* "the amount of a rotl in terms of oil" (see other comparable examples in 'U. I, 321.4–6).

As for the 'iḍāfah, its meaning here is specification (it refers to a "genus" jins) as in raṭlun min zaytin, which is, along with possession, one of the two possible meanings of this construction ('U. I, 53–54).

As for the ' $itb\bar{a}$ ', Ibn as-Sarrāj does not mention which meaning is concerned: badal, $tawk\bar{\iota}d$, '1 na't or 'atfal- $bay\bar{a}n$. See 'U. II, 19–79 for a detailed presentation of the $taw\bar{a}bi$ '. This point will be dealt with below (pp. 259f).

10.4.1 The expression of definiteness

The first issue related to numerals in these <code>masā'il</code> related to the numerical specifier is the addition of the definite article to the numeral and to the specifier. According to Ibn as-Sarrāj, al-Kisā'ī (d. 189/805) allows the addition of the definite article to both the numeral and its specifier of the two types (annexational and specifying constructions), as in <code>al-xamsatu l-'atwābi</code> and <code>al-xamsatu l-'atwāba</code> ('U. I, 321.14). Later in the same section he even quotes al-Kisā'ī's opinion that the following expression is valid: 'indī <code>l-xamsatu l-'alfī¹² d-dirhami</code> ("I have the five thousand dirhams"; 'U. I, 325.4). But Ibn as-Sarrāj disapproves of this use, just as he disapproves of 'indī <code>l-xamsata l-'ašara l-'alfa d-dirhami</code> ("I have the fifteen thousand dirhams"; 'U. I, 325.5–7).

Baṣrans are said to have rejected the addition of the article in all cases (${}^{2}U$. I, 321.16) and al-Farrā 3 is reported to have accepted it only for active participles and adjectives that resemble them, as in $a\dot{q}$ - $d\bar{a}$ ribu r-rajula and al- $d\bar{a}$ nanu l-wajhi (${}^{3}U$. I, 321.17).

10.4.2 Is xamsatun 'atwāban a valid possibility?

Ibn as-Sarrāj reports that al-Farrā' teaches that the expression 'indī xamsatun 'atwāban "I have five [in terms of] dresses" shares "something" with the expression marartu bi-rajulin ḥasanin wajhan "I passed by a handsome man [in terms of] face" ('U. I, 324.5–6). From the rest of the text, it appears that the underlying question is the following. Is there in numerals something of the verbal strength of a corresponding maṣdar that would justify the specifying construction, even if the numeral is annexable? In other words, if there is a

¹¹Both terms, *tawkīd* and *ta'kīd*, are found in the *'Uṣūl*, almost 70 times each.

¹²This singular is unexpected here.

verb-like strength in annexable numerals like *xamsah*, it would be possible to say 'indī xamsatun 'atwāban.

'Abū Bakr (Ibn as-Sarrāj) disapproves of this use because, unlike *ḥasan*, numerals do not resemble the active participle; however, he admits it could be found as a poetic licence ('U. I, 324.7-9).

The position of Taʿlab is quite different since, according to Ibn as-Sarrāj, he considers that "all specifiers in the dependent form confer a verbal interpretation on what precedes them" (kullu manṣūbin ʻalá t-tafsīri fa-qad juʻila mā qabla-hu fī taʾwīli al-fī li; 'U. I, 324.10-11) as in 'indī mā yuʻaddu bi-hi d-dirhamu xamsatan ("I have that in which the dirhams are counted to be five"; 'U. I, 324.12). It is as if xamsah "had been made a maṣdar" (fa-juʻilat la-hā maṣdaran; 'U. I, 324.12). In other words, if 'atwāban surfaces in the dependent form it confers a verbal (maṣdar) interpretation to xamsah. The meaning of such a maṣdar is thus "counting something to be five" as in 'indī mā yuʻaddu bi-hi d-dirhamu xamsatan mentioned above.

At the end of the section, Ibn as-Sarrāj quotes Bagdadian grammarians who say that both 'indī xamsatun waznan and 'indī xamsatun waznun "I have five measures" are valid possibilities ('U. I, 326.1–2). In the first one, xamsah is treated like a maṣdar ('U. I, 326.2) and in the second one, waznun is treated like a qualifier (na't) and the expression means xamsatun mawzūnatun "five measured" ('U. I, 326.2–3).

10.4.3 Appositive complements

Ibn as-Sarrāj is the only author to deal with the issue of the expression of appositive complements ($taw\bar{a}bi$) of the counted object, such as the qualifier (sifah in this section; na't is also found) and the appositional substantive (badal). What is as stake is the "number" of the numeral. If the appositive complement agrees with the numeral, it agrees in the plural.

For example, it is both possible to say 'indī 'išrūna rajulan ṣāliḥan ("I have twenty righteous men"; 'U. I, 325.7–8) with the qualifier applying to the specifier and agreeing with it, and 'indī 'išrūna rajulan ṣāliḥūna ("I have twenty righteous men"; 'U. I, 325.7–8) where the qualifier applies to the numeral itself, hence its independent form. All authors agree on the fact that 'išrūna is not a plural, it is however clear here that its qualifier is put in a plural form.

And if the qualifier is "a plural that has a singular surface form" ('in kāna jam'an 'alá lafdi l-wāḥidi; 'U. I, 325.9), it can either be put in the independent

form or in the dependent form, as in 'indī 'išrūna dirhaman jiyādan and jiyādun ("I have twenty excellent dirhams"; 'U. I, 325.10). In other words, the singular surface pattern of jiyād (fi'āl) makes it possible to treat it as a qualifier of dirhaman, instead of the singular jayyid which is expected, as in 'indī 'išrūna dirhaman jayyidan.

In the same way, the *badal* can agree either with the numeral as in 'indī talātu niswatin 'ajūzāni wa-šābbatun¹³ or with the specifier as in 'indī talātu niswatin 'ajūzayni wa-šābbatin "I have three women, two old ones and one young one" ('U. I, 325.13–14).

10.4.4 The specifier as an identifiable thing

In expressions like *xamsatu-ka* "your five" and *xamsatu 'atwābi-ka* "your five dresses", Ibn as-Sarrāj says that no specifier is expressed, or in his words, "you have not extracted any specifier out of it" (*lam tuxrij min-hu mufassiran*; 'U. I, 325.15). This is because the numeral was "annexed and defined" ('udīfa wa-'ullima; 'U. I, 325.14–15). This means that the specifier has to refer to a whole indefinite species, not to something identifiable by the listener. However, the specifier can carry the definite article ('U. I, 311.8–10), as in *xamsatu l-'atwābi* "the five dresses", but in this case 'atwāb still refers to the whole species, not to particular items. The difference between *xamsatu 'atwābi-ka* and *xamsatu l-'atwābi* is that in the former what is expressed is not a specifier but a regular *mudāf 'ilayh*.

For Ibn as-Sarrāj there is thus a difference between *xamsatu l-'atwābi*, which he says is a valid way of specifying the numeral (*'U.* I, 311.8–10), and *xamsatu 'atwābi-ka* where 'atwābi-ka cannot be called a specifier because it refers to something identifiable¹⁵ (*'U.* I, 325.14–15).

The point here is that a specifier has to be a generic term that refers to the whole species, even with the definite article, and not to a particular item. This distinction between a definite species and an identifiable item enables Ibn as-Sarrāj to consider *ad-dirhami* as a *tamyīz* in the expression *mi'atu d-dirhami*, which was a problem in al-Mubarrad's theory, because of his definition of the *tamyīz* as an indefinite noun (see above, p. 235).

¹³The text reads 'indī talātu niswatin wa-'ajūzāni wa-šābbatun but the first wāw makes no sense.
Nevertheless, it was not corrected by Bohas (1993). We propose to suppress it.

¹⁴See Talmon (2009, 206) on the expression xaraja mufassiran, as used by al-Farrā'.

 $^{^{15}}$ Marogy (2010, 95) borrows this pragmatic category from Lambrecht (1994, 92) and Lyons (1999, 282) and shows that it is more efficient than definiteness and indefiniteness to understand the $Kit\bar{a}b$. Here also in the $^{\prime}U\bar{s}ul$, it enables us to distinguish between a definite species and an identifiable item. The latter cannot be used in a $tamy\bar{v}z$ relationship whereas the former can.

However, Ibn as-Sarrāj does not mention here the difference in meaning between these expressions. What is the exact nuance in meaning between *xamsatu 'atwābin* and *xamsatu l-'atwābi* and how different is it from *xamsatu 'atwābi-ka* in terms of definiteness? According to his own definition of 'iḍā-fah, these three expressions should be equivalent to *xamsatun min 'atwābin*, *xamsatun min al-'atwābi* and *xamsatun min 'atwābi-ka* respectively.

In the section devoted to 'iḍāfah ('U. I, 53-54), Ibn as-Sarrāj is very keen on explaining the fact that, unlike in the possessive 'iḍāfah and the use of the particle li-, there is no difference between the "generic" 'iḍāfah and the use of the particle min. Indeed, whereas baytu Zaydin "the house of Zayd" and baytun li-Zaydin "a house belonging to Zayd" do not convey the same meaning in terms of definiteness, the two expressions tawbu xazzin "a silk dress" and tawbun min xazzin "a dress [made of] silk" have exactly the same meaning ('U. I, 53.8-54.6). In other words, the "generic" 'iḍāfah does not modify the definiteness of the muḍāf, unlike the possessive 'iḍāfah, because what is expressed is the genus (al-xazz "silk").

In the possessive annexation, Ibn as-Sarrāj says that the definiteness of the *muḍāf* 'ilayh applies to the *muḍāf* or, in his words, *allaḍī yuḍāf bi-ġayri lām yaktasī¹ mim-mā yuḍāf* 'ilayh ta'rīfa-hu wa-tankīra-hu fa-yakūnu ma'rifatan 'in kāna ma'rifatan wa-nakiratan 'in kāna nakiratan ("that which is annexed without *lām* takes from that to which it is annexed its definiteness and indefiniteness, so that it is definite if it is definite and indefinite if it is indefinite"; 'U. I, 53.11–12).

Ibn as-Sarrāj refers here to the annexation "without $l\bar{a}m$ ", i.e., the possessive annexation. Although it is not explicit in the text, one must understand that this principle does not apply in the "generic" annexation and that the addition of the definite article to the $mud\bar{a}f$ 'ilayh does not make the $mud\bar{a}f$ definite.

The difficulty in this matter is that Ibn as-Sarrāj compares <code>tawbu</code> xazzin to <code>dāru</code> <code>l-xalīfati</code> "the caliph's house", and not with an indefinite <code>mudāf</code> 'ilayh, as in <code>baytu</code> <code>qādin</code> "a judge's house" and <code>baytun</code> <code>li-qādin</code> "a house of a judge". He says that <code>dāru</code> <code>l-xalīfati</code> "the house of the caliph" and <code>dārun</code> <code>li-l-xalīfati</code> "a house of the caliph" do not convey the same definiteness ('U. I, 53.13–15), but how do <code>tawbu</code> xazzin and <code>tawbu</code> <code>l-xazzi</code> compare in terms of definiteness? Logically, both are most probably indefinite because <code>al-xazzi</code> refers to the whole genus, not to something definite.

 $^{^{16} \}rm Literally$ "is dressed, clothed". The ms. of the British Library reads yaktasibu "acquires, takes on".

This does not apply to *xamsatu 'atwābin* "five dresses" and *xamsatu l-'atwābi* "the five dresses", since the second expression is clearly labelled as definite by Ibn as-Sarrāj ('*U.* I, 311.8–10). If this is true, we are in front of a semantic difference between the measure and the numerical specifier, which can both surface in the same "generic" annexation but with different syntactic implications in terms of definiteness. This is probably the reason why Ibn as-Sarrāj treats them separately.

We have then the following differences: <u>tawbu xazzin</u> and <u>tawbu l-xazzi</u> both mean "a silk dress" and are both indefinite. These constructions express a "measure" <u>tamyīz</u>. The expressions <u>xamsatu 'atwābin</u> "five dresses" and <u>xamsatu l-'atwābi</u> "the five dresses" express a "numerical" <u>tamyīz</u>. The first one is indefinite and the second one is definite. As for the definite expression <u>xamsatu 'atwābi-ka</u> "your five dresses", it is not a numerical <u>tamyīz</u> but a regular 'idāfah in the meaning of the particle <u>min</u>.

10.5 Compound morphosyntax

The section entitled <code>dikr</code> <code>ad-darb</code> <code>at-tani</code> <code>min</code> <code>al-mabniyyat</code> <code>wa-huwa</code> <code>l-kalim</code> <code>al-murakkab</code> ("mention of the second type of undeclinable nouns, namely the compounds"; 'U. II, <code>139-144</code>) is devoted to compound nouns such as <code>xamsata-'ašara</code>. It is a subsection of a section devoted to "indeclinable nouns that resemble declinable ones" (<code>dikr</code> <code>al-'asmā'</code> <code>al-mabniyyah</code> <code>allatī</code> <code>tudāri'u</code> <code>l-mu'rab;</code> 'U. II, <code>111-144</code>). There are six types of one-word indeclinable nouns and two types of compound indeclinable nouns: those that have been made one noun (like <code>xamsata-'ašara</code>) and those whose <code>mudāf</code> 'ilayh has been deleted but that are compound in their intention (<code>fī</code> <code>n-niyyah</code>, like <code>qablu</code>, 'amsi and <code>haytu</code>).

Although it is only in this section that Ibn as-Sarrāj presents his theory about compound nouns, xamsata—'ašara serves as a prime example in a few places earlier in the 'Uṣūl: The undeclinable verbal noun hay—hala "come by here!" is compared to xamsata—'ašara ('U. I, 144.18—19); according to 'Abū 'Uṭmān (al-Māzinī) miṭla mā has been made "one noun" in Qur'ānic ﴿'innahu la-ḥaqqun miṭla mā 'anna-kum tanṭiqūna) (Q. 51, 23), just like xamsata—'ašara ('U. I, 275.4—5); 'Abū 'Uṭmān says that it is possible to interpret the expression ibn 'umm" son of mother" in the expression $y\bar{a}$ bna 'umma!" O son of [my] mother!" as an indeclinable compound noun, just like xamsata—'ašara ('U. I, 341.13—14); Ibn as-Sarrāj compares the expression $l\bar{a}$ rajula "no man" to xamsata—'ašara, saying that $l\bar{a}$ and the following indefinite noun have been

made "one noun" and have the same "status" *manzilah* as *xamsata-'ašara* (*'U.* I, 380.1–2; 385.5–7; 403.7–9; II, 66.6–7).¹⁷

There are two kinds of compound nouns, partially declinable (diptotic) and indeclinable ($mabn\bar{\imath}$), although Ibn as-Sarrāj does not present things this way. Rather, he deals with the two types in different places: diptotic compounds are treated in a section dedicated to the nine "reasons that make a noun diptotic" (al-' $asb\bar{a}b$ $allat\bar{\imath}$ tamna' as-sarf; 'U. II, 80–93), while undeclinable compounds are presented here, in a section devoted to compound morphosyntax.

Typical examples of diptotic compounds are Ḥaḍra-Mawt, Baʿla-Bakk, Rāma-Hurmuz, Māra-Sarjis and Maʿdī-Karib (ʾU. II, 92.15-16).

As for indeclinable compounds, there are different types. The first type includes compounds that are made up of two words; this type is subdivided into six categories depending on the nature of the words (two nouns, a noun and a verb, a noun and a particle, a noun and an onomatopoeia, a particle and a verb, two onomatopoeia). The second type is made up of nouns whose muḍāf 'ilayh has been deleted: qabl, ġayr, ḥasb, 'ams, 'awān, or replaced by a sentence: haytu, 'iḍ, 'iḍā and ladun ('U. II, 142.66–144.18).

Compound numerals belong to the first category of the first type of indeclinable compounds. They are made up of two nouns, which both carry an invariable fathah, as in the cardinal xamsata—'ašara "fifteen" and the ordinal $h\bar{a}diya$ —'ašara "eleventh" ('U. II, 140.3—6). The base form (al-'aṣl) of these compounds is the coordination with a $w\bar{a}w$ as in xamsatun wa-'ašaratun where the $w\bar{a}w$ has been elided "for brevity" ($ixtiṣ\bar{a}ran$; 'U. II, 140.5).

There are other compounds that are said to belong to the same category as xamsata-'ašara, such as ḥayṣa-bayṣa "confusion", šaġara-baġara "in all directions", 'Ayādī-Sabā, Qālī-Qalā ('U. II, 140.8–10).

Lastly, there are compounds for which there are different interpretations ($x\bar{a}za-b\bar{a}za$, bayta-bayta, bayna-bayna, $sab\bar{a}ha-mas\bar{a}^2a$, yawma-yawma, kaffata-kaffata), which are either treated like xamsata-`asara, or like diptotic Hadra-Mawt, or like a $mud\bar{a}f$ and a $mud\bar{a}f$ `ilayh (`U. II, 140.11–21). However, Ibn as-Sarrāj reports no variant interpretation for numerals.

Compound cardinals and ordinals belong thus, for Ibn as-Sarrāj, to a simple category of compounds that poses no special difficulty.

The only two issues mentioned in this section by him are the following: the addition of the definite article and the annexation to a pronoun. He says that Arabs "leave *xamsata-'ašara* unchanged after the annexation and (the

¹⁷The negation is missing in al-Fatli's edition. See Bohas (1993, 97) for the correction.

addition of) the article" (wa-l-'Arabu tada'u xamsata–'ašara fī l-'iḍāfati wa-l-'alifi wa-l-lāmi 'alá ḥāli-hā; 'U. II, 140.6–7). He also qualifies the expression xamsata–'ašara-ka as "bad" (radī'ah; 'U. II, 140.8). However, it is not clear what his judgment is concerning the addition of the article. Is actual use a sufficient justification? In 'U. II, 305–312, which is part of bāb al-ittisā' "chapter on flexibility", ¹⁸ Ibn as-Sarrāj quotes al-'Axfaš who says that some Arabs say al-xamsata l-'ašara instead of al-xamsata–'ašara ('U. II, 312.4–5).

In the same manner, it is not very clear what he means by annexation. Does he only mean the annexation to a pronoun, as in *xamsata-'ašara-ka*, or to other nouns as well?

The fact that "twelve" is declinable (see above, p. 125) is not dealt with by Ibn as-Sarrāj in the sections analysed here. It is only in the first of the three short sections devoted to numerals (${}^{\prime}U$. II, 424-429) that he mentions the fact that "twelve" is declinable, unlike other compound numerals. The explanation he gives is exactly the same as Sībawayh in the $Kit\bar{a}b$, although he does not quote him explicitly. "Twelve" is declinable because the declension is carried by a letter (the 'alif or the $y\bar{a}$ ') that remains after the replacement of the final $n\bar{u}n$ in $i\underline{t}n\bar{a}$ -ni by -'ašara (${}^{\prime}U$. II, 424.15-16 repeating K. II, 177.5-6 word for word without explicit quotation). Ibn as-Sarrāj does not provide an original opinion in this matter.

10.6 The logic at stake in the 'Uṣūl

The grammar of numerals in the $U\bar{s}\bar{u}l$ is rather simple, partly due to the fact that some very specific issues are not dealt with, unlike in the $Kit\bar{u}b$ and even more in the Muqtadab. Ibn as-Sarrāj focuses almost exclusively on the counted object when it is expressed after the numeral (i.e., when the counted object specifies the numeral) and not on the other possible constructions, except allusively. This is hardly surprising, since he focuses on what is specific to numerals, not on constructions that are common to other substantives. Numerals found in these common constructions (appositional and predicative) are dealt with in the relevant sections of the $U\bar{s}\bar{u}l$.

The specific way Ibn as-Sarrāj deals with the expression of the counted object as a specifier is as follows. Numerals are "unspecified" *mubham* nouns and as such are in need of a specifier ('*U.* I, 311.2). This specifier can be easily expressed by one of the two meanings of the proper '*iḍāfah* construction, namely its "generic" meaning, as opposed to its "possessive" meaning ('*U.*

¹⁸See Versteegh (1990b).

I, 53.7–8; 17). However, due to the difference in morphological shape, not all numerals can be annexed to their counted objects, compound numerals and decades for instance (${}^{\circ}U$. I, 312.2–6). For these numerals, the specifier is expressed by a specifying construction. Ibn as-Sarrāj distinguishes three different meanings for the specifying construction, depending on the nature of the word to which it applies, its operator.

Thus, Ibn as-Sarrāj distinguishes between the syntactic level and the semantic level, which he both needs in his grammatical analysis. The specifying construction can have different meanings, depending on its operator. In the verbal specifying construction, the specifier expresses the agent of the verb in the dependent form (as in <code>imtala'a l-'inā'u mā'an</code>; see above, p. 247); whereas the nominal specifying construction either means <code>miqdār</code> "the amount of" if the operator is a measure (as in <code>raṭlun zaytan</code>, <code>miqdār raṭlin zaytan</code> "a rotl of oil"); and if the operator is a numeral, the counted object "specifies" (<code>yumayyizu</code>, <code>yubayyinu</code>, <code>yufassiru</code>) the numeral, which needs it ('U. I, 311.2); Ibn as-Sarrāj also says that the relationship means <code>min</code> ('išrūna dirhaman, 'išrūna min ad-darāhimi "twenty dirhams"; 'U. I, 315.11–13).

As for the 'iḍāfah construction, it either expresses possession (baytu Zaydin, baytun li-Zaydin "Zayd's house") or specification (xātamu ḍahabin, xātamun min ḍahabin "a gold ring"). If the muḍāf is a numeral, the muḍāf 'ilayh expresses the specifier (mufassir) and the construction is a "generic" (jins) 'iḍāfah (xamsatu 'aṭwābin, xamsatun min 'aṭwābin "five dresses").

In other words, the grammatical definition of the numerical specifying construction can be summed up as follows. It has the same syntax as the verbal *tamyīz* construction and the same meaning as the "generic" *'iḍāfah*. What is noticeable is that this definition includes a semantic dimension. It expresses the counted object, not the agent. Seen from the perspective of the numerical specifier (a semantic category), it is expressed in an annexational construction, if the numeral is annexable, and in a specifying construction otherwise.

This way of presenting things is typical of Ibn as-Sarrāj's "exhaustive divisions" (*taqāsīm*, see above, p. 57).

This means that although these sections are entitled *tamyīz al-maqādīr* and *tamyīz al-'a'dād*, and although they are located in a section devoted to nouns in the dependent form, the oblique form is the base form. It is only when annexation is not possible that the nominal specifier surfaces in the dependent form (*'U.* I, 306.6–9). The reason given by Ibn as-Sarrāj for the preference of the annexational construction over the specifying one is that numerals do not resemble the active participle (*'U.* I, 324.7–9). Unlike

hasanun, they have no verbal meaning and it is only because they cannot be annexed that they have a complement (specifier) in the dependent form. Tāhā (1995, 163) notes that "the verb is central in [Ibn as-Sarrāj's] analysis of verbal constructions and of the relationship between every verb and the different Noun Phrases that occur with it." It is true that here both measure and numerical tamyīz are explained in a section that is linked with verbal transitivity, although they share very little with it, if anything. The only link these two constructions have with transitivity is that if annexation is impossible, the mufassir takes the dependent form.

A striking difference between Ibn as-Sarrāj and Sībawayh or al-Mubarrad is the fact that he explicitly includes a semantic criterion in his grammatical interpretation (the two meanings of the annexational construction, the three meanings of the specifying construction, the five meanings of the appositional construction) and it enables him to solve the tricky problem of the apparent inconsistency between the expression of the counted object in different constructions. Instead of aiming at a one-to-one correspondence between constructions and meanings, he believes that some constructions have the same meaning, namely the "generic" meaning of the annexational construction the "specifying" meaning of the specifying construction.

Another difference with Sībawayh and al-Mubarrad is the distinction Ibn as-Sarrāj makes between *xamsatu l-'atwābi* and *xamsatu 'atwābi-ka*: In the latter case no specifier is expressed, because it refers to something identifable. Ibn as-Sarrāj says that in *xamsatu 'atwābi-ka* the numeral was "annexed and defined" ('*udīfa wa-'ullima*; 'U. I, 325.14–15). The implication of this difference is that, unlike Sībawayh and al-Mubarrad, Ibn as-Sarrāj has no difficulty with a definite specifier, as long as it refers to the whole species.

10.7 Beyond Ibn as-Sarrāj ...

Ibn as-Sarrāj solves a difficulty that was undermining both Sībawayh's and al-Mubarrad's theory of numerals by creating a specific category of $tamy\bar{\imath}z$ al-'a'dād. Although this category has a clear syntactic origin, namely, a construction involving a verb and a substantive in the indefinite dependent form, it evolves towards a semantic relationship that can be expressed by two different syntactic constructions, namely, annexational and specifying.

Moreover, the assertion that the annexational construction is the base form widens the gap between the verbal and the numerical *tamyīz*. But it is only at this price that some consistency in the syntax of numerals can be safeguarded.

Ibn as-Sarrāj clearly addresses the grammatical issues from a syntactic perspective, however, the introduction of a semantic dimension enables him to reconcile apparently inconsistent phenomena in the language, such as the problematic series *talāṭatu 'awlādin*, *xamsata-'ašara waladan*, 'išrūna waladan, mi'atu waladin and 'alfu waladin. In each case, the relationship between the numeral and its counted object is a *tamyīz*, however, it surfaces in two different shapes because, for morphological reasons, some numerals are not annexable.

In other words, Ibn as-Sarrāj has no problem with the fact that there is no one-to-one correspondence between syntactic construction and semantic relationship. The same meaning is conveyed by different constructions and one construction conveys different meanings. For example, the (proper) annexational construction expresses both possession (*li-*) and species (*min*), and in turn, species can be expressed by both the annexational and specifying constructions. Another example is the specifying construction that can both express the agent of the verb and specify measures or numerals.

In the same manner, Ibn as-Sarrāj is not aiming at a one-to-one correspondence between morphological shape and syntactic behaviour. This is clear from the way he deals with compound nouns. In a section devoted to syntax he compares the second part of compound cardinals to a compensatory $n\bar{u}n$, but in a section devoted to compound morphology this comparison is completely absent. In other words, nothing prevents a compound noun from behaving syntactically like a word carrying a $n\bar{u}n$ in some cases and like a word carrying a $t\bar{u}$ marb $\bar{u}tah$ in other cases. And inversely, a noun carrying a compensatory $n\bar{u}n$ may behave differently in different syntactico-semantic constructions, like ' $i\bar{s}r\bar{u}na$ in a possessive and a generic annexation. Unlike Sībawayh, Ibn as-Sarrāj does not seem to have been concerned about these issues.

Among the questions that kept Sībawayh and al-Mubarrad busy but are not dealt with in the 'Uṣūl are the following: the gender of numerals, the (surface) gender disagreement between cardinals and their counted object, the singular of the counted object after compound ordinals and decades, the verbal value of ordinals, the fact that compound cardinals between "thirteen" and "nineteen" are made up of two words of opposite (surface) gender.

In some cases, it is clear that Ibn as-Sarrāj adopts Sībawayh's or al-Mubarrad's views, which he either quotes verbatim or alludes to. In these cases, what is important is probably not the opinion expressed as much as its position in the outline of the U, \bar{u} .

Also striking is the little importance given to criteria such as *xiffah* "lightness", *tiqal* "heavyness" or *quwwah* "strength", which words and morphemes can have in comparison with one another, as noted by Chairet (2000, 218). It seems that his classification relieves him of the use of these analytical tools. In other words, his criteria are more formal than linked with any inner qualities words might possess.

Part IV Results of the study

Chapter 11

A comparison of the three grammarians

We can now compare the three treatises that we focused on in this study. We will first compare factual grammar, which was the object of chapters 3 to 7. Then we will compare grammatical methods, which was the object of chapters 8 to 10. Lastly, we will compare our grammarians' stand towards semantics, based on the theoretical frame presented in the literature review (chapter 2).

This detailed comparison of the three treatises will enable us to check the validity of our research hypothesis, namely that the search for consistency in the grammar of numerals moves from a functional to a formal dimension of grammar.

11.1 Formal differences between the three treatises

In this chapter, we will not consider the issues that are discussed by all three grammarians, and on which they may agree or disagree. This is the aim of chapters 4 to 6, which list all the issues linked with numerals at large and gives the opinion of Sībawayh, al-Mubarrad and Ibn as-Sarrāj.

What we would like to focus on in this chapter is the content of the three treatises we have studied, i.e., the presence or the absence of the issues as

such. We wish to consider the appearance and dispearance of some issues linked with numerals in these treatises and to have a comparative overview at their content.

Counting the issues dealt with is not a straightforward thing to do since there are many ways of separating them. The principle we have adopted here is to consider issues as separate if different rules apply. For example, it is not pertinent to consider the diminutive form of *xamsah* to be a separate issue, since regular rules apply to its formation. No author deals with it explicitly and we will not consider it to be a separate issue from the diminutive as such. However, we considered the diminutive form of *mi'ah* to be a separate issue, since its formation requires the restitution of a missing consonant and no author has dealt with it.

Theoretically, there are eight possible categories: 1. issues discussed by all three grammarians; issues discussed in the $Kit\bar{a}b$ and that later disappeared, either 2. from the Muqtadab alone, or 3. from the $U\bar{s}\bar{u}l$ alone, or 4. from both later treatises; issues that are not discussed in the $Kit\bar{a}b$ but that appear in 5. the Muqtadab alone, 6. the $U\bar{s}\bar{u}l$ alone, or 7. in both treatises; lastly, 8. there are issues that are not found in any of the three treatises.

There are approximately one hundred issues linked with numerals at large that are dealt with in the $Kit\bar{a}b$. Only a handful of these issues are not found in the Muqtadab (four issues) or in the ${}^{\prime}U\bar{s}\bar{u}l$ (three issues). On the other hand, we could find in these two treatises 23 issues that are not found in the $Kit\bar{a}b$ but that appear in later treatises, fifteen in the Muqtadab, six in the ${}^{\prime}U\bar{s}\bar{u}l$, and two in both treatises. These figures are approximations but they give an idea of the content of these treatises at large. They also confirm the idea that almost the entirety of Sībawayh's $Kit\bar{a}b$ was subsumed in later tradition, in terms of discrete issues. As we will see in the next chapter, the picture is very different for Sībawayh's grammatical methods.

Interestingly, if one also takes into account the fact that the $Kit\bar{a}b$ is approximately 60% longer than the $Muqta\dot{q}ab$ and 25% longer than the ${}^{\prime}U_{\dot{\gamma}}ul$ in terms of number of words, it means that the $Muqta\dot{q}ab$ deals with almost 20% more issues linked with numerals than the $Kit\bar{a}b$, in a book that is 40% shorter. This first information confirms the impression that the $Muqta\dot{q}ab$ has a more factual and detailed approach to grammar than the $Kit\bar{a}b$. As for a comparison between the $Kit\bar{a}b$ and the ${}^{\prime}U_{\dot{\gamma}}\bar{u}l$, the figures are less explicit. The ${}^{\prime}U_{\dot{\gamma}}\bar{u}l$ deals with 5% more numerical issues than the $Kit\bar{a}b$, in 20% less words.

 $^{^1}$ There are 277.017 words in the $Kit\bar{a}b$, 171.175 in the Muqtadab and 219.843 in the 1 U $_5\bar{u}l$. These statistics are made according to electronic versions of these texts that we were able to compile according to the edition of Derenbourg for the $Kit\bar{a}b$, of 'Udaymah for the Muqtadab and of al-Fatlī for the 'U $_5\bar{u}l$.

11.1.1 The legacy of the Kitāb

What happened to the numerical issues discussed in the $Kit\bar{a}b$? Categories 1. to 4. represent the four possible evolutions. One can say that almost all the issues linked with numerals in the $Kit\bar{a}b$ are discussed in the later treatises. We could only find two issues that completely disappeared (category 4.), in addition to two other issues that disappeared only from the Muqtadab (category 2.), and one that disappeared only from the $Us\bar{u}l$ (category 3.) All other issues have made their way in the later treatises (category 1. not repeated here) We will briefly recall the issues of categories 2., 3. and 4.

| Cat. | Issues | Found in | Above |
|------|--|-------------|-------------|
| 1. | More than a hundred issues found in the <i>Kitāb</i> are treated in the <i>Muqtaḍab</i> and in the <i>ʾUṣūl</i> . | K., M., 'U. | pp. 101–163 |
| 2. | The phonetic assimilation of the root <i>sds</i> (referring to "six"). | K., 'U. | p. 103 |
| 2. | The <i>nisbah</i> of numerals. While Sībawayh has only discussed the case of compound numerals, Ibn as-Sarrāj has a whole chapter devoted to the <i>nisbah</i> where he discusses the case of "two", "eight", and compound numerals. | K., 'U. | p. 113 |
| 3. | The case of <code>itnāni</code> in the position of <code>mudāf</code> , in the expression <code>tintā hanḍalin</code> "two colocynths" and in the incorrect annexation * <code>itnay-himā</code> "the two of them". | K., M. | p. 130 |
| 4. | The case of <i>waḥd</i> -, which is found only in annexation. Mentioned explicitly only in the <i>Kitāb</i> . | K. | p. 103 |
| 4. | The dual and the plural forms of compound numerals and decades *'išrūnāni "two twenties", *mi'atānāni "two two hundreds" or *'alfānāni "two two thousands". | K. | p. 144 |

Table 11.1: What happened to the issues treated in the Kitāb?

11.1.2 Apparition of new issues

Altogether, twenty-three new issues appear in the *Muqtaḍab* and the *ʾUṣūl*. There are three possibilities for new issues to appear in these two treatises. They are either found in the *Muqtaḍab* alone (category 5., fifteen issues), or in the *ʾUṣūl* alone (category 6., six issues), or they are found in both treatises (category 7., two issues).

| Cat. | Issues | Found in | Above |
|------|--|------------|--------------------|
| 5- | The morphology of the feminine form 'iḥda', which does not correspond to a masculine. | М. | p. 109 |
| 5. | For "one" and "two" the noun expresses both the quantity and the species in one word, as in <i>rajulun</i> "[one] man" and <i>rajulāni</i> "two men" but for other quantities, the number has to be expressed separately from the species. | М. | p. 163 |
| 5- | It would be confusing to build a $f\bar{a}$ 'il form on decades have the same root as numerals from "three" to "nine". | М. | p. 145 |
| 5. | Since <i>mi'ah</i> begins a new series, its form is different from that of decades. | М. | p. 138 |
| 5. | The verb 'am'á (Form IV) means "to make something a hundred", and the verbs 'allafa and 'ālafa mean "to make something a thousand". | <i>M</i> . | pp. 107 and 109 |
| 5. | "Twenty-one" can be expressed by both 'aḥadun wa- 'išrūna and wāḥidun wa-'išrūna. | М. | p. 121 |
| 5. | The morphology of decades prevents coalescence of conjoined numerals. | М. | p. 121 |
| 5. | Analogically, one should say *wāḥidu rijālin "one men", however, wāḥid cannot be annexed in its numerical meaning. | M. | p. 129 |
| 5. | Conjoined numerals can be annexed to their possessor, as in <i>talāṭatu-ka wa-ṭalāṭū-ka</i> "your thirty-three". | <i>M</i> . | p. 132 |
| 5. | Conjoined proper name can also be annexed to their possessor, as in <i>Talāṭatun-Wa-Ṭalāṭū-ka</i> "your <i>Talāṭatun-Wa-Ṭalāṭū</i> n". | М. | p. 132 |
| 5. | The numerals <i>mi'ah</i> and 'alf can be annexed to their possessor, as in <i>mi'atu-ka</i> "your hundred" and 'alfu-ka "your thousand". | M. | p. 132 |
| 5. | Al-Mubarrad is the only author to discuss—and deny—a possible verbal value to compound ordinals, in the expressions of the type of <i>xāmisu</i> ' <i>arba</i> 'atin. | M. | p. 133 |
| 5. | The morphology of 'išrūna and the origin of its kas-rah. | M. | p. 137 |
| 5. | The impossibility to annex cardinals to a collective noun. | M. | p. 180 |
| 5. | The numeral 'alf behaves like any other counted object when it is found after a numeral. | M. | p. 183 |
| 6. | The root of 'awwal "first", which Ibn as-Sarrāj says is wwl. | 'U. | p. 102 |
| 6. | The diminutive form of sittah "six" is sudaysah. | 'U. | p. 112 |
| 6. | Numerals are diptotic when used in their absolute meaning. | 'U. | pp. 123 and 143 |

| 6. | Although it has a plural-like pattern, <i>tamānin</i> "eight" is not diptotic. | 'U. | p. 109 |
|----|---|---------|--------|
| 6. | 'Aḥad (fem. 'iḥda') is always in the position of muḍāf, as in 'aḥadu l-'awlādi "one of the boys". Sībawayh and al-Mubarrad use this construction but never comment on it. | 'U. | p. 129 |
| 6. | Ibn as-Sarrāj discusses—and rejects—the possibility of putting 'aḥad and 'iḥdá in the dual and in the plural, as in *marartu bi-rajulayni maqṭūʿay 'iḥdá l-'āḍāni "I passed by two men one of whose ears was cut off", because their meaning supposes a parallel with another item. | U. | p. 129 |
| 7. | Decades can be annexed to their possessor, as in 'išrū Zaydin "Zayd's twenty", 'išriy-ya "my twenty", and 'išrū-ka "your twenty". | M., 'U. | p. 131 |
| 7. | It is possible to express the counted object by a noun defined by 'idāfah, as in talāṭatu 'aṭwābi-ka "your three dresses". While al-Mubarrad has no reservation, Ibn as-Sarrāj says that this is a poetic licence. | M., 'U. | p. 176 |

Table 11.2: Apparition of issues not treated in the Kitāb

11.1.3 Issues discussed by none of the three grammarians

Lastly, there are issues that do not seem to have triggered the curiosity of our grammarians.

| Cat. | Issues | Above | | |
|-------|---|---------------------|--|--|
| In mo | In morphology | | | |
| 8. | A possible quadriliteral origin of <i>talātah</i> and 'arba'ah. | p. 104 | | |
| 8. | The biliteral nature of the root of <i>mi'ah</i> is not tested with any morphological test, diminutive, vocative, relative adjective, proper name, and so on. | p. 109 | | |
| 8. | The presence of an 'alif in the spelling of mi'ah (مئة or مائة). | p. 109 | | |
| 8. | The irregularities of the pattern $f\bar{a}'il$, which does not apply to $mi'ah$ nor to $\dot{a}lf$, which applies to the root $\underline{t}n$ after the restoration of a third radical, and which generates the very irregular form $h\bar{a}din$. | p. 104 | | |
| 8. | The diminutive form of wāḥid (wuwayḥid?), 'arba'ah ('urbay'ah?) or mi'ah (mu'ayyah?) | pp. 98, 109, 113 | | |
| 8. | The external masculine plural form of decades, a pattern that is preferred for human males (our grammarians content themselves with the fact that decades do not have a plural meaning). | p. 126 | | |
| 8. | The partitive patterns $fu'ul$ and $fa'\bar{\imath}l$, although the first one is well attested in the Qur'ān. | pp. 115 and | | |

| 8. | The relative adjective forms ($nisbah$) of "deflected" ($ma^{\circ}d\bar{u}l$) numerals, $\underline{t}un\bar{a}^{\circ}iyyun$, $\underline{t}ul\bar{a}\underline{t}iyyun$, and so on. (These are regularly used in the ' $Us\bar{u}l$ to describe the roots.) | p. 117 | | | |
|--------|---|-------------------|--|--|--|
| In sen | nantics | | | | |
| 8. | The fact that decades, "one hundred" and "one thousand" have both a cardinal and an ordinal meaning. | pp. 98 and 145 | | | |
| In mo | rphosyntax | | | | |
| 8. | The gender of compound cardinals: Should they be treated like their first part or does the coalescence modify their gender? | p. 96 | | | |
| 8. | The fact that "eleven" and "twelve" agree with their counted object, unlike other compound cardinals. | p. 169 | | | |
| 8. | The adjectival nature of wāḥid and iṯnāni. | p. 153 | | | |
| 8. | The possibility to annex $wahd$ -to a feminine pronoun, as in $wahda$ - $h\bar{a}$. | p. 142 | | | |
| 8. | All numerals are found in all three texts with and without the definite article, however, it is not easy to extract the opinion of the three grammarians on this issue, which is not tackled <i>per se</i> . | p. 134 | | | |
| In syr | In syntax | | | | |
| 8. | The counted object above "ten" is in the plural in the appositional and predicative constructions, as in al-'awlādu l-'išrūna "the twenty boys", 'awlādun mi'atun "a hundred boys", al-'awlādu 'išrūna "the boys are twenty" and al-'awlādu 'alfun "the boys are a thousand". | p. 177 | | | |
| 8. | The expression of the counted object after conjoined numerals. | p. 181 | | | |

Table 11.3: Issues not treated by our three authors

11.2 Example of treatment of specific issues

Before comparing the three authors' methodology, we would like to present three problematic issues, as an illustration of the three different frames in which our authors work.

11.2.1 What is the status of the second part of compound numerals?

The status of the second part of compound numerals has triggered a lot of discussion among grammarians (see above, p. 119).

Sībawayh seems to be the only author to study compound morphology in detail. He studies every possible case and subcase of coalescence in a way that is not found in the *Muqtaḍab* and the ʾUṣūl. What is at stake for Sībawayh is clearly not important for al-Mubarrad and Ibn as-Sarrāj, namely, to find a single frame to interpret all compound numerals. If "twelve" were not declinable, it would be simple to analyse all compounds in the same manner, but the fact that "twelve" is declinable forces our grammarians to deal with this issue.

Sībawayh is clearly aiming at consistency among numerals. He first considers $i\underline{t}n\bar{a}$ –'ašara, finds the compensatory $n\bar{u}n$ solution according to which –'ašara has the status of the final $n\bar{u}n$ in $i\underline{t}n\bar{a}ni$ (as opposed to the substantival status it had before coalescence) and then applies this solution to all compounds, cardinals and ordinals (see p. 206).

The solution proposed by al-Mubarrad is very different. He says that the declensional long vowel in the first term in $i\underline{t}n\bar{a}$ –' $a\check{s}ara$ forbids coalescence. Thus, he adopts the same position as Sībawayh on the status of –' $a\check{s}ara$ but only for "twelve" (see p. 220). Other compound cardinals are real compounds and do not need this interpretation. They are interpreted like any other compound in the language where both parts carry an indeclinable fathah. Their second part has the status of the $t\bar{a}$ ' $marb\bar{u}tah$ in the male proper names Hamdah and Talhah (see p. 218). Al-Mubarrad treats the problems separately. There is an issue with "twelve", so he proposes a solution (Sībawayh's solution). There is no issue with other compounds, so he treats them like other compounds.

In $b\bar{a}b\ tamy\bar{\imath}z\ al$ -'a'dad, Ibn as-Sarrāj gives a detailed account of the status of the second part of compound cardinals and ordinals. It occupies the slot of a $tanw\bar{\imath}n$ and this is the reason why these numerals, just like decades, are not annexable (see p. 253). It is remarkable that the evidence of this assertion for xamsata-'ašara lies in the expression $it\bar{\imath}n\bar{a}$ -'ašara dirhaman where -'ašara has replaced the final $n\bar{\imath}n$ of $it\bar{\imath}n\bar{a}ni$ ('U. I, 311.15–312.3). It is almost as if Ibn as-Sarrāj had not seen that there is a consistency issue among compound cardinals.

Strangely, this interpretation of the second part of compound numerals is completely absent in the section devoted to indeclinable compounds, where he simply says that compound numerals are made up of two nouns, both carrying an invariable *fatḥah* as in *xamsata-ʿašara* "fifteen" and *ḥādiya-ʿašara* "eleventh" ('*U.* II, 140.3–6). This description is a mere morphological account of these compounds (see p. 262).

In a section devoted to apocopation ($tarx\bar{\imath}m$), - ' $a\check{s}ar$ in compound numerals used as proper names is treated like a final $h\bar{a}$ ' (i.e., $t\bar{a}$ ' $marb\bar{u}tah$) and is thus deleted in order to build the apocopated form, as in $y\bar{a}$ Xamsata

'aqbil!, the apocopated form of the proper name *Xamsata-'Ašar* ('*U.* I, 363.4–6; 364.1–3).

Ibn as-Sarrāj does not comment on the difference in the treatment of - \dot{a} - \dot{a}

The question is whether the interpretation of the second part of compound numerals given in $b\bar{a}b$ $tamy\bar{\imath}z$ al-'a' $d\bar{a}d$ (the compensatory $n\bar{u}n$ frame) is an ad hoc explanation, which is valid only in this section in order to justify the specifying construction—exactly like it is compared to a $t\bar{a}$ ' $marb\bar{u}tah$ in the section devoted to $tarx\bar{\imath}m$ —or whether it has some validity outside this section, and especially in the section devoted to indeclinable compounds. In other words, is the compensatory $n\bar{u}n$ explanation a morphological interpretation that is valid for other indeclinable compounds such as $hay\bar{\imath}a-bay\bar{\imath}a$ and $\bar{\imath}agara-bag\bar{\imath}ara$ or simply a syntactic comparison valid only in the section dealing with the numerical $tamy\bar{\imath}z$?

Since syntactic issues and morphological issues are so clearly separated in the ${}^{2}U_{5}\bar{u}l_{5}$, one might think that the compensatory $n\bar{u}n$ explanation is only a syntactic comparison without a morphological basis, except maybe in the case of "twelve", as suggested by Ibn as-Sarrāj in the expression $i\underline{t}n\bar{a}$ –' $a\bar{s}ara$ dirhaman where –' $a\bar{s}ara$ has replaced the final $n\bar{u}n$ of $i\underline{t}n\bar{a}ni$ (${}^{2}U$. I, 311.15-312. 3).

In conclusion, we can say that the three solutions are quite different. Sībawayh endeavours to find a single consistent frame, al-Mubarrad simply ignores the consistency issue and Ibn as-Sarrāj seems to have an *ad hoc* approach to the phenomenon, depending on the section where he deals with the issues.

11.2.2 Are numerals "unspecified" substantives?

"Unspecified" substantives are not clearly defined by our authors (see above, p. 145). It is only through cross-examination that we can try to figure out what they mean and why they apply it to numerals. "Unspecified" substantives can either replace a whole category (like $h\bar{a}d\bar{a}$ or $allad\bar{a}$) or they need to be specified (like 'išrūna and kam). See above, p. 145. In both cases, these substantives can be said to be semantically deficient, unlike "regular" substantives, which are supposed to refer to something in themselves, according to the very definition of what a substantive is for our grammarians.

According to Sībawayh, compound cardinals and ordinals are "unspecified" (K. II, 47.11). Al-Mubarrad teaches the same about cardinal compounds

(M. II, 165.2) and decades (M. II, 144.6; 165.13). As for Ibn as-Sarrāj, it is not clear whether he means that all numerals are "unspecified" or only those whose specifier is expressed by an indefinite dependent form ('U. I, 114.16).

What is at stake is the definition of the numerical specifier. Both al-Mubarrad and Ibn as-Sarrāj primarily link the definition of $tamy\bar{t}z$ to the dependent form, but they both say that it can surface as a $mud\bar{t}af$ 'ilayh if the numeral is annexable, as is the case with hundreds and thousands. However, they both expand the definition of $tamy\bar{t}z$ in order to apply it to hundreds and thousands, though for different reasons. Al-Mubarrad draws a clear distinction between basic and subsidiary numerals and says that only the latter need a $tamy\bar{t}z$ (either in the dependent or in the oblique form), while Ibn as-Sarrāj creates an ad hoc category numerical $tamy\bar{t}z$ that surfaces in the oblique form with annexable numerals and in the dependent form with non annexable numerals.

The consequence is the same, hundreds and thousands need a specifier. Does this make them *mubhamah*? Neither al-Mubarrad nor Ibn as-Sarrāj give a clear answer to this question.

Sībawayh does not define a category of *tamyīz* in the first place and he only qualifies compound numerals as *mubhamah*. He does not explore this path further and the reader is left with more questions than answers on this matter.

Ibn as-Sarrāj states that *kam* is an "unspecified numeral" (*ism* 'adad *mubham*; 'U. I, 314.1), and later in the 'Uṣūl he says that it is a "noun for an unspecified numeral" (*ismun li-ʿadadin mubhamin*; 'U. II, 135.4–5). What is meant by this expression is that *kam mālu-ka*? "how much is your sum?" replaces the expression 'a-'išrūna mālu-ka? "is your sum twenty?" and any other numeral ('U. II, 135.5–7). He further explains that "numerals are infinite so they came up with a noun that subsumes them all" (*wa-l-ʿadadu bi-lā nihāyatin fa-ʾataw bi-smin yantadimu l-ʿadada kulla-hu*; 'U. II, 135.7).

The other nouns that Ibn as-Sarrāj explicitly quotes as being *mubhamah* are demonstratives like $h\bar{a}d\bar{a}$, tilka, ' $ul\bar{a}$ 'ika ('U. I, 149.7), adverbs like $qudd\bar{a}m$, ' $am\bar{a}m$, $war\bar{a}$ ', xalf ('U. I, 197.11–13), and pronouns like $m\bar{a}$, man, $allad\bar{a}$ ('U. II, 68.5–7).

As for numerals, it is not clear whether they are all *mubhamah* or not. Ibn as-Sarrāj says that *kullu mubhamin min al-'a'dādi wa-ġayri-hā 'innamā tufassiru-hu n-nakiratu l-manṣūbatu* ("any unspecified numeral or any other [word] is made explicit by a [noun in the] indefinite dependent form"; *'U.* I, 114.16).

On the one hand, since not all numerals are specified by a specifying construction, does this mean that only non-annexable numerals are "unspecified"? And on the other hand, since all numerals are in need of a specifier ('U. I, 311.2), does this mean that they are all unspecified?

The last question linked with unspecified nouns in the ${}^{\prime}U_{5}\bar{u}l$ is whether mubhamah nouns are definite by nature or not, as could be inferred from the following quotation: wa-l-ma 'rifatu xamsatu 'ašyā'a: al-ismu l-makniyyu wa-l-mubhamu wa-l-'alamu $wa-m\bar{a}$ fī-hi l-'alifu wa-l-lāmu $wa-m\bar{a}$ 'udīfa 'ilay-hinna ("the definite [noun] is five things: the pronoun; the unspecified [noun]; the proper name; what carries the definite article; and what has been annexed to these"; 'U. I, 149.2–3). Since this obviously does not apply to numerals, because they are not definite, one is forced to admit that mubham refers to at least two different things: a particular category of definite nouns that share common features (such as $h\bar{a}d\bar{a}$, $m\bar{a}$, $allad\bar{a}$) and a broader semantic "unspecifiedness" that describes numerals, measures, and some adverbs like $qudd\bar{a}m$, xalf, $war\bar{a}$ ', and so on.

11.2.3 Why should the counted object be in the singular above "ten" in the annexational and specifying constructions?

We have seen above, p. 177, that the counted object above "ten" in predicative and appositional constructions is in the plural, as in *al-'awlādu 'išrūna* "the boys are twenty" and *al-'awlādu l-'išrūna* "the twenty boys", but this is not pointed out by our grammarians.

However, in annexational and specifying constructions, the counted object remains in the singular above "ten", as in 'išrūna waladan and mi'atu waladin. The positions of Sībawayh, al-Mubarrad and Ibn as-Sarrāj are quite different and reflect their theory at large.

Sībawayh explains the phenomenon by saying that it is not rare for a plural to be expressed by a singular, which is "lighter" (*K.* I, 85.5–7). But he does not say why this should be true only above "ten".

The logic of al-Mubarrad is different. He simply says that the counted object of greater numerals is expressed in the singular (M. II, 164.5–6) because it expresses a whole species. He does not address the issue of the predicative and appositional constructions, but as far as the annexational and specifying constructions are concerned, his solution is simple and consistent with the

necessity for greater numerals to be specified, i.e., to have a complement that expresses their species, which the singular can do perfectly.

Ibn as-Sarrāj is not very explicit about the reason why the counted object has to be in the singular above "ten" in the annexational and specifying constructions. He simply notes that it is in the plural after "three" to "ten" ('*U.* I, 311.5–8) and in the singular after decades because the number is already expressed in the numeral ('*U.* I, 223.7–10 quoting *M.* III, 34.11–14), but he does not comment on the singular counted object after compound numerals.

As for hundreds, Ibn as-Sarrāj explains the singular of the counted object by the fact that "one hundred" was due to behave partly like "ten" because it is "ten tens" and partly like "ninety" because it comes just after it ('*U*. I, 312.8–10). Like "ten", "one hundred" is annexed to its specifier, and like "ninety", its specifier is in the singular. He gives exactly the same analysis for "one thousand", wich is "ten hundreds" ('*U*. I, 312.11). This interesting "two-sided consistency" is not found in the *Kitāb* or in the *Muqtaḍab*.

The absence of commentary on this issue is all the more strange since the verbal specifier can surface either in the singular or in the plural, depending on the intended meaning (${}^{\prime}U$. I, 223.3). In the case of the numerical specifier, there is no choice.

The solution of Ibn as-Sarrāj is not as simple as that of al-Mubarrad. His argument that after decades the plural is not needed because the quantity is already expressed, does not account for the plural after numerals between "three" and "ten". He does not mention compound numerals and in he case of "hundreds" and "thousands" his "two-sided consistency" looks like a middle way between Sībawayh's consistency at all price and al-Mubarrad's interpretation of different series in different frames.

11.3 Differences in methodology

In chapter 2, we have seen how modern scholars have qualified the grammatical methodology of Sībawayh, al-Mubarrad and Ibn as-Sarrāj, especially focusing on Sībawayh and often qualifying the two other grammarians by comparison with him. In part three, we have tried to understand the theoretical frame in which these grammarians deal with numerals, not only as discrete issues but as a whole. At this point, we are able to cast a new light on the grammatical methodology of our three grammarians and not only on their factual approach to grammatical issues.

Obviously, numerals are not separable from the grammatical systems developed by these grammarians and most of the traits that scholars have discerned in these grammar treatises are confirmed at the level of numerals.

In the case of Sībawayh, what is described in the literature as a search for a simple consistency across the grammatical rules, even at the cost of a non-intuitive and highly sophisticated theory (see p. 32), is surely at work in his presentation of numerals. In the same manner, the description made by Bohas, Guillaume, and Kouloughli (1990/2006, 5) of al-Mubarrad's method as a "heterogeneous" approach (see p. 52) is not only confirmed but well documented by our study. Lastly, we also have a confirmation of Ibn as-Sarrāj's use of what can be labelled as "formal semantic subcategories", as described by Owens and Ṭāhā (see p. 65), which enables him to present the grammar of numerals in a simpler way than Sībawayh, without renouncing some consistency but, sometimes, at the cost of a "double-sided consistency", as we will see below.

In the following pages, we present the results of our inquiry on numerals and we link them to what has been presented in the literature review in part one. However, before we turn to these issues, we will compare the way Sībawayh, al-Mubarrad and Ibn as-Sarrāj deal with the linguistic corpus they analyse.

11.3.1 The recourse to the testimony of canonised tradition

We have seen above (p. 85) that there are in the Muqtadab almost twice as many Qur'ānic quotations containing numerals than in the $Kit\bar{a}b$. One half of these Qur'ānic verses is identical with those in the $Kit\bar{a}b$, the other half is found exclusively in the Muqtadab. This picture is quite different from what we find in the ' $Us\bar{u}l$, since Ibn as-Sarrāj quotes the Qur'ān twice less than Sībawayh, i.e., four times less than al-Mubarrad.

If one considers all the Qur'ānic quotations, and not only those containing numerals, we obtain a more precise picture of how our authors quote the sacred text. There are 70% more Qur'ānic quotations in the *Muqtaḍab* than in the *Kitāb* (832 and 488 respectively), 34% more Qur'ānic quotations in the *Kitāb* than in the 'Uṣūl (488 and 364 respectively) and 128% more Qur'ānic quotations in the *Muqtaḍab* than in the 'Uṣūl (832 and 364 respectively).

Lastly, if one relates these figures to the size of the three treatises, i.e., with the fact that the $Kit\bar{a}b$ is 60% longer than the Muqtadab and 25% longer than the U.5% longer than the U.5% we find even more significant differences between them: The 70% more Qur'anic quotations in the Muqtadab than in the $Kit\bar{a}b$ become 175%

more, and the 34% more Qur'ānic quotations in the *Kitāb* than in the '*Uṣūl* are reduced to only 6% more. The comparison between the *Muqtaḍab* and the '*Uṣūl* is even more dramatic: The 128% more quotations in the *Muqtaḍab* jumps to 193% more Qur'ānic quotations in the *Muqtaḍab* than in the '*Uṣūl*.

These first estimations are only an indication of the importance our authors assign to the Qur'ān as a source of linguistic data. Of course, more investigation should be done in this field.

Our three authors have a less different stand towards quotations from the Prophetic traditions (${}^{a}h\bar{a}d\bar{\imath}t$), see above p. 89. There is no explicit $had\bar{\imath}t$ quotation in the $Kit\bar{a}b$, only one in the Muqtadab (not mentioned in 'Udaymah's tables) and one in the ' $Us\bar{\imath}ul$.

However, Hārūn mentions seven implicit $had\bar{\imath}t$ quotations in the $Kit\bar{a}b$ and some scholars have extracted as many as 46 implicit $had\bar{\imath}t$ quotations. As for the ' $U\bar{\imath}u\bar{l}$, aṭ-Ṭanāḥī's tables mention three ' $ah\bar{a}d\bar{\imath}t$, of which only the third one is explicitly quoted as such by Ibn as-Sarrāj.

As for poetry and quotations from the "language of the Arabs", their volume and their variation make it difficult to compare them accurately. If we focus only on poetic lines and expressions that contain numerals, we get the impression that the $Kit\bar{a}b$ quotes more poetry than the Muqtadab, which in turn quotes more poetry than the ' $Us\bar{u}l$: There are 25 poetic passages in the $Kit\bar{a}b$ that contain numerals, 22 in the Muqtadab, and only 14 in the ' $Us\bar{u}l$. If one takes their repetition into consideration, the figures are 29, 25 and 17 passages, respectively (see p. 92).

Out of these 22 different poetic passages found in the $Muqta\dot{q}ab$, 13 are already found in the $Kit\bar{a}b$, al-Mubarrad providing the nine other ones. As for the $^{\prime}U_{\dot{\gamma}}\bar{u}l$, 10 of its 14 different passages are already found in the $Kit\bar{a}b$, the last four ones being unique to Ibn as-Sarrāj.

We have identified approximately 70 different quotations from the "canonised language of the Arabs" that contain numerals (see p. 93). Out of these 70 different quotations, 40 are found in the $Kit\bar{a}b$, 30 in the Muqtadab and 50 in the $U\bar{s}ul$. Interestingly, it seems that Ibn as-Sarrāj tends to rely either on the $Kit\bar{a}b$ or on independent sources for his linguistic quotations, but not on the Muqtadab, which was also the case for Qur'ānic and poetic quotations.

Roughly speaking, if quotations containing numerals are representative of all quotations, one can say that the Muqtadab relies on the $Kit\bar{a}b$ for half of its quotations (Qur'ānic, poetic, or canonised language); and if compared to the $Kit\bar{a}b$, it quotes more Qur'ān, the same amount of poetry, and less canonised

language. As for the 'Uṣūl, it relies more on the Kitāb for its quotations than on the Muqtaḍab, and its quotations are taken from the canonised language more than from the Qur'ān and poetry, if compared to the two other treatises.

11.3.2 A focus on rare forms rather than on regular ones

It is a basic observation that our grammarians focus on rare forms rather than on regular ones. This common feature to the three treatises reminds us to be prudent when speaking of a "pedagogical turn" in post-Sībawayh grammar (see p. 48). Surely, a pedagogical book would focus on regular cases and majority use rather than on difficult and irregular cases.

In part two, we have come across a number of issues that are not dealt with by our grammarians and are thus left to our interpretation (see, p. 275, a list of issues not discussed). The reason why grammarians did not treat some of these issues is probably that they consider them as too evident.

However, this is not the whole picture, since even difficult cases are not tackled in our grammar treatises: the diminutive of $w\bar{a}hid$, the root of mi'ah, to name only two of them. Why did grammarians not tackle these issues although they present interesting morphological challenges? This absence could be explained by the fact that since these issues are not dealt with in the $Kit\bar{a}b$, they do not belong to the corpus of issues that grammarians have to comment. It seems difficult to believe that they have deliberately ignored a difficult point in grammar.

11.3.3 Formalisation of Sībawayh's methods by al-Mubarrad

Another view that is widely shared by scholars is that post-Sībawayh grammar is more formal than that of Sībawayh (see p. 62). What these scholar intend by formalism is different from prescriptiveness and pedagogy. It is rather the diffuse feeling that Sībawayh's dynamic view of the relationship between words, in terms of strength and power, is reduced to formal rules. For other scholars, it also includes the idea that post-Sībawayh grammar focuses on syntactic rules rather than on the communicative act that lies behind the utterance. This formalism can be opposed to Sībawayh's empirical non-systematic method.

In our study, we have come across a few clear cases where al-Mubarrad takes for granted what was probably simply an analytical tool in the $Kit\bar{a}b$. For example, while dealing with expressions like $x\bar{a}misu$ xamsatin and $x\bar{a}misu$

'arba'atin, Sībawayh explains their form and meaning with the help of the verb xamasa. This semantic comparison is apparently taken seriously by al-Mubarrad who provides a full list of numerical verbs that contrasts with the clear affirmation of Ibn as-Sarrāj that these verbs do not actually exist (see p. 105).

In exactly the same manner, Sībawayh postulates an underlying verb that explains the dependent form of <code>waḥda-hu</code> in the expression <code>marartu bi-hi waḥda-hu</code> but he does not say what verb it is. Not only does al-Mubarrad quote the full expression, <code>'awḥadtu-hu bi-murūrī 'īḥādan</code>, but he extends it to other numerals, as in <code>marartu bi-l-qawmi xamsata-hum</code>, which he paraphrases as <code>bi-hā'ulā'i taxmīsan</code> (see above, p. 141). In other words, here again al-Mubarrad interprets literally what was only suggested by Sībawayh.

Lastly, this increased formalism is much more apparent in criteria such as *quwwah*, *xiffah* or *tiqal*, which are used by Sībawayh to establish local and relative hierarchies between linguistic elements. In the *Muqtaḍab*, these criteria are treated as if they could only take an on/off value, and in the 'Uṣūl they are mentioned only briefly. However, our focus on numerals is certainly too narrow to account for this phenomenon and wider research is needed to prove it.

11.3.4 Differentiation as an interpretative tool

A new criterion appears in the *Muqtadab* that is not used by Sībawayh, and that can be described as a "differentiation tool". In many places, al-Mubarrad draws a distinction between series of words and explains their different behaviour by the mere fact that they belong to different series. In other words, he contents himself with the fact that words belong to different categories as a justification for their different behaviour. Curiously, by doing so, al-Mubarrad succeeds in giving the impression that here lies a certain consistency (it is consistent that different categories behave differently). This method is as far as one can imagine from Sībawayh's quest for consistency, whose aim is to find a limited number of reasons that explain different surface phenomena.

As far as numerals are concerned, al-Mubarrad draws a first distinction between lesser and greater numerals (see p. 216). This distinction accounts for the fact that some numerals have a counted object in the plural and others a singular one (which is only true in the annexational and specifying constructions). It also accounts for the fact that some numerals have a unique form in the masculine and in the feminine, while others have two different

forms (with the exception of compound numerals, which al-Mubarrad treats as lesser numerals because they are made up of two lesser numerals).

Moreover, each series is due to behave differently from the previous series. Al-Mubarrad explains thereby the difference between decades and hundreds, between units and hundreds, between hundreds and thousands and the differences in the issue of the definite article (see pp. 221ff. and 225).

A different meaning can also justify a different behaviour, as is the case with the number of the $tamy\bar{\imath}z$. In the expression Zaydun 'afrahu $n-n\bar{a}si$ 'abdan, a plural $tamy\bar{\imath}z$ ('ab $\bar{\imath}dan$) conveys a different meaning. Both constructions are thus possible, whereas after numerals, there would be no difference in meaning since plural is already expressed by the numeral. Thus, numerical $tamy\bar{\imath}z$ cannot surface in the plural (see p. 232).

This differentiated approach, added to the fact that al-Mubarrad deals with a significantly larger number of issues, definitely confirms the impression that al-Mubarrad's grammar is a "discrete" one, i.e., a grammar that treats issues separately with a minimal theoretical frame. See above, p. 52, the description of al-Mubarrad's method as a "heterogeneous" approach by Bohas, Guillaume, and Kouloughli (1990/2006, 5).

Interestingly, although it is far from our main concern, we find the same differentiated approach in al-Mubarrad's treatment of the Qur'ān and poetry. He spends quite some time to draw a clear difference between them. *M.* II, 171.4–174.10 is devoted to a discussion about the Qur'ān and poetry. His argument is that the justification of a specific use in poetry cannot apply to the Qur'ān because the language of the Qur'ān is different from that of poetry.

11.3.5 Local vs. global consistency

Sībawayh aims at a global consistency throughout his *Kitāb* (see p. 44). Not only does the expression 'išrūna dirhaman serve as a prime example for specifying constructions inside the chapter on numerals, but also outside this chapter. Indeed, the fact that *ṣifāt mušabbahah* are found in all four constructions, appositional, predicative, annexational, and specifying, as in wajhun ḥasanun, al-wajhu ḥasanun, ḥasanu l-wajhi and ḥasanun wajhan³ is probably the main incentive for Sībawayh to gather the syntax of all numerals under this chapter.

²It is here that he comments on *Q*. 18, 25 mentioned above, p. 87.

³See above, p. 194, for this last expression.

Although not all numerals are found in all four constructions, they are, when considered together: 'awlādun xamsatun, al-'awlādu xamsatun, xamsatu 'awlādin and 'išrūna dirhaman. As is clear from this series, the difficult case is the last one. Sībawayh considers it first and once the validity of its position as a subcase of ṣifāt mušabbahah is proven, all other numerals are added to the picture, to which they fit easily.

This non-intuitive approach is aiming at a global consistency for all numerals. It does not mean that numerals resemble the active participle, but that they resemble adjectives that resemble active participles. This "second degree" resemblance justifies the lesser freedom of behaviour that numerals show, in comparison to actual *şifāt mušabbahah*.

Al-Mubarrad is confronted with the same consistency issue as Sībawayh, but he solves it in a radical way: the consistency lies in the fact that each series behaves differently.

As for Ibn as-Sarrāj, his methodology of "exhaustive divisions" ($taq\bar{a}s\bar{i}m$) is very clear in the case of the grammar of numerals, as it is in general (see p. 57). He treats the syntax of the counted object in a subsection called $tamy\bar{i}z$ al- $^2a'd\bar{a}d$, which is itself a subsection of complements in the dependent form, namely, those that are not operated on by a verb (see above, p. 246). The annexational construction is presented at the same place in the $^2U_5\bar{u}l$, in what at first sight looks like a subcase of numerical $tamy\bar{i}z$ for annexable numerals. However, the presentation of Ibn as-Sarrāj leaves little doubt that it is the other way round: the specifying construction is a subcase of the annexational one, and it is only if numerals are not annexable that their counted object is expressed by a noun in the indefinite dependent form.

The conclusion we draw from Ibn as-Sarrāj's presentation is that the numerical $tamy\bar{\imath}z$ is actually considered first for its meaning (to express the species), and that it surfaces in a specifying construction only if annexation is not possible. We see here the limit of Ibn as-Sarrāj's rigid $taq\bar{a}s\bar{\imath}m$ based on the four basic forms that substantives can take (independent, dependent, oblique and indeclinable). Since his outline is organised according to these forms, he is compelled to choose one of these four forms to insert the numerical $tamy\bar{\imath}z$ in his treatise. He adopts the dependent form as the entry point for the expression of the counted object, but then widens its definition in order to include the annexational construction (oblique form). By doing this, Ibn as-Sarrāj maintains some consistency in the system, which is ultimately not based on the syntactic forms that the counted object can take but on the meaning it expresses (it specifies the numeral).

There are two other cases where Ibn as-Sarrāj finds new solutions in order to maintain some consistency within his theory. The first case can be labelled a "double-sided consistency". It is the case of "one hundred" that behaves partly like annexable "ten" ("one hundred" means "ten tens") and partly like "ninety" which "one hundred" immediately follows and whose counted object is in the singular (see p. 254).

The second case can be labelled a "local consistency". In the interpretation of compound numerals, Ibn as-Sarrāj does not try to reconcile two different approaches, syntactic and morphological (see above, p. 276). Syntactically, the second part of compound numerals occupies the slot of a *tanwīn*, which forbids their annexation. This interpretation is completely absent from the discussion on their morphology. Since Ibn as-Sarrāj clearly separates issues in his treatise, he discusses syntactic issues in syntactic sections and morphological issues in morphological sections. Consequently, unlike Sībawayh, Ibn as-Sarrāj has no place to discuss transversal issues. Most of the discussions linked with compound substantives in the *Kitāb* simply disappear in the *'Uṣūl* because only a local consistency is aimed rather than a global one.

11.3.6 Appearance of formal semantic categories

Owens (1990b), Ṭāhā (1995) and al-Māḍī (2009) mention semantic constraints in the description of syntactic categories in the Muqtadab and the $Us\bar{u}l$ (see p. 65), which correspond exactly to what we have observed above in the definition of $tamy\bar{\imath}z$ in the $Us\bar{\imath}ul$. In this case, a broad syntactic category (complements in the dependent form) is refined and subdivided into categories that apply only to a limited number of cases $(maf^t\bar{\imath}ul \ bi-hi, \ verbal \ tamy\bar{\imath}z, \ tamy\bar{\imath}z \ al-maq\bar{\imath}ad\bar{\imath}r, \ tamy\bar{\imath}z \ al-a^d\bar{\imath}add, \ and so on)$. Ibn as-Sarrāj's "exhaustive divisions" enable him to present subcategories that are exclusive of one another. All substantives in the dependent form are either operated on by a verb or by a noun; those operated on by a noun are either operated on by a measure or a numeral or tamu (see p. 246). Verbal $tamy\bar{\imath}z$ and nominal $tamy\bar{\imath}z$ are clearly separated from the beginning in the $Us\bar{\imath}ul$.

A first semantic criterion is already operating in these divisions, since the only difference between measures and numerals is their meaning. The case of kam is different, since it can replace any numeral. A second semantic criterion appears in what constitutes the semantic shift of the whole category of $tamy\bar{v}z$ al- 2a $^2d\bar{u}d$ that was described above: Although it is treated as a subsection of substantives in the dependent form, the annexational construction is actually the base form of this $tamy\bar{v}z$. What is left in the definition of the numerical $tamy\bar{v}z$ is not its dependent form, nor its singular, nor its indefiniteness but

its meaning: it specifies the numeral. This definitely cuts off the numerical *tamyīz* from its verbal counterpart.

Actually, this obvious shift in the ${}^{i}U_{i}$ \bar{u} is also present in the Muqtadab. There, it is less striking, because of the differentiated approach of al-Mubarrad which makes general categories less compelling. Unlike Ibn as-Sarrāj, al-Mubarrad does not separate verbal $tamy\bar{\imath}z$ and nominal $tamy\bar{\imath}z$ (see p. 229). According to him, $tamy\bar{\imath}z$ complements are operated on either by a verb or by a word that behaves like a verb, either because of its meaning $(li-l-ma^cn\hat{a})$, or of its behaviour $(li-t-ta\bar{\imath}arruf)$, or because of its surface level $(li-l-laf\underline{a})$.

This definition is based on formal criteria, namely, the dependent form in which the *tamyīz* surfaces. However, al-Mubarrad quickly shifts to a semantic definition of the *tamyīz* as the expression of the species and he adds that it can surface in the oblique form, as in *kullu rajulin*, *mi'atu dirhamin* and *'anta 'afrahu 'abdin fī n-nāsi* (see p. 233). What is left from the first definition of *tamyīz* is the specification meaning, as well as the singular and the indefiniteness.

With this new definition, there is a consistency issue with numerals between "three" and "ten", which al-Mubarrad solves by saying that, as base form numerals, they do not need a *tamyīz*. There is another difficulty with "hundreds" and "thousands" whose counted object can take the definite article, although al-Mubarrad explicitly says that *tamyīz* should be indefinite. This case is not elucidated by him and we cannot predict whether or not he would call a *tamyīz* the definite expression *ad-dirham* in *mi'atu d-dirhami*.

Ibn as-Sarrāj solves this difficulty by introducting a distinction between two types of definite nouns: those referring to the whole genus and those referring to one specific item (see above, p. 260). It is thus possible for the specifier to carry the definite article, since this does not prevent it from referring to the whole genus, as in *mi'atu d-dirhami* "the hundred dirhams". This distinction is only semantic, since *ad-dirham* could also refer to "this very dirham that you and I know", depending on what is intended by the speaker.

It is remarkable that neither al-Mubarrad nor Ibn as-Sarrāj is disturbed by the fact that their definition of *tamyīz* changes radically from a clear dependent form analysis to a semantic category, which can surface in two different constructions. The reason why they see no contradiction is probably due to the fact that meaning is primary. Their grammar is subordinated to the meanings expressed. If syntactic constructions were al-Mubarrad's and Ibn as-Sarrāj's primary concern, this shift would not have passed unnoticed. In the case of Ibn as-Sarrāj, it is less evident, since the whole section on substantives is organised according to case endings, but he does not hesitate

to subsume the annexational and the specifying constructions under the subsection of $tamy\bar{z}$ al-'a' $d\bar{a}d$.

This is a drastic case. There are more cases in the 'Uṣūl where Ibn as-Sarrāj simply introduces a semantic constraint in order to distinguish one subcategory from another and explain different syntactic behaviours. In these cases, there is no syntactic conflict within the category, but semantic subcategories are set up to correspond better to syntactic ones. This is the case of the 'iḍāfah construction that can express different meanings. The case of the expression 'išrū Zaydin exemplifies the idea that different meanings can justify different syntactic behaviours. If annexation means possession, it is licit to say 'išrū Zaydin, whereas if it expresses the counted object it is not licit to annex 'išrūna. Typically, this discussion is found in both the Muqtaḍab and the 'Uṣūl, but not in the Kitāb (see p. 131).

11.3.7 No question about the semantic unity of numerals

We have mentioned at the beginning of this study that numerals show a strong and self-evident semantic unity (see p. 135). It is the only plausible reason why Sībawayh, al-Mubarrad and Ibn as-Sarrāj treat them together in their grammar. This is particularly true of the link between numerals and counted objects, not of their morphology and position in the sentence, which are dealt with along with other similar issues. They endeavour to find some consistency, each one of them in his own way. It is striking that all three grammarians consider the annexational and the specifying constructions together. In other words, for them there is a clear link between *talāṭatu 'awlādin* and *'išrūna waladan* and they have to account for it in a way or another. The nature of this link can only be semantic. More precisely, it corresponds to what Versteegh names "conceptual correlate" of the words expressing numerals [m. 9] (see above, p. 27, the sixteen types of meanings).

 difference in strength between *kam* and numerals that justifies, for Sībawayh, the difference in behaviour.

This difference between the interrogative *kam* and *'išrūna* is also pointed out by al-Mubarrad and solved by the theory that the additional freedom of behaviour granted to *kam* is a compensation for its not being *mutamakkin*. This is why, instead of being fully declinable, *kam*, which is a substantive, has the strength to operate on its *tamyīz* even if it is separated from it (see p. 147).

In the 'Uṣūl, kam is also considered to have a strong link with numerals. What is more, Ibn as-Sarrāj says that kam is a numeral (see p. 255). However, the differences mentioned above between kam and 'išrūna simply disappear as issues by the mere fact that the tamyīz of kam is a different subcategory of tamyīz. For Ibn as-Sarrāj there are three subcategories of nominal tamyīz: after measures, numerals and kam.

The case of *kam* is interesting since it shows both semantic and syntactic similitudes with numerals, which together justify their combined treatment. It is, however, difficult to decide whether the semantic similitudes justify the syntactic ones, or if it is the other way round in the eyes of our grammarians. Lastly, we cannot rule out that al-Mubarrad and Ibn as-Sarrāj inherited the comparison between *kam* and numerals from Sībawayh and integrate it into their system with some adaptation.

11.3.8 A more precise view on semantics

Intentional semantics [m. 1]

We have seen in the literature review that some scholars believe that a distinctive feature of Sībawayh's $Kit\bar{a}b$ is its focus on the intention of the speaker (see p. 35). According to this "enunciative theory", Sībawayh is said to focus on the unconscious decisions that the native speaker has to perform in order to express his intended meaning. Later grammarians, beginning right after Sībawayh, are viewed as having a much more formal approach (see p. 62), until the confrontation with Greek logic forced grammarians to consider seriously the role of meaning in the linguistic process.

This picture is not supported by our limited data. In the passages related to numerals, there are three cases altogether in our three treatises where grammarians do take into account the intention of the speaker. Two are found in the *Muqtaḍab*, one in the *'Uṣūl* and none in the *Kitāb*. We do not pretend

at all that this is representative of the situation on a wider scale, but it surely encourages us to refine our views.

In the *Muqtaḍab*, al-Mubarrad comments on a line of poetry in which it is licit to put the complement of *kam* in all three independent, dependent and oblique form, depending on the intended meaning (see p. 147). In the same manner, he says that it is possible for the verbal *tamyīz* to surface in the singular or in the plural, according to the meaning the speaker wants to express (see p. 247).

In the same manner, Ibn as-Sarrāj says that triptotic numerals may become diptotic if the speaker intends their absolute meaning (see p. 123).

Communicative semantics [m. 3.5.6]

The "enunciative theory" quickly evolved into a communicational appreciation of Sībawayh's grammar, i.e., a grammar that focuses on the efficiency of the communicative act (see p. 37). According to Versteegh's classification of meanings (see p. 27), communicative semantics gathers five different types of meaning, all linked with the message. We could find only three of these five meanings in the passages related to numerals in our texts: the paraphrase of the message [m. 3], the mood of the sentence [m. 5] and the communicative purpose of speech [m. 6].

The paraphrase of the message [m. 3] Explanatory paraphrase [m. 3] should not be confused with the underlying structure of the sentence [m. 13], which is much more frequent in our grammar treatises. In the passages related to numerals we can mention the following occurences of explanatory paraphrase. All of Sībawayh, al-Mubarrad, and Ibn as-Sarrāj say that the "deflected" forms of numerals 'uḥād, tunā', and so on, mean wāḥidan wāḥidan "one by one", iṭnayni ṭnayni "two by two" (see p. 141). The expressions used by the three grammarians to describe this semantic equivalence are: hadd "definition" (K. II, 15.2); ta'wīl "reformulation" (M. III, 381.7); and ma'ná "meaning" ('U. II, 88.12).

In the same manner, all three authors paraphrase the meaning of the names of the day of the week between al- $^{2}Ahad$ and al- $^{2}Xam\bar{\imath}s$, which correspond to the ordinals al- $^{2}Awwal$ "the first", $a\underline{\imath}$ - $^{1}t\bar{\imath}an\bar{\imath}$ "the second", and so on. The actual names are the days' proper names (see p. 150). Here, the expressions they use are: $yur\bar{\imath}du$ "he wants" (K. I, 228.23); ma "na" "meaning" (M. II, 92.18); and ya " $n\bar{\imath}$ " "it means" (U. I, 158.1).

Al-Mubarrad and Ibn as-Sarrāj also paraphrase expressions of the type $t\bar{a}n\bar{i}$ tnayni and $t\bar{a}litu$ $tal\bar{a}tatin$ as 'aḥadu talatatin' and 'aḥadu talatatin' one of two" and "one of three" (see p. 132), instead of "the second of two" and "the third of three". In this case, the meaning they mention (ma'na', in both M. II, 181.4 and 'U. II, 426.5) is an explanatory paraphrase [m. 3]. Sībawayh does not paraphrase these expressions.

The case of expressions of the type $x\bar{a}misu$ 'arba'atin is less clear. All grammarians relate them to expressions like alladī xamasa l-'arba'ata (see p. 132). However, al-Mubarrad is the only author to say that these numerical verbs actually exist, and that the "meaning" (ma'ná; M. II, 181.6) of this expression is alladī xamasa l-'arba'ata. It is thus a semantic paraphrase [m. 3], because the verb xamasa actually exists. Ibn as-Sarrāj explicitly says that these verbs do not really exist. He adds that when you say xāmisu 'arba'atin you "mean" (turīd "you want"; 'U. II, 426.8) alladī xamasa l-'arba'ata. However, since the verb xamasa does not actually exist, the expression alladī xamasa l-'arba'ata is a reconstructed underlying structure [m. 13], not a paraphrase [m. 3]. Sībawayh is silent on the actual existence of these verbs. In all three cases they do not address the question of the meaning of ordinals per se [m. 9], i.e., the rank they refer to. As for the morphological meaning of their pattern [m. 14], only al-Mubarrad seems interested in the discussion on whether or not they have a verbal meaning that would derive from their $f\bar{a}$ 'il pattern (see p. 133). He only deals explicitly with compound ordinals, but it is clear that for him non-compound ordinals do have a verbal strength (tujrī-hi majrá ḍārib "you treat it like [the active participle] ḍārib; M. IV, 183.4) in expressions of the type xāmisu 'arba'atin.

The semantic tests are clearer cases of paraphrase [m. 3]. Numerals are found in semantic tests in the *Muqtaḍab* and the '*Uṣūl*, but not in the *Kitāb* (see p. 83). For example, Ibn as-Sarrāj says that if someone says *allaḍī la-hu* '*indī mi'atu dirhamin 'illā dirhamayn* "what I owe him is a hundred dirham less two", what he means ('aqarra bi-"he confirms, he asserts"; '*U*. I, 304.7–8) is "98 dirhams". In the same manner, Ibn as-Sarrāj says that *la-ka 'alayya 'ašaratun 'illā xamsatan mā xalā dirhaman* "I owe you ten [i.e., dirhams] less five but one dirham" means "six dirhams" (*fa-llaḍī la-hu sittatun* "so what he has is six"; '*U*. I, 304.20).

The mood of the sentence [m. 5] The only discussion about the mood of the sentence in the chapters devoted to numerals is found in the passages dedicated to *kam*, which behaves differently, depending on its "meaning" [m. 5] (*mawdi*'; *K.* I, 250.12; *M.* III, 55.3; '*U.* I, 315.2), interrogative or predicative. All three grammarians deal with this issue in detail (see p. 147).

The communicative purpose of the message [m. 6] Another dimension of communicative semantics is the communicative purpose ($f\bar{a}$ 'idah) of the utterance [m. 6]. In the chapters devoted to numerals in our grammars, it is only mentioned by Ibn as-Sarrāj, in three different places. The first case is the expression *at-tānī-himā 'anā tnāni (see p. 177) which is redundant unless it is uttered by a woman (kāna radī'an li-'anna-hu 'ulima "it is bad because it is already known"; 'U. II, 334.19). The second case is the use of compound numerals in sentences of the form alladīna hādā tālitu-hum talātatun (see p. 82). The only possibility would be to say *alladīna hādā hādī-him 'ahada-'ašara but this is not correct because the expected semantic outcome is impaired. The compulsory elision of -'ašara leads to "confusion" (yulabbasu bi-; 4 'U. II, 331.11). The last case is the use of indefinite nouns in the position of mubtada' (see p. 160). It is by way of exception possible to say $m\bar{a}$ 'ahadun fī d-dāri, mā kāna 'ahadun mitla-ka or laysa 'ahadun xayran min-ka because these sentences convey a "useful meaning" (fā'idah; 'U. I, 59.10; 66.18; 84.2).

It is thus not possible to say that post-Sībawayh grammar has lost its communicative dimension. Our limited data could even give the opposite impression, namely that a communicative dimension appears in post-Sībawayh grammar.

Extra-linguistic semantics [m. 7] and cognitive semantics [m. 9]

It is a common view among historians of Arabic grammar that grammarians excluded extra-linguistic semantics from their inquiry and reserved it to others branches of scholarship such as lexicography and rhetorics (see p. 62). We can only confirm this statement. For example, nowhere do we find any reference to the meaning [m. 7] of the diminutive form of numerals (see p. 139). Rather, grammarians deal with the morphological meaning [m. 14] of specific patterns, which is the case with diminutives. But what "a little three" and "a little eight" refer to is far from clear; it could be the case that grammarians only regard them as proper names.

The case of *mubham* "unspecified" substantives is also doubtful. We have seen above that our grammarians do not provide us with a theory of *mubham* substantives (see p. 145). These substantives are semantically deficient, since they do not refer to anything in particular. This is the reason why they need a specifier. We have also seen that it is not clear in our three grammar treatises whether all numerals are *mubhamah* (which seems to be Ibn as-Sarrāj's position, see p. 278), or only non-annexable ones

⁴Sic. The Form VIII, *yaltabisu*, would be more common in this sense.

(probably Sībawayh's position, see p. 145) or all greater numerals (probably al-Mubarrad's position, see p. 235).

Yet, the question remains: What dimension of meaning do they lack? Since grammarians explicitly say that they apply to everything, and not to something in particular, they probably intend the extra-linguistic meaning [m. 7]. (To be sure, not all words that do not have an extra-linguistic referent are said to be *mubhamah*.) On the other hand, as we have mentioned above, the conceptual correlate [m. 9] of numerals is extremely clear and distinctive: they represent discrete quantities that apply to counted objects.

Ibn as-Sarrāj is the only author to mention cases where numerals are used for their own meaning ('idā 'aradta l-ma'rifata wa-l-'adada fa-qaṭ "if you want the definite and the numeral alone"; 'U. II, 98.17), which we called their "absolute meaning" (pp. 123 and 143). According to Ibn as-Sarrāj, it is possible to consider numerals by themselves, as in talāṭatu 'akṭaru min iṭnayni wa-'aqallu min 'arba'ata ("three is more than two and less than four"; 'U. II, 98.19–20).

In this case, it seems obvious that numerals are not *mubhamah* any more, i.e., they do not need a specifier any more. This means that they refer to the quantity in itself [m. 9], in a way that is not deficient semantically. However, as we have said above, the category of "unspecified" (*mubham*) substantives is not systematically explored by our grammarians.

As far as the conceptual correlate [m. 9] is concerned, a few other issues are worth mentioning. For example, none of the authors mentions the fact that decades have both a cardinal and an ordinal meaning [m. 9] (see p. 145). Only al-Mubarrad discusses the morphological impossibility to build a $f\bar{a}^iil$ form, which conveys the ordinal meaning [m. 9], from roots that are used both for units and decades, otherwise it would be "confusing" (yaltabisu; M. II, 184.1).

The same comment can be said about Sībawayh's remark that there is no need to say "two twenties" because the word 'arba'ūna "forty" exists instead (K. II, 93.19; see above, p. 144). He clearly refers to the conceptual correlate [m. 9] of "twenty", "forty" and the dual, but also to the morphological meaning [m. 14] of the dual.

Al-Mubarrad is the only author to mention a discussion about the dual meaning of 'išrūna (see p. 137). This origin is still visible in the kasrah, "because it ['išrūna] is the dual of 'ten' and not a plural" (li-ʾanna-hā taṭniyatu 'ašaratin wa-laysat bi-jam'in; M. II, 165.16). However, he rejects this interpretation and says that 'išrūna has a pattern of its own. In this case he probably regards the dual meaning of 'išrūna as a conceptual correlate [m. 9], not as a morphological meaning [m. 14].

In other words, it seems that the only motive for grammarians to tackle an issue related to extra-linguistic semantics [m. 7] is to mention a deficience (*mubham* substantives). As for the conceptual correlate of words [m. 9], i.e., the concepts that numerals refer to, it is usually taken for granted in our texts.

Formal semantics [m. 12-14]

Formal semantics is by far the most frequent type of meaning dealt with in our three treatises, at least in the chapters devoted to numerals. This includes, among other meanings, the semantic content of the root [m. 12], the underlying structure of the sentence [m. 13], the morphosyntactic meaning of a pattern or of a sentence, its <code>mawdi^c</code> [m. 14]. These dimensions of semantics are labelled as "formal" because they are linked with the linguistic sign (see above, pp. 27f.)

The root's semantic content [m. 12] The semantic content of numerical roots [m. 12] is implicitly dealt with in the regular morphological derivations such as the formation of the pattern $f\bar{a}$ il (see p. 104), and the "deflected" forms ' $uh\bar{a}d$, $tun\bar{a}$ ', $tul\bar{a}t$, and so on (see p. 116). In the case of the corresponding verbal forms (see p. 105) and the names of the days of the week (see p. 150), it is understood that what is at stake is the semantic content of the root itself, but the grammarians do not comment on it.

The case of the root $\underline{t}n$ is interesting since the semantic content of the root [m. 12] seems to be very weak. In a discussion on the morphology of ' $i\check{s}r\bar{u}na$ al-Mubarrad says that it should have been built like other decades (see p. 137). What he means here is that if it were parallel to $\underline{t}al\bar{a}\underline{t}\bar{u}na$ and 'arba'una it would be * $i\underline{t}n\bar{u}na$. Al-Mubarrad does not quote this form, he

simply says that the meaning of the word would disappear after the elision of the dual suffix (la-ba;al ma' $n\bar{a}$ -hu" its meaning [of it $n\bar{a}ni$] would have disappeared"; M. II, 166.14). This means that for al-Mubarrad once the dual suffix has been removed from itn-al ni, the semantic content [m. 12] of the root a ni is neutralised.

The issue behind this discussion it that al-Mubarrad notices that the root 'šr is treated irregularly with respect to its semantic content, which is "ten" [m. 12]. The form 'išruna means the "dual of ten" [m. 9] but it surfaces in what could be morphologically interpreted as a "ten tens" [m. 14], just like talatuna is morphologically "three tens" [m. 14], but it means "thirty" [m. 9] without discrepancy. Al-Mubarrad tackles this issue by discussing why the form "ttnuna is impossible because it would not mean [m. 9] anything.

Lastly, what is at stake in proper names tests is that the semantic content of the root [m. 12] is neutralised, the word acquiring a clear extra-linguistic referent, the person who is referred to [m. 7]. The grammarian checks whether anything remains of its morphological meaning [m. 14], such as the suffixes (see p. 80).

The sentence's underlying structure [m. 13] We have seen above, p. 293, an application of the sentences's underlying structure as a semantic explanation in the grammarians' commentary of expressions of the type $x\bar{a}misu$ 'arba'atin. For al-Mubarrad, it "means" [m. 3; reformulation] $allad\bar{a}$ xamasa l-'arba'ata, while for Sībawayh, it "means" [m. 13; underlying structure] $allad\bar{a}$ xamasa l-'arba'ata. The difference between both interpretations depends on whether the verb xamasa actually exists.

Al-Mubarrad also comments on the expression *kam talātatan sittatun 'illā talātatāni?* "how many threes is six, if not two?" saying that at an "underlying level" (*taqdīr*) is the expression 'ayyu šay'in min al-'adadi sittatun 'illā talātatāni? "what numeral is six if not two threes?" (M. III, 64.3–5).

Another application of the underlying structure is found in the commentary on the meaning of compound cardinals and ordinals (see p. 138). For Sībawayh and Ibn as-Sarrāj, the base form ('aṣl, [m. 13]) of compound cardinals is a 'aṭf' construction, e.g., the 'aṣl of xamsata-'ašara is xamsatun wa-'ašaratun (K. II, 47.8 and 'U. II, 140.5). Al-Mubarrad does not mention this discussion. Sībawayh alone adds that the base form ('aṣl, [m. 13]; K. II, 47.9) of compound ordinals is an annexational construction (see p. 139).

All three authors assert that the expression 'išrūna dirhaman "means" ([m. 13]; 'arādū "they want", in K. I, 85.5; ma'ná "meaning", in M. III, 66.9; 'aradta

"you want", in 'U. I, 315.12) 'išrūna min ad-darāhimi (see p. 198, for Sībawayh's opinion; p. 232, for al-Mubarrad's opinion; and p. 255, for Ibn as-Sarrāj's opinion). This reveals its underlying structure. However, just like they take for granted the semantic [m. 9] unity of numerals, they also take for granted the semantic [m. 9] unity of the expression of the counted object. What they explore (each in his own way) is the underlying structural unity [m. 13] of this expression.

Lastly, all three authors spend a lot of time discussing the meaning [m. 14] of the *maṣdar*, which numerals can take in expressions of the type *marartu bi-hi waḥda-hu* and *marartu bi-him ṭalāṭata-hum*. The grammarians relate this to the expressions 'afradtu-hu 'ifrādan and 'awḥadtu-hu 'īḥādan (see p. 141). What is at stake here is twofold. While implicitly interpreting the numerals' position [m. 14] as that of a *maṣdar*, Sībawayh and Ibn as-Sarrāj reveal the underlying structure of the sentence [m. 13] (tamṭīl "representation", in K. I, 157.11; ka-'anna-ka qulta "as if you said", in 'U. II, 22.14–15).

The position of al-Mubarrad is different. As was the case with the fāʿil forms, it seems that he takes for granted the existence of the underlying verbal maṣādir (ʾīḥādan, taxmīsan, and so on), because he mentions them explicitly. Since for al-Mubarrad the corresponding Form II and IV maṣādir really exist in the language, it implies that 'awḥadtu-hu 'īḥādan and marartu bi-him taxmīsan are not underlying structures [m. 13] but "reformulations" [m. 3] (taʾwīl, in M. III, 239.6). It is exactly the same case as for the expression alladī xamasa l-ʾarbaʿata, which is, for al-Mubarrad, a reformulation [m. 3], not an underlying structure [m. 13].

The morphosyntactic meanings [m. 14] This last dimension of meaning is by far the one represented most frequently in our texts. We have already come across a few cases where it mingles with other dimensions of meaning: the meaning of the $f\bar{a}^{c}il$ pattern in ordinals and its verbal strength; the meaning of the final $n\bar{u}n$ in decades; the proper names where morphosyntactic meanings are tested; the diminutive pattern; the "deflected pattern"; the $ma\bar{s}dar$ meaning of numerals in certain expressions, and so on. In almost all these cases, only the morphosyntactic dimension of these forms is treated [m. 14], sometimes with a paraphrase [m. 3], as for the "deflected" pattern, or with an emphasis on underlying structures [m. 13], as for the $ma\bar{s}dar$ slot. Yet, their conceptual correlate is always taken for granted [m. 9].

There are other cases that are simpler to deal with. For example, both al-Mubarrad and Ibn as-Sarrāj say that, depending on the meaning [m. 14] of annexation, it is either possible to annex decades or not (see p. 131, for the annexation of decades; p. 234, for al-Mubarrad's position; and p. 252, for Ibn as-Sarrāj's opinion).

We have mentioned above (p. 272) that al-Mubarrad mentions more issues linked with numerals than other grammarians. Some of these issues deal with morphosyntactic meanings [m. 14]. For example, al-Mubarrad is the only author to discuss whether a $f\bar{a}^{i}$ il form having an active participle meaning [m. 14] can be built on compound ordinals (see p. 133). He also discusses the absence of a link between the morphological meaning [m. 14] of $mi^{2}ah$ "one hundred" and its lexical meaning "ten tens" [m. 9] (see p. 138). He is also the only author to say that the intention of $tanw\bar{n}$ [m. 14] in $-\hat{a}sara$ can be deleted from compound numerals in order to enable their annexation (see p. 226). Lastly, he clearly says that decades have no verbal meaning "at an underlying level" $(taqd\bar{n}r)$ [m. 14] and that the dependent form of their $tamy\bar{n}z$ is justified at the surface level only (see p. 229).

Formal semantics, i.e., linked with the linguistic sign, are dealt with in our texts in two main components, the underlying structure of the sentence [m. 13] and the morphosyntactic meanings of words and sentences [m. 14]. As was the case with the extra-linguistic referent [m. 7] and the conceptual correlates [m. 9], the semantic content of roots [m. 12] is taken for granted and only rarely mentioned explicitly.

The only clear difference between our three authors, as far as formal semantics are concerned, is that the *Muqtaḍab* contains more issues where formal semantics is involved. However, this observation is of little significance because the *Muqtaḍab* contains more issues linked with numerals in the first place. It is thus not a surprise that this dimension of semantics is more visible in the *Muqtaḍab*.

Chapter 12

Summary

In this study, I have compared three Arabic grammatical treatises from the first four centuries AH, Sībawayh's (d. 180/796) *Kitāb*, al-Mubarrad's (d. 285/898) *Muqtaḍab* and Ibn as-Sarrāj's (d. 316/928) '*Uṣūl fī n-naḥw*, in order to contribute to the study of the evolution of the place of semantics in their grammatical methods.

Based on a classification of the different meanings of the word $ma^cn\acute{a}$ ("meaning") in the Arabic grammatical tradition (Versteegh 1997b), I have isolated five main dimensions of semantics: intentional, communicative, extra-linguistic, cognitive, and formal. The purpose of this distinction was to show that it is too simplistic to consider that a semantic concern is or is not found in these grammatical treatises: semantics has many dimensions, which may or may not surface, together or separately.

In order to reach this aim, I have focused on the grammar of numerals, because they present an obvious semantic unity and a great syntactic diversity. This led me to believe that the way grammarians treat numerals gives a relevant insight into the way they link semantics and syntax. My research hypothesis was that the search for consistency in the grammar of numerals moved from a functional to a formal dimension of semantics. This corresponds to shift from a psychological understanding of the concepts of *lafd* vs. *ma'ná*, roughly equivalent to 'signifier/signified', to a linguistic understanding (Kouloughli 1985).

After a review of the literature focused on the place of semantics in the Arabic grammatical tradition (chapter 2), all the issues linked with numerals

in Arabic, in morphology, morphosyntax, and semantics are dealt with in chapters 3 to 7. Then, I have studied how each grammarian deals with numerals within his grammatical system (chapters 8 to 10). Lastly, I have compared the three treatises on three points (chapter 11): their formal level (extent, content, language described); the grammatical methodology each grammarian uses; and the recourse of each grammarian to the five main dimensions of semantics.

Comparison at a formal level

These three treatises are comparable in terms of volume, content and focus. They represent three attempts to gather, organise, and explain the language of the Arabs. There are differences between them at the formal level, but this does not impair their resemblance. The $Kit\bar{a}b$ is by far the most extensive work of the three, but it does not contain as many issues as the two other treatises, as far as numerals are concerned. Paradoxically, it is in the Muqtadab that one finds the most extensive list of issues. This is paradoxical because it is the shortest of the three treatises (the $Kit\bar{a}b$ is 60% longer than the Muqtadab and 25% longer than the $U.\bar{y}a\bar{u}l$ in terms of number of words).

A striking difference between them is their link with the linguistic corpora, especially the Qur'ān, poetry, and the canonised language of the Arabs. Al-Mubarrad quotes many more Qur'ānic verses than the two other grammarians, while Ibn as-Sarrāj quotes significantly more utterances from the language of the Arabs than Sībawayh and al-Mubarrad. This conclusion is based only on quotations containing numerals.

As far as the grammar of numerals is concerned, the three grammarians describe exactly the same phenomena. This means that the way in which numerals and quantities are expressed in Arabic seems to be stable through time, since no major variation is mentioned. The differences the grammarians mention are minor (the possibility to add an article to numerals, the possibility to annex them) and can easily be accounted for by the methodological frames they adopt rather than by actual linguistic variation.

Comparison of grammatical methodologies

This picture contrasts with the differences between their methodology. Indeed, the methodological framework in which Sībawayh, al-Mubarrad and Ibn as-Sarrāj interpret linguistic phenomena differs considerably.

Sībawayh's methodology has been studied extensively in the last forty years, and my study confirms the main findings of these scholarly works. The most striking feature of Sībawayh's grammar is that it aims at a profound and wide consistency between linguistic phenomena. In order to discover this consistency, and to limit the number of rules and categories, Sībawayh does not hesitate to assimilate phenomena that could intuitively be seen as separate. The frame in which he works is that of a potentially unlimited gradation of rights and powers that words have vis-à-vis other words. Sībawayh considers the most difficult case first (the fact that for some numerals the annexational construction is impossible and replaced by a specifying construction). He inserts numerals in a scale somewhere between aṣ-ṣifāt al-mušabbahah bi-l-fā'il (adjectives with a verbal valency) and ka-dā (constructions with the particle ka-), and refines their relative position visà-vis other words by comparing them in different contexts. The result of this highly speculative method is simple and unified: all numerals behave the same, but at a deeply underlying level.

The methodology of al-Mubarrad is probably the least studied of the three. He presents more issues than the two other grammarians, in a way that clearly does not aim at a wide-scale consistency. The development between the Muqtadab and the $Kit\bar{a}b$ is certainly not one of rationalisation, nor of pedagogical organisation, but rather an attempt to continue Sībawayh's description of the language. However, unlike Sībawayh, whose aim was to uncover the underlying consistency of the language, al-Mubarrad's treatise shows a clear emphasis on exhaustivity. For him, applying distinctions is tantamount to offering an explanation. He divides numerals into basic and subsidiary ones, and refines these divisions in order to explain each series. The result of this much less speculative method is, at the same time, more complicated and shallower than that of Sībawayh: each series behaves differently, according to rules that apply only to a given set of numerals and that can be explained easily.

Ibn as-Sarrāj's method has received some attention although not as much as it would deserve. He presents grammatical issues in a systematic way, using syntactic, semantic and morphological tools to refine his classification. His system clearly aims to organise grammatical issues rather than finding a wide-scale consistency between them. His "exhaustive classification"

(taqāsīm) makes him blind to transversal issues that occupied Sībawayh in his Kitāb. This gives the impression that he contents himself with local consistencies. Thanks to a subcategory specific to numerals, tamyīz al-'a'dād, Ibn as-Sarrāj addresses the same question as Sībawayh and al-Mubarrad (the semantic equivalence of the annexational and specifying constructions and their complementary distribution for the expression of the counted object). What is probably new is that Ibn as-Sarrāj does not reject the use of semantic criteria to distinguish between these subcategories, if needed. The result of this systematic method is a strong consistency, which is however only local, i.e., it applies only to numerals, and this at a much lower speculative cost than Sībawayh.

The consequence of these different methods on the grammar of numerals is far-reaching, not in terms of the linguistic facts themselves, since all three grammarians describe the same linguistic facts, but in terms of justification and organisation. In the $Kit\bar{a}b$, the syntactic and semantic link between numerals and their counted objects could be called a fossilised subcase of the sifah musabbahah $bi-l-f\bar{a}$ il. For al-Mubarrad numerals behave differently according to the series they belong to. And Ibn as-Sarrāj's ready-to-wear category of numerical $tamy\bar{z}z$ enables him to find a strong consistency among numerals, which is, by definition, not valid for other words.

Comparison of the place of semantics

The issue of semantics was at the core of the debate about the grammatical methods of Arabic grammarians. However, my inquiry did not bring clear-cut evidence that any radical shift happened between Sībawayh, al-Mubarrad and Ibn as-Sarrāj, as far as the recourse to semantics is concerned. One might say that this is due to the limited volume of data dealt with, but this does not seem to be a major obstacle to understand the evolution of grammar, at least not in the first centuries. All three grammarians deal with semantic issues. They have in common that they take extra-linguistic [m. 7] and cognitive [m. 9] semantics for granted, they all rely on communicative semantics (reformulation [m. 3], mood of the sentence [m. 5] and communicative purpose [m. 6]). Lastly, they all rely in their analysis on formal semantics (underlying structures [m. 13] and morphosyntactic meanings [m. 14]).

It is not the case that Sībawayh focuses on the intention of the speaker [m. 1] more than al-Mubarrad and Ibn as-Sarrāj do, nor is his grammar more communicative [m. 2.3.5.6], or al-Mubarrad's and Ibn as-Sarrāj's grammar more formal [m. 12–14]. Rather, my conclusion is that their grammatical

methods are much more discriminating than their views about meaning. The three treatises deal with the same semantic dimensions, but they serve different methodological approaches. Qualifying a methodological approach thus means that one has to find out in which way a grammarian integrates the different semantic dimensions of language, in function of his view of consistency of the grammatical rules.

Tentatively, one might say that when al-Mubarrad's Muqtadab or Ibn as-Sarrāj's ${}^{2}U\underline{s}\bar{u}l$ does not feature the same "lively" approach to grammar as Sībawayh's $Kit\bar{a}b$, this is not primarily due to a lack of focus on intentional or communicative semantics, but to a radical reshaping of the issues dealt with, in a "discrete" way in the Muqtadab and in a systematic way in the ${}^{2}U\underline{s}\bar{u}l$, whereas in the $Kit\bar{a}b$ issues are presented in a more "narrative" way.

At the beginning of this study I formulated the hypothesis that the search for consistency in the chapter of numerals shifted from a functional to a formal dimension of grammar. This hypothesis could not be validated because my data do not support the idea that Sībawayh's search for consistency relies more on communicative semantics than that of later grammarians and because al-Mubarrad's differentiated approach cannot be called a search for consistency in the proper sense. My study does support, however, the view that Ibn as-Sarrāj's subdivision of syntactic categories was based on formal semantic criteria.

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Part VI

Annexes

Index of Qur'anic verses

Here are the Qur'ānic verses quoted in the grammatical texts studied here and which contain numerals. They are sorted according to their numbering in the Qur'ān.

1. Q. 2, 102 (M. II, 20.10).

2. Q. 2, 196 (M. II, 158.2-3).

3. Q. 2, 228 (K. II, 185.13; M. II, 159.1; 'U. II, 430.9). See pp. 86, 180 & 251.

4. $Q.\ 2,\ 282\ (K.\ I,\ 383.2-3;\ 425.5-6;\ M.\ III,\ 214.8-9).$

5. Q. 4, 3 (M. III, 381.2). See p. 116.

6. Q. 5, 73 (K. II, 177.22-12; M. II, 181.4-5). See p. 88.

7. Q. 6, 160 (K. II, 181.13; M. II, 149.1; 185.8; 9; U. III, 477.5–6). See pp. 86, 86, 88 & 173.

٨. ﴿وَٱخْتَارَ مُوسَى قَوْمَهُ سَبْعِينَ رَجُلاً لِّمِيقَاتِنا ﴾ (الأعراف، ١٥٥)

8. Q. 7, 155 (K. I, 12.15; M. II, 321.5; 342.10; 'U. I, 178.1–2). See p. 86.

٩. ﴿ وَإِذْ يَعِدُكُمُ ٱللَّهُ إِحْدَى ٱلطَّآبِفَتَيْنِ أَنَّهَا لَكُمْ ﴾ (الأنفال، ٧)

9. Q. 8, 7 (K. I, 415.12-13; 'U. I, 270.11).

١٠. ﴿إِذْ أَخْرَجَهُ ٱلَّذِينَ كَفَرُواْ ثَانِيَ ٱثْنَيْنِ ﴾ (التوبة، ٤٠)

10. Q. 9, 40 (K. II, 177.22; M. II, 181.4-5). See p. 88.

١١. ﴿وَلَا يَلْتَفِتْ مِنْكُمْ أَحَدٌ إِلَّا آمْراَتُكُ ﴿ (هود، ٨١)

11. Q. 11, 81 (M. IV, 395.10). See p. 86.

١٢. ﴿إِنِّى رَأَيْتُ أَحَدَ عَشَرَ كَوْكَبًا وَالشَّمْسَ وَالْقَمَر رَأَيْتُهُمْ لِى سَلْجِدِينَ (يوسف، ٤)
 12. Q. 12, 4 (M. II, 225.8-9).

١٣. ﴿يَلْبَنِيُّ لَا تَدْخُلُواْ مِنْ بَابٍ وَاحِدٍ ﴾ (يوسف، ٦٧)

13. Q. 12, 67 (M. IV, 249.1).

١٤. ﴿سَيَقُولُونَ ثَلَاقَةٌ رَّابِعُهُمْ كَلْبُهُمْ ﴾ (الكهف، ٢٢)

14. Q. 18, 22 (M. II, 181.9). See p. 88.

١٥. ﴿وَلَبَثُواْ فِي كَهْفِهِمْ ثَلَثَ مِاْئَةٍ سِنِينَ وَٱزْدَادُواْ تِسْعًا﴾ (الكهف، ٢٥)

15. Q. 18, 25 (M. II, 170.4). See pp. 87, 167, 182, 286 & 254.

(٦ ﴿ وَأَلُ إِنَّمَاۤ أَنَا بَشَرٌ مِّشْلُكُمْ مُوحَى إِلَى الْبَهَا إِلَى اللّهِ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَيْ اللّهُ عَلَى اللّهُ اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ اللّهُ اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَى اللّهُ عَلَّ عَلَى اللّهُ عَلَّهُ عَلَى اللّهُ عَل

١٧. ﴿ فَإِمَّا تَرَينَّ مِنَ ٱلبَشَرِ أَحَدًا ﴾ (مريم، ٢٦)

17. Q. 19, 26 (K. II, 155.3; M. III, 14.1; M. IV, 34.6).

١٨. ﴿وَإِنَّ هَــٰذِهِۦٓ أُمُّتُكُمْ أُمَّةً وَاحِدَةً وَأَنَا رَبُّكُمْ فَٱتَّقُونَ﴾ (المؤمنون، ٥٧)

18. Q. 23, 52 (K. I, 247.10–11; M. II, 347.6–7; $^{\circ}U$. I, 267.3–4; 271.14–15). See pp. 86 & 86.

١٩. ﴿الزَّانِيَةُ وَالزَّانِي فَآجْلِدُواْ كُلَّ وَاحِدٍ مِّنْهُمَا مِائْةَ جَلْدَةً ﴾ (النور، ٢)

¹After the correction of Bohas (1993, 82).

19. Q. 24, 2 (K. I, 60.9).

٢٠. ﴿فَشَهَادَةُ أَحَدِهِمْ أَرْبَعُ شَهَادَاتِ بِٱللَّهِ إِنَّهُ لَهِنَ ٱلصَّادِقِينَ ﴾ (النور، ٦)

20. Q. 24, 6 (K. I, 422.6-7).

٢١. ﴿وَٱلْحُامِسَةُ أَنَّ غَضَبَ ٱللَّهِ عَلَيْهَا ﴾ (النور، ٩)

21. Q. 24, 9 (K. I, 429.2).

٢٢. ﴿وَمِنْهُم مَّن يَمْشِي عَلَىٰ أَرْبَعُ ۗ (النور، ٤٥)

22. Q. 24, 45 (M. II, 50.18).

٢٣. ﴿عَلَىٰٓ أَن تَأْجُرَنِي ثَمَانِيَ حِجَجَّ فَإِنْ أَتْمَمْتَ عَشَرًا فَمِنْ عِندِكُّ ۗ (القصص، ٢٧)

23. Q. 28, 27 (M. II, 158.1-2).

٢٤. ﴿أُوْلِي أَجْنِحَةٍ مَّثْنَى وَثُلَاثَ وَرُبَاعً ﴾ (فاطر، ١)

24. Q. 35, 1 (K. II, 15.4; M. III, 381.1-2). See p. 116.

٢٥. ﴿ وَلَوْ أَنَّمَا فِي ٱلْأَرْضِ مِن شَجَرَةٍ أَقَلَمٌ وَٱلْبَحْرُ يَمُدُّهُ مِنْ بَعْدِهِ عَسَبْعَةُ أَبْحُرٍ ﴾ (لقمان، ٢٧)

25. Q. 31, 27 (K. I, 246.4-5; 'U. I, 249.12-13). See p. 86.

٢٦. ﴿ وَلَئِن زَالتَآ إِنْ أَمْسَكَهُمَا مِنْ أَحَدٍ مِّنْ بَعْدِهِ عَ ۖ (فاطر، ٤١)

26. Q. 35, 41 (K. I, 405.10-11; 'U. II, 190.8).

٢٧. ﴿وَأَرْسَلْنَـٰكُ إِلَىٰ مِاْئَةِ أَلْفٍ أَوْ يَزِيدُونَ﴾ (الصّافّات، ١٤٧)

27. Q. 37, 147 (M. III, 304.3).

Q. 41, 6 see Q. 18, 110.

٢٨. ﴿فِي أَرْبَعَةِ أَيَّامٍ سَوَآءً لِّلسَّآبِلِينَ﴾ (فصّلت، ١٠)

28. Q. 41, 10 (K. I, 232.3; 4; M. II, 158.1; M. III, 232.4; M. IV, 304.12; 305.1). See pp. 83 & 86.

٢٠. وأَبَشَرًا مِّنَّا وَاحِدًا نَّتَّبَعُهُ ﴿ (القمر، ٢٤)

29. Q. 54, 24 (M. II, 76.4-5).

٣٠. ﴿ وَمَا أَمْرُنَا إِلَّا وَاحِدَةٌ كَلَمْحِ ﴾ (القمر، ٥٠)

30. Q. 54, 50 (M. IV, 190.17).

٣١. ﴿مَا يَكُونُ مِن نَّجْوَىٰ ثَلَـٰثَةٍ إِلَّا هُوَ رَابِعُهُمْ وَلَا خَمْسَةٍ إِلَّا هُوَ سَادِسُهُمْ ﴾ (المجادلة ٧٠) 31. Q. 58, 7 (M. II, 181.8-9). See p. 88.

٣٢. ﴿ سَخَّرَهَا عَلَيْهِمْ سَبْعَ لَيالٍ وَثَمَانِيَةَ أَيَّامٍ ﴾ (الحاقة، ٧)

32. Q. 69, 7 (M. II, 157.16).

٣٣. ﴿ فَإِذَا نُفِخَ فِي ٱلصُّورِ نَفْخَةٌ وَاحِدَةٌ ﴾ (الحاقة، ١٣)

33. Q. 69, 13 (M. III, 104.6; 'U. II, 297.20). See p. 82.

٣٤. ﴿ فَمَا مِنكُم مِّنْ أَحَدٍ عَنْهُ حَلْجِزِينَ ﴾ (الحاقة، ٤٧)

34. Q. 69, 47 (M. III, 252.7).

٣٥. ﴿وَأَنَّ ٱلْمَسَاجِدَ لِلَّهِ فَلَا تَدْعُواْ مَعَ ٱللَّهِ أَحَدًا﴾ (الجنّ، ١٨)

35. Q. 72, 18 (K. I, 413.10; M. II, 347.8; 'U. I, 269.5-6). See p. 86.

٣٦. ﴿وَمَا لِأَحَدٍ عِندَهُۥ مِن نِّعْمَةٍ تُجْزَكَى إِلَّا ٱثْبِتَعَآءَ وَجْهِ رَبِّهِ ٱلْأَعْلَىٰ﴾ (الليل، ١٩-٢٠) 36. Q. 92, 19–20 (M. IV, 412.6–7).

٣٧. ﴿قُلْ هُوَ اللَّهُ أَحَدُّ اللَّهُ الصَّمَدُ ﴾ (الإخلاص، ١-٢)

37. *Q*. 112, 1–2 (*K*. II, 298.16; *M*. II, 314.2; 315.11–12; *'U*. II, 369.14). See pp. 86, 86, 87, 154 & 158.

٣٨. ﴿وَلَمْ يَكُن لَّهُۥ كُفُواً أَحَدُ ﴾ (الإخلاص، ٤)

38. Q. 112, 4 (K. I, 21.15–16; M. IV, 90.8; 'U. I, 85.15). See p. 86.

Other Qur'ānic verses containing numerals, mentioned in this research, but not quoted in the grammatical texts studied here.

١. ﴿فَإِن كُنَّ نِسَاءً فَوْقَ اثْنَتَيْنِ فَلَهُنَّ ثُلْفًا مَا تَرَكُّ وَإِن كَانَتْ وَاحِدَةً فَلَهَا النِّصْفَ وَلِأَبَوْيْهِ لِكُلِّ وَاحِدٍ مَنْهُمَا السُّدُسُ مِمَّا تَرَكَ إِن كَانَ لَهُ وَلَدٌّ فَإِن كَانَ لَهُ وَلَدٌّ وَوَرِثَهُ السُّدُسُ مِمَّا تَرَكَ إِن كَانَ لَهُ وَلَدٌّ فَإِن كَانَ لَهُ إِخْوَةً فَلِاللَّمِ السُّدُسُ ﴿ (النساء ، ١١)

1. Q. 4, 11. (See p. 115.)

٢. ﴿فَإِن كَانَ لَهُنَّ وَلَدٌ فَلَكُمُ ٱلرُّبُعُ مِمَّا تَرَكُنَّ مِنْ بَعْدِ وَصِيَّةٍ يُوصِينَ بِهَآ أَوْ دَيْنٍ وَلَهُنَّ ٱلرُّبُعُ مِمَّا تَرَكُتُمْ إِن لَهُمْ وَلَدٌ فَلَهُنَّ النُّمُنُ مِمَّا تَرَكُتُمْ (النساء، ١٢)

2. Q. 4, 12. (See p. 115.)

٣. ﴿فَإِن كَانَتَا آثَنَتَيْنِ فَلَهُمَا ٱلثُّلْثَانِ مِمَّا تَرَكُّ (النساء، ١٧٦)

3. Q. 4, 176. (See p. 115.)

٤. ﴿ وَقَطَّعْنَا لَهُ مُ ٱثْنَتَىٰ عَشْرَةَ أَسْبَاطًا أَمَمَّ ۚ (الأعراف، ١٦٠)

4. Q. 7, 160. (See p. 89.)

٥. ﴿وَٱعْلَمُواْ أَنَّمَا عَنِمْتُم مِّن شَيْءٍ فَأَنَّ لِلَّهِ خُمُسَهُ.﴾ (الأنفال، ٤١)

5. Q. 8, 41. (See p. 115.)

 آ. ﴿أَن تَقُومُواْ لِلّٰهِ مَثْنَىٰ وَفُرادَىٰ ثُمَّ تَتَفَكَّرُواْ ﴿ (سبأ ، ٤٦)

6. Q. 34, 46. (See p. 116.)

٧. ﴿إِنَّ رَبَّكَ يَعْلَمُ أَنَّكَ تَقُومُ أَدْنَى مِن تُلثَي اللَّيْلِ وَنِصْفَهُ وَثُلثُهُ وَطَآبِفَةٌ مِّنَ اللَّذِينَ مَعَكَ ﴿ (المرّمل، ٢٠)

7. Q. 73, 20. (See p. 115.)

Qur'ānic verses mentioned in this research, but that do not contain numerals.

﴿ وَلِلَّهِ ٱلْأَمْرُ مِن قَبْلُ وَمِن بَعْدُ ﴾ (الروم، ٤)

1. Q. 30, 4. (See p. 227.)

٢. ﴿إِنَّهُ لَحَقٌّ مِّثْلَ مَآ أَنَّكُمْ تَنطِقُونَ ﴿ (ق، ٢٣)

2. Q. 51, 23. (See p. 262.)

Index of poetic lines

Here are the poetic verses quoted in the grammatical texts studied here and which contain numerals. They are listed in strict alphabetic order of the the first words.

1. *K.* I, 35.17-18.

2. 'U. II, 19.17.

3. K. II, 183.15: only the first verse; M. II, 176.1–2; 200.6: only the first verse; IV, 144.4: only the second verse, وَالدِّيارُ

4. K. I, 87.10; 253.6.

5. K. I, 87.8; 253.4: $\mathring{\tilde{a}}$ $\mathring{\tilde{$

(See 38.

٦. الواهِبُ المِائةِ الهجانِ وَعَبْدِها عودًا تُزجّى بَيْنَها أَطْفالُها

٧. تَحْدُو ثَمانِيَ مُولَعًا بِلَقاحِها حَتَّى هَمَمْنَ بِزَيْغةِ الإِرْتاج

7. K. II, 17.15; 'U. II, only the first hemistich in 91.15: يَحْدُو

٨. ثَلاثُ مِئينِ قَدْ مَرَرْنَ كُوامِلًا وَها أَنْذا أَرْتَجي مَرَّ أَرْبَع

8. M. II, 170.7.

٩. ثَلاثُ مِئينِ لِلمُلوكِ وَفَى بِهَا وِدائِي وَجَلَّتْ عَنْ وُجوهِ الأَهاتِم

9. M. II, 170.5.

.١. ثَلاثَةُ أَنْفُسِ وَثَلاثُ ذَوْدٍ لَقَدْ جارَ الزَّمانُ عَلَى عِيالِي

10. K. II, 181.4.

١١. ثَماني حِجَجِ حَجَجْتُهُنَّ بَيْتَ اللَّهِ

11. K. I, 75.22.

١٢. جَزَيْتُكِ ضِعْفَ الوُدِّ لَمَّا اسْتَثَبْتِهِ وَمَا إِنْ جَزاكِ الضَّعْفَ مْن أَحَدٍ قَبْلَى

12. M. IV, 137.10.

١٣. جَمَعْتَ وَبُخَلاً غَيْبةً وَنَميمةً ثَلاثَ خِصالِ لَسْتَ عَنْها بِمُرْعُوي

13. U. I, 354.11.

١٤. حَيْدةُ خالى وَلَقيطٌ وَعَلِيٌّ وَحاتِمُ الطَّائِيُّ وَهَّابُ المِئِيِّ

14. 'U. III, 329.1; 332.9.

١٥. خَوِّى عَلَى مُسْتَوَيَاتٍ خَمْسِ كَرْكِرةٍ وَثَفِناتٍ مُلْسِ

15. K. I, 183.2. (See pp. 92 & 157.)

١٦. سَماءُ الإلهِ فَوْقَ سَبْع سَمائِيا

16. K. II, 54.13; M. I, 282.5; 'U. III, 341.1; 445.3.

١٧. صَبَحْناهُمْ بِأَلْفٍ مِنْ سُلَيْمٍ وَسَبْع مِنْ بَني عُثْمانَ وافي

17. M. II, 184.8. (See p. 108.)

18. *K.* I, 251.16–17; *M.* III, 55.12: only the first verse; *'U.* I, 316.2: only the first verse.

(See 35.

19. K. II, 180.10.

. 20. K. II, 181.6; M. II, 148.11: مِجَنّى; 'U. III, 476.5: مِجَنّى

21. M. III, 56.2.

22. U. I, 325.12.

23. K. II, 181.2.

24. K. II, 182.20; 210.16: الطِّرار; M. II, 159.2.

25. M. III, 170.2.

26. K. II, 182.18; 210.14: جِرابٍ ; M. II, 156.3: جِرابٍ . (See pp. 92, 130, 154, 177 & 273.)

٧٧. لَئِنْ كُنْتَ في جُبِّ ثَمانينَ قامةً وَرُقَيْتَ أَسْبابَ السَّماءِ بِسُلَّم

27. K. I, 197.18; 'U. II, 27.21. (See p. 93.)

٢٨. لَعَمْرُكَ ما أَدْرِي وَإِنْ كُنْتُ دارِيًا بِسَبْع رَمَيْنَ الجَمْرَ أَمْ بِثَمانِ

28. K. I, 434.14; M. III, 294.5.

٢٩. لَقَدْ رَأَيْتُ عَجَبًا مُذْ أَمْسا عَجائِزًا مِثْلَ السَّعالَى خَمْسا

29. K. II, 40.15.

٣٠. لَنا مِرْفَدٌ سَبْعُونَ أَلْفَ مُدَجَّج فَهَلْ في مَعَدٍّ فَوْقَ ذٰلِكَ مِرْفَدا

30. K. I, 258.3. (See p. 183.)

٣١. ما بالمدينة دارٌ غَيْرُ واحِدةٍ دارُ الخَليفة إلّا دارُ مَرُوانا

31. K. I, 325.22; M. IV, 425.2; 'U. I, 303.14.

٣٢. ما زالَ مُذْ عَقَدَتْ يَداهُ إِزارَهُ وَدَنا فَأَدْرَكَ خَمْسَةَ الأَشْبار

32. M. II, 176.4.

٣٣. مَنَتْ لَكَ أَنْ تُلاقِيني المَنايا أُحادَ أُحادَ في شَهْر حَلالِ

33. M. III, 381.4. (See p. 117.)

٣٤. نَحْنُ بَنو أُمِّ البَنِينَ الأَرْبَعة وَنَحْنُ خَيْرُ عامِرِ بْنِ صَعْصَعةَ

34. K. I, 285.13. (See p. 157.)

٥٦. وَإِنَّ كِلابًا هاذِهِ عَشْرُ أَبْطُنِ وَأَنْتَ بَرِيةٌ مِنْ قَبائِلِها العَشْرِ

35. K. II, 180.22; M. II, 148.11: وَإِنَّ 'U. III, 477.1.

(وَالذِّئْبَ أَخْشاهُ إِنْ مَرَرْتُ بِهِ وَحْدِي وَأَخْشَى الرِّياحَ وَالمَطَرا

(See 1.

(وَقَفْتُ فيها أُصَيْلانًا أُسائِلُها عَيَّتْ جَوابًا وَما بالرَّبْع مِنْ أَحَدِ

(See 38.

٣٦. وَلَكِنَّما أَهْلِي بِوادٍ أَنيسُهُ ذِئابٌ تَبَغَّى النَّاسَ مَثْنَى وَمَوْحَدُ

36. K. II, 15.8; M. III, 381.6. (See p. 117.)

٣٧. وَماذا يَدَّرِي الشُّعَراءُ مِنّى وَقَدْ جاوَزْتُ حَدَّ الأَرْبَعين

37. M. III, 332.7; IV, 37.6.

(وَقَفْتُ فيها أُصَيْلانًا أُسائِلُها عَيَّتْ جَوابًا وَما بِالرَّبْع مِنْ أَحَدِ

(See 3.

٣٨. يا دَّارَ مَيَّةَ بِالعَلْيَاءِ فَالسَّنَدِ أَقْوَتْ وَطَالَ عَلَيْها سَالِفُ الأَبْدِ وَقَفْتُ فيها أُصَيْلاً أُسائِلُها عَيَّتْ جَوابًا وَما بِالرَّبْعِ مِنْ أَحَدِ وَقَفْتُ فيها أُصَيْلاً أُسائِلُها وَالتُّوْيُ كَالحَوْضِ بِالمَظْلُومةِ الجَلَدِ وَالتُّوْيُ كَالحَوْضِ بِالمَظْلُومةِ الجَلَدِ

38. K. I, 319.14–16; M. IV, 414.4–5: only the first and the second verses, أُصَيْلالًا ; 'U. III, 275.10: only the second verse, أَعْيتُ أُصَيْلالًا ; 'U. III, 275.10: only the second verse, وَمَا بِالرَّبْعِ مِنْ أَحَدٍ and only أَعْيتُ أُصَيْلالًا وَمَا بِالرَّبْعِ مِنْ أَحَدٍ

(يَحْدو ثَمانِيَ مولَعًا بِلَقاحِها حَتّى هَمَمْنَ بِزَيْعةِ الإِرْتاج

(See 7.

(يُذَكِّرُنيكِ حَنينُ العَجولِ وَنَوْحَ الحَمامةِ تَدْعو هَديلا

(See 18.

Index of Classical authors

Here is a list of the authors of the Classical period quoted in this study, sorted according to their date of death. The dates of death are quoted from Kaḥḥālah (1957), Sezgin (1967–2010), and Brockelmann (1943–1949/1996). For simplicity's sake, only the most widely acknowledged date of death is mentioned when these authors are quoted in the text.

See below in the index of proper names, p. 344, the pages where these authors are quoted in the text.

Authors of the Ist/VIIth century

```
al-'A'šá, Maymūn b. Qays ('Abū Baṣīr) (d. ca. 7/629)
```

al-ʿAjjāj, ʿAbd al-Lāh b. Ruʾbah (ʾAbū š-Šaʿṯāʾ) (d. between 86/705 and 96/715)

Authors of the IInd/VIIIth century

'Abū 'Amr b. al-'Alā', Zabbān (or Zayyān or al-'Uryān) b. 'Ammār (d. 154/771 or 157/774)

al-Xalīl b. 'Aḥmad ('Abū 'Abd ar-Raḥmān) al-Farāhīdī (d. 160/776 or 170/786 or 175/791 or 177/793)

Sībawayh, 'Amr b. 'Utmān ('Abū Bišr) (d. 180/796)

Yūnus b. Ḥabīb (ʾAbū ʿAbd ar-Raḥmān) (d. 182/798)

al-Kisā'ī, 'Alī b. Ḥamzah ('Abū l-Ḥasan) (d. 189/805)

Authors of the IIIrd/IXth century

aš-Šāfiʿī, Muḥammad b. ʾIdrīs (ʾAbū ʿAbd al-Lāh) (d. 204/820)

Quṭrub, Muḥammad b. al-Mustanīr (ʾAbū ʿAlī) (d. 206/821)

al-Farrā', Yaḥyá b. Ziyād ('Abū Zakariyyā') al-'Aslamī d-Daylamī (d. 207/822)

al-'Axfaš al-'Awsaṭ, Saʻīd b. Masʻadah ('Abū l-Ḥasan) al-Mujāšiʻī (d. 210/825 or 215/830 or 221/835)

al-Jarmī, Ṣāliḥ b. 'Isḥāq ('Abū 'Umar) (d. 225/839)

Ibn 'Abī Šaybah, 'Abd al-Lāh b. Muḥammad ('Abū Bakr) (d. 235/849)

Ibn Ḥanbal, 'Aḥmad b. Muḥammad ('Abū 'Abd al-Lāh) aš-Šaybānī (d. 241/855)

Ibn as-Sikkīt, Ya'qūb b. 'Isḥāq ('Abū Yūsuf) (d. 243/857 or 244/858 or 246/860)

al-Mutawakkil 'alá l-Lāh, Ja'far b. al-Mu'tasim ('Abū l-Fadl) (d. 247/861)

al-Māzinī, Bakr b. Muhammad ('Abū 'Utmān) (d. 248/862 or 249/863)

al-Jāḥid, 'Amr b. Baḥr ('Abū 'Utmān) (d. 255/869)

Ibn Qutaybah, ʿAbd al-Lāh b. Muslim (ʾAbū Muḥammad) ad-Dīnawarī (d. 270/883 or 271/884 or 276/889)

al-'Azdī, 'Ismāʿīl b. 'Isḥāq ('Abū 'Iṣḥāq) al-Qādī l-Baġdādī (d. 282/896)

al-Mubarrad, Muḥammad b. Yazīd (ʾAbū l-ʿAbbās) aṭ-Ṭumālī l-ʾAzdī (d. 285/898 or 286/899)

Ţaʿlab, 'Aḥmad b. Yaḥyá ('Abū l-ʿAbbās) aš-Šaybānī (d. 291/904)

Ibn Kaysān, Muḥammad b. 'Aḥmad (or 'Ibrāhīm) ('Abū l-Ḥasan) (d. 299/912 or 320/932)

Authors of the IVth/Xth century

az-Zajjāj, 'Ibrāhīm b. as-Sarī ('Abū 'Isḥāq) (d. 311/923)

Ibn as-Sarrāj, Muḥammad b. as-Sarī (ʾAbū Bakr) al-Baġdādī (d. 316/928)

al-Xayyāt, Muḥammad b. 'Aḥmad ('Abū Bakr) (d. 320/932)

Ibn Mujāhid, 'Aḥmad b. Mūsá ('Abū Bakr) at-Tamīmī l-Baġdādī (d. 324/936)

Ibn Wallād, ʾAḥmad b. Muḥammad (ʾAbū l-ʿAbbās) at-Tamīmī l-Miṣrī (d. 332/944)

az-Zajjājī, 'Abd ar-Raḥmān b. 'Isḥāq ('Abū l-Qāsim) al-Baġdādī (d. 337/949 or 339/950 or 340/952)

al-Fārābī, Muhammad b. Muhammad ('Abū Nasr) (d. 339/950)

al-Qālī, 'Ismā'īl b. al-Qāsim ('Abū 'Alī) al-Baġdādī al-Qālī (d. 356/967)

as-Sīrāfī, al-Ḥasan b. ʿAbd al-Lāh (ʾAbū Saʿīd) (d. 368/979)

al-Basrī, 'Alī b. Hamzah ('Abū l-Qāsim) at-Tamīmī (d. 375/985)

al-Fārisī, al-Ḥasan b. 'Aḥmad ('Abū 'Alī) l-Baġdādī (d. 377/987)

az-Zubaydī, Muhammad b. al-Ḥasan ('Abū Bakr) al-'Išbīlī (d. 379/989)

Ibn al-Warrāq, Muḥammad b. ʿAbd al-Lāh (ʾAbū l-Ḥasan) al-Baġdādī (d. 381/991)

al-Marzubāni, Muḥammad b. ʿImrān (ʾAbū ʿAbd al-Lāh or ʿUbayd al-Lāh) (d. 378/988 or 384/994)

ar-Rummānī, 'Alī b. 'Īsá ('Abū l-Ḥasan) (d. 384/994)

Ibn Jinnī, 'Utmān b. Jinnī ('Abū l-Fatḥ) al-Mawṣūlī (d. 392/1002)

Authors of the vth/xIth century

'Abū Hilāl al-'Askarī, al-Ḥasan b. 'Abd al-Lāh (d. c. 400/1010)

Ibn Ḥazm, ʿAlī b. ʾAḥmad al-Fārisī l-ʾAndalusī (d. 456/1064)

al-Xaṭīb al-Baġdādī, 'Aḥmad b. 'Alī ('Abū Bakr) (d. 463/1071)

al-Jurjānī, 'Abd al-Qāhir b. 'Abd ar-Raḥmān ('Abū Bakr) (d. 471/1078)

Authors of the vith/xiith century

az-Zamaxšarī, Maḥmūd b. 'Umar ('Abū l-Qāsim) (d. 538/1144)

Ibn al-'Anbārī, 'Abd al-Raḥmān b. Muḥammad ('Abū l-Barakāt Kamāl ad-Dīn) (d. 577/1181)

al-Suhaylī, 'Abd al-Raḥmān b. 'Abd al-Lāh (Abū al-Qāsim/Abū Zayd/Abū al-Hasan) l-Andalusī l-Darīr (d. 581/1185)

Ibn Maḍā', 'Aḥmad b. 'Abd ar-Raḥmān ('Abū Ja'far/'Abū l-Qāsim/'Abū l-'Abbās) al-Qurṭubī (d. 592/1196)

Authors of the viith/xiiith century

Ibn Xarūf, ʿAlī b. Muḥammad (ʾAbū l-Ḥasan) al-ʾIšbīlī l-ʾAndalusī (d. 603/1206 or 605/1208 or 609/1212 or 610/1213)

Yāqūt b. 'Abd al-Lāh ('Abū 'Abd al-Lāh Šihāb ad-Dīn) al-Ḥamawī (d. 626/1229)

as-Sakkākī, Yūsuf b. 'Abī Bakr ('Abū Yaʻqūb Sirāj ad-Dīn) al-Xawārizmī (d. 626/1229)

Ibn Yaʿīš, Yaʿīš b. ʿAlī (ʾAbū l-Baqāʾ Muwaffaq ad-Dīn) al-ʾAsadī (d. 643/1245)

Ibn Mālik, Muḥammad b. ʿAbd al-Lāh (ʾAbū ʿAbd al-Lāh Jamāl ad-Dīn) al-Jayyānī (d. 672/1274)

Ibn aḍ-Ḍā'i', 'Alī b. Muḥammad ('Abū l-Ḥasan) al-'Išbīlī (d. 680/1281)

al-'Astarābādī, Muḥammad b. al-Ḥasan (Raḍī ad-Dīn) (d. 684/1285 or 686/1287 or 688/1289)

Authors of the viiith/xivth century

Ibn Manḍūr, Muḥammad b. Mukarram (ʾAbū l-Faḍl Jamāl ad-Dīn) al-Xazrajī (d. 711/1311)

'Abū Ḥayyān, Muḥammad b. Yūsuf ('Atīr ad-Dīn) al-Ġarnāṭī l-'Andalusī (d. 745/1344)

al-' \bar{I} j \bar{i} , 'Abd ar-Raḥmān b. 'Aḥmad aš-Š \bar{i} rāz \bar{i} ('Aḍud ad-D \bar{i} n) (d. 756/1355 or 753/1352)

Ibn 'Aqīl, 'Abd al-Lāh b. 'Abd ar-Raḥmān ('Abū Muḥammad Bahā' ad-Dīn) (d. 769/1367)

Authors of the IXth/XVth century

Ibn Xaldūn, 'Abd ar-Raḥmān b. Muḥammad ('Abū Zayd) (d. 808/1406)

Authors of the xth/xvith century

as-Suyūṭī, ʿAbd ar-Raḥmān b. ʾAbī Bakr (Jalāl ad-Dīn ʾAbū al-Faḍl) (d. 911/1505)

Index of proper names

```
'Abū 'Amr b. al-'Alā' (d. 154/771),
108, 109, 112, 339
'Abū Hayyān (d. 745/1344), 221,
227, 342
'Abū Hilāl al-'Askarī (d.
400/1010), 24, 341
'Abū Janāh, S., 47, 237, 238
al-'Ajjāj (d. 90/708), 92, 339
Anghelescu, N., 36, 47, 165
al-'Ansārī, 'A., 70
Aoun, Y., 197
al-'A'šá (d. 7/629), 93, 339
al-Assyouti, N., 11
al-'Astarābādī (Radī ad-Dīn) (d.
686/1287), 22, 55, 63, 65,
99, 102, 122, 160, 342
al-'Axfaš al-'Awsat (d. 215/830),
45, 48, 52, 65, 110, 131,
133, 135, 142, 177, 216,
219, 257, 264, 340
'Ayd, M., 241
Ayoub, G., 26, 27, 39–41, 45, 71,
93, 106, 141, 155, 195,
203, 211
al-'Azdī (d. 282/896), 57, 340
Baalbaki, R., 12, 19, 23, 30, 31, 33,
34, 37, 38, 41-47, 49, 50,
```

52, 55, 60-64, 69-71, 78,

80, 82, 83, 85, 86, 88, 119, 145, 147, 175, 183,

191, 195, 199, 208, 210, 213, 219, 227, 238, 242 Badawi, el-S., 12 al-Baġdādī ('Abū 'Alī), see al-Qālī (d. 356/967) al-Baġdādī ('Abū Bakr), see al-Xatīb al-Baġdādī (d. 463/1071) al-Basrī (d. 375/985), 237, 341 Beck, E., 22 Belguedj, M., 36, 62 Bernards, M., 56, 57, 60, 75 Bin 'Āšūr, 'A. H., 90, 91 Bjørsnøs, A., 82 Blau, J., 102-104, 159, 169, 174 Bohas, G., 19, 21-23, 29, 32, 35-37, 48, 52, 57, 70, 71, 106, 242, 252, 260, 263, 282, 286 Broch, J. P., 22 Brockelmann, C., 339

Cannuyer, C., 11
Carter, M., 19, 21, 23, 30–36, 39, 44, 46, 48, 49, 51, 52, 54, 57, 58, 60, 62, 63, 70, 71, 78–80, 82, 89, 99, 141, 166, 194–196, 199, 203, 208, 209, 238, 241
Chairet, M., 147, 268

Dayf, Š., 22, 70, 241

Derenbourg, H., 22, 95, 171, 191, 195, 196, 272 Dévényi, K., 21, 40–42, 66 Druel, J., 204

Elamrani-Jamal, A., 50, 51 Elgibali, A., 12 Endreß, G., 50

Fahmi, Kh., 12 al-Fārābī (d. 339/950), 57, 341 al-Fārisī (d. 377/987), 50, 56, 68, 341 al-Farrā' (d. 207/822), 40–42, 48, 50, 52, 66, 167, 257, 258, 260, 340 al-Fatlī, 'A. Ḥ., 70, 102, 252, 263, 272 Ferrando, I., 178 Fleisch, H., 17, 30, 52, 99, 102–105, 110, 115, 116, 119, 122, 126, 129, 130, 132, 137, 145, 155, 166, 184 Frank, R., 26, 27, 54

Gilliot, C., 62, 84 Goldziher, I., 22, 62 Gouttenoire, M.-A., 59 Guillaume, J.-P., 19, 21–23, 32, 35–37, 48, 49, 52, 57, 63, 70, 71, 242, 282, 286

Haarmann, U., 62 al-Ḥadītī, X., 70, 89–91 Hārūn, ʿA. S., 85, 86, 89, 283 Holzer, V., 11 Hopkins, S., 12 Howell, M., 17, 78, 87, 89, 101, 103, 114, 116, 119, 126, 127, 130, 134, 143, 149, 155, 158, 159, 163, 166, 169, 170, 172, 174, 179, 181, 183 Humbert, G., 45

'Ibādah, M., 70, 87 Ibn 'Abī Šaybah (d. 235/849), 340 Ibn al-'Anbārī (d. 577/1181), 22, 54, 60, 342 Ibn 'Aqīl (d. 769/1367), 52, 342 Ibn ad-Dā'i' (d. 680/1281), 89, 342 Ibn Hanbal (d. 241/855), 57, 340 Ibn Hazm (d. 456/1064), 55, 341 Ibn Jinnī (d. 392/1002), 32, 50, 54, 56, 57, 61, 69, 341 Ibn Kaysān (d. 299/912), 50, 340 Ibn Madā' (d. 592/1196), 55, 342 Ibn Mālik (d. 672/1274), 342 Ibn Mandūr (d. 711/1311), 118, 221, 342 Ibn Mujāhid (d. 324/936), 57, 341 Ibn Qutaybah (d. 276/889), 62, 340 Ibn as-Sarrāj (d. 316/928), 241-268, 340 Ibn as-Sikkīt (d. 244/858), 175, 183, 340 Ibn Wallad (d. 332/944), 60, 75, 195, 237, 341 Ibn al-Warrāq (d. 381/991), 58, 341 Ibn Xaldūn (d. 808/1406), 63, 343 Ibn Xarūf (d. 609/1212), 89, 342 Ibn al-Xayyāţ, see al-Xayyāţ (d. 320/932) Ibn Ya'īš (d. 643/1245), 22, 99, 122, 342 Ibrahim, Z., 12 al-'Ījī (d. 756/1355), 68, 342 Itkonen, E., 32 Iványi, T., 75

al-Jāḥiḍ (d. 255/869), 57, 69, 340 Jahn, G., 122 al-Jarmī (d. 225/839), 45, 216, 340 Jumʿah, X., 70, 88 al-Jurjānī (d. 471/1078), 23–25, 47, 68, 69, 341 Kaḥḥālah, 'U., 50, 339 Kapeliuk, O., 59 Kazimirski, A., 115, 118, 221 al-Kisā'ī (d. 189/805), 183, 257, 258, 339 Košut, J., 22 Kouloughli, J. E., 19, 21–29, 32, 35–38, 43, 48, 52, 57, 70, 71, 282, 286, 301, 359 Krenkow, F., 22

Lambrecht, K., 260 Lane, E., 221, 229 Larcher, P., 38, 40, 64, 65, 69, 71, 85 Leech, G., 39 Levin, A., 32, 59, 83 Loucel, H., 54 Lyons, C., 260

Machuel, L., 22 al-Mādī, S., 67, 288 Marogy, A., 38, 39, 47, 64, 71, 85, 145, 260 al-Marzubānī (d. 384/994), 34, 53, 341 Massignon, L., 47 al-Maxzūmī, M., 70 al-Māzinī (d. 248/862), 45, 53, 55, 56, 133, 233, 248, 262, 340 Moreh, Sh., 12 Mosel, U., 146, 153, 154 al-Mubarrad (d. 285/898), 213-239, 340 Mustafá, I., 22 al-Mutawakkil 'alá l-Lāh (d.

Nakamura, K., 55 al-Nassir, A., 143

247/861), 57, 340

Owens, J., 19, 21, 23, 43, 52, 53, 59, 65, 66, 70, 71, 78, 202,

203, 230, 241, 249, 282, 288

Peled, Y., 12 Peters, J., 54 Peterson, D., 29, 30

al-Qāḍī, see al-'Azdī (d. 282/896) al-Qālī (d. 356/967), 89, 341 Quṭrub (d. 206/821), 53, 55, 56, 340

Rabin, C., 205 Ratcliffe, R., 178 Reuschel, W., 22 ar-Rummānī (d. 384/994), 50, 55–57, 179, 341

as-Sakkākī (d. 626/1229), 69, 342 Sara, S., 85 Schoeler, G., 45 Seybold, C., 22 Sezgin, F., 339 aš-Šāfi'ī (d. 204/820), 62, 89, 340 Shakir, M., 82 Sībawayh (d. 180/796), 191-212, 339 Silvestre de Sacy, A.-I., 22 as-Sīrāfī (d. 368/979), 22, 50, 51, 56, 138, 182, 197, 198, 201, 222, 341 al-Suhaylī (d. 581/1185), 69, 342 Suleiman, Y., 49, 58 as-Suyūṭī (d. 911/1505), 53, 55, 242, 343 Szemerényi, O., 137

 Ṭāhā, Z., 12, 19, 23, 66, 67, 71, 241,

 247, 266, 282, 288

 Ṭaʿlab (d. 291/904), 238, 257, 259,

 340

 Talmon, R., 33, 163, 249, 260

 aṭ-Ṭanāḥī, M., 86, 89, 91, 283

```
Troupeau, G., 52-55, 117, 143, 145
'Udaymah, M., 70, 86, 89, 90, 138,
159, 227, 237, 238, 272,
283
Vernier, D., 22
Versteegh, K., 21, 23, 27-29, 31,
32, 35-37, 41-44, 46,
50-52, 56, 58, 59, 63, 66,
68-71, 76, 106, 107, 145,
146, 177, 206, 209, 228,
264, 290, 292, 301, 359
Wallād, see Ibn Wallād (d.
332/944)
Weil, G., 22
Weiß, J., 22
Wright, W., 17, 78, 87, 102, 109,
115-117, 120, 131, 134,
145, 149, 155, 164, 169,
184
al-Xalīl b. 'Aḥmad (d. 170/786),
22, 34, 54, 80, 108, 109,
112, 114, 124, 141, 179,
180, 204, 211, 221, 255,
257, 339
al-Xatīb al-Baġdādī (d. 463/1071),
89, 341
al-Xayyāt (d. 320/932), 50, 340
Yāqūt (d. 626/1229), 242, 342
Yāqūt, M., 70, 85
Yūnus b. Habīb (d. 182/798), 96,
136, 257, 339
az-Zajjāj (d. 311/923), 50, 340
az-Zajjājī (d. 337/949), 50, 52,
54-57, 179, 238, 341
az-Zamaxšarī (d. 538/1144), 22,
51, 99, 122, 128, 131,
221, 341
az-Zubaydī (d. 379/989), 89, 341
```

General index

```
Analogy (qiyās), 32, 43, 47, 55, 60,
                                              Cardinal numerals
                                                   'Zero', 102
78, 93, 110, 129, 137, 175,
                                                   'One', 17, 79, 82, 87, 95, 96,
177, 182, 192, 194, 195,
199, 203, 207-212, 217,
                                              102, 104, 116, 117, 128,
223, 225, 227-229, 237,
                                              129, 141, 143, 151, 153,
238, 246, 248, 256, 274
                                              155, 158, 160, 161, 163,
Annexational construction, 17, 18,
                                              169, 176, 177, 182, 216,
119, 163, 166, 168, 169,
                                              223, 234, 236, 245, 274,
174, 176-178, 182-184,
                                              275, 292, 293
192, 198, 202, 203,
                                                      'ahad, 87, 95, 104, 109, 113,
207-209, 212, 233-234,
                                              121, 122, 128, 129, 153,
236, 237, 239, 249, 250,
                                              154, 158-161, 177, 192,
254, 255, 257, 258, 260,
                                              205, 206, 215, 216, 218,
265-267, 279, 280,
                                              234, 244, 246, 275, 293,
285-288, 290, 297, 303,
                                              294
                                                      'iḥdá, 96, 104, 109, 121,
304, 361, 362
Appositional construction, 18,
                                              129, 153, 158, 205, 206,
163, 164-165, 167, 169,
                                              244, 274, 275
173, 174, 176-178, 180,
                                                      wāḥid, 17, 87, 102, 104,
181, 183, 202, 208, 257,
                                              105, 113, 122, 129, 136,
264, 266, 276, 280, 286
                                              141, 143, 145, 153, 154,
'Aşl, pl. 'uṣūl, 28, 44, 50, 60, 129,
                                              159, 163-165, 177, 217,
138, 139, 165, 166, 199,
                                              245, 246, 274-276, 284,
210, 217, 218, 223, 236,
                                              292
241, 242, 253, 263, 297
                                                      wāhidah, 82, 104, 105, 122
                                                   'Two', 17, 18, 77, 79, 88, 92,
Baġdād, 30, 52–54, 167, 176, 257,
                                              95, 97, 104, 107, 114,
259
                                              116, 124-126, 129, 130,
Banū Tamīm, 179, 205, 234
                                              133, 141, 143-145, 151,
Başrah vs. Kūfah, 30, 32, 52, 54,
                                              153-155, 161, 163, 169,
60, 135, 174, 175, 183,
                                              177, 206, 214, 216, 236,
219, 238, 248, 257, 258
Bid<sup>c</sup>ah, 149, 290
```

```
122, 126, 129, 130, 132,
246, 273, 274, 292, 293,
295, 297
                                              141, 143, 144, 154, 155,
        itnāni, 17, 77, 81, 95, 112,
                                              157, 164, 165, 167, 170,
114, 121, 124-126, 130,
                                              171, 175, 176, 179-181,
137, 141, 143, 153, 154,
                                              185, 192, 193, 200, 206,
163, 164, 177, 205-207,
                                              225, 244, 245, 251,
210, 214, 220, 245, 246,
                                              257-262, 265, 266, 272,
264, 273, 276-278,
                                              284, 285, 287, 293
                                                      'Six', 81, 83, 84, 99, 103,
292-295, 297
                                              112, 117, 122, 165, 246,
        itnatāni, 17, 77, 114, 121,
                                              273, 274, 293, 297
125, 177
                                                      'Seven', 99, 103, 108, 122,
        tintāni, 92, 93, 114, 125,
129, 130, 154, 177, 217,
                                              165, 174, 192, 245
                                                      'Eight', 81, 98, 101, 105,
273
     From 'three' to 'ten', 17, 18,
                                              108, 109, 112, 114, 122,
79, 96, 98, 109, 126, 127,
                                              123, 140, 215, 245, 246,
130, 141, 145, 149, 151,
                                              273, 275, 294
166, 169, 176-182, 192,
                                                      'Nine', 87, 103, 122, 136,
193, 200, 201, 203, 204,
                                              295
                                                      'Ten', 88, 89, 103, 122, 127,
207, 217, 218, 221-224,
238, 245, 251, 254, 274,
                                              133, 137, 138, 144, 173,
281, 289, 290
                                              178, 205, 207, 218, 221,
        'Three', 17, 18, 79, 81-84,
                                              223, 224, 235, 236, 238,
88, 95-98, 104, 107, 111,
                                              251, 253, 254, 276, 280,
122, 124, 126-128, 130,
                                              281, 288, 293, 296, 297
133, 136, 139, 141-145,
                                                    Compound cardinals, 18, 19,
154, 155, 158, 165, 167,
                                              43, 77-79, 81, 82, 89, 98,
169-182, 193, 200, 203,
                                              99, 103, 104, 113, 114,
214, 216, 217, 221-226,
                                              119-121, 126-128, 130,
238, 245, 251, 260, 267,
                                              131, 133-135, 138, 139,
275, 290, 293-295, 297,
                                              142, 144-146, 149, 151,
298
                                              166, 167, 169, 170, 176,
        'Four', 19, 81, 83, 84, 88,
                                              178, 182, 183, 192, 193,
95, 98, 99, 101, 105, 111,
                                              200, 201, 203-205, 207,
112, 122, 124, 126, 127,
                                              209-211, 213, 215, 216,
132, 133, 139, 141, 143,
                                              218-220, 222, 224-227,
                                              229, 235, 238, 239, 245,
154, 157, 164, 165, 170,
                                              246, 253, 262-265, 267,
171, 173, 193, 214, 215,
238, 245, 274, 275, 285,
                                              273, 276-279, 281, 286,
293, 295, 297, 298
                                              288, 294, 297, 299
        'Five', 79, 81, 84, 88, 92, 95,
                                                      'Eleven', 18, 81, 82, 103,
98, 99, 103, 105, 114,
                                              120, 134, 151, 169, 175,
```

```
'Ninety', 103, 138, 253
177, 182, 205, 207, 224,
                                                   From 'twenty-one' to
249, 254, 276
       'Twelve', 18, 81, 89, 112,
                                             'ninety-nine', 79, 81, 87,
                                              107, 121-122, 132,
120, 126, 127, 131, 134,
151, 169, 185, 200, 204,
                                              149-151, 158, 181, 205,
206, 207, 210, 211, 213,
                                             206, 226, 236, 274, 276
220, 221, 245, 253, 264,
                                                   Hundreds, 18, 84, 87, 88, 95,
276-278
                                             98, 99, 107, 109, 110, 113,
       'Eighteen', 127, 131, 142
                                             117, 122, 126, 127, 132,
    Decades, 18, 19, 79, 98, 99,
                                             137, 138, 144, 145, 151,
111, 122, 126, 128, 131,
                                              154, 157, 158, 164-167,
136-138, 144-146, 151,
                                              169, 170, 174-176, 178,
154, 166, 170, 175, 176,
                                             181-184, 201, 203, 213,
181, 182, 200, 201, 203,
                                             216, 221-224, 226, 233,
210, 213, 214, 221, 222,
                                             235-237, 239, 245, 246,
224-226, 234-239, 253,
                                             251, 252, 254, 255, 267,
254, 265, 267, 273-277,
                                             272-276, 279-281, 284,
279, 281, 286, 295, 296,
                                             286, 288, 289, 293, 299
298, 299
                                                   Complex numerals
       'Twenty', 18, 44, 79, 84, 95,
                                                     'Six hundred and
                                             fifty-one', 184
98, 99, 103, 111, 121,
                                                   Thousands, 18, 19, 91, 98,
131, 136-138, 143-148,
155, 158, 166, 174-176,
                                              102, 103, 108, 111, 115,
178, 181, 182, 185, 194,
                                              122, 126, 132, 144, 145,
195, 198-203, 208, 209,
                                              151, 154, 166, 169, 170,
211, 212, 214-216,
                                             174, 176, 178, 181–184,
220-223, 225, 226,
                                             201, 203, 223, 224, 226,
229-234, 236, 237, 243,
                                             233, 235-237, 239, 251,
246, 248, 252-255, 259,
                                             252, 254, 258, 267,
260, 265, 267, 273-275,
                                             273-276, 279, 281, 286,
278-280, 286, 287, 290,
                                             289
291, 296, 297
                                                   'One million', 102
       'Thirty', 81, 98, 104, 111,
                                                   'One milliard', 102
126, 131, 136, 137, 140,
                                             Compensatory n\bar{u}n, 98, 155, 199,
145, 176, 194, 201, 221,
                                             200, 202-208, 210, 211,
226, 231, 245, 295-297
                                             221, 222, 226, 234, 249,
       'Forty', 112, 137, 144, 221,
                                             252, 267, 277, 278
296
                                             Days of the week, 111, 113, 118,
       'Fifty', 103, 137, 144
                                             140, 141, 150-151, 192,
       'Sixty', 95, 103, 113, 156
       'Seventy', 86, 103
                                             214, 215, 244, 245, 292,
                                             296
       'Eighty', 93, 245
                                                   al-'Aḥad, 113, 118, 150, 292
```

al-'Arbi'ā', 118, 140 Nisbah forms, see Relative al-Itnāni, 118, 140, 144, 150 adjective forms al-Itnu, 151 Numerals as proper names, 80, at-Tunayy, 151 109, 114, 121, 123, 140, at-Talātā', 118, 140 149-150, 217, 219, 245, al-Xamīs, 118, 150 275, 277, 294, 297, 298 Diminutive forms, 80, 81, 98, 108, 'Arba'ata-'Ašar, 149 109, 110-113, 121, 126, 'Arba'ūna, 149 Tšrūna, 149 136, 139-141, 149, 151, Itnā-'Ašar, 80, 114, 149, 192, 172, 215, 243, 245, 246, 272, 274, 275, 284, 294, 204, 220, 246 295, 298 Mi'atu, 123 Diminutive forms built on Sab'ah, 149 'deflected' numerals, see Sitt, 149 Numerals' 'deflected' *Talāt*, 149, 217 forms Talātatu, 123 Distributives, see Numerals' Ţalātatun-Wa-Ţalātūna, 81, 'deflected' forms 132, 149, 150, 193, 274 Wāḥidatu, 123 Fractions, 115, 136, 139 Xams, 114, 149 Xamsa-'Aš(i)rah, 114 al-Ḥijāz, 85, 141, 205 Xamsah, 114 Xamsata-'Ašar, 114, 149, *Kam*, 83–84, 146, **147–148**, 192, 193, 204, 244, 246, 278 211, 215, 232, 244, 247, Xamsata-'Ašaru-Zaydin, 255-258, 278, 279, 288, 150 290-293, 297 Numerals' 'absolute' meaning, Kūfah, see Basrah vs. Kūfah 124, 126, 143-144, 144, 151, 245, 274, 292, 295 Lafd, pl. 'alfād, see Surface form Numerals' 'deflected' forms. 116-118, 124, 125, 141, Ma'dul numerals, see Numerals' 193, 215, 245, 246, 292, 'deflected' forms 296, 298 Ma'ná, pl. ma'ānī, 23-29, 35, Their diminutive forms, 117, 37-43, 50, 52, 64, 65, 68, 118, 124-125, 149 69, 137, 158, 182, 219, Their relative adjective 220, 229, 230, 234, 236, forms, 76, 117, 118, 276 247, 253, 256, 289, 292, Numerical verbs, 104, 105-108, 293, 297, 301, 359 Mubham nouns, see 'Unspecified' 138, 141–143, 154, 177, 201, 259, 267, 274, 293, nouns 296 Nayyif, 149 wahhada (Form II), 106, 108

'awhada (Form IV), 141, 285, Thousands, 145, 276 298 Predicative construction, 17, 18, tanná (Form II), 106, 107 164, 165-166, 168, 169, talata (Form I), 105 174, 176-178, 181, 182, tallata (Form II), 106-108 202, 208, 212, 264, 276, raba'a (Form I), 105, 139 280, 286 rabba'a (Form II), 108 xamasa (Form I), 105, 106, Relative adjective forms, 80, 81, 285, 293, 297, 298 108, 113-114, 121, 149, xammasa (Form II), 142, 285, 155, 173, 193, 205, 243, 298 246, 273, 275 sadasa (Form I), 105 Relative adjectives built on tassa'a (Form II), 107 'deflected' numerals, see 'aššara (Form II), 107 Numerals' 'deflected' 'am'á (Form IV), 102, 107, forms 214, 274 'allafa (Form II), 91, 107, 108, Samā', 35, 47, 85, 238 214, 274 Specifying construction, 18, 65, 'ālafa (Form IV), 90, 107, 214, 77, 83, 128, 146-148, 274 164, **166-167**, 168, 169, Nūn al-itnayni wa-l-jamī, see 174, 176, 178, 181, 192, Compensatory nūn 194, 198, 200, 202, 203, 207-212, 214, 221-224, Ordinal numerals, 19, 101, 102, 229-233, 235-239, 106, 132, 134, 145, 150, 246-250, 255, 257, 258, 164, 167, 178, 183, 267, 265-267, 277-280, 274, 293 285-287, 289, 290, 292, Units, 81, 82, 88, 102, 299, 303, 304, 361, 362 104-105, 106, 123, 132, Surface form, 24-29, 35, 38-40, 133, 136, 138, 139, 145, 43, 50, 56, 63-65, 68, 69, 150, 151, 154, 158, 161, 172, 182, 218, 229, 230, 166, 169, 170, 177, 193, 236, 237, 247, 254, 259, 198, 202, 210, 244, 274, 289, 301, 359 292, 293, 298 Compounds, 105, 119-121, Tamīm, see Banū Tamīm 127, 133, 134, 139, 146, Tamtīl, 40, 41, 75, 106, 141, 298 167, 169, 207, 263, 267, *Tamyīz* in the dependent form, 274, 277, 278, 293, 297, see Specifying 299 construction Decades, 98, 99, 145, 154, *Tamyīz* in the oblique form, see 164, 295 Annexational Conjoined, 105, 121 construction Hundreds, 145, 276

Taqdīr, 28, 34, 41, 44, 45, 49, 55, 148, 157, 229, 230, 253, 256, 297, 299

'Unspecified' nouns, 145–146, 148, 209, 211, 228, 231, 235, 236, 239, 244, 255–256, 264, **278–280**, 294–296

List of tables

| 1 | Transliteration system | • | • | • | • | • | • | • | • | 13 |
|------|---|---|---|---|---|---|---|---|---|-----|
| 5.1 | Expression of the counted object | • | • | • | | | | | | 168 |
| 3.1 | Numerals in the Kitāb | | | | | | | | | 193 |
| 9.1 | Numerals in the Muqtaḍab | | | | | • | • | | • | 216 |
| 10.1 | Numerals in the 'Uṣūl | | | | | | | | | 246 |
| 11.1 | What happened to the issues treated in the Kitāb? | | | | | | | | | 273 |
| 11.2 | Apparition of issues not treated in the Kitāb \dots | | | | | | | | | 275 |
| 11.3 | Issues not treated by our three authors | | | | | | | | | 276 |

Samenvatting

In deze studie heb ik drie Arabische grammaticale traktaten uit de eerste vier eeuwen A.H., Sībawayhs (st. 180/796) *Kitāb*, al-Mubarrads (st. 285/898) *Muqtaḍab* en Ibn as-Sarrājs (st. 316/928) *'Uṣūl fī n-naḥw*, vergeleken als bijdrage aan de studie van de plaats van de semantiek in hun grammaticale methode.

Uitgaande van een indeling van de verschillende betekenissen van het woord ma'na' betekenis' in de Arabische grammaticale traditie (Versteegh 1997b), heb ik vijf belangrijke domeinen van semantiek onderscheiden: intentioneel, communicatief, extra-linguistisch, cognitief, en formeel. Het doel van dit onderscheid was aan te tonen dat het te eenvoudig is te denken dat een semantische aanzet al of niet gevonden kan worden in deze grammaticale traktaten. Semantiek heeft veel dimensies, die, tezamen of apart, al of niet op kunnen treden.

Om dit doel te bereiken, heb ik mij gericht op de grammatica van de telwoorden, omdat deze een evidente semantische groep vormen en zich tegelijkertijd syntactisch zeer verschillend gedragen. Ik ging er daarbij van uit dat de manier waarop grammatici de telwoorden behandelen inzicht kan geven in de wijze waarop zij grammatica en syntaxis verbinden. De werkhypothese was dat de zoektocht naar consistentie in de grammatica van de telwoorden in de loop van de tijd verschoof van een functionele naar een formele benadering van de semantiek. Dit kwam overeen met een geleidelijke verschuiving van een psychologische naar een taalkundige benadering van het begrippenpaar lafd/ma'ná dat min of meer equivalent is aan het begrippenpaar 'signifier/signified' (Kouloughli 1985).

Na een bespreking van de literatuur met de nadruk op de rol van de semantiek in de Arabische grammaticale traditie (hoofdstuk 2), worden in hoofdstuk 3 tot 7 alle problemen met telwoorden in het Arabisch opgesomd, in de morfologie, de morfosyntaxis en de semantiek. Daarna heb ik bestudeerd

hoe elke grammaticus met telwoorden omgaat in zijn grammaticale systeem (hoofdstuk 8 tot 10). Tenslotte heb ik in hoofdstuk 11 de drie traktaten vergeleken op drie punten: het formele niveau (extent, inhoud, taalbeschrijving); de grammaticale methodologie; en het gebruik van elk van de vijf hoofddomeinen van de semantiek.

Vergelijking op formeel niveau

Deze drie traktaten zijn vergelijkbaar wat betreft hun omvang, inhoud en focus. Zij vertegenwoordigen drie verschillende pogingen de taal van de Arabieren te verzamelen, te organiseren en te verklaren. Op formeel niveau zijn er verschillen tussen hen, maar dit doet geen afbreuk aan de gelijkenis. De $Kit\bar{a}b$ is veruit het grootste traktaat van de drie, maar het bevat niet zoveel onderwerpen gerelateerd aan de telwoorden als de twee andere. Paradoxaal zijn in de Muqtadab de meeste onderwerpen te vinden. Dit is paradoxaal omdat het de kortste van de drie traktaten in aantal woorden (de $Kit\bar{a}b$ is 60% langer dan de Muqtadab en 25% langer dan de $U\bar{s}u\bar{l}$).

Een opvallend verschil tussen de drie traktaten is hun gebruik van de linguïstische corpora, in het bijzonder de Qur'ān, poezie en de gecanoniseerde taal van de Arabieren. Al-Mubarrad citeert veel meer Qur'ānverzen dan de andere twee grammatici, terwijl Ibn as-Sarrāj significant meer uitdrukkingen van de Arabieren citeert dan Sībawayh of al-Mubarrad. Deze constatering is overigens alleen gebaseerd op de citaten met betrekking tot telwoorden.

Voor wat betreft de grammatica van de telwoorden beschrijven de drie traktaten precies dezelfde fenomenen. Dit betekent dat de manier waarop het Arabisch telwoorden en hoeveelheden uitdrukt stabiel lijkt te zijn door de tijd heen. De verschillen die zij vermelden zijn betrekkelijk gering (bijvoorbeeld de mogelijkheid het telwoord met een lidwoord te verbinden of te gebruiken in een genitiefverbinding). Deze verschillen kunnen verklaard worden uit het verschillende theoretisch kader dat de grammatici gebruiken en houden waarschijnlijk geen verband met feitelijke taalvariatie.

Vergelijking van de grammaticale methodes

Dit beeld contrasteert met de verschillen in methodologie. Het theoretisch kader waarbinnen Sībawayh, al-Mubarrad en Ibn as-Sarrāj de taalkundige fenomenen interpreteren verschilt aanzienlijk.

Gedurende de laatste veertig jaar is Sībawayh's methode uitvoerig be-Mijn onderzoek bevestigt de belangrijkste conclusies van dit wetenschappelijk werk. Het meest opvallende kenmerk van Sībawayh's grammatica is dat hij streeft naar een diepgaande samenhang tussen de taalkundige fenomenen. Sībawayh aarzelt niet fenomenen met elkaar in verband te brengen die intuitief als verschillend gezien worden, teneinde een samenhang te ontdekken en het aantal regels en categorieën te beperken. Het raamwerk waarin hij de taal onderzoekt bestaat uit een potentieel onbeperkte gradatie van rechten en krachten die woorden ten opzichte van andere woorden hebben. Sībawayh bekijkt eerst het moeilijkste geval (het feit dat sommige telwoorden niet gebruikt kunnen worden in een genitiefverbinding, zodat deze vervangen moet worden door een constructie als specifier). Hij plaatst telwoorden op een schaal tussen as-sifāt al-mušabbahah bi-l-fā'il (de adjectieven met een syntactische valentie) en ka-dā (de constructie met het partikel ka-) en verfijnt hun relatieve positie ten opzichte van andere woorden door ze in verschillende contexten te vergelijken. Het resultaat van deze hoogst speculatieve methode is eenvoudig en homogeen: alle telwoorden gedragen zich op dezelfde wijze, maar dan wel op een dieper niveau.

Van de drie grammatici is de methode van al-Mubarrad waarschijnlijk het minst bestudeerd. Hij bespreekt meer problemen dan de andere twee grammatici, kennelijk zonder daarbij te streven naar volledige consistentie. De ontwikkeling van de *Kitāb* tot de *Muqtadab* is zeker geen kwestie van rationalisering of van pedagogische organisatie, maar meer een poging Sībawayhs beschrijving van de taal voort te zetten. In tegenstelling tot Sībawayh, die ernaar streefde de onderliggende consistentie van de taal te laten zien, ligt bij al-Mubarrad veel meer de nadruk op een uitputtende beschrijving. Voor hem staat het aanbrengen van een onderscheid gelijk aan het geven van een verklaring. Hij verdeelt telwoorden in elementaire en secundaire, en verfijnt dit onderscheid teneinde elke serie te verklaren. Het resultaat van deze veel minder speculatieve methode is enerzijds gecompliceerder en anderzijds oppervlakkiger dan dat van Sībawayh. Elke serie gedraagt zich verschillend en gehoorzaamt aan regels die alleen van toepassing zijn op een bepaalde set telwoorden en die daardoor gemakkelijker verklaard kunnen worden.

Ibn as-Sarrājs methode heeft meer aandacht gekregen, maar wellicht nog niet zoveel als zij verdient. Hij presenteert grammaticale zaken op systematische wijze, met gebruikmaking van syntactische, semantische en morfologische begrippen voor de verfijning van zijn indeling. Het doel van zijn systeeem is kennelijk meer het organiseren van grammaticale problemen dan het vinden van grootschalige consistentie. Zijn 'uitputtende classificatie' $(taq\bar{a}s\bar{i}m)$ houdt in dat hij geen oog heeft voor zaken die dwars door de indeling

heen spelen. Hierdoor kan de indruk ontstaan dat hij genoegen neemt met het vinden van locale consistentie. Via een subcategorie die speciaal is ingericht voor telwoorden (tamyīz al-ʿadad) houdt Ibn as-Sarrāj zich met dezelfde vraag als Sībawayh en al-Mubarrad bezig (de semantische gelijkwaardigheid van annexerende en specificerende constructies en de complementaire distributie daavan bij het uitdrukken van de getelde objecten). Wat waarschijnlijk nieuw is in Ibn as-Sarrājs aanpak is dat hij waar nodig het gebruik van semantische criteria om deze subcategorieën te onderscheiden niet afwijst. Het resultaat van deze systematische aanpak is een hoge graad van consistentie, maar alleen op locaal niveau, d.w.z. alleen van toepassing op de telwoorden, waarbij het speculatieve aspect veel kleiner is dan bij Sībawayh.

De consequentie van deze verschillende methoden voor de grammatica van de telwoorden is aanzienlijk, niet zozeer wat betreft de taalkundige feiten zelf - immers, alle drie grammatici beschrijven dezelfde feiten -, maar wat betreft de verklaring en de organisatie van die feiten. Men zou kunnen zeggen dat in de *Kitāb* de syntactische en semantische relatie tussen de telwoorden en de getelde objecten functioneert als een gefossiliseerde subcategorie van aṣ-ṣifah al-mušabbahah bi-l-fā'il. Al-Mubarrad is van mening dat telwoorden zich verschillend gedragen al naargelang de serie waar zij toe behoren. Ibn as-Sarrājs ad hoc categorie van numerieke tamyīz stelt hem in staat een hoge graad van consistentie tussen telwoorden te vinden, die per definitie niet geldt voor andere woorden.

Vergelijking van de plaats van de semantiek

De plaats van de semantiek vormt de kern van het debat over de grammaticale methoden van de Arabische grammatici. Mijn studie heeft geen duidelijke aanwijzingen gevonden voor enige radicale omslag tussen Sībawayh, al-Mubarrad en Ibn as-Sarrāj, voorzover het de inbreng van de semantiek betreft. Men zou kunnen zeggen dat dit het gevolg is van de kleinere reikwijdte van het bestudeerde probleem, maar dit lijkt geen obstakel te zijn voor het begrijpen van de ontwikkeling van de grammatica, althans niet in de eerste eeuwen. Alle drie de grammatici moesten zich met semantische zaken bezighouden. Zij hebben gemeen dat zij extra-linguïstische [m. 7] en cognitieve [m. 9] semantiek als vanzelfsprekend beschouwen, zij vertrouwen alle drie op communicatieve semantiek (herformulering [m. 3], zinsmodaliteit [m. 5] en communicatief doel [m. 6]). Tenslotte maken zij alle drie in hun analyse gebruik van formele semantiek (onderliggende structuur [m. 13] en morfosyntactische betekenis [m. 14]).

Het is niet juist dat Sībawayh meer gericht is op de intentie van de spreker [m. 1] dan al-Mubarrad of Ibn as-Sarrāj, en het is evenmin juist dat zijn grammatica communicatiever zou zijn [m. 2.3.5.6], of dat al-Mubarrads en Ibn as-Sarrājs grammatica's formeler [m. 12–14] zouden zijn. Mijn conclusie is veeleer dat hun grammaticale methoden meer verschillen dan hun opvattingen over betekenis. De drie traktaten behandelen dezelfde semantische dimensies, maar zij dienen verschillende methodologische doeleinden. Het kwalificeren van een methodologische aanpak staat dus gelijk aan het ontdekken van de wijze waarop iedere grammaticus de verschillende semantische dimensies van taal integreert, als functie van zijn opvatting over de consistentie van de grammaticale regels.

Zo kan bijvoorbeeld niet gezegd worden dat de afwezigheid van de 'levende' aanpak van de grammatica in Sībawayhs $Kit\bar{a}b$ in al-Mubarrads Muqtadab en Ibn as-Sarrājs ' $U\bar{s}\bar{u}l$ primair toegeschreven moet worden aan een gebrek aan aandacht voor de intentionele of communicatieve semantiek. Het heeft meer te maken met een radicale herschrijving van de problemen die zij behandelen, op een 'discrete' wijze in de Muqtadab en op een systematische wijze in de ' $U\bar{s}\bar{u}l$, terwijl in de $Kit\bar{a}b$ de zaken op een meer 'narratieve' wijze gepresenteerd worden.

Aan het begin van deze studie heb ik de hypothese geformuleerd dat de zoektocht naar consistentie in het hoofdstuk van de telwoorden in de loop van de tijd evolueerde van een functionele naar een formele benadering van de grammatica. Deze hypothese kon niet bevestigd worden omdat mijn data geen ondersteuning leveren voor het idee dat Sībawayhs zoektocht naar consistentie meer op communicatieve semantiek steunde dan die van latere grammatici, en omdat al-Mubarrads alternatieve aanpak niet een zoektocht naar consistentie in eigenlijke zin genoemd kan worden. Wel bevestigt mijn studie de stelling dat Ibn as-Sarrājs onderverdeling van syntactische categorieën gebaseerd was op formele semantische criteria.

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Academic publications

| (Forthcoming) | The proper name $Ahmar$: A morphological discussion in the $2^{n\alpha}-4^{n\alpha}$ centuries AH. $Mid\acute{e}o$ 29. |
|---------------|---|
| (Forthcoming) | How to deal with contradictory chapters in the $Kit\bar{a}b$ of Sībawayh? Les Cahiers du Midéo 6 (= $Islam$, $Christianity$ and $citizenship$. $Festschrift$ offerts à $Emilio$ $Platti$). |
| 2007 | Nisba. Encyclopedia of Arabic Language and Linguistics. Ed. by Kees Versteegh. Vol. 3. Leiden & Boston: Brill. 377–381. Co-authored with René-Vincent du Grandlaunay. |

In this study, we have compared three Arabic grammatical treatises from the first four centuries AH, Sībawayh's (180/796) *Kitāb*, al-Mubarrad's (285/898) *Muqtaḍab* and Ibn as-Sarrāj's (316/928) 'Uṣūl fī n-naḥw, in order to contribute to the study of the evolution of the place of semantics (intentional, communicative, extra-linguistic, cognitive, and formal) in their grammatical methods.

In order to reach this aim, we have focused on the grammar of numerals, because they present an obvious semantic unity and a great syntactic diversity.

The conclusion of our research is that their grammatical methods are much more discriminating than their stand towards the different dimensions of meaning. The three treatises deal with the same semantic dimensions, but they serve completely different methodological approaches, and different stands towards consistency of the grammatical rules.

If al-Mubarrad's *Muqtaḍab* or Ibn as-Sarrāj's '*Uṣūl* do not feature the same "lively" approach to grammar as Sībawayh's *Kitāb*, this is not primarily due to a lack of focus on intentional or communicative semantics, but to a radical reshaping of the issues dealt with, in a "discrete" way in the *Muqtaḍab* or in a systematic way in the '*Uṣūl*, whereas in the *Kitāb* issues are presented in a more "narrative" way.

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