Grammaticalization of auxiliary verb constructions: The case of Italo-Romance mixed perfective auxiliation systems and the 'MIXPAR' project

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ABSTRACT

This paper deals with auxiliary verb constructions in Romance, in particular with those that exhibit two auxiliary verbs 'have' and 'be' which alternate, in many Italo-Romance varieties, within one and the same paradigm. It is argued that such an intra-paradigmatic distribution represents a special kind of grammaticalization, traditionally referred to as morphologization. Two aspects are discussed. First, a morphological approach to such 'mixed paradigms' is advocated, the main claim being that in order to explain the distribution of the two auxiliaries within the paradigm, one has to make essential reference to paradigmatic structure rather than to the intrinsic featural composition of the auxiliaries (along the lines of paradigmatic approaches reviewed in Blevins 2016). Second, it is shown that these mixed systems, although they often represent "delicate transitional stages" (Loporcaro 2014: 56, n. 8), also display interesting diachronic convergence typical of various stem alternation patterns, famously referred to as morphomes (cf. Maiden 2018). The paper draws on a dataset that is currently being put together in order to become, in the future, a large database of mixed perfective auxiliation systems. Some space is thus devoted to the description of the main parameters of this project, called 'MIXPAR'.

1 INTRODUCTION

Auxiliary verb constructions are usually taken to be multi-word expressions in which the auxiliary is a functional, grammaticalized element with a (language-specific) range of properties different from full lexical verbs (cf., e.g., Heine 1993; Kuteva 2001; Ledgeway 2012: 121–134). In Romance, we find a typical diachronic path which leads from an original point of departure with two auxiliaries, 'have' (henceforth H for Latin ʜᴀʙᴇʀᴇ) and 'be' (henceforth E for Latin ᴇssᴇ), down to a single-auxiliary system, as is the case of Spanish. While the binary auxiliary alternation may depend on a range of criteria, the most common pattern being the active/stative distinction (cf., e.g, Bentley 2006), the single-auxiliary pattern simply lacks any external motivation altogether (all verbs, be they reflexive, transitive or unaccusative, select one and the same auxiliary). However, such a grammaticalization path is far from being the only way things can happen diachronically. In a large number of

Italo-Romance varieties, in fact, we find an intricate system of mixed perfective aux-
iliation patterns in which the two auxiliaries, H and E, alternate inside one and the
same paradigm (cf. Loporcaro 2001; 2007; 2014; Manzini and Savoia 2005, Štichauer
2018; 2019, among others).

In this paper,[1] I will argue that this scenario represents a special kind of gram-
maticalization, traditionally referred to as *morphologization*, and I intend to show two
important aspects of this phenomenon. First, I will put forward a strictly morpholog-
ical approach to such mixed auxiliary systems, the main claim being that in order to
explain the distribution of the two auxiliaries within the paradigm, one has to make
essential reference to paradigmatic structure rather than to the intrinsic featural
composition of the auxiliaries (along the lines of paradigmatic approaches reviewed
in Blevins 2016). Second, I will demonstrate that these mixed systems, although they
often represent "delicate transitional stages" (Loporcaro 2014: 56, n. 8), also display
an interesting diachronic convergence typical of various stem alternation patterns,
famously referred to as *morphomes* (cf. Maiden 2018). I will draw on a dataset that is
currently being put together in order to develop it, in the future, into a large database
of mixed perfective auxiliation systems. Some space is thus devoted to the descrip-
tion of the main parameters of this project, called 'MIXPAR'.[2]

The paper is organized as follows. Section 2 presents a brief introduction to aux-
iliary verb constructions in Romance along with an overview of mixed perfective
auxiliation systems in Italo-Romance. In Section 3, I dwell on theoretical consider-
ations which advocate a strictly morphological approach. This approach rests upon
the crucial notion of paradigm and upon the notion of 'lexical split'. Section 4 is de-
voted to the diachronic implications of such an approach. I shall address issues such
as suppletion and periphrastic morphomic patterns, and I will deal with a case of
a receding pattern in one particular variety. Section 5 brings concluding remarks and
Section 6 is — by way of an appendix to the present paper — devoted to the descrip-
tion of the 'MIXPAR' project.

2 PERFECTIVE AUXILIATION SYSTEMS IN ITALO-ROMANCE

In the Romance languages, we witness a remarkable variation in how the periphrastic tenses, formed through an auxiliary and a past participle, have evolved. Although we could say that two major patterns predominate, namely two auxiliaries, H and E, distributed across two or three more or less well-defined classes of verbs (as in Standard French or Italian), and a single-auxiliary system with H or E used for all verbs (as in Spanish), there is still a large amount of variation (for a recent overview, see Pescarini and Loporcaro 2022). In what follows, I shall briefly describe these major patterns focusing then on mixed auxiliation systems henceforth referred to as 'mixed paradigms'.

2.1 AUXILIARY VERB CONSTRUCTIONS IN ROMANCE

Although the facts are well known, I shall nonetheless briefly describe the two major auxiliary selection strategies in the Romance languages, so that the peculiarity of mixed auxiliation systems can be clearly apparent.

In Standard Italian (and, with some differences, in Standard French), for all compound tenses, the selection between H and E follows an active/stative distinction, (with all reflexives aligning with E). Thus, transitive and unergative verbs trigger the choice of H, whereas unaccusatives align with E, as in the examples (1) with *dormire* 'sleep' and (2) *arrivare* 'arrive'.[3]

(1)

	SG	PL
1	**ho dormito** I.have sleep.PTCP	**abbiamo dormito** we.have sleep.PTCP
2	**hai dormito** you.have.SG sleep.PTCP	**avete dormito** you.have.PL sleep.PTCP
3	**ha dormito** s/he.has sleep.PTCP	**hanno dormito** they.have sleep.PTCP

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3   It is important to note, as one reviewer points out, that the distinction between unergatives and unaccusatives is not without controversy. As is well known, the distinction, nowadays usually referred to as 'split intransitivity', stems from Perlmutter's work and has given rise to a number of semantic or syntactic approaches which all point to a certain degree of variation or gradience (cf., e.g., Bentley 2006: 1–7). I adopt this distinction mainly for practical reasons (see Appendix in Sect. 6): in order to arrive at a typology of mixed systems I need to classify the verbs at different levels of semantic and syntactic "granularity". The labels 'transitives', 'unergatives', and 'unaccusatives' thus provide the first macro-level of classification. There will be a further, more fine-grained classification of reflexive verbs as these cannot be uniformly classified with any of the available labels.

(2)

	SG	PL
1	**sono arrivato/a** I.am arrive.PTCP.M/F	**siamo arrivati/e** we.are arrive.PTCP.M/F
2	**sei arrivato/a** you.are.SG arrive.PTCP.M/F	**siete arrivati/e** you.are.PL arrive.PTCP.M/F
3	**è arrivato/a** he/she.is arrive.PTCP.M/F	**sono arrivati/e** they.are arrive.PTCP.M/F

As for reflexive verbs, they all select E regardless of their argument structure so that unaccusative reflexives (also called inherent reflexives, or *reflexiva tantum*), such as *accorgersi* 'notice', and, for example, indirect transitive reflexives, in constructions such as *lavarsi le mani* 'wash self's hands', behave uniformly. It might be interesting to note that under a class-based account, we could go so far as to claim that we have two (or, perhaps, three) inflectional classes differentiated according to the different periphrastic realization (for such a radical view, see Bonami 2015; Bach 2019; Bach and Štichauer 2019a; 2019b; 2022).

In contrast, in Spanish, this original two-auxiliary system has long been superseded by a systematic single-auxiliary system with H selected for all verbs and in all compound tenses, as can be seen in the examples (3) and (4), where the present perfect of the verb *comer* 'eat' and the pluperfect of the verb *ir* 'go' are given.

(3)

	SG	PL
1	**he comido** I.have eat.PTCP	**hemos comido** we.have eat.PTCP
2	**has comido** you.have.SG eat.PTCP	**habéis comido** you.have.PL eat.PTCP
3	**ha comido** s/he.has eat.PTCP	**han comido** they.have eat.PTCP

(4)

	SG	PL
1	**había ido** I.had go.PTCP	**habíamos ido** we.had go.PTCP
2	**habías ido** you.had.SG go.PTCP	**habíais ido** you.had.PL go.PTCP
3	**había ido** s/he.had go.PTCP	**habían ido** they.had go.PTCP

Although these facts, as already mentioned, are familiar, two remarks are in order before embarking on the discussion of the 'wildly' behaving mixed paradigms.

First, once the choice of one or the other auxiliary is made — in those languages where we have the two-auxiliary system, of course — the selected auxiliary is systematically used throughout the whole periphrastic part of the conjugation, both within one and the same tense-aspect-mood (henceforth TAM) paradigm and across all these TAM paradigms. There is thus what we might dub *intra-paradigmatic* and *inter-paradigmatic uniformity*.

Second, as already alluded to above, all reflexive verbs generally follow the same auxiliary strategy in that all reflexives — no matter which kind of reflexive verb we are dealing with — select E. This also looks like a systematic uniformity, based here on the morphological (and syntactic) condition of the presence of a reflexive clitic (regardless of its syntactic nature — i.e. whether it corresponds to an internal argument, or is just an inherent part of the verb as in *reflexiva tantum*).

But these two apparently robust generalizations break down once we move to a wide range of non-standard Italo-Romance varieties where, firstly, we witness a fascinating intra-paradigmatic and inter-paradigmatic variation, and, secondly, we also find different auxiliation strategies within the group of reflexive verbs. I thus move to these varieties in the next section.

2.2 MIXED AUXILIATION SYSTEMS IN ITALO-ROMANCE

As anticipated above, we find in a large number of Italo-Romance varieties mixed perfective auxiliation patterns in which the two auxiliaries, H and E, are distributed not across different groups of lexemes, but *intra-paradigmatically*, within one single TAM paradigm giving rise to what is usually described in the literature as 'mixed paradigms' (cf. Bentley and Eythórsson 2001) or 'person-driven systems' (cf., among others, D'Alessandro and Roberts 2010; Ledgeway 2019).[4]

Let us consider, in a way parallel to example (1), the present perfect of the unergative verb *dormire* 'sleep' in example (5) which comes from the variety of Popoli (Abruzzo, province of Pescara, cf. Manzini and Savoia 2005: 688–689):

(5)

	SG	PL
1	**sɔ ddur'moitə** I.am sleep.PTCP	**a'vemmə dur'moitə** we.have sleep.PTCP
2	**ʃi ddur'moitə** you.are.SG sleep.PTCP	**a've:tə dur'moitə** you.have.PL sleep.PTCP
3	**a dur'moitə** s/he.has sleep.PTCP	**annə dur'moitə** they.have sleep.PTCP

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4   I only add, for the sake of completeness, that a number of Italo-Romance varieties also follow the single-auxiliary strategy where only H or E is selected in all compound tenses. More varieties are attested with generalized H than with generalized E (cf., e.g., Manzini and Savoia 2005: 779–809, 759–778). For a more detailed geographical overview cf. in particular Loporcaro 2001; 2007; 2014; 2016.

Unlike example (1), where one auxiliary, H, is used throughout the paradigm, here we have a case of intra-paradigmatic mixing of the two auxiliaries since, as the grey shading indicates,[5] the auxiliary H is selected in a subset of paradigm cells, namely the 3rd pers. sg. and in all cells of the plural, whereas the 1st and 2nd pers. sg. are realized with E.

Now let us look at a different pattern, parallel to example (2), the unaccusative verb ʃi' (< ĪRE) 'go' in the southern variety of Bari (cf. Andriani 2017: 156):[6]

(6)

	SG	PL
1	**so ʃʃutə** I.am go.PTCP	**simə ʃutə** we.are go.PTCP
2	**si ʃʃutə** you.are.SG go.PTCP	**sitə ʃutə** you.are.PL go.PTCP
3	**a ʃʃutə** he/she.has go.PTCP	**annə ʃutə** they.have go.PTCP

Here, the auxiliary E is used in a different subset of cells, namely the 1st and 2nd pers. of both number values, leaving the auxiliary H in the 3rd persons. This pattern, although it represents one of the most widespread distributions within mixed systems, is only one of many other patterns (see, e.g., Loporcaro 2007; 2014).

Moreover, once we move from one TAM paradigm, the present perfect that we have been considering here, to another one, the pattern changes crucially, thus disrupting what we called above *inter-paradigmatic uniformity*. Thus, the same verb ʃi in the variety of Bari, displays the generalized auxiliary H throughout the paradigm of the pluperfect subjunctive (which overlaps, in this variety, with the past conditional serving to express counterfactuals; see, for details, Andriani 2017: 163–164), as example (7) illustrates:

(7)

	SG	PL
1	**avèssə ʃutə** I.had.SBJV go.PTCP	**avèssəmə ʃutə** we.had.SBJV go.PTCP
2	**avìssə ʃutə** you.had.SBJV.SG go.PTCP	**avìssə(və) ʃutə** you.had.SBJV.PL go.PTCP
3	**avèssə ʃutə** s/he.had.SBJV go.PTCP	**avèssərə ʃutə** they.had.SBJV go.PTCP

5 Henceforth the grey shading will always indicate those paradigm cells where the auxiliary E is selected as opposed to the cells with H left in blank. Note that this does not imply any 'markedness' considerations on the selection of either auxiliary.

6 I adapt Andriani's simplified IPA-based transcription so that the IPA characters are used here consistently (I thus rewrite, for instance, *so ssciùtə* as *so ʃʃutə*). At the same time, the

As already hinted at above, the phenomenon of mixed paradigms can also be limited to only a specific group of verbs, such as reflexives. This situation is far from rare, and there are indeed a large number of varieties with a 'standard' split between transitives/unergatives with H and unaccusatives with E, but with a mixed auxiliation system just within the class of reflexive verbs. This situation is found not only in northern Italian dialects (Piedmont, Veneto, Friuli), as Loporcaro (2007: 200) and Benincà, Parry, and Pescarini (2016: 203–204) point out, but also elsewhere (e.g. Calabria, Marche). It is also important to note that 'reflexive' represents an overarching label for a series of distinct types of reflexive verbs. That these distinct types of reflexivity are crucial for the auxiliary selection has been demonstrated by Loporcaro (2007; 2014; 2016).

As an illustration, let us consider the examples (8) and (9), from the variety of Macerata (central Marchigian dialects, cf. Paciaroni 2009: 49–50).

(8)

	SG	PL
1	**io me sɔ ʒvejjatu/a** I myself= I.am wake.PTCP.M/F	**nu'a tʃe simo ʒvejjati/e** we ourselves= we.are wake.PTCP.PL.M/PL.F
2	**tu te si ʒvejjatu/a** you.SG yourself= you.are.SG wake.PTCP.M/F	**vu'a ve sete ʒvejjati/e** you.PL yourselves= you.are.PL wake.PTCP.PL.M/PL.F
3	**issu/essa s ɛ ʒvejjatu/a** he/she oneself= is wake.PTCP.M/F	**issi/esse s ɛ ʒvejjati/e** they.M/F oneself= is wake.PTCP.PL.M/PL.F

Apparently, this example of the middle reflexive verb — corresponding to the Standard Italian *svegliarsi* 'wake up' — does not represent any particular deviation from the general pattern with the systematic E throughout the paradigm. Indeed, as Paciaroni (2009: 49–50) reports, the generalized E holds for direct transitive reflexives as well as for unergative reflexives. However, the other types of reflexive verbs may follow a different — mixed — pattern with, for instance, free variation between the two auxiliaries (signaled here and throughout the paper by the symbol '≈') in a subset of cells, as illustrated in example (9), capturing the indirect transitive reflexive construction 'wash self's hands':

phonosyntactic doubling, *rafforzamento fonosintattico* (RF), is systematically signaled where it obtains. For a general overview of RF, see Loporcaro 1997, and for the morphological role of RF in mixed paradigms, see Torcolacci 2015; Štichauer 2017.

(9)

	SG	PL
1	**io me sɔ llaatu/a le ma** I myself= I.am wash.PTCP.M/F the hands	**nu'a tʃe simo laati/e le ma** we ourselves= we.are wash.PTCP.PL.M/PL.F the hands
2	**tu te si llaatu/a le ma** you.SG yourself= you.are.SG wash.PTCP.M/F the hands	**vu'a ve sete laati/e le ma** you.PL yourselves= you.are.PL wash.PTCP.PL.M/PL.F the hands
3	**issu/essa s ɛ llaatu/a ≈ s a laato le ma** he/she oneself= is wash.PTCP.M/F ≈ has wash.PTCP the hands	**issi/esse s ɛ llaati/e ≈ s a laato le ma** they.M/F oneself= is wash.PTCP.PL.M/PL.F ≈ has wash the hands

As can be seen, indirect transitive reflexives (along with antipassives) allow for a free choice of either auxiliary in the 3rd persons, thus disrupting not only the intra-paradigmatic uniformity as defined above, but also creating a self-contained subgroup of reflexive verbs which must be taken separately.

As is now clear, the variation in mixed perfective auxiliation systems across the wide array of Italo-Romance varieties is so immense that it is extremely difficult to do justice to the full range of data without carefully considering each paradigm in its entirety. For this reason, I have decided to pursue a project comprising a large database the aim of which is to put together all the attested data. Even though the database is only at its incipient stage, the detailed description of its parameters might be useful here and can be found, as an appendix to this paper, in Section 6.[7]

3 THEORETICAL ACCOUNTS: A MORPHOLOGICAL APPROACH

In this section, I advocate a paradigmatic approach to mixed paradigms which amounts to claiming that in order to understand the distribution of the two auxiliaries within the paradigm, it is necessary to take into account the paradigmatic structure rather than positing a functionally motivated association between one or the other auxiliary and a specific person/number value.

3.1 A PARADIGMATIC APPROACH
In one of the most widespread patterns, EEH-EEH, as in example (6) above, the first and second persons are opposed to the third persons. One may thus say that the se-

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7   The idea of creating such a database has arisen on the basis of ongoing joint work with Xavier Bach whom I thank here for a number of important remarks. The data from the database have already been exploited in a couple of joint presentations (cf. Bach and Štichauer 2019a; 2019b) and a recent publication (cf. Bach and Štichauer 2022). For technical advice I am indebted to Ondřej Tichý and Tomáš Bořil.

lection of E is triggered by the (binary) discourse-participant feature,[8] whereby the positive value identifies the first and second persons, whereas the third persons stand out as having the negative value, thus triggering H. Such a person-based split (cf., e.g., Ledgeway 2019: 354 ff.) is thus accounted for by adopting a syntagmatic — as opposed to paradigmatic — view typical of the vast majority of current approaches (see, e.g., Torcolacci 2015 for a DM-based account, and Andriani 2017; 2018; Ledgeway 2019, among others, for a microparametric approach).[9] Under such a syntagmatic account, the selection of either auxiliary is dictated by the specific value of the person/number combination. Thus, for instance, it might be said that one auxiliary is triggered by the 'non-discourse participant', while the other is reserved for other values (discourse participant, but also other values, see below in example 10), without any "blind" reference to the paradigm structure which would be simply defined as "four cells" *versus* "two cells" in the present perfect paradigm.

Let us now consider one example that represents yet another frequent pattern in which only one person/number combination (i.e. one paradigm cell) is selected by one or the other auxiliary. In example (10), from the variety of Miglionico (the southern region of Basilicata, prov. Matera; cf. Manzini and Savoia 2005: 726), the verb *dormire* 'sleep' leaves only the 3rd pers. pl. for the auxiliary H, while the rest of the paradigm, i.e. a collection of five (irreconcilable) cells, is realized with E.

(10)

	SG	PL
1	**sɔ ddər'mutə** I.am sleep.PTCP	**simə dər'mutə** we.are sleep.PTCP
2	**si ddər'mutə** you.are.SG sleep.PTCP	**sitə dər'mutə** you.are.PL sleep.PTCP
3	**jɛ ddər'mutə** s/he.is sleep.PTCP	**vɔnnə dər'mutə** they.have sleep.PTCP

It is extremely difficult to account for such a pattern in a syntagmatically based way, i.e. attempting to define a common morphosyntactic or semantic value for the collection of five cells (or, conversely, for the only one cell), which would justify the selection of one or the other auxiliary.

Moreover, there are other such patterns, where only one cell stands out as being realized with the different auxiliary, as for instance, EHH-HHH or HHE-HHH. Invoking the featural composition of the individual sequences (such as, for instance, *jɛ ddər'mutə* lit. 'he/she is slept' versus *vɔnnə dər'mutə* lit. 'they have slept') would be

8   Note that even this proposal is very problematic in that there is a crucial difference between, say, the 1st pers. singular and 1st pers. plural. See the insightful discussion in Cysouw 2011: 434 ff.

9   A more restricted pattern, which can be said to rely on this feature, is reported in example (5) above, where only the first and second pers. singular are realized with E, while the rest of the paradigm selects H.

a classic item-and-arrangement approach which necessarily arises for the lack of a larger paradigmatic context. Indeed, as Blevins observes (2016: 56–57), this is exactly how zero exponence came into being. If, crucially, a paradigmatic context is lacking, the absence of an explicit exponent is difficult to account for.

In fact, as the data tend to show, a stable association of one auxiliary with a given cell (or a feature combination) is crucially lacking, and so we cannot assign discrete meanings to one or the other auxiliary (this again is the hallmark of paradigm-based inflection, see, e.g., Blevins 2016: 74). I thus argue that even auxiliary alternation of this type is a kind of paradigmatic context-dependent contrast that cannot be satisfactorily captured by a system of context-independent rules, in which, say, the auxiliary E would be a single marker introduced by a single realizational rule (cf. Blevins 2016: 213).

In what follows, I review the most widespread patterns (giving rise to what Corbett (2013: 180–186) calls *splits within periphrasis*) — some of them have always been described as motivated by some kind of extramorphological factor, but I shall treat all these patterns with Maiden's warning (Maiden 2018: 308) in mind: "(…) do not overprivilege potential extramorphological motivation, and do not seek to wring out arbitrariness from alternation patterns simply because such a motivation may appear to be present."

3.2 'SPLITS' WITHIN PERIPHRASIS

Following Corbett (2013; 2015; 2016), in Štichauer (2018; 2019) I put forward a proposal according to which the intra-paradigmatic alternation of the two auxiliaries is an instance of a further lexical split within periphrasis.

The typology of such splits, inspired by Bonami (2015: 68–70), invokes a gradient scale of motivatedness. For instance, what I call *pragmatically based splits*, corresponding to the above-mentioned pattern EEH-EEH, is taken to be less motivated than *balanced patterns* (EEE-HHH, i.e. a pattern where a morphosyntactic distinction between the singular and the plural is reflected in the different auxiliary selection) but, at the same time, more motivated than *elsewhere splits*, where only one cell is realized with one or the other auxiliary. Yet, as Baerman, Brown and Corbett (2017: 66) point out, the distinction between morphosyntactically motivated and morphologically arbitrary might not always be clear-cut, and this, again, is a good reason to follow Maiden's above-mentioned warning.

Moreover, the typology of such splits within periphrasis is based on a limited sample, taking into account only the present perfect of the major classes, leaving out both the other periphrastic tenses and cases where only a subset of verbs follows the mixed strategy. Thus a more interesting situation is the one I discussed, in passing, in Štichauer (2019: 89–90), as exhibiting a sort of mirror-image distribution. Although the two examples presented therein are discussed only with respect to the nature of the distribution, there is more to say about the patterns in question.

First, the examples — exhibiting the 'reversed' (or, indeed, 'mirror-image') patterns HEE-HHE and EHH-EEH — capture the reflexive verb *lavarsi* 'wash oneself' in two different varieties (the northern variety of Velo Veronese, and the southern variety of Altomonte; cf. Manzini and Savoia 2005: 652). Interestingly, in both varieties, the mixed strategy is limited to reflexive verbs leaving transitives/unergatives

with H and unaccusatives with E, as in Standard Italian. This creates an intriguing situation which comes close to *heteroclisis* in that one part of the periphrastic realization selects one auxiliary, and the other part selects the other auxiliary (see Bach and Štichauer 2022 for details of such a proposal).

Second, the mirror-image distribution is certainly interesting and theoretically relevant because it shows, once again, the abstract pattern of alternation without reference to the concrete 'auxiliary material' used for its realization. The "erratic list of cells" is probably not the most important thing for a pattern to become strictly morphomic (as Maiden 2018: 20–21 claims), but we may surely say that examples of mirror-image patterns must be seriously considered, because they clearly show that auxiliary selection involves one and the same paradigmatic partition regardless of the identity of the contrasting auxiliaries. Indeed, we find such reversed distributions even within the traditionally defined morphomes, such as the N-pattern. Maiden (2018: 204–205) reports two interesting examples of suppletion of DARE/DONARE corresponding to just one verb 'give', in which the two verbs are reversed according to the pattern in question:[10]

(11)
Limone (Liguria-Piedmont border; cf. Schädel 1903: 108, cited in Maiden 2018: 204)

	SG	PL
1	**dau** I.give	**du'naŋ** we.give
2	**das** you.give.SG	**du'na** you.give.PL
3	**da** he/she gives	**daŋ** they.give

(12)
Terranova di Pollino (southern Basilicata; cf. Rensch 1964: 186, cited in Maiden 2018: 205)

	SG	PL
1	**ðɔŋg**[11] I.give	**ˈðamə** we.give
2	**ˈðɔnəsə** you.give.SG	**ˈðatəsə** you.give.PL
3	**ˈðɔnəðə** he/she gives	**ˈðonənə** they.give

10   In these two examples, grey shading is used to highlight the cells where DARE, as the etymological origin, is present, while DONARE is left unshaded.

11   Martin Maiden informs me that Michele Loporcaro (p. c.) takes this to be possibly a form of *dare* (and not *donare*) modelled on the basis of *tengo*. Indeed, one of the reviewers (and Franck Floricic, p. c.) also notes that forms such as *io dago* 'I give' are widespread in a range of Italo-Romance dialects, for instance in the variety of Ancona.

Of course, the important aspect here is that of the suppletion pattern which entirely conforms to the N-pattern (and we will be discussing this issue in Sect. 4.1),[12] but it is equally interesting to note the mirror-image distribution, structurally analogous to the one we saw above. Hence, in the next section, I shall try to justify a 'morphomic' approach to mixed paradigms.

3.3 NEW AND UNIQUE MORPHOMES?

The intra-paradigmatic distribution of the two auxiliaries gives rise, as we have seen, to a variety of patterns for which it is virtually impossible to find a coherent, motivated account in terms of syntagmatically based conditions on each of the person/number combinations (i.e. paradigm cells). I thus propose that even in the case of such mixed patterns, we have here new and unique morphomes. Such a claim is obviously problematic for a number of reasons which must now be addressed.

The first thing to note is that morphomes have been illustrated on the basis of patterns of stem alternation in Romance verbs (Maiden 2005; 2011; 2016b; 2018). Hence, the difference between stem alternations and auxiliary alternations is important. Let us consider the main differences.

First, Maiden's morphomic patterns involve more than one subparadigm covering a wider set of implicated cells (this wider set corresponds to what Pirrelli 2000: 53–54; Pirrelli and Battista 2000: 316–318 term a 'partition class'). In the case of mixed paradigms, instead, I deliberately deal with a narrower distribution in that the unmotivated subset of cells concerns only one periphrastic paradigm (and the other periphrastic subparadigms might exhibit yet a different pattern).[13]

Second, and most importantly, Maiden's morphomes have been demonstrated to be a diachronically (more or less) stable phenomenon in that the patterns of stem alternation are resistant to diachronic disruption. The patterns often lead to morphological innovations in which these very patterns serve as a template for further analogical extensions (see, e.g., Maiden 2016a: 34–40; and especially Maiden 2018).

In Sect. 4, I discuss three issues which have direct relevance to the morphomic approach I advocate: suppletion, periphrasis and the N-pattern, and a case of diachronic attraction.

4 DIACHRONIC CONSIDERATIONS

It may well be that such mixed patterns are morphomic, creating their own patterns of alternation — they would thus be unique in the system. Corbett (2013: 172–173) ex-

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12 It is important to note that I am here 'extracting' just one part of the N-patterned distribution, limiting deliberately the discussion to just the present indicative, whereas the N-pattern comprises, of course, a much larger partition of cells, see Maiden 2018: 167 ff. For some pitfalls of such a limitation of the N-pattern to only the present indicative, see also Maiden 2021: 93–94.

13 For a very recent similar remark about particular — strictly local — morphomic distributions within a subset of paradigm cells, see Ledgeway and Vincent 2022: 23–25.

plicitly admits such a situation: in fact, he posits the distinction between *shared* versus *unique* patterns as a second variable in the typology of lexical splits within periphrasis.[14]

However, if they were morphomic according to Maiden's technique for demonstrating their psychological reality, then some diachronic stability, along with the coherence and attraction force of the patterns, should also be detectable. As already mentioned, the erratic list of cells is simply not enough for a pattern to be really morphomic, i.e. a psychologically real template.

From this point of view, mixed paradigms are indeed problematic: we have patterns of alternation which often represent "delicate transitional stages" (Loporcaro 2014: 56, n. 8). Furthermore, the rise of these systems does not seem to follow the same scenario across all attested varieties. In some varieties, as in Neapolitan (cf. Ledgeway 2009: 591–626), the mixed systems seem to be a recent innovation where there is still much variation. In other varieties, the mixed strategy has probably a long history, as in Abruzzese where the widespread EEH-EEH pattern appears to be stable (cf., for instance, Savini 1881: 94).[15] In some texts, such as the interesting *Cronaca teramana del canonico Angelo de Jacobis* (Fresu 2006), dating back to 1777–1823, the evidence is limited, given the textual type, to the 3rd persons (and there the auxiliary H surfaces with regularity), and so the stability of the most widespread EEH-EEH pattern might as well be posited.

In what follows, after discussing the problem of suppletion and the periphrastic realization of Maiden's N-pattern, I shall argue that we are close to having one clear case of a morphomic attraction, in which precisely the pattern EEH-EEH serves as a template for further evolution.

4.1 SUPPLETION ACCOUNT

Corbett (2013: 183–184; submitted: Sect. 4.3.4) raises the question of whether such mixed paradigms should not be taken as suppletive paradigms with H and E as two etymological origins now fused into one single suppletive auxiliary paradigm. In Štichauer (2018: 6–8) I address this issue along the lines sketched by Corbett himself, but there is now more to say, especially with respect to Maiden (2018: 296–300) who puts forward an important account of how suppletion works in Romance.

As Maiden demonstrates, suppletion works in a straightforward way in the Romance languages: it will necessarily take on a morphomic distribution, and the distribution will be that of the N-pattern (or, more rarely, L-pattern) (Maiden 2018: 192). Maiden (2018: 296) goes so far as to claim that suppletion must in any case assume a morphomic pattern, since it is the only available pattern present in the system.

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14 Indeed, I espouse Corbett's (2013: 173) view that his typology of splits "(…) suggests a further possibility, namely a morphomic distribution unique to periphrasis, within a given language".

15 The problem is that Savini signals only the 1st pers. sg. without reporting the full paradigms. The 3rd pers. are given only with impersonal verbs, such as *piovere* 'rain'. Interestingly, reflexive verbs are declared to take systematically *avere*, but there are only a couple of examples, which do not cover the whole range of reflexive verbs, so it is difficult to judge the validity of such a generalization.

We would then expect that auxiliary alternation in mixed paradigms would conform to the existing patterns of suppletion. We do have an interesting case of suppletion with HABERE 'have'/ TENERE 'hold' cited by Maiden (2018: 202), in the dialect of Rodome and Paziols, in Aude, but, interestingly, the suppletion occurs only in the case of the lexical verb (with TENERE 'hold' just in the N-pattern cells), while being uniformly HABERE 'have' if used as an auxiliary.

In the case of mixed paradigms, on the basis of the extant data from the MIXPAR database, it appears that there is virtually no example of the N-patterned suppletion of the two auxiliaries. Therefore, a suppletion account, invoked by Corbett, might also be ruled out on these grounds. At the same time, it also sets apart mixed paradigms as a unique morphological phenomenon which is probably not attracted to the existing morphomic patterns.

4.2 PERIPHRASIS AND THE MORPHOMIC PATTERNS

A closely related issue is that of 'periphrasis' which has been widely debated over the past decades (cf. Ackerman and Stump 2004; Brown et al. 2012; Ledgeway, Smith, and Vincent 2022). The chief question is aptly put by Vincent (2011: 434): "if periphrases can become part of a paradigm, can they exhibit the distributional behaviour associated with autonomous morphemes?".

Recent research has shown that such morphomic distribution can indeed be found at the level of periphrasis (cf. Cruschina 2013; Ledgeway 2016; Andriani 2017: Chap. 5). Brown et al (2012: 238; see also Corbett 2013) claim to this effect that, if periphrasis is not externally motivated, it tends to follow the already attested morphomic patterns present in the morphological system. There is some evidence that some major periphrastic structures conform to the N-pattern (e.g., Cruschina 2013; Maiden 2018: 219–220; but see Bjorkman 2016 for a different non-morphomic view). Again, we would expect that such behavior may also appear for the mixed paradigms. And we do find some distributions which apparently come close to the N-pattern (cf. Štichauer 2018: 18; see also Ledgeway 2019: 359–360), as in example (13), from the variety of Viticuso (Lazio, province of Frosinone, southern Italy, cf. Manzini and Savoia 2005, II: 706):

(13)

	SG	PL
1	**fosse ≈ a'vessə mə'nutə** I.was ≈ had come.PTCP	**fus'simə mə'nutə** we.were come.PTCP
2	**fusse ≈ a'vissə mə'nutə** you.were ≈ had come.PTCP	**fus'sitə mə'nutə** you.were come.PTCP
3	**fosse ≈ a'vessə mə'nutə** he/she.was ≈ had come.PTCP	**'fossənə ≈ a'vissənə mə'nutə** they.were ≈ had come.PTCP

However, the example is problematic for at least two reasons. First, the paradigm is that of the counterfactual, and the pattern thus holds only for this specific TAM paradigm. If the genuine N-pattern were here, then the same auxiliary would be used by all past (and other) tense forms and in the first and second person plural forms of the

present, but another auxiliary would appear in the singular and third person forms of the present perfect.

Second, it rests upon the versatile behavior of free variation which, of course, is not problematic from a theoretical point of view as a case of overabundance, but presupposes that free variation occurs just in the collection of cells inherent in this pattern, not encroaching on the two remaining cells (1st and 2nd pl.). If this were the case, we would have a case of ongoing disruption of the pattern. Finally, there is also a further remark to be made: such distributions, with the 1st and 2nd pers. pl. realized differently with respect to the rest of the paradigm, are far from rare even outside the N-pattern (see Maiden 2018: 22). Hence, this kind of distribution could also be taken as pure coincidence.

4.3 RECEDING PATTERNS AND A CASE OF MORPHOMIC CONVERGENCE

Thanks to the excellent work by Andriani (2017; 2018), we have a detailed description of a diachronic change *in fieri*. Indeed, Andriani (2017: 158–159; 2018: 376) observes, for Barese varieties, how the pattern EEH-EEH progressively establishes itself over the other receding patterns (typical of older generations and attested as early as 19th century).[16] Andriani (2017: 159) points out that, besides the 'canonical' pattern EEH-EEH, older and middle-aged speakers also follow, in a parallel way, two competing patterns, as represented in example (14).

(14)

PATTERN 1 (older generation)

	SG	PL
1	**aɟɟə ʃutə** I.have gone.PTCP	**simə ʃutə** we.are gone.PTCP
2	**si ʃʃutə** you.are.SG gone.PTCP	**sitə ʃutə** you.are.PL gone.PTCP
3	**a ʃʃutə** he/she.has gone.PTCP	**ɔnnə(annə) ʃutə** they.have gone.PTCP

PATTERN 2 (middle-aged generation)

	SG	PL
1	**so ʃʃutə** I.am gone.PTCP	**simə≈amə ʃutə** we.are≈have gone.PTCP
2	**si ʃʃutə** you.are gone.PTCP	**sitə≈avitə ʃutə** you.are.PL≈have.PL gone.PTCP
3	**a ʃʃutə** he/she.has gone.PTCP	**ɔnnə/annə ʃutə** they.have gone.PTCP

PATTERN 3 (younger generations — the commonest pattern)

	SG	PL
1	**so ʃʃutə** I.am gone.PTCP	**simə ʃutə** we.are gone.PTCP
2	**si ʃʃutə** you.are gone.PTCP	**sitə ʃutə** you.are gone.PTCP
3	**a ʃʃutə** he/she.has gone.PTCP	**(ɔnnə)annə ʃutə** they.have gone.PTCP

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16   I thank Luigi Andriani for an illuminating discussion of these data.

Although Andriani offers a diachronic interpretation of these facts in terms of progressive replacement of individual cells, I wish to look at these paradigms in a different way. What is striking, in fact, is that all three patterns are used, as Andriani observes, in parallel, with strong preference for the 'canonical pattern' EEH-EEH both by older and middle-aged speakers, while being the first choice for younger speakers. There is thus not really a micro-diachronic path from Pattern 1 to Pattern 2, and finally to Pattern 3, but, admittedly, global convergence towards Pattern 3 from both of the competing and receding patterns. Indeed, the passage across Pattern 2 would be disrupting in that in Pattern 1 we already have the 1st and 2nd pl. firmly established with E, while it is only the 1st sg. which undergoes a shift from H to E. In Pattern 2, however, this shift would also be accompanied, unexpectedly, by free variation between E≈H in the 1st and 2nd pers. pl., resolved in turn in Pattern 3. Let us appreciate this situation through a schematic representation of the same data in example (15):

(15)

PATTERN 1 (older generation)

	SINGULAR	PLURAL
1	H	E
2	E	E
3	H	H

PATTERN 2 (middle-aged generation)

	SINGULAR	PLURAL
1	E	E≈H
2	E	E≈H
3	H	H

PATTERN 3 (younger generations — the commonest pattern)

	SINGULAR	PLURAL
1	E	E
2	E	E
3	H	H

Thus what I find striking, in Pattern 2, is this kind of disrupting free variation in the two cells which seem to be stable in the other two patterns. Therefore, I argue — in line with Andriani's observation about the parallel use of all three patterns — that we have here a case of morphomic convergence or attraction of the most common pattern EEH-EEH already widespread in a large number of other varieties of the same dialectal area (and of other areas as well).[17] Of course, I am well aware of the fact that

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17   Martin Maiden (p.c.) raises an intriguing question. According to his definition of 'convergence' and 'attraction', the morphomic patterns are already present in the system and 'replicated', while here, in the case at hand, what I am talking about would be a case of 'pattern borrowing', as the most common pattern EEH-EEH, so far unavailable in the present perfect paradigm of the variety of Bari but widespread in other varieties, is 'borrowed', which is "controversial and certainly rare".

this represents only one — speculative — case. But as the MIXPAR database progressively grows, more data will be available to investigate not only the current variation but also some diachronic implications.

5 CONCLUDING REMARKS

In this paper, I have argued that progressive morphologization is going on. I propose that what we witness here is a loss of the original transitivity/unaccusativity marking and the subsequent reorganization of the two auxiliaries which can eventually give rise to inflection classes with no semantic or syntactic motivation. I have stressed the morphological nature of the alternation — we do need a paradigmatic account but the morphological behavior of these mixed auxiliary systems does not seem to display typical morphomic behavior associated with the major morphomic patterns described by Maiden.

However, I would insist on the claim that these patterns, even if unique within the system, are as psychologically real as any other inflectional phenomena in that speakers, rather than figuring out a covert motivation for a pattern, simply acquire it as a predictable distribution where the implicational relationships can be established. I think that this holds — in line with Maiden's above-mentioned warning — even for those patterns that happen to be present cross-linguistically and for which extramorphological motivation has always been envisaged, as is the case with the widespread pattern EEH-EEH.

I conclude by offering an audacious comparison of two examples which are linguistically unrelated, as they come from two entirely different languages, but closely connected on theoretical grounds since they both assume, I argue, the same abstract pattern.[18] In example (16), I only repeat the much discussed instance of the EEH-EEH pattern reported in example (6) above, while in example (17), Czech periphrastic past of the verb *číst* 'read' is reported.

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18 There has been a debate about whether 'typological uniqueness', i.e. the fact that some patterns are cross-linguistically rare or, on the other hand, frequent, should be taken as an important diagnostic for genuine 'morphomehood' (cf. Herce 2019; Maiden 2021: 93–95). I do not wish to enter into the debate directly because I am not discussing the traditionally defined L-, N-, and U-patterns but simply describing a superficial, synchronically active identity between these two patterns. However, what is interesting to note is that the two patterns, Italo-Romance EEH-EEH and the Czech periphrastic past, have an entirely different diachronic origin. While the former arises from the mixing of two auxiliaries, the latter is the result of a (long attested) loss of the 3rd sg. and pl. auxiliary forms. Such completely different diachronic scenarios of how two presumably identical patterns came into being might indicate that a hidden, motivated pattern could lie behind them (for a similar point, cf. Maiden 2018: 22; 2021: 93).

(16)

	SG	PL
1	**so ʃʃutə** I.am go.PTCP	**simə ʃutə** we.are go.PTCP
2	**si ʃʃutə** you.are.SG go.PTCP	**sitə ʃutə** you.are.PL go.PTCP
3	**a ʃʃutə** he/she.has go.PTCP	**annə ʃutə** they.have go.PTCP

(17)

	SG	PL
1	**četl/a jsem** read.PTCP.M/F I.am	**četl-i/y jsme** read.PTCP.M/F we.are
2	**četl/a jsi** read.PTCP.M/F you.are.SG	**četl-i/y jste** read.PTCP.M/F you.are.PL
3	**četl/a (*je)** read.PTCP.M/F (*he/she is)	**četl-i/y (*jsou)** read.PTCP.M/F (*they are)

In Czech as well as in Slovak (as discussed by Corbett 2013: 173), the auxiliary *být* 'be' only surfaces in the 1st and 2nd persons, while being obligatorily absent in the 3rd persons.[19] As Bonami and Webelhuth (2021: 88) point out, the absence of the auxiliary is inherent in this particular paradigm since the 3rd. pers. forms *je* 'she/he/it is' and *jsou* 'they are' are obligatorily used in copular constructions. The paradigm is thus striking precisely for the fact that it follows a unique pattern of alternation which can ultimately be, on an abstract morphomic level, just the same as what we have discussed in the case of the Italo-Romance varieties.

6 APPENDIX. 'MIXPAR': THE PROJECT OF A DATABASE OF MIXED PARADIGMS

The overall design of the database is straightforward. In order to get the complete information about concrete paradigms, a simple MS Excel format with rows and columns has been chosen where every single row (or input line) corresponds to one concrete paradigm and the columns capture the relevant types of information. The

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19   Hence, it is impossible to say, for example, **četl je* lit. 'he is read', while it is perfectly acceptable to omit the auxiliary in the 1st pers. when the subject pronoun is spelled out, thus, for instance, *pracovali jsme celou noc* and *my pracovali celou noc* 'we worked all night long', in which the presence of *my* 'we' admits the auxiliary omission. Interestingly, the future auxiliary, which unlike the present tense form is not a clitic, comes in the complete set, but only for imperfective verbs: *budu pracovat, budeš pracovat, bude pracovat* 'I will work, you will work, he/she will work'.

structure is simple enough to allow for any kind of data export (for instance, into the statistical software R for advanced analyses).

Thus, the first column hosts the complete paradigm,[20] the subsequent columns are labelled **Verb/Construction**, **Class**, **TAM**, **Pattern**, **Region**, **Province, Place**, **Dialect classification-1**, **Dialect-classification-2**, **Dialect-classification-3**, **Source**, and **Notes**. One of the concrete input lines, capturing the example (6) discussed above, can be seen in Figures (1) and (2), Figure (2) being the continuation of the same input line.

Full paradigm	Verb/Construction	Class	TAM	Pattern	Region	Province	Place
so ʃʃiˈutə si ʃʃiˈutə a ʃʃiˈutə simə ʃiˈutə sitə ʃiˈutə annə ʃiˈutə	ANDARE (IRE)	Unaccusative	PRF	EEH-EEH	Puglia	Bari	Bari

FIGURE 1. Illustrative input line in the MIXPAR database (lefthand part)

Dialect Classification-1	Dialect Classification-2	Dialect Classification-3	Source	Notes
Meridionale intermedio	Pugliese	Apulo-barese	Andriani 2017: 156	Receding pattern HEH-HHH

FIGURE 2. Illustrative input line in the MIXPAR database (righthand part, continuation)

The column labels thus indicate a series of factors with a number of values (statistically speaking, 'levels'). The **Verb/Construction** contains the citation form of a concrete verb whose paradigm is given in the first column. In order to unify this factor, which is obviously more or less open-ended as more and more verbs will be added, the citation forms are given as Standard Italian verbs, with sometimes the etymological point of departure as, for example, the verb ʃi' (< īRE) subsumed here under the heading of the verb *andare* 'go'. This decision will enable us to search for all paradigms of the verb *andare* in each of the varieties present in the database regardless of the concrete phonological shape.

The **Class** factor is a closed category based on the argument structure with the levels corresponding to transitives, unergatives, unaccusatives, and to six types of reflexive verbs. For each of the reflexivity types, there is one example in Standard Italian provided in the legend to the database (on the second sheet of the Excel file). Here we find inherent reflexives (*accorgersi* 'notice'), transitive direct and indirect reflexives (*lavarsi* and *lavarsi le mani*, 'wash oneself' and 'wash self's hands', respectively), unergative indirect reflexives (*rispondersi* 'answer to oneself'), 'antipassive' reflexives expressing the subject's benefit from the action performed (*mangiarsi un*

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20 Alternatively, as some colleagues propose, it would also be useful to split the first column devoted to full paradigms into six separate columns corresponding to each of the six paradigm cells.

panino 'eat up a sandwich'), and middle reflexives (*svegliarsi* 'wake up'). As already alluded to above, this detailed classification of reflexive verbs is crucial as there are differences, across Italo-Romance varieties, between each of these types.

The **TAM** category is also a closed factor containing the concrete tense-and-mood paradigm. The abbreviations, spelled out in the legend, correspond to those used in the Leipzig glossing rules (thus, for instance, PRF = present perfect, PLF = pluperfect, etc.).

Within the **Pattern** factor, all attested intra-paradigmatic combinations of the two auxiliaries are captured in the format EEH-EEH, i.e. the three cells of the sg. — the three cells of the plural. Free variation, a frequent situation in many varieties, is signaled by the double tilde. H≈E thus indicates that in a given cell, the two auxiliaries can be used interchangeably. There are two points worth mentioning here. The first is the order in which such free variation is indicated. If, in fact, we have clear (diachronic, or theoretical) evidence that the erstwhile choice was H, or E, then the order should also reflect this important observation, so that H≈E and E≈H capture two different scenarios, and they should be read as 'the first auxiliary choice is H, being progressively superseded by E', and, conversely, 'the first auxiliary choice is E, being progressively superseded by H'. The problem is that we often do not have such clear evidence for positing this order in any reliable way. The second point, probably more serious, is that sometimes, in particular in the pluperfect, the auxiliary forms are clearly the result of a merger of both of the auxiliaries H and E. Thus, for instance, forms such as *eva, seva, jeva* etc. cannot be readily ascribed to H or E (see Cennamo 2010). In the database, this conflation represents a practical obstacle to assigning such paradigms to specific patterns of H/E alternation.

The next series of factors all involve detailed geographical information. The first three, **Region, Province,** and **Place** provide simple geographical coordinates based on the administrative division of Italy (regions, provinces) with the concrete name of the locality. The three dialect classification factors, **Dialect-classification-1/2/3**, follow the traditional and still valid dialectal divisions and subdivisons based on Pellegrini 1977. The first 'macro-classification' reports the basic dialect area, e.g. *Meridionale intermedio*, the second follows the narrower area, indicated in Pellegrini's map as I, II, III, etc., e.g., *Pugliese*, and the third 'micro-classification', indicated as, for example, Ia, Ib, Ic, etc., indicates the most restricted area defined by Pellegrini 1977, e.g., in the case at hand, *Apulo-barese*.

The last two columns, **Source** and **Notes**, contain the precise bibliographical reference from where the paradigm is taken, and possibly a note on any additional aspect which might be relevant for the data in the input line. Thus, for instance, in the example reported in Figures (1) and (2), a remark on a receding or competing pattern is present. In other cases, particular comments on the data can also be found, such as a note on some inconsistency or a classification error (such as when the references identify — often on the basis of a slightly different dialect classification — a variety as belonging to one group rather than another one).

This is, then, the overall design of the MIXPAR database which is, as already said, at the very beginning of development (as of August 2022, it contains 100 full paradigms), but has been growing progressively. Once all the attested data have been put together, the database will be ready for online publication.

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