

obtained through geminating the second radical or prefixing [tt-]. Also, verb-initial [b, f, m] are realized as [a] in some intensive aorist forms. In the aorist, the authors point out the neutralization of the aorist verb-final [u/a] variation (bḍu/bḍa). Alternate forms are given in appendices between brackets.

The second part of M is a thirteen-page long synopsis of Amazigh verb morphology (p.11-23), referred to as ‘introduction’ (p.8-9) but entitled ‘verb morphology’ in its due place in M. L et al. organize their introduction into an opening paragraph describing the dichotomy simple/ derived verbs, listing the four verb themes of Amazigh, person indices and the pre-verbal particles, and explaining the internal constituency of verbs. Then L et al. elaborate on verb types (monoliterals, biliterals, triliterals, and quadriliterals), bound personal pronouns (“*désinences verbales*”), verb themes (aorist, preterite, negative preterite, intensive aorist, and imperative) and preverbal particles. Illustrative and recapitulative tables are provided.

The conjugation tables span 60 pages (p. 26-85). L et al. consistently adopt the same layout for the entire set of 30 types. Every type (henceforth T) is given on two pages, each displaying three tables. On the even-numbered page are given the aorist, preterite, and negative preterite stems, while the odd-numbered page contains the intensive aorist, the simple imperative, and the intensive imperative. Each T is illustrated by one verb, written in Tifinaghe-Ircam at the top of the even-numbered page (e.g. Type 1: ⵓⵏⵓ (p.26)). No gloss is provided. The grammatical terms used are immediately followed by their Amazigh counterpart, e.g. aorist (ⵓⵏⵓ), person (ⵓⵏⵓ), singular (ⵓⵏⵓ), etc... Conjugations are given in three-row by four- column tables, except for the imperative, given in three-by-three tables. In the three-by-four tables, each verb is conjugated into three persons, coupled by singular/plural and masculine/feminine distinctions, yielding 12 exponents of each verb. In imperative tables, each verb has five exponents, one per person/gender distinction, except for the masculine plural, for which L et al. provide two exponents. To enhance the layout, L et al. add light blue shading to the first column and row of each table and indicate in dark blue bound personal pronouns accompanying each exponent.

Appendices, which L et al. aptly qualify as representing the bulk of the book, are organized alphabetically, depending on entry type (Amazigh, French, or Arabic). There are three appendices: (i) Amazigh-French-Arabic, (ii) French-Amazigh and (iii) Arabic-Amazigh. Each glossary contains an integer with each and every verb, referring to verb T, and by the same token the conjugation table, which makes M quite user-friendly. Finally, in their bibliography, L et al. provide a list of sources whence the data has been collated as well as a few references that deal with the morphology of Amazigh. There are additional references in footnotes 2 and 3 (p.8).

To sum up, with its practical spirit and data orientation, M has a very thoughtful design, wide-ranging verb coverage and commendable user-friendliness; accordingly, users will find it a very practical and quite valuable reference on

Amazigh conjugation. M is also a very timely publication, definitely filling a gap in the literature. This is all the more so at a time when Amazigh is being standardized and diffused through mass-media and education. Those in need of teaching or reference materials to design class materials will find M a very easily exploitable and quite useful reference.

One aspect of M that we cannot trenchantly say anything about presently, but which remains crucial, is its value as a pedagogical tool. Only time can elucidate this aspect, which depends on the extent to which M satisfies the needs of the audience it is intended for. Nonetheless, various technical aspects of M could have been enhanced. In the remainder of this review, we will point out the feasibility of enhancing the readability of M, as well as its self-containment as a morphology text. However, the jury is still out on variation and normalization (and the related outreach challenge), pre-theoretical neutrality regarding the linguistic background of M, and the issue of inclusiveness, class homogeneity and choice of archetype.

2. For a more enhanced readability of M

Three measures would definitely enhance readability and information retrieval in M. First, organizing the morphology background into more discernible sections also listed in the table of contents can assist users (e.g. teachers and learners/students) in locating the information in a work like M. With no section numbering and no details of the organization in the table of contents, the facts presented in M are not easy to read through. Also, in the appendices, imposing page breaks or intercalating letters between the sets of data organized alphabetically will definitely make more optimal the reading and exploitation of M.

Second, in both the conjugation tables and the appendices, verbs are provided in Tifinaghe-Ircam, making it quite difficult for readers not conversant with this script to read efficiently through the data.³ Recall that M is also meant for linguists, as pointed out by L et al. in the foreword. Writing in IRCAM-Latin characters or providing IPA transcriptions immediately after the verb could help tremendously in the task of seeking information. Technically, things standing as they are, any linguist interested in the data in M has to virtually learn Tifinaghe-Ircam in order to be able to use M, which reduces the targeted audience, at best.

The third comment is related to the details of the data. The assumption behind M is that once a user locates a verb, the integer in front of it will direct them to the relevant conjugation table. However, the risk is that the details of the conjugation are not completely retrievable from the conjugation tables themselves (see some

³ Using Tifinaghe-Ircam in publications will indubitably help diffuse the script, which has been officialized for almost a decade now. Although this is a crucial step in the standardization process of Amazigh, using Tifinaghe-Ircam solely in M defeats one of the goals of L et al. Mind that the list of Tifinaghe-Ircam letters with their Arabic and/or Latin correspondents is also missing.

missing facets discussed in 5.2 below). This inconvenience is coupled with the sheer heterogeneity of some classes. Note that since the verbs have been collated from various sources, even a user who is familiar with one of the varieties of Amazigh might find it at times confusing to decide on some verb conjugations. The task of the designers of M then becomes formidable, as they have to check and cross check each and every verb conjugation, a burden that could have been alleviated if, in a way, the details on the conjugation of each verb had been included in the appendices. This move would have made the book much longer, on the other hand.

3. Variation and normalization: A challenging mix

L et al. have indubitably faced the gargantuan task of collating data from different sources (10305 verbs in all), checking and cross-checking it for various types of inconsistencies. Difficulty accrues as L et al. face the very ambitious and the inherently conflicting task of doing both pre-required corpus planning and ensuing diffusion. Worthwhile as it may be, the endeavor is not without compromising the essential goal of M.

Clearly, the writing of M is most probably one step ahead in the process of standardizing Amazigh morphology, although L et al. are quite silent about this aspect. The declared, forthright goal is one of diffusion, enhanced diffusion we would say, through the medium of instruction. However, no diffusion (language acquisition planning) takes place without prior normalization (corpus planning). Clearly, these two tasks go beyond the scope of one endeavor, as is the case of M. In M, there is indeed a significant amount of variation left over, especially at the level of the lexical items included. A conspicuous case is that of ‘quality’ verbs, which happen to belong to T8, but which are listed in doublets appearing on different pages: ⵜⵏⵏⵉⵙⵏⵉⵙ [sfsis] (p.172), ⵜⵏⵏⵉⵙⵏⵉⵙ [smlul] (p.178), and ⵜⵏⵏⵉⵙⵏⵉⵙ [sslwiɣ] (p.190) as opposed to ⵜⵏⵏⵉⵙⵏⵉⵙⵏⵉⵙ [ssifsus], ⵜⵏⵏⵉⵙⵏⵉⵙ [ssimlul] and ⵜⵏⵏⵉⵙⵏⵉⵙⵏⵉⵙ [ssilg^wiy] (p.188-9).

Closely related to corpus planning is morphological variation. In this respect, L et al. claim that variation has generally been taken care of (“d’une façon générale, le présent manuel accorde aux faits de variation toute la place qu’ils méritent...” (p.10)), referring to the example of negative stems (p. 11). Footnote 5 (p.11) further comments that Central Rif, Eastern Rif and Figuig varieties of Amazigh have in addition to the four stems a fifth one, the negative intensive aorist. Nonetheless, no mention is made of the absence of negative verb morphology altogether in some Tashlhit varieties, reducing verb stems to three only.⁴ Another overlooked case is related to morphological gemination, a process

⁴ In this connection, see Elmoutassir (1989) and Derkaoui (1986); but see in particular Bensoukas (2006a, 2007, 2009, 2010b), in which issues of standardization are addressed, together with synchronic and diachronic variation.

presented by L et al. as forming the intensive aorist of triliteral verbs by doubling the second consonant (p.20). Tashlhit provides once more an exception: gemination can affect either the initial or medial consonant of trilaterals in a quite predictable fashion.⁵

4. Linguistic background of Manuel de conjugaison

4.1 Pre-theoretical neutrality

In an enterprise such as designing M, a certain amount of pre-theoretical, and as far as possible neutral, descriptive work is generally a prerequisite. The authors should be careful enough to meet the disparate requirements of (i) including as much background information as necessary for the optimization of the use of the book (ii) and not encumbering the readers with irrelevant conceptual and theoretical detail.

The presentation of verb morphology (“Morphologie du verbe” p.11-23) in M is meant content-wise to provide readers/users of M with a general background that makes easier and more efficient the reading of the book. Nevertheless, it is not clear how all the background information provided serves this purpose, if it does at all. For example, L et al. (p. 13) list and exemplify a number of verb types using the terms ‘monoliteral’, ‘biliteral’, ‘triliteral’, and ‘quadriliteral’. To start with, such terms play no role in M. More importantly, the morphological sketch is based on the assumptions of only one of the schools of Amazigh linguistics (that espousing European functionalism), which at best impairs the pre-theoretical neutrality that a work such as M is supposed to assume initially, and at worst overlooks details covered in other works (see Bensoukas (2006c) for an overview) that would have made M a more fathomable work.

Finally, what we judge to be more worrying is that the space devoted to the general background information could have been used also to provide more relevant morphological and morpho-phonological information that would help with the overall understanding of the verb morphology of Amazigh, more specifically conjugation which is the focal interest of M. We turn to issues related to this latter remark immediately.

⁵ This aspect of the verb morphology of Tashlhit is in fact quite complex from a descriptive viewpoint. For details, see Dell and Elmedlaoui (1991), Jebbour (1996), Bensoukas (2001) and Lahrouchi (2010) among others. Note that in the same place in M, L et al. comment on the phonology of some geminates and the alternations they are subject to phonetically, as in rdl/rṭṭl, rwl/rgg^wl and yr/qqar.

4.2 More on morphology and morphophonology

The aim of this section is to show how M could have benefited from a more comprehensive overview of the morphology and morphophonology of Amazigh. We are not digging into the morphosyntax here, although it may prove to be an interesting path to follow as well.

We start with morphological information. Negative preterite verb morphology is presented in a very short paragraph (p.18) and illustrative table (p.19). If compared to the space devoted to the preterite (p.15-18) or the intensive aorist (p.19-21), the space devoted to negative verb morphology is scanty, to say the least. A more troublesome aspect is related to the totally inaccurate presentation of negative verb morphology, which L et al. reduce to epenthesis of the vowel [i] (pre-)finally or replacing a final [a] with [i] (“L’opposition entre le thème positif et le thème négatif est marquée par l’insertion de la voyelle ε soit, devant soit, après la consonne finale du radical soit, par l’alternance \circ/ε à la finale.” (L et al., 18)) A quick look at the negative forms of some archetypes belies this statement, revealing that negative morphology is either not clearly marked on the verb (T3 (sni, p.30), T17 (qqim, p.58), and T18 (sdid, p.60)) or is totally absent in these archetypes (T8 (smsasa, p.40), T16 (fssus, p.56), T19 (ssiwq, p.62) and T25 (gzz, p.74)). 7 archetypes out of the 30 listed correspond to 23.3%, and, to our mind, such a ratio is not insignificant.

From a morphophonological perspective, one issue M raises is the weight given to some phonological/ morpho-phonological processes involved. First, inconsistently, some processes are presented in footnotes and/or in the text, which would suggest that those in the text have more importance. Glide formation is a case in point, as in the vowel [i] of the participial form {i+...+n} changing to [j] in vowel-initial verb bases (p.14). Processes mentioned in footnotes (fn.) include assimilation ([ad] and following [t] assimilation, e.g. /ad tisinm/ → [attisinm] (p.14; fn. 13)) and singleton/geminate alteration (e.g. [d]→[t̪t̪], [y]→[qq], and [w]→[gg^w] (p.20; fn. 17). Also, there is an instance in which the same process is mentioned once in the footnote and another in the text. This is the case of the glide formation process mentioned earlier and a similar one (3p. sg. masc. {i+} is realized as [j] when the verb is vowel initial (p.13; fn. 8)). A similar alternation is reported regarding [u/w] in ssftu ‘dictate’ ssftaw (p. 21).

Another issue is the absence of comment when presenting a process. L et al. (p.21) illustrate a vowel insertion process occurring in the intensive aorist form. Missing is a note that most, if not all, the verbs undergoing this process start with {s(s)+} (or one of its variants through place/voicing assimilation), which corresponds to the fact that these verbs are mostly derived causative verbs (this type of verbs spans 30 pages in the first appendix to M). Also overlooked is the assimilation process operating in causative verb formation, a very salient, complex morpho-phonological process involving at the same time voicing and place and applying in both contact and distant situations (see for example Elmedlaoui, 1992/1995 and

Bensoukas, 2004a). Finally, the morpho-phonology of causatives has a bearing on a related process. Intensive aorist [tt-] is not compatible with causative {s(s)+}, but compatible with other [s]'s, which leaves unclear why no [tt-] is realized with some s-initial verbs while it shows up in others (T21 sll/ttslla 'listen' (p.66)).⁶

More serious is the absence of presentation of processes taking place and which make possible a better understanding of the workings of the morphology. The processes not mentioned in M are delabialization, degemination, and vowel copying, which have varying degrees of importance. First, delabialization is illustrated by the items ad agg^wy/uggiy (I will look/I looked (p.15)), in which the sound gg^w is delabialized. This aspect of the morpho-phonology of Amazigh has ramifications elsewhere in the language (see Jebbour, 1985; Elmedlaoui, 1992/1995; Selkirk, 1993; Bensoukas, 2006b among others). Second, degemination is not a simple process in the morphophonology of Amazigh (see Jebbour, 1996; Bensoukas, 2001, 2010a). Examples in M are T5 (ddukkl/ttdukkul 'befriend' (p.35)) and T28 (ggall/ttgalla 'swear' (p.80)), in which the initial geminate of the root is degeminated when the intensive aorist form has the allomorph [tt-] attached. Degemination involves more complexity not given due attention in M: The process may apply or fail to apply; the latter option is illustrated by T9 zzu/ttzzu 'plant; chase' (p.42) and T17 qqim/ttqqim 'sit; remain' (p.58). Another process is vowel copying (see for example Basset, 1929; Bensoukas, 2001, 2004b). We first encounter it in the introduction to M (fulki/ttfulkuj 'be handsome' (p.19)) and siggl/siggil 'look for' (p.21)), and it appears even on some of the archetypes in M (T5 ddukkll/ttdukkul 'befriend' (p.34)); T7 sduqqr/sduqqur 'knock' (p.38); T10 ssisn/ssisin 'dip (in sauce)' (p.44)).

It is our opinion that, for the verb conjugations presented in M to fully make sense, a purely inflectional and derivational approach to the endeavor leaves quite a few questions unanswered and will probably force the users of M, especially teachers and material designers, to seek the missing information elsewhere, which jeopardizes the self-sufficiency of a reference book such as M. We therefore conclude that such background information is missing and that M would be a more useful reference book had such information been (i) sought in works on Amazigh morpho(phono)logy other than the ones used as basic references in M, (ii) checked for thoroughness with respect to all the conjugations in M, (iii) didacticized for simpler access by the prospective users, and (iv) provided in the background information section.

⁶ Bensoukas (to appear) analyzes this very process as a case of morphological haplology, consisting of a dissimilation process affecting one of two identical morphemes in sequence. In this case, haplology favors the causative affix over the intensive aorist one.

5. Inclusiveness, class homogeneity and choice of archetype

L et al. state that the criteria for classification are morphological, more specifically inflectional. Prototypical verbs are defined in terms of their morphology in the aorist, preterite, aorist intensive, etc. Derivational morphology, as a dividing line, has been discarded so that derived verbs are put in the same pool as the simple ones. Although passive verbs are marked for the inflectional category of voice, they are also listed along with the derived verbs. Very common as this practice may be in the literature on Amazigh, we believe that a note is in order to explain this choice.

Two related decisions ensue from the difference in the morphology of Amazigh between simple and derived verbs. The first decision relates to including in the pool of verbs in M derived verbs, namely causatives, reciprocals/reflexives and passives. This resulted in a lack of balance regarding the number of items listed under each letter. Those under s, most of which are causative verbs, span around 30 pages, those under m, most of which are reflexive/reciprocal verbs, span 18 pages, and those under t, mostly passives, span 8 pages. These figures add up to 56 pages out of 127- a ratio of 44.09%. Consequently, including derived verbs makes a few verb classes in M unusually crowded.

The second decision relates to lumping vs. splitting simple and derived verbs, which in M is to lump simple and derived verbs. The first remark is that this move unnaturally suggests that the morphology of derived verbs and that of simple verbs is the same. More perspicuously, the number of verb Ts increases. Take, for example, T7 (⊙Λ%ZZ⊙ [sduqqr], p.38) and T10 (⊙⊙ξ⊙⊙ [ssisn], p.44), which pattern in exactly the same way except in the intensive form, in which case the forms become ⊙Λ%ZZ%⊙ [sduqqr] and ⊙⊙ξ⊙ξ⊙ [ssisin], respectively. The difference between the two archetypes resides in whether the prefinal vowel is [i] or [u], which itself depends on copying the quality of the vowel in the aorist. This is a morphophonological, rather than a purely inflectional, difference, which shows that the morpho-phonology, which is not taken into consideration in deciding on archetypal verbs, does seem to be quite important after all.

Quite similar remarks can be made with respect to including a special class of verbs, that of quality verbs. In M, two classes are recognizably quality verbs, T16 (⊙⊙%⊙ [fsus], p.56) and T18 (ξ⊙ΛξΛ [isdid], p.60). This move also remains problematic. Quality verbs have a special, distinguishing type of morphology and, as such, do not easily pattern with 'normal' verbs. In fact, they present a set of morphological/ morphophonological alternations that can be quite complex. In addition to the initial vowel in the aorist that deletes in the preterite, these verbs can show consonant and vowel alternations, as in the Tashlhit verbs isgin/ssgan 'be(come) dark', iwriy/wry 'be(come) yellow'. If these were taken into consideration, more verb types would have been needed to accommodate them. The latter point raises once more the issue of prior corpus planning, and it seems that the morphological variation quality verbs show has not been addressed in M.

We would like to finish by pointing out another issue that has not been quite addressed or clarified by L et al., the criteria for the choice of the archetype. As we have shown earlier, class membership is fundamentally based on inflectional morphology. Now, the larger the class, the more heterogeneous it is. The choice of the archetype then becomes problematic, especially if it is meant as a mnemonic device to help remember the verbs belonging to the class. The question that needs to be addressed is how is the archetype chosen, and to what extent is it representative of the class as a whole? In this connection, it is not clear what difference there is between T1 ⵍⵎⵔ [rms] (p. 26) and T6 ⵎⵔⵎⵔ [frfr] (p.36). As far as we can tell, both types are apparently the same as far as the conjugation tables are concerned.

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