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Some lessons from history

Morphomes in diachrony

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3.1 Introduction

What follows informally recounts some 'lessons I have learned' from several years spent exploring and describing in close detail the history of the inflectional morphology of the Romance verb.[1] This programme of research, which has considered the entire range of Romance languages and dialects, and in as much historical depth and comparative breadth as possible, has been concerned in particular to identify, and describe the development of, a number of phenomena for which it can be argued that they are clear-cut,[2] unambiguous cases of 'morphomes' in the sense of Aronoff (1994); phenomena, that is, for which extramorphological (phonological or morphosyntactic) synchronic conditioning can be ruled out. Reproduction of all the relevant arguments would require far more space than I have here, and they have been published elsewhere. This is not to say, of course, that these arguments are self-evidently correct or that all morphologists would necessarily be persuaded by them (far from it), but I am interested here in standing back and developing some general reflections on what I believe the unusual comparative breadth and historical depth

[1] Notably work in connection with the AHRC-funded project *Autonomous Morphology in Diachrony: comparative evidence from the Romance Languages* conducted at Oxford University between 2006 and 2010.

[2] One should not fall into the trap of thinking that 'clear-cut', unambiguous cases of morphomehood (assuming they can be established as such) are the only true morphomes. In Aronoff's view morphomes constitute an 'intermediate level' in the mapping between morphosyntax and phonological realization, which is in principle present even in one-to-one correspondences between the last two levels (cf. also Maiden 2008 for some arguments in support of the presence of a 'morphomic level' even in the relation between lexical meanings and the invariant forms that represent them). Rather, it is the clear-cut cases of autonomy from phonological and morphological conditioning which demonstrate beyond doubt the reality of morphomes and (as Aronoff 1994: 25 puts it) 'truly earn their name'. I shall focus here on such cases, but as I suggest later, there may be overlap between the morphomic and apparently purely morphosyntactic or phonological conditioning.

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offered by the descriptive literature[3] on Romance languages has to offer for the study of morphomes. The principal lessons that have emerged from the diachronic observation of Romance verb morphology seem to me to be the following:

i. Diachrony can provide evidence for the psychological reality of putative morphomes.
ii. Diachrony can be used as a diagnostic of the synchronically morphomic nature of some pattern of alternation.
iii. Typological comparison can serve to falsify the putatively morphomic status of some pattern of alternation.
iv. Speakers do not especially prefer 'non-morphomic' over 'morphomic' patterns.
v. An alternation pattern can be morphomic even when it appears to be phonologically conditioned.

Each of these findings will be explained and illustrated at least in outline[4] in the following sections. In conclusion, I shall briefly present some thoughts on why morphomes persist diachronically, which I shall relate to the observation that all morphomes seem to originate in allomorphy affecting lexical roots.

3.2 Diachrony can provide evidence for the psychological reality of putative morphomes

Aronoff's illustrations of morphomes, chosen from a wide range of languages, are liable to what is, perhaps, a rather perverse objection. Given that morphomes, in their most clear-cut manifestations, 'make no sense' in terms of extramorphological (semantic or phonological) conditioning one might ask whether they are even 'psychologically real'. Why, after all, would speakers internalize nonsense? A reply might be that if the relevant pattern is observed repeatedly and unfailingly, then speakers could hardly fail to grasp it. Yet it might be the case that the distribution of alternation has a straightforward extramorphological motivation for one generation but that for a succeeding generation that motivation has for some reason been effaced while the associated alternating outputs persist. The latter generation *could*, in principle, simply correctly learn the relevant alternation pattern perfectly for the inflectional paradigm of each and every one of the lexemes historically affected. Some readers may feel that such a scenario is implausible, and that sheer 'force of numbers' would ensure that speakers made the appropriate generalization. One should perhaps not underestimate humans'

[3] Some three thousand sources, produced mainly between the last quarter of the nineteenth century and the present, have been consulted in the course of this research.

[4] Given that this study is in the nature of a broad overview of my findings, I have not found it possible to offer as detailed descriptive accounts of all the phenomena at issue as some readers might like: to have done so would have made this essay intolerably long. I have, however, indicated where the relevant arguments are to be found in print.

ability to learn by rote lengthy lists of arbitrary form-meaning relationships, but that is beside the point. The point is that for any period in history before the present (when psycholinguistic experimentation on native speakers becomes potentially available), we just cannot tell, from a synchronic perspective, what is going on.

It is diachrony which can potentially answer our question.[5] More specifically, we have an opportunity to answer it just as soon as the putative morphome becomes subject to any morphological innovation with respect to the input grammar, in other words, to something that was not present in the grammar of the previous generation. If that innovation affects equally and in exactly the same way all and only the set of paradigm cells over which the morphome is defined—that is to say, if the change is *coherent*—then we have substantive evidence that speakers have indeed internalized the generalization that there is a pattern of formal, distinctive identity over the relevant set of cells. If this is not the case, if the change is *incoherent* and does not apply equally to all the relevant paradigm cells, then we have reason to doubt that morphome's psychological reality. The evidence for psychological reality is even stronger if this pattern of 'coherence' is observed for every single lexical item affected by the innovation, that is to say that the innovation advances in 'lockstep' across the lexicon.[6]

'Coherence' is not the only diachronic diagnostic of morphomicity. There is also what I term 'attraction'. Here some morphological variation, in origin wholly independent of the morphome in question and of its historical causes, and possibly quite different in form from any existing alternants associated with it, assumes exactly the pattern of distribution associated with that morphome: the result is usually suppletion. Such development clearly presupposes speakers' making abstract distributional generalizations across paradigms which function as a paradigmatic 'template' for novel sources of variation. If 'coherence' and/or 'attraction' can be identified, then we have unambiguous diagnostics of the psychological reality of some putative morphome.

I give here some brief examples of coherence and attraction in diachrony. They are, in fact, cases that I have presented at greater length in specialist journals and elsewhere,[7] and to which readers are referred for more detailed accounts. For example, the Latin verb had two stems distinguishing perfective and imperfective

[5] Of course, this method of obtaining 'substantive evidence' (cf. Skousen 1975) for the psychological reality of some morphological phenomenon is not limited just to the evaluation of morphomes.

[6] In my previous presentations of the notion of 'coherence' (e.g., Maiden 2005), I have not always made the rather important distinction between intra- and inter-lexemic coherence. One could imagine a scenario in which *some* lexemes showed coherence across all the relevant cells, but some others did not. What this scenario would show is that speakers really did make the relevant abstract generalizations, but did not always bother to implement them across the lexicon. What is striking in the Romance data is that coherence is typically general across the lexicon.

[7] See, e.g., Maiden (2000; 2001a; 2004a,b; 2005; 2006; 2009a,b; 2011a,b,c,d; 2012).

aspect (1). The differences between these stems were often idiosyncratic and (especially in third conjugation verbs) involved highly unpredictable types of allomorphy. In the history of the Romance languages the aspectual distinctions are neutralized (2) in most of the tense-forms in which such allomorphy occurred (the preterite and imperfect indicative retain the aspectual distinction of the Latin present perfective indicative and past imperfect indicative respectively). I present here the fate of the Latin lexemes FACERE 'make', TENERE 'hold' (later 'have'), SCRIBERE 'write', STARE 'stand'.

(1) Disparate root-allomorphy dependent on imperfective vs perfective *aspect* in Latin

PRS.IND.IPFV	FACIO	TENEO	SCRIBO	STO
PRS.SBJV.IPFV	FACIAM	TENEAM	SCRIBAM	STEM
PST.IND.IPFV	FACIEBAM	TENEBAM	SCRIBEBAM	STABAM
PRS.IND.PFV	FECI	TENUI	SCRIPSI	STETI
PRS.SBJV.PFV	FECERIM	TENUERIM	SCRIPSERIM	STETIM
PST.IND.PFV	FECERAM	TENUERAM	SCRIPSERAM	STETERAM
PST.SBJV.PFV	FECISSEM	TENUISSEM	SCRIPSISSEM	STETISSEM
FUT.IND.PFV	FECERO	TENUERO	SCRIPSERO	STETERO

(2) Dissolution of functional unity, but continuation of the (originally) perfective forms in the transition from Latin to Romance (Portuguese)

Latin		Portuguese
PRS.IND.IPFV	>	present indicative
PRS.SBJV.IPFV	>	present subjunctive
PST.IND.IPFV	>	imperfect
PRS.IND.PFV	>	preterite [perfective]
PRS.SBJV.PFV	>	future subjunctive [aspectually neutral]
PST.IND.PFV	>	pluperfect [aspectually neutral]
PST.SBJV.PFV	>	imperfect subjunctive [aspectually neutral]
FUT.IND.PFV	>	future subjunctive [aspectually neutral]

In Romance, the allomorphy associated in Latin with aspectual distinctions is effectively 'stranded', consistently showing a pattern of distribution which reflects its history but no longer 'makes sense'. I have labelled it the 'PYTA' morphome, an acronym prompted by the cover-term traditionally used for the relevant set of forms in Spanish by grammarians of Spanish, namely 'perfecto/pretérito y tiempos afines' ('perfect/preterite and related tenses'). What shows that, given the failure of any shared functional motivation, this distribution has remained 'psychologically real' for speakers is that the multiple morphological adjustments (including analogical levelling) which over the centuries have affected these allomorphs have consistently respected, virtually without exception across the lexicon, the 'coherence' of inherited pattern of distribution. Thus (3) and (4). In (4) we see various representative types of

analogical change, including extension of the tonic vowel /i/ originally found only in the 1SG preterite, analogical extension of *-iv-* into *estar* 'stand, be', and analogical 'levelling out' of alternation in *escrever* 'write'.

(3) Ex-imperfective roots in Portuguese

PRS.IND	*faço*	*tenho*	*escrevo*	*estou*
PRS.SBJV	*faça*	*tenha*	*escreva*	*estê*
IPF	*fazia*	*tinha*	*escrevia*	*estava*

(4) Ex-perfective roots in Portuguese

PRET	*fiz*	*tive*	*escrevi*	*estive*
FUT.SBJV	*fizer*	*tiver*	*escrever*	*estiver*
PLPF	*fizera*	*tivera*	*escrevera*	*estivera*
IPF.SBJV	*fizesse*	*tivesse*	*escrevesse*	*estivesse*

To give an example of diachronic coherence in the inherited paradigmatic effects of sound change we might take the paradigmatically accidental, yet phonologically disparate, effects of palatalization by yod, and of slightly later palatalization of velar consonants before front vowels, in proto-Romance. The effect in central Italian varieties (and in some verbs in Romanian) is to create what I label a 'U-pattern' alternation; in other Romance languages, we find an 'L-pattern' distribution. What is involved is the emergence of a distinctive root allomorph within some cells of the present tense (1SG and 3PL present indicative and the whole of the present subjunctive, for the U-pattern; the same, minus the 3PL present indicative, for the L-pattern) (5):

(5) U-pattern (central Italian; for verbs with velar alternants in Romanian[8])

L-pattern (otherwise general in Romance)

Some regular effects of the relevant early Romance sound changes in *early modern* Italian are given in (6). Examples (6a–d) show the effects of historically underlying yod; (6e–g) those of palatalization of velars before front vowels (for explanation of the now aberrant behaviour of the 1/2PL subjunctives, see Maiden 2010, 2012):

[8] The distribution of the U/L-pattern alternants in modern Romanian is in several respects different from that shown in these diagrams, due to early syncretizing analogical changes. See below.

(6) a.

vo/ʎʎ/*o* 'want'	*vuoi*	*vuole*	*volemo*	*volete*	*vo*/ʎʎ/*ono*
vo/ʎʎ/*a*	*vo*/ʎʎ/*a*	*vo*/ʎʎ/*a*	*vo*/ʎʎ/*amo*	*vo*/ʎʎ/*ate*	*vo*/ʎʎ/*ano*

b.

pia/ttʃ/*o* 'please'	*pia*/tʃ/*i*	*pia*/tʃ/*e*	*pia*/tʃ/*emo*	*pia*/tʃ/*ete*	*pia*/ttʃ/*ono*
pia/ttʃ/*a*	*pia*/ttʃ/*a*	*pia*/ttʃ/*a*	*pia*/ttʃ/*amo*	*pia*/ttʃ/*ate*	*pia*/ttʃ/*ano*

c.

ve/ddʒ/*o* 'see'	*vedi*	*vede*	*vedemo*	*vedete*	*ve*/ddʒ/*ono*
ve/ddʒ/*a*	*ve*/ddʒ/*a*	*ve*/ddʒ/*a*	*ve*/ddʒ/*amo*	*ve*/ddʒ/*ate*	*ve*/ddʒ/*ano*

d.

muoio 'die'	*muori*	*muore*	*morimo*	*morite*	*muoiono*
muoia	*muoia*	*muoia*	*moiamo*	*moiate*	*muoiano*

e.

di/k/*o* 'say'	*di*/tʃ/*i*	*di*/tʃ/*e*	*di*/tʃ/*emo*	*dite*	*di*/k/*ono*
di/k/*a*	*di*/k/*a*	*di*/k/*a*	*di*/tʃ/*amo*	*di*/tʃ/*ate*	*di*/k/*ano*

f.

le/gg/*o* 'read'	*le*/ddʒ/*i*	*le*/ddʒ/*e*	*le*/ddʒ/*emo*	*le*/ddʒ/*ete*	*le*gg/*ono*
le/gg/*a*	*le*/gg/*a*	*le*/gg/*a*	*le*/ddʒ/*amo*	*l*/ddʒ/*ate*	*le*/gg/*ano*

g.

cre/sk/*o* 'grow'	*cre*/ʃʃ/*i*	*cre*/ʃʃ/*e*	*cre*/ʃʃ/*emo*	*cre*/ʃʃ/*ete*	*cre*/sk/*ono*
cre/sk/*a*	*cre*/sk/*a*	*cre*/sk/*a*	*cre*/ʃʃ/*amo*	*cre*/ʃʃ/*ate*	*cre*/sk/*ano*

All analogical changes affecting the U/L-pattern faithfully replicate the inherited distributional pattern, even when what is involved is the creation of novel alternations whose phonological content is different from the output of the original phonological processes. Thus the rise of novel[9] alternations in the verbs *chiudere* 'close' or *potere* 'be able' (7):

(7)

chiu/gg/*o*	*chiudi*	*chiude*	*chiudemo*	*chiudete*	*chiu*/gg/*ono*
chiu/gg/*a*	*chiu*/gg/*a*	*chiu*/gg/*a*	*chiudiamo*	*chiudiate*	*chiu*/gg/*ano*

posso	*puoi*	*può*	*potemo*	*potete*	*possono*
possa	*possa*	*possa*	*possiamo*	*possiate*	*possano*

[9] In the case of *chiudere*, we have introduction into a verb previously having invariant root-final /d/ of the alternant /gg/, originally the U-pattern form alternating with /ddʒ/ (e.g., 1SG.PRS.IND *le*/gg/o 'read' vs 3SG.PRS.IND *le*/ddʒ/*e*). In *potere*, alternants that existed already in Latin have had their distribution redeployed to conform to the U-pattern.

To give an example of 'attraction', we may mention the effects of another major Romance sound change, namely the rise of major vocalic allomorphy in the lexical root of the verb as a consequence of *stress*. In most cases Latin stress fell—for purely phonological reasons—on the lexical root in the singular and third person plural forms of the present tense of the verb, together with the second person singular imperative. The phonological rule of stress placement largely dissolves in Romance, making stress-alternation in the verb dependent on morphological specifications. This morphologized pattern of alternating stress is amplified by the often extensive patterns of vocalic differentiation which differentiate stressed from unstressed syllables. The resultant alternation pattern (which I have labelled the 'N-pattern'), typically differentiating the singular and third person forms of the present indicative, present subjunctive, and imperative from the *whole of the rest of the paradigm*, provides a template for innovatory patterns of (suppletive and other) alternations across the Romance languages. In (8) I give some historically regular results of historical stress-related vocalic alternation in Romanian and Italian. In (9) I list some analogical innovations replicating this pattern. Among these are some examples of 'attraction'—situations in which older morphological or lexical distinctions having quite different functions are redeployed diachronically in such a way that they replicate the N-pattern in their distribution. Briefly, Latin had a derivational affix -SC- marking ingressive aspect (e.g. FLORESCIT 'it comes into bloom' vs non-derived FLORET 'it flowers') and restricted to originally imperfective forms of the verb. The affix, reanalysed (see Maiden 2004a for a more detailed analysis of the processes at work) variously as -isk- or -esk-, loses its original semantic association but often survives intact alongside unaffixed forms of the same verb. Ultimately, the coexistence of semantically non-distinct affixed and non-affixed variants of the same verb is systematized by assigning the affix (termed the 'augment') to the 'N-pattern' cells, and abolishing it from the remaining cells. Thus Romanian *iubesc* 'I love' with the augment vs augmentless *iubim* 'we love'; similarly Italian *finisco* 'I end' with the augment vs augmentless *finiamo* 'we end'. Romanian also has a second verbal augment *-ez-* which also originally had an aspectual meaning, but one which is long extinct. Although this affix could have occurred originally in any part of the paradigm, it too has been reanalysed as occupying (obligatorily) all and only the N-pattern cells of certain verbs. Thus *lucrez* 'I work' with the augment vs augmentless *lucrăm* 'we work'. In much the same fashion, in Italo-Romance there have, over time, been three lexemes all meaning 'go', and deriving respectively from Latin UADERE, IRE, and AMBULARE. In early Italo-Romance (a situation surviving to this day in much of central and southern Italy), the first two verbs are fused into a single paradigm such that continuants of UADERE occupy the N-pattern cells and those of IRE occupy the rest; later (for example, in Tuscan), a reflex of AMBULARE (*andare*) comes to occupy all and only non-N-pattern cells, thereby leaving perfectly intact the N-pattern suppletive distribution.

(8) Romanian

mor	'I die'	*mori*	*moare*	*murim*	*muriți*	*mor*
vin	'I come'	*vii*	*vine*	*venim*	*veniți*	*vin*
plac	'I please'	*placi*	*place*	*plăcem*	*plăceți*	*plac*
mănânc	'I eat'	*mănânci*	*mănâncă*	*mâncăm*	*mâncați*	*mănâncă*
usuc	'I dry'	*usuci*	*usucă*	*uscăm*	*uscați*	*usucă*
iau	'I take'	*iei*	*ia*	*luăm*	*luați*	*iau*

IPF.IND *muream, veneam, plăceam, mâncam, uscam, luam*

Italian

muoio	'I die'	*muori*	*muore*	*moriamo*	*morite*	*muoiono*
siedo	'I sit'	*siedi*	*siede*	*sediamo*	*sedete*	*siedono*
odo	'I hear'	*odi*	*ode*	*udiamo*	*udite*	*odono*
devo	'I must'	*devi*	*deve*	*dobbiamo*	*dovete*	*devono*

IPF. IND *morivo, sedevo, udivo, dovevo*

(9) Romanian

măsor 'I measure'	*măsori*	*măsoară*	*măsurăm*	*măsurați*	*măsoară*
iubesc 'I love'	*iubești*	*iubește*	*iubim*	*iubiți*	*iubesc*
lucrez 'I work'	*lucrezi*	*lucrează*	*lucrăm*	*lucrați*	*lucrează*

IPF.IND *măsuram, iubeam, lucram*

Italian

finisco 'I end'	*finisci*	*finisce*	*finiamo*	*finite*	*finiscono*
v(ad)o 'I go'	*vai*	*va*	*andiamo*	*andate*	*vanno*
			[older *gimo*]	[older *gite*]	

IPF. IND *finivo, andavo* [older *givo*]

Both 'coherence' in innovation and 'attraction' provide clear diachronic evidence for the psychological reality of putative morphomes. In their phonological content, the relevant innovations may be nothing like any alternation ever produced by the historically underlying determinants, yet they replicate the idiosyncratic yet systematic patterns of alternation produced by these.

3.3 Diachrony can be used as a diagnostic of the synchronically morphomic nature of some alternation

The synchronically arbitrary, indeed 'nonsensical' nature of morphomes makes it intuitively unlikely in the extreme that they could ever arise spontaneously. My observations from Romance languages indicate that they emerge typically because a pattern of alternation which, at some historical stage, is motivated either by phonological factors or by meaning, somehow remains intact after that extramorphological determinant has disappeared. Those determinants may, in themselves, be quite unremarkable: countless languages show, for example, palatalization of consonants before front vowels, or morphological marking of aspectual distinctions. In the case of palatalization (or other

sound changes historically underlying morphomes) an automatic and at one time wholly *accidental*, contingent feature of the resulting alternations, namely the fact that they occurred over a heterogeneous array of paradigm cells in the verb, becomes fundamental to the distribution of the alternation, since the original causation is defunct. Alternatively, the fading away of aspectual distinctions, yet survival of the corresponding formal distinctions, in the transition from Latin to Romance, accidentally leaves behind systematic, recurrent, but fundamentally nonsensical and accidental patterns of allomorphy in the verb. Scenarios of this kind underlie virtually all of the morphomic phenomena which one can observe in the history of the Romance languages, and it is tempting to make the general prediction that 'all morphomes arise because contingent and automatic properties of phonological or morphosyntactic conditioning of alternation emerge as fundamental to the distribution of that alternation when phonological or morphosyntactic conditioning is lost'. Broadly, I believe this to be true, although the Romance languages—specifically, the Francoprovençal variety of Gallo-Romance—provide some evidence that there may be yet another route to morphomehood. Once again, however, what is involved is a pattern of alternation which cannot be ascribed to any extramorphological conditioning and is the accidental effect of a complex set of historical changes. Since the Francoprovençal scenario has not been discussed in the literature before, I give a brief account of it here.

The great majority of 'fourth conjugation' verbs in northern Gallo-Romance varieties, together with Francoprovençal, show a formative (the 'augment') immediately following the lexical root of the verb and preceding the inflectional endings. The ancestor of the 'augment', in Latin, was an affix indicating ingressive *Aktionsart*, and was confined to imperfective forms of the verb. In the relevant Gallo-Romance varieties the paradigmatic distribution of this augment remains limited to those parts of the paradigm that had in Latin distinctively imperfective value (present indicative, present subjunctive, imperfect indicative, gerund). Thus, French *finir* 'end' (remnants of the augment underlined) (10):

(10)

PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND	PST.PT	GER
finis	*finisse*	*finissais*	*finis*	*finisse*	*finirai*	*finirais*		
finis	*finisses*	*finissais*	*finis*	*finisses*	*finiras*	*finirais*		
finit	*finisse*	*finissait*	*finit*	*finît*	*finira*	*finirait*		
finissons	*finissions*	*finissions*	*finîmes*	*finissions*	*finirons*	*finirions*	*fini*	*finissant*
finissez	*finissiez*	*finissiez*	*finîtes*	*finissiez*	*finirez*	*finiriez*		
finissent	*finissent*	*finissaient*	*finirent*	*finissent*	*finiront*	*finiraient*		

In French, as in many other Romance languages, a small (but token-frequent) minority of verbs in the fourth conjugation historically lack the augment, e.g., *mentir* 'lie', *dormir* 'sleep', *servir* 'serve', *partir* 'leave', *ouvrir* 'open' (11):

(11)

PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND	
ouvre	*ouvre*	*ouvrais*	*ouvri*	*ouvrisse*	*ouvrirai*	*ouvrirais*	PST.PT
ouvres	*ouvres*	*ouvrais*	*ouvris*	*ouvrisses*	*ouvriras*	*ouvrirais*	*ouvert*
ouvre	*ouvre*	*ouvrait*	*ouvrit*	*ouvrît*	*ouvrira*	*ouvrirait*	
ouvrons	*ouvrions*	*ouvrions*	*ouvrîmes*	*ouvrissions*	*ouvrirons*	*ouvririons*	GER
ouvrez	*ouvriez*	*ouvriez*	*ouvrîtes*	*ouvrissiez*	*ouvrirez*	*ouvririez*	*ouvrant*
ouvrent	*ouvrent*	*ouvraient*	*ouvrirent*	*ouvrissent*	*ouvriront*	*ouvriraient*	

In some Francoprovençal varieties (see, e.g., Jaquenod 1931: 93,95–8) the augment has a different distribution, over the present subjunctive, the imperfect indicative, the preterite, the imperfect subjunctive, the future, the conditional, and the present participle. Note that for historical phonological reasons the form assumed by the augment in the future (and conditional) is -et-, as opposed to -es- elsewhere. Thus the dialect of Vaux (Reymond and Bossard 1979: 102,110–13) (12):

(12)

nourrî 'nourish'

	PRS.IND	PRS.SBJV	IPF.IND	FUT.	PRS.PART	PST.PART
1SG	*nourro*	*nourresso*	*nourressé*	*nourretrî*		
2SG	*nourre*	*nourresse*	*nourressâi*	*nourretrî*		
3SG	*nourre*	*nourresse*	*nourressâi*	*nourretrâ*		
1PL	*nourrein*	*nourressein*	*nourressein*	*nourretrein*	*nourresseint*	*nourri*
2PL	*nourrî*	*nourressi*	*nourressâi*	*nourretrâ*		
3PL	*nourrant*	*nourressant*	*nourressant*	*nourretrant*		

finî 'finish'

	PRS.IND	PRS.SBJV	IPF.IND	FUT.	PST.PART	PST.PART
1SG	*fino*	*finesso*	*finessé*	*finetrî*		
2SG	*fine*	*finesse*	*finessâi*	*finetrî*		
3SG	*fine*	*finesse*	*finessâi*	*finetrâ*		
1PL	*finein*	*finessein*	*finessein*	*finetrein*	*finesseint*	*fini*
2PL	*finî*	*finessi*	*finessâi*	*finetrâ*		
3PL	*finant*	*finessant*	*finessant*	*finetrant*		

âovrî 'open'

	PRS.IND	PRS.SBJV	IPF.IND	FUT	PST.PART	PST.PART
1SG	*âovro*	*âovresso*	*âovressé*	*âovretrî*		
2SG	*âovre*	*âovresse*	*âovressâi*	*âovretrî*		
3SG	*âovre*	*âovresse*	*âovressâi*	*âovretrâ*		
1PL	*âovrein*	*âovressein*	*âovressein*	*âovretrein*	*âovresseint*	*âovri*
2PL	*âovrî*	*âovressi*	*âovressâi*	*âovretrâ*		
3PL	*âovrant*	*âovressant*	*âovressant*	*âovretrant*		

This development presupposes the following sequence of states and changes:

a. The historically underlying system was much like that of French, the augment being present in originally imperfective cells of most fourth conjugation verbs, and in a small nucleus of very frequent and semantically fairly basic verbs which did not take the augment.
b. In Francoprovençal this augment was subsequently extended intraparadigmatically to all finite parts of the paradigm (+ present participle). That is, *it occurred everywhere except for two non-finite cells* (*infinitive and past participle*). At this point, one might want to claim that the augment is almost perfectly aligned with 'finiteness', occurring in all and (almost) only those forms that also indicate tense, person, and number.
c. The augment was also extended lexically into that small group of highly frequent fourth conjugation verbs that did not traditionally take it, a development widely attested in Francoprovençal and far beyond. That is, *it tended to occur in all fourth conjugation verbs.*
d. But the analogical extension in (c.) met resistance in the present and especially the present indicative, most plausibly because that tense-form must have been the most frequently used and 'salient' set of forms of these verbs. See also Jaberg (1906: 120).
e. The resultant pattern, with the augment infiltrating most of the paradigm but meeting resistance in the present indicative, thereby took root in some highly frequent lexical verbs, such as *âovrî* 'open', *dourmî*, 'sleep', *partî* 'leave', *servî* 'serve'.
f. The accidental pattern of distribution of the augment described in (e.) was subsequently generalized to fourth conjugation verbs *in general*, leading to the disappearance of the augment from the present tense even of verbs 'traditionally' bearing the augment. See also Jaberg (1906: 119–20).

In sum, Francoprovençal had been moving towards a situation in which the distribution of the augment could simply be stated as pertaining to finite forms (+ the present participle) of all fourth conjugation verbs. This paradigmatic distribution was already established in the great majority of verbs of this class. But this pattern was then overturned in favour of a much more arbitrary distributional pattern, excluding the present indicative (and thereby uniting it with the infinitive and past participle), involving a *systematization* of the contingent and accidental effects of frequency (both of the present tense in general and of certain fourth conjugation lexemes in particular). We end up with a synchronically erratic, but recurrent and systematic situation in which all finite forms of the verb except for the present indicative[10] and

[10] For clarity of exposition I have given examples in which only the present indicative lacks the augment. But in fact that present subjunctive also sometimes behaves in the same way.

the present participle end up in opposition, with respect to the distribution of the augment, to the remainder of the paradigm.

I can imagine no other scenario that makes sense of this emergence of complexity out of relative simplicity. That I am on the right track is suggested by the dialect of Bagnes (Bjerrome 1957: 103,105), which seems to display an intermediate stage consistent with the development I have suggested. Here the present indicative of the reflexes of some originally augmentless verbs still wholly lacks the augment, despite its presence in the other finite forms and the present participle of those verbs, while there are signs of the augment receding in the present indicative of verbs which traditionally took it. See also Lavallaz (1899: 223–4, 230), Philipon (1901: 259) and (Keller 1928: 59). What the Francoprovençal facts suggest, then, is that there is at least a third possible diachronic route to 'morphomehood', in addition to loss of phonological conditioning of alternation and loss of morphosyntactic conditioning, namely the systematization of the accidental effects of interacting analogical extension and frequency.

This excursus into the fate of the augment in Francoprovençal adds to our knowledge of the range of diachronic paths by which a morphome can arise, but serves overall to underscore the more general methodological point that it appears, from the Romance data, that to show for some *synchronic* phenomenon that it is truly morphomic, in the sense of having no extramorphological determination, a useful diagnostic is that it should have a history such that the relevant alternation emerges from the *accidental, contingent, arbitrary* effects of some source of alternation (phonological, morphosyntactic, or even produced by the interaction of frequency and analogical change) which no longer exists. If no such ancestry can be shown, if it cannot be shown to have been accidentally spawned by the interaction of earlier extramorphological processes, then the probability that some putative morphome may not be *synchronically* morphomic, but rather has some other kind of explanation, is stronger.

3.4 Typological comparison can serve to falsify the putatively morphomic status of some pattern of alternation

For some phenomenon to be shown to be unambiguously morphomic, it should be typologically unique. The relevant pattern of paradigmatic distribution should not have arisen *independently* in any other language. If it can be shown to have occurred more than once in languages with no relevant common history, then again we have clear grounds to suspect that it may have some more general, universally available motivation, rather than being a synchronically accidental and arbitrary effect of local changes, in the way I have suggested above.

This does not mean, of course, that the existence of the same phenomenon across unrelated (or only distantly related) languages necessarily invalidates the hypothesis

that it is morphomic. It might appear at first blush that what I have said above invalidates one of Aronoff's most famous illustrations of a 'morphome', namely the observation that the English 'perfect participle' (or 'past participle'),[11] while implicated in two, disparate types of function, the passive periphrasis and what we may call 'periphrastic perfect tense-forms', is always and unfailingly identical in form, in either function. Thus for English verbs *see, write, bear, tear, pick, stick, buy, sing, take, tell, hit,* etc., with often idiosyncratic past participles, the same form always appears both in both functions:

Passive: *It is seen/written/borne/torn/picked/stuck/bought/sung/taken/told/hit.*
Perfect: *I have seen/written/borne/torn/picked/stuck/bought/sung/taken/told/hit.*

Now what Aronoff observes for English is (I believe) valid for Germanic languages generally. This, of course, poses no difficulty, since we may suppose that this morphome has a common history in early Germanic. What does at first sight look like a major difficulty for a morphomic account is the fact that exactly the same exceptionless patterning of the 'past participle' is observable in the history of all Romance languages. Exemplification is almost otiose, because the observation is simply true, throughout observable history of Romance, and in Romance language after Romance language.[12] Italian is as good a representative example as any, and we may take among numerous possible verbs *vedere* 'see', *scrivere* 'write', *condurre* 'lead', *strappare* 'tear', *cogliere* 'pluck', *fondere* 'melt', *prendere* 'take', *mettere* 'put', *fare* 'do', *finire* 'finish', *cuocere* 'bake', given here in the third person singular present indicative form of the passive, and the first person singular indicative of the perfect:

Passive *È visto/scritto/condotto/strappato/colto/fuso/preso/messo/fatto/finito/cotto*
Perfect *Ho visto/scritto/condotto/strappato/colto/fuso/preso/messo/fatto/finito/cotto*

[11] Neither label very accurately captures what the phenomenon in question is, nor could they in principle, for they are both names for morphomes, and morphomes cannot, by their very nature, bear labels which describe what they mean, or what their function is. The proliferation of rather esoteric labels in my own work on morphomes ('N-pattern', 'PYTA', etc.) is a necessity born of dealing with things that resist easy categorization.

[12] An exception is constituted by Portuguese, which in a small number of verbs has a 'long' form used in the perfect function, and a short form used in the passive (see especially Loporcaro, Pescia and Ramos 2004; also Chagas de Souza 2007). Among such pairs are *morrer* 'die' (*matado* vs *morto*), *aceitar* 'accept' (*aceite* vs *aceitado*), *acender* 'light' (*aceso* vs *acendido*), *elegir* 'elect' (*eleito* vs *elegido*), *entregar* 'hand over' (*entregue* vs *entregado*), *enxugar* 'dry' (*enxuto* vs *enxugado*), *prender* 'capture, arrest' (*preso* vs *prendido*). Thus: *A Maria tem acendido muitas luzes* 'Maria has been lighting many lights' vs *Muitas luzes foram acesas pela Maria* 'Many lights were lit by Maria'. For a discussion of such cases (and of other long vs short pairs of Romance past participles which are not, in fact, aligned with the distinction between perfect and passive, see Maiden 2013a). The existence of such counterexamples to an otherwise 'coherent' pattern of identity across functions in Portuguese does not invalidate the morphomicity of the past participle. Rather it shows that there really is nothing other than linguistic convention holding the forms together, that there is no hidden extramorphological determinant of identity. And in any case, Portuguese has always shown, and overwhelmingly continues to show, 'coherence' in the development of its past particple.

Nonetheless, the parallel status of the 'past participle', both in Germanic and Romance gives no particular reason to suppose a common semantic motivation for the identity of form over function in both varieties. Briefly, the Latin 'past participle' had the status of a verbal adjective meaning, roughly, 'being in the state resulting from the action or process expressed by the verb'. Romance is distinguished from Latin by the emergence of two periphrastic constructions—the passive and the perfect—in which the past participle is the primary exponent of the lexical meaning of the verb, while tense, mood, person, and number are expressed by an auxiliary verb. These Romance structures are today monoclausal,[13] but they originated as biclausal syntagms in which the past participle was an adjective modifying the subject or object of the verb. What is involved is the outcome of relatively unsurprising paths of grammaticalization and univerbation (and subsequent extensions into, for example, intransitive contexts in the perfect) affecting the relevant structures. The reason why Germanic languages display the same pattern is that they happen (but perhaps we are in the presence of an areal phenomenon attributable to contact?) to have shared the same historical developments, with originally verbal adjectives occurring in perfective and passive periphrases.[14] The parallel between Germanic and Romance does not, therefore, call into question the morphomic status of the past participle: what *would* do so would be the discovery of some language in which the type of historical development we have sketched could be clearly ruled out, yet in which there were consistent and distinctive patterns of formal identity between the forms of passive and those of perfect constructions. One commentator[15] on this essay observes in this connection: 'I am not at all convinced that there's no syntactic or semantic explanation, nor am I convinced that the syncretism is unique to Romance/Germanic.' Such scepticism is, of course, legitimate and perfectly healthy, and there is indeed an urgent need for typological research across a much wider range of languages to see whether my claim can be falsified. It is perhaps worth saying, though, that for my part I strongly suspect that intuitions of a semantic or syntactic link may be 'morphomically driven'—by the kinds of essentially idiosyncratic patterns that happen to seem so normal to us native speakers of Germanic or Romance languages.

In Maiden (2005, 2011b: 263), I cite as evidence for the synchronically morphomic status of the 'N-pattern' in Romance languages the fact that it occurs in all and only those languages which historically underwent changes giving rise to allomorphy in the set of cells comprising the singular and third person forms of the present and imperative (and the infinitive of third conjugation verbs). The point at issue is whether there might not exist a semiotic motivation in terms of 'markedness', given that the domain of the N-pattern contains unmarked values for number

[13] See, for example, Vincent (1982), Ledgeway (2012: 130–4), de Acosta (2011).
[14] See, e.g., Wright (1910: 134); Davis (1978: 51–2); Robinson (1992: 39;168–70); Traugott (1992: 190–3).
[15] Andrew Koontz-Garboden, to whom I am grateful for many other helpful remarks.

(singular), person (third), and tense (present). I am not concerned here with the wider reasons for rejecting this idea (see Maiden ibid.), but one argument that I cited in defence of my position that the N-pattern is the arbitrary relic of extinct sound changes was that there is, to my knowledge, no similar morphological pattern in any other language having a broadly comparable system of tense, person, and number distinctions in the verb. I further adduced the fact that central Sardinia is the one and only domain of the Romance world where there is no evidence for innovatory N-pattern allomorphy, and argued that this could be explained precisely because central Sardinia (Nuorese and Logudorese) is the one area of Sardinia in which sound changes differentiating the vowels of the relevant cells from those of the rest of the paradigm never occurred. Indeed, even continuants of the Latin verb AMBULARE, which in the meaning 'go' typically shows 'N-pattern complement'[16] distribution in other Romance languages, shows a completely invariant stem in this meaning in the relevant Sardinian dialects. This, I argued, is very clear evidence that N-pattern 'attraction' can only occur in dialects whose ancestors underwent the relevant types of vocalic differentiation: any evidence to the contrary—namely the emergence of N-pattern innovations outside these dialects—would seriously undermine my claim, and give rise to the suspicion that, after all, there might be some deeper, non-local and non-accidental, motivation for N-pattern. This is an empirical challenge which has recently been answered.

Loporcaro (2013) cites evidence from the western Logudorese dialect of Bonorva, where there has been analogical extension of the results of a phonological process deleting intervocalic [d], a process blocked wherever the result would be a hiatus **[ii]. Consequently, in the present indicative of 'bier 'see' (< Latin UIDERE) we find:

1sg	2sg	3sg	1pl	2pl	3pl
'bio	'bies	'biet	bi'dimos	bi'dides	'bien

Similarly, in the imperfect indicative there is (1SG) bi'dia, etc., and gerund bi'dinne, with phonologically regular conservation of the dental. However, the dental has also been analogically extended, in some verbs, into environments where it has no historical phonological justification, namely the 1/2PL present subjunctive and the whole of the imperfect subjunctive:

present subjunctive: 'bia 'bias 'biat bi'demus bi'dɛdas 'bian
imperfect subjunctive: bi'dɛre (1SG), etc.

The analogical extensions add to the phonologically regular forms to give rise to an 'N-pattern' distribution, the dental appearing everywhere except for the singular and third person forms of the present indicative and subjunctive (with the

[16] That is to say that its distribution is negatively sensitive to the N-pattern, occurring only in those parts of the paradigm which lie outside its domain.

infinitive). Such an interpretation potentially damages my analysis of the general origins of N-pattern alternation. The question can probably only be satisfactorily answered given more extensive documentation of the relevant historical processes than may be available, but it is worth saying that in this case the appearance of an N-pattern distribution might be the result of two different processes, in neither of which the N-pattern itself is implicated. For example, there is some analogical extension of the dental alternant into other verbs in which no dental was originally present (e.g., 'frier 'fry' < FRIGERE), but here the distribution of the dental replicates that found in 'bier in the 1/2PL of the present indicative and subjunctive and in the imperfect indicative (e.g., fri'dia), but *not* in the imperfect subjunctive (e.g., fri'ɛre). This distribution possibly throws light on an earlier stage of the analogical change in the history of 'bier itself, at which the dental would have been extended into the 1/2PL present subjunctive only, without any teleology of producing an N-pattern distribution. Replication of patterns of allomorphy associated with the 1/2PL present indicative in 1/2PL present subjunctive is widely attested in Romance languages (see Maiden 2010, 2012): indeed, there are many Romance varieties (western Romansh, Emilian, Romagnol, Tuscan, Ladin, Friulian, Venetan, Istrian, dialects of the Rome-Ancona corridor, and possibly old Romanian) in which the root (or even the entire word form) of the 1/2PL cells of the present subjunctive is identical to those of the present indicative but, as I suggest (Maiden 2012: 42–3), the existence of analogical changes singling out the 1/2PL are not evidence for the N-pattern, since there is a body of evidence from Romance that the 1/2PL often behave differentially in respect of analogical change. In many Italo-Romance varieties, first conjugation imperfect indicative endings are analogically introduced into the verb 'be' exclusively in 1/2PL (e.g., Italian *ero eri era eravamo eravate erano*). According to Iliescu (1972: 178), the 'Romance future' (a synthetic form) is replaced in some Friulian varieties by analytic forms just in the 1/2PL. Wheeler (1993: 194) describes dialects of southern Catalonia and Valencia where the imperfect subjunctive replaces the present subjunctive just in 1/2PL. And precisely in Logudorese itself there is extensive neutralization of conjugation distinctions in non-first conjugation verbs just in the 1/2PL present indicative (Pittau 1991). These changes, whatever motivates them, at best involve a *subset* of the N-pattern cells, but they are clearly not the same thing as the N-pattern. My suggestion, then, is that in Bonorva we first have an analogical change affecting 1/2PL present subjunctive, quite independently of the N-pattern and then, but apparently only in a few verbs such as 'bier, a further analogical change on the basis of the innovatory stem-shape bi'de- which replaces *bi'e- in the present subjunctive, such that *bi'e- is replaced by bi'de-[17] elsewhere in the paradigm. In short, the evidence

[17] The closed or open quality of the theme vowel is dependent on purely phonological factors.

from Bonorva is not a wholly compelling case for N-pattern alternation arising in a domain where, on historical grounds, we should expect it not to. The really important point I want to make here, however, involves not the specific details of the Bonorva case, but the fact that claims of 'morphomehood' involve empirical predictions which can be tested, and if appropriate defended, against wider historical and comparative data.

3.5 Speakers do not especially prefer 'non-morphomic' over 'morphomic' patterns

There is a widespread assumption among linguists[18] that, all other things being equal, the relation between form and meaning in language will tend to get 'simpler', and that 'irregularity' will tend to disappear. With respect to putative morphomes, one would therefore expect that given the opportunity speakers will, so to speak, 'leap at the chance' and align some morphomic alternation with some extramorphological determinant. This is simply not what I find with respect to morphomic structures in the history of Romance.

Examples of analogical changes involving replication of morphomic patterns of alternation are numerous, even in cases where the source of the analogy is located in some morphological subdomain of the morphome with which it could in principle become aligned. One such example involves the spread, within the PYTA morphome, of a root-vowel alternant historically associated exclusively with the first person singular present indicative of the preterite, where it is the result of a process of assimilatory raising ('metaphony') originally triggered by the 1SG preterite vowel -i. As I show in Maiden (2001a) and (2011a: 184–5), the analogical extension of this vowel, widely attested across Romance languages, never 'takes the opportunity' of spreading to all and only the other forms of the preterite, thereby potentially creating a distinctive marker of that tense-form, even though it is precisely in the preterite that it originates; rather, it systematically extends to all PYTA cells.

I shall discuss here another case, involving the L-pattern. The 'morphomic' status of the L-pattern could be seen as 'hanging by a thread'. Historically, the L-pattern distinctively marks out the present subjunctive *plus* the first person singular present indicative, and is the result of two historically distinct 'waves' of palatalization both of which (in most Romance varieties) shared the same paradigmatic distribution (see section 3.2 above and Maiden 1992, 2005, 2011b). A typical modern example from Spanish is (13):

[18] For one recent example of this assumption with regard to (Italo-)Romance, see Spina and Dressler (2011: 510).

(13)

	PRS.IND	PRS.SBJV	PRS.IND	PRS.SBJV
1SG	*digo* 'say'	*diga*	*quepo* 'fit'	*quepa*
2SG	*dices*	*digas*	*cabes*	*quepas*
3SG	*dice*	*diga*	*cabe*	*quepa*
1PL	*decimos*	*digamos*	*cabemos*	*quepamos*
2PL	*decís*	*digáis*	*cabéis*	*quepáis*
3PL	*dicen*	*digan*	*caben*	*quepan*

It is also the case, though, that all Romance languages inherited a few verbs—usually reflexes of Latin ESSE 'be', STARE 'stand', and DARE 'give', and some others analogically influenced in early Romance by these (reflexes of HABERE 'have', UADERE 'go', SAPERE 'know')—in which a root-allomorph happens to emerge *uniquely aligned* with the 'present subjunctive'. This means that a positive *model for alignment of some allomorph uniquely with the present subjunctive* has in principle always existed in Romance. Thus in (old) Italian we have (14):

(14)

	1SG	2SG	3SG	1PL	2PL	3PL
PRS.IND	*do* 'give"	*dai*	*d,à*	*damo*	*date*	*danno*
PRS.SBJV	*dia*	*dia*	*dia*	*diamo*	*diate*	*diano*

	1SG	2SG	3SG	1PL	2PL	3PL
PRS.IND	*ho* 'have'	*hai*	*ha*	*avemo*	*avete*	*hanno*
PRS.SBJV	*abbia*	*abbia*	*abbia*	*abbiamo*	*abbiate*	*abbiano*

There is, then, clear potential, and indeed a significant model, for 'extramorphological' alignment of L-pattern alternants just with 'present subjunctive', but this is exactly what one does not observe in the history of the Romance languages (with one major exception which I address later). Across the Ibero-Romance, Italo-Romance, Romansh, Friulian, Ladin and Daco-Romance domain it is overwhelmingly the case that if a distinctive alternant is found in the present subjunctive, it is also present in the first person singular present indicative, and vice versa. Not only do the Romance languages actively resist any 'regularizing' trend, but there are some striking cases of active 'correction', should, for some reason, that distributional pattern be threatened.

Thus, some Corsican dialects acquire forms of the verb 'go' (and of certain other verbs) in which 1SG present indicative has a unique root allomorph in /ɔ/ ('bɔgu or 'bɔ); the reaction is to generalize this vowel right through the present subjunctive, thereby *restoring* the integrity of the L-pattern morphome (15):

(15) Influence of vowel of 1SG PRS.IND. of an'dare 'go' on the present subjunctive in Corsica[19]

PRS.IND	'bɔ(gu)	'bai	'ba	an'dɛmu	an'dade	'banu
PRS.SBJV	'bɔga (for older 'baga, etc.)	'bɔga	'bɔga	'bɔgamu	'bɔgade	'bɔganu

[19] See also for example Chiodi Tischer (1981), Giacomo-Marcellesi (1997: 27), Schmid (1949: 70–1).

Romansh dialects noticeably tend to 'repair' any discrepancies (usually of phonological origin) between the root allomorph of 1SG present indicative and that of present subjunctive. In (16), the vowel /ɛ/ was acquired by analogy from the root of the verb 'give', where it is historically limited just to the present subjunctive. In the dialect of Parsons, analogical extension of this vowel into the verb meaning 'do' is correspondingly limited to the present subjunctive, but it is very widely[20] introduced also into the 1SG present indicative, thereby implementing an L-pattern distribution:

(16) Parsons

fatʃ	fa:st	fɔ	fa'ʒaɲ	faʒɛts	fɔn
'fɛtʃa	'fɛtʃas	'fɛtʃa	'fɛtʃan	'fɛtʃas	'fɛtʃian

Pignia

fɛtʃ	fas	fa	fa'ʒain	fa'ʒɛts	fan
'fɛtʃi	'fɛtʃas	'fɛtʃi	fa'ʒejan	fa'ʒejas	'fɛtʃan

The general pattern of preservation (and occasional 'repair') of the L-pattern is widely attested across the Romance languages, but there is one major apparent class of exceptions which commands our attention. Prima facie, the Gallo-Romance languages (French and Occitan, plus some adjacent varieties of Catalan, and minus some varieties of Gascon) glaringly contradict everything I have just claimed. Medieval attestations of Gallo-Romance show the L-pattern firmly in place; yet over recent centuries these varieties have implemented a virtually exceptionless alignment of original L-pattern alternants with 'present subjunctive' (17, 18):

(17) Restriction of L-pattern root allomorphs just to present subjunctive in French

fais	*fais*	*fait*	*faisons*	*faites*	*font*
fasse	*fasses*	*fasse*	*fassions*	*fassiez*	*fassent*

peux[21]	*peux*	*peut*	*pouvons*	*pouvez*	*peuvent*
puisse	*puisses*	*puisse*	*puissions*	*puissiez*	*puissent*

vaux	*vaux*	*vaut*	*valons*	*valez*	*valent*
vaille	*vailles*	*vaille*	*valions*[22]	*valiez*	*vaillent*

veux	*veux*	*veut*	*voulons*	*voulez*	*veulent*
veuille	*veuilles*	*veuille*	*voulions*	*vouliez*	*veuillent*

viens	*viens*	*vient*	*venons*	*venez*	*viennent*
vienne	*viennes*	*vienne*	*venions*	*veniez*	*vienne*

[20] See, e.g., Decurtins (1958). [21] Residually also *je puis*.

[22] For the reasons why the 1/2PL present subjunctive sometimes fail to show the expected alternant, see, however, Maiden 2012 and also the observations in the discussion of Bonorvese in section 3.4 above.

(18) Occitan (St Augustin, Corrèze, Monteil 1997)

'faw 'do'	'fa	'fej	fɑ'ʒɛ̃	fɑ'ʒɛ	'fow
'fasi	'fase	'fasɑ	fa'ʃjɑ̃	fɑ'ʃja	'fasu

'mwere 'die'	'mweri	'mwer	mu'rɑ̃	mu'rɛ	'mweru
'mwerje	'mwerji	'mwerjo	mwer'jɑ̃	mwer'ja	'mwerju

'pwode 'can'	'pwodi	'pwo	pu'dɛ̃	pu'dɛ	'pwodu
'pese	'pesi	'pese	pu'dɛ̃	pu'dɛ	'pesu

'tine 'hold'	'tini	'tɛ	te'nɑ̃	te'nɛ	'tinu
'tenje	'tenji	'tenjɑ	te'njɑ̃	te'nja	'tenju

'vale 'am worth'	'vali	'vaw	vɑ'lɑ̃	vɑ'lɛ	'valu
'vaje	'vaji	'vajo	vɑ'jɑ̃	vɑ'ja	'vaju

'vwole 'want'	'vwoli	'vɔw	vu'lɑ̃	vu'lɛ	'vwolu
'vwoje	'vwoji	'vwoje	vu'jɑ̃	vu'ja	'vwoju

The result is obviously 'simpler' in terms of a feature count, but it would in fact be very rash to proclaim this as an example of a 'simplifying reaction' to a morphomic distribution. In fact, I would suggest that it is as historically fortuitous as the original morphomic pattern it replaces.

One needs to ask, first of all, why this adjustment occurs so systematically just in Gallo-Romance, rather than anywhere else, and there is a rather obvious answer which is, at bottom, quite independent of morphology. In the history of Gallo-Romance,[23] final unstressed vowels other than -a were generally deleted, and word-final consonants were later devoiced and not infrequently deleted altogether. Since (in non-first) conjugation verbs the characteristic marker of the present subjunctive was inflectional -a, no root of the present subjunctive was ever word-final and, correspondingly, no root-final consonant could ever be subject to any of the phonological processes affecting word-final consonants. In contrast, the historical ending of the first person singular present indicative was -o. Since this unstressed vowel was normally subject to deletion, preceding root-final consonants could find themselves in word-final position and therefore be subject to processes affecting word-final consonants. Note that these changes also involved differentiation of syllable structure, since root-final

[23] The phonological phenomena I am about to describe do occur elsewhere in Romance (e.g. in Romansh and some Romance varieties of northern Italy, as well as in Catalan), but their geographical domain is in effect a contiguous area of the centre, and by far the largest segment of it is Gallo-Romance. Some Catalan varieties (especially those spoken north of the Pyrenees) do in fact participate in the morphological adjustment.

consonants in the 1SG present indicative became tautosyllabic with the remainder of the root, whilst in the present subjunctive the root-final consonant was often heterosyllabic with respect to the rest of the root. These processes are summarized in (19):

(19)

	1SG.PRS.IND	PRS.SBJV	1SG.PRS.IND	PRS.SBJV
Latin	DICO 'say'	DICAT	MORDEO 'bite'	MORDEAT
early Romance	*'di.ɡo	*'di.ɡa	*'mɔr.do	*'mɔr.da
loss of -o (+ adjusted syllable structure)	*'diɡ	*'di.ɡa	*'mɔrd.	*'mɔr.da
word-final devoicing	*'dik	*'di.ɡa	*'mɔrt	*'mɔr.da
word-final deletion	*'di	*'di.ɡa	*'mɔr	*'mɔr.da
French	di	di.(z)ə	mɔʁ	mɔ'.də
Latin	UIUO 'live'	UIUAT	BIBO 'drink'	BIBAT
early Romance	*'vi.vo	*'vi.va	*'be.vo	*'be.va
loss of -o (+ adjusted syllable structure)	*viv	*'vi.va	*beî̯v	*'be̯î̯.va
word-final devoicing	*vif	*'vi.və	*beî̯f	*'be̯î̯.və
word-final deletion	*'vi	*'vi.və	*be̯î̯	*'be̯î̯.və
French	vi	'vi.və	bwa	'bwa.və

If Gallo-Romance varieties, in particular among Romance languages, have lost the L-pattern distribution, this is not because of any inclination to 'make sense' of the L-pattern alternation by anchoring it with 'present subjunctive', but because of a massive, but morphologically accidental incidence of such alignment arising through sound change and providing, in turn, a very prominent model on which the remaining verbs could also be adjusted.

Note that this observation has an interestingly subversive implication. If the only data to which we had access comprised proto-Romance and modern Gallo-Romance, we should no doubt blithely assume that we were in the presence of a 'simplification', an unremarkable 'making sense' of an earlier, morphologically erratic pattern created by sound change. Yet in the wider comparative Romance perspective, and with our knowledge of intervening phases of the history of Gallo-Romance, things look very different. What we see in modern French and Occitan has the kind of history we associate with 'classic' morphomes, where fortuitous distributional characteristics of the effect of a sound change have been reinterpreted as fundamental to the distribution of the alternation. From this comparative-historical point of view, the pattern of allomorphy associated with the present

subjunctive actually looks downright *morphomic*, and its alignment with present subjunctive quite fortuitous. Its difference with respect to a typical morphome such as the L-pattern seems to be only a matter of degree. The issue of the actual distributional arbitrariness of forms which may seem to be safely aligned with some morphosyntactic feature or complex of features is interestingly discussed in O'Neill (2013).

That the L-pattern seems to survive intact in the history of the Romance languages unless some major, extramorphologically motivated change intervenes to undermine it has another significant implication. Clear-cut examples of morphomes are by definition (cf. Aronoff 1994, 1999) examples of 'complexity' in morphology, involving an obvious and irreducible mismatch between form and meaning. 'Complexity', in general parlance, tends to carry connotations of undesirability or difficulty, and describing a morphome on paper is certainly a 'complex' operation for linguists, involving specification of disjunct sets of features corresponding to the ensemble of paradigm-cells for a which a certain type of 'stem' (in the typical case) is indexed. However, the very diachronic persistence of the L-pattern (and in general the coherent persistence of morphomes), despite its greater complexity on paper than simple alignment with 'present subjunctive', suggests that, *for speakers*, such complexity is not in any significant sense 'difficult' or 'undesirable'. In fact we just do not know at what point the notional complexity of some alternation's distribution leads to real difficulty of acquisition and memorization for speakers, and in analysing morphology we are likely to be ill served if we simplistically equate complexity with difficulty[24] and rule out a priori the possibility that the set of paradigm cells over which the distribution of some form is defined cannot just be learned by heart. I certainly do not mean that for any putative morphome there is no need to seek out and evaluate all the possible, alternative, extramorphological motivations.[25] What I do mean is that we should also always be open to the possibility that 'what you see is all there is'. Identity of form over disparate subdomains of the inflectional paradigm should not automatically be regarded as some kind of puzzle to be solved, as a kind of challenge to extract some unique underlying same of meaning (or phonological motivation) corresponding to some same of form.[26] Virtuoso displays of ingenuity by linguists bent on such reductionist ends must be regarded with suspicion if they invoke intrinsically ordered rules or absolutely neutralized underlying representation, especially if they turn out to be just as 'complex', if not more so, than simply listing the environments in which the alternants occur. For some arguments of this kind see, for example, Maiden's responses (2001b and 2009b) to the attempts

[24] Compare also Miestamo (2008: 38).
[25] For some different responses to the general issue, see both O'Neill (2013) and Vincent (2013).
[26] Or, at any rate, one must be prepared to find that the answer to the 'puzzle' is purely diachronic.

respectively by Fanciullo (1998) and Burzio (2004) to account for the U-pattern in Italian not in morphomic terms but in terms of the phonological environment.[27] I cannot rehearse these arguments in much detail here, but it may suffice to say that Burzio, for example, requires postulation of an (in fact long extinct—albeit present in the orthography) underlying front vowel following the lexical root to account for those U-pattern alternations of the kind displayed by verbs such as *piacere* or *volere* in (6), while some curious special pleading[28] is required to explain away the awkward fact that, for the velar-palatal alternation, the palatal systematically and without exception fails to occur as predicted in the many central Italian varieties in which the marker of the present subjunctive in the relevant verbs is not a back vowel as in standard Italian (e.g., *ven*/g/*a*) but a front vowel (e.g., *ven*/g/*i*), still preceded by a velar consonant (the same was true in old Italian, and to this day in some modern dialects, of the second person singular form of the present subjunctive). The general methodological point I want to make here is simply that such alternative accounts may get the linguist where s/he wants to go, by transferring the alternation from morphology to some extramorphological motivation, but what always has to be shown, in any given case, is whether the proposed alternative is inherently 'simpler', or 'easier' or generally more plausible than the alternative and not inherently impossible view that speakers simply list the environments in which alternants occur.

The points I have made in this section reflect an even deeper methodological difficulty which morphologists face. Many linguists, faced with a pattern of identity of form, will instinctively look to some motivating, unifying force to account for such identity outside the morphology itself. This is not only a healthy and reasonable first reaction, but it is an attitude without which very little of value would ever have been discovered in morphology, or anywhere else in linguistics. Those of us who see that some patterns really are just a matter of 'morphology by itself', are therefore constantly open to the charge (and are often more or less directly charged with!) 'not having looked hard enough', or of denying deeper, underlying truths.[29] Yet this charge is open to a serious countercharge, for it simply tends to deny a priori the possibility that *arbitrary* patterns of identity can exist within morphology, while at the same admitting (necessarily) the existence of arbitrariness in the relation between the form of lexical roots and their referents, or between the form of inflectional endings and the grammatical meanings they express. Arbitrariness in the relation between form and meaning is a linguistic fact of life, and a question that may therefore reasonably be asked is: 'How far does arbitrariness go in morphology?'

[27] But see also my partial concession to Burzio's position in Maiden (2013b).

[28] The argument appears to be (see Burzio 2004: 36) that the relevant forms are characteristic of a 'working-class variety' of Italian, and that somehow the forms of the standard variety remain underlying. But this ignores the historical fact that such forms have existed stably in central Italian dialects for centuries.

[29] An eminent colleague recently described some of my own morphomically oriented analyses as 'somewhat nihilistic', but as I argue below, 'nihilism' is a two-edged sword.

This cannot be answered by assuming from the outset that all patterns of identity of form must have an extramorphological motivation. What we really need are some 'rules of engagement'. It would certainly be questionable to describe as 'morphomic' some pattern of allomorphy *consistently and exclusively correlated* with, say, 'plural', or with a following back vowel, and the onus would clearly fall in such a case on the proponent of a morphomic account to prove why that pattern of allomorphy should be regarded as morphomic. But it should also be admitted that the plausibility of a morphomic interpretation grows in proportion to the complexity of an alternative, extramorphological explanation. If linguists have to scratch their heads, and deploy all the technical ingenuity at their disposal, in order to get an extramorphological account to 'come out right', when the alternative is simply to list a couple of alternants and state the handful of (albeit heterogeneous) cells over which those alternants are distributed, one must seriously wonder why speakers would not go for the latter, far more 'concrete' option. This, of course, leaves one searching for a better definition of 'a handful' (although see my comments in section 3.7 on the characteristics small number of cells requiring recognition in the definition of morphomes), but my point is a more general methodological plea for openness to the possibility that speakers can, and do, learn disparate lists of paradigmatic cells with which they can associate alternation patterns.

3.6 An alternation pattern can be morphomic even when it appears to be phonologically conditioned

The fact that some putatively morphomic alternation may be shown to be sensitive to a phonological conditioning environment need not undermine its morphomic status. Many morphomic phenomena in Romance languages are the result of sound change and it is not surprising that in many cases some of the original phonological conditioning environment persists intact. In these quite common circumstances, the difficult question arises whether the alternation is not still, really, a function purely of its phonological environment. I have discussed issues of this kind in a number of places (Maiden 2005, 2009b, 2011b, 2011d) and I shall not repeat here the relevant arguments for individual morphomic phenomena. In general, I have tried to show that putative phonological conditioning could not be plausibly demonstrated to be at work, mainly because the existence of multiple synchronic counterexamples to the alleged phonological process made the operation of that process synchronically highly unlikely. What follows here, however, is an example[30] from Romanian of a different kind in which

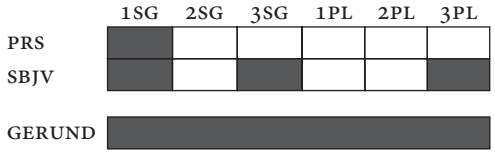
[30] For a more detailed exposition of the facts and the historical background, see Maiden (2011d). Also Maiden (2013b) for a presentation that also takes into account some historical Italo-Romance data bearing similar implications.

the evidence for phonological conditioning seems inescapable—and yet so does the *morphomic* status of the alternation.

The old Romanian verb inherited the paradigmatic effects of two regular, but ancient and long-extinct sound changes: palatalization by an originally following yod and palatalization-affrication of velars before front vowels. They produced (respectively) the following, nearly coextensive patterns of alternation) (20, 21):

(20)

Effect of (original) yod (plus certain early analogical adjustments)

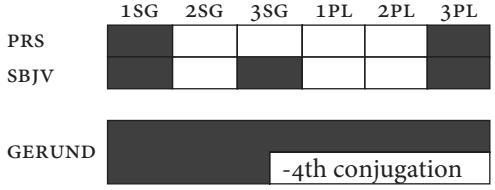


(Early modern) Romanian

PRS	*vădzu* 'see'	*vedzi*	*vede*	*vedemu*	*vedeți*	*vădu*
SBJV	*vădzu*	*vedzi*	*vadză*	*vedemu*	*vedeți*	*vadză*
GERUND	*vădzându*					

(21)

Effects of palatalization of velars



(Early modern) Romanian

PRS	*plân*/g/*u* 'weep'	*plân*/dʒ/*i*	*plân*/dʒ/*e*	*plân*/dʒ/*emu*	*plân*/dʒ/*eți*	*plân*/g/*u*
SBJV	*plân*/g/*u*	*plân*/dʒ/*i*	*plân*/g/*ă*	*plân*/dʒ/*emu*	*plân*/dʒ/*eți*	*plân*/g/*ă*
GERUND	*plân*/g/*ându*					

Importantly, fourth conjugation verbs, for wholly '*lautgesetzlich*' historical reasons, deviate from the above pattern *just in respect of the gerund*, although there happens in practice to be only one lexeme for which this effect can be observed, namely *a fugi* 'to run, flee':

PRS	*fu*/g/*u*	*fu*/dʒ/*i*	*fu*/dʒ/*e*	*fu*/dʒ/*imu*	*fu*/dʒ/*iți*	*fu*/g/*u*
SBJV	*fu*/g/*u*	*fu*/dʒ/*i*	*fu*/g/*ă*	*fu*/dʒ/*imu*	*fu*/dʒ/*iți*	*fu*/g/*ă*
GERUND	*fu*/dʒ/*indu*					

In Maiden (2011d), I argue at length that the comparative and historical data from Romanian dialects show such alternation patterns are indeed morphomic (they cannot be stated exclusively in terms of phonological environment, but they can consistently be stated in terms of a morphological pattern of paradigmatic distribution). However it also emerges that the diachronic 'coherence' of the morphome is particularly robust over time wherever the alternation also remains correlated with the presence of a front vowel in the inflectional ending—and *especially* where the alternation is between velars before non-front vowels and palatals before front vowels. This observation suggests a certain sensitivity of the alternation to the phonological environment, but the entire issue, and its theoretical significance, can be best captured by focusing on one, seemingly insignificant detail involving the gerund of *a fugi*. We have seen that this verb is anomalous with respect to the morphological distribution of the palatal-velar alternation in that here, and here alone, the velar alternant does not also occur in the gerund. In fact, the 'anomaly' in respect of the gerund *fugi* 'run' tends, in scores of dialects,[31] to be 'repaired', so that the gerund is made to conform to the otherwise general distribution of the alternant (22).

(22) Morphomic 'repair of the anomaly'in respect of the fourth conjugation gerund

PRS	*fu*/g/'run'	*fu*/dʒ/*i*	*fu*/dʒ/*e*	*fu*/dʒ/*im*	*fu*/dʒ/*iți*	*fu*/g/
SBJV	*fu*/g/	*fu*/dʒ/*i*	*fu*/g/*ă*	*fu*/dʒ/*im*	*fu*/dʒ/*iți*	*fu*/g/*ă*
GERUND	*fu*/g/*ând*					

Without exception, wherever the innovatory gerund with velar alternant is introduced for this verb, we also find that the characteristic fourth conjugation gerund ending *-ind* (-[ind] with front vowel) is replaced by the characteristic non-fourth conjugation ending *-ând* (-[Ænd] with non-front vowel). So we always find either *fu*/dʒ/*ind* or *fu*/g/*ând*, but *never* ***fu*/g/*ind*[32]—although this latter form is phonologically quite unexceptionable, and /gi/ sequences have abounded throughout the recorded history of Romanian.[33] These facts clearly show, then, that there is indeed a strict implicational relationship between the velar alternant and the non-front vowel phonological environment.

[31] In fact, Romania is a kind of 'chequerboard' in respect of this form, with some dialects showing the historically inherited form, neighbouring dialects showing the innovatory form, and some showing both. See, e.g., Lombard (1954–5: 651–2); *ALRII* map 2153 *fugind* (Pătruț 1972) and the responses to question 543 *fugind* in the regional Romanian linguistic atlases (e.g. Neiescu et al. 1969; Teaha et al. 1984). It is perhaps worth underlining that the number of examples available for comparison runs into scores, if not hundreds, in the dialectological literature.

[32] In some dialects (Maramureș) one does get the form *fu*/dʒ/*ând*, but this has a purely local phonological explanation involving centralization of front vowels after (among other things) palatal affricates.

[33] Indeed, this string actually occurs in certain *first* conjugation gerunds, where the root-ends in a front glide: cf. *a cânta* 'to sing'—gerund *cantând* but *a veghea* /veˈgʲa/ 'to watch (by night)'—gerund *veghind* /veˈgind/.

At first sight, all this looks like overwhelming evidence for the fundamentally *phonological* nature of the alternation, for it shows quite unambiguously that, within verbs with the velar-palatal alternation, you can only have the palatal before a front vowel, and you can only have the velar before a non-front vowel. Unfortunately for the 'phonologizing' view, this does not necessarily mean that the distribution of the alternants is *effected* by the phonological environment. Indeed, in the case of the gerund of *a fugi*, such an interpretation is downright impossible. If it were the case that the velar alternant were being selected by the phonological environment, we would need to show that the fourth conjugation gerund ending *-ind* (with front vowel) had *first* been replaced by non-fourth conjugation *-ând* (with non-front vowel). Yet such a change would be inexplicable and wholly unmotivated: there is to my knowledge no other example in any Romanian dialect of a fourth declension gerund inflexion being replaced by a non-fourth conjugation one, while the rest of the inflectional paradigm retains all its fourth conjugation characteristics,[34] and there is absolutely no conceivable reason why this should happen in just one lexeme, namely *a fugi*. To claim this would not only be wholly ad hoc, it would also be to put the cart before the horse.

In fact it is quite evident that the motivation for the change is *purely morphological*, and involves the 'repair' of an anomalous deviation from an otherwise general—and morphomic—pattern of distribution embracing the first person singular present, the third person singular subjunctive, and the third person plural of the subjunctive, as well as the gerund. But we must equally conclude (at least where velar alternants are concerned), that speakers strongly correlate the distribution of the alternant with the presence of a non-front vowel in the inflectional environment, so that when the morphological anomaly is repaired, the syntagmatic anomaly in respect of the following thematic vowel is 'repaired' as well, but only as a *secondary reaction* to the morphomic adjustment.

The really significant implication of this observation of a microscopic detail of Romanian historical morphology is that it opens up the theoretical possibility that *even in cases where the distribution of some alternation is apparently systematically correlated with some phonological environment*, speakers are in principle capable of analysing the resulting pattern primarily in terms of its morphological distribution, even if that distribution may be irreducible to any common morphosyntactic function.[35]

[34] Nor indeed of any change of inflexion-class marking affecting just one cell of the paradigm in just one (or even in a few) verbs.

[35] Greg Stump points out that support for the argument that alternations that appear to be phonologically conditioned may still be morphomic also comes from cases of instances of phonologically conditioned suppletion, for example the fact that in Sanskrit, the heteroclite lexeme AHAN 'day' inflects as an *n*-stem before a suffix-initial vowel and otherwise as an *s*-stem.

3.7 Conclusions

In the foregoing I have tried to outline some of the 'lessons' which I feel I have learned in exploring the history of the inflectional morphology of the Romance verb, particularly involving the diachronic and typological diagnostics of morphomehood, and some challenges to some fairly widespread assumptions that speakers must surely favour apparently 'simpler' form-meaning relations over more 'complex' ones, or extramorphological conditioning over the purely morphological, when the evidence for the latter may seem overwhelming. In virtually every case I have mentioned, persistence of the morphomic pattern over time, and over the lexicon, has been of central importance. The Romance data also hint at an answer to an even more fundamental question: why do morphomes persist in this way?

All of the morphomic phenomena I have observed in the history of the Romance languages originate in *root-allomorphy*, that is, as alternation in the lexical root of the verb. Virtually[36] all of the phenomena which replicate the relevant patterns of alternation equally involve lexical root-allomorphy of some kind. Whether there can exist diachronically persistent morphomic phenomena which do not have their origin in root-allomorphy is an empirical question, of course, but I suspect that root-allomorphy may have something to contribute to our understanding of *why* morphomes can persist over time. Morphomic phenomena (by definition) 'do not make sense' in phonological or morphosyntactic terms. Yet they persist, as we have seen, not simply through historical 'inertia', but by 'defending', replicating and reinforcing themselves over time. In the history of Romance languages, at least, they are apparently not less highly valued than extramorphologically motivated alternations, and they can endure even when they are within a hair's breadth of 'making sense' by becoming correlated with a morphosyntactic or phonological category.

It is not the case, of course, that root-allomorphy in Romance always, or even usually, persists intact over time *for every lexeme* in which it originally occurred. An extremely common outcome is simply 'levelling-out' of the alternation (although this happens 'coherently'), so that the allomorphy is removed (cf. the case of Portuguese *escrever* in section 3.2 above). But there are usually only two things that can happen to an inherited morphomic allomorph: it either survives in its original distribution or it disappears—there are no 'halfway houses'. I suspect that these two diachronic paths are simply two sides of the same coin, involving the transparency or iconicity of

[36] The most salient exception involves Romanian (see Maiden 2007), where certain person-number desinences which originate in the preterite are subsequently extended in such a way that their distribution replicates the paradigmatic patterning of the continuants of the 'PYTA' root. Even this presupposes a pattern of distribution which originates in root-allomorphy.

the relation between form and meaning. Loss of allomorphy, however it occurs,[37] has the advantage of offering a maximally iconic relationship between form and meaning. But if inherited allomorphy *is* learned, but does not otherwise 'make sense' in terms of any extramorphological motivation, we are left with an arbitrary violation of transparency. Paradoxically, the best way of minimizing this disruption may well be to ensure that the pattern of deviation between form and meaning, given that it exists and has to be learned, be made *maximally predictable.* Morphomic alternants are not therefore allowed to stray outside the confines of their arbitrary paradigmatic domain, while newly arising violations of form-meaning transparency, such as may come about particularly in cases of lexical synonymy (see Maiden 2006) where two or more lexemes become semantically indistinguishable (as in the case of the (Italo-)Romance verb 'to go'), may be resolved by forcing them into existing morphomic distributional templates. The diachronic defence and replication of morphomes is, in effect, a local, language-specific, or language-family-specific, strategy for rendering transparent the relation between form and lexical meaning, which stands in a complementary relationship to the 'universal' solution, which is to admit only one form for that meaning. In this light, morphomes may reflect, in their coherence and persistence not so much a 'disease' of language (as Aronoff 1999 jokingly suggests), as a 'cure' for a possible 'disease' of lexical signs.

My claim involves, of course, an empirically testable prediction: that if some morphome 'breaks up' diachronically, appearing to develop an incoherent distribution of the alternant, then the fracture will be correlated with some disunity of lexical meaning: differences of form emerge because there is not perfect identity of meaning. The behaviour of the past participle in both English and Romance points in this direction.[38] The 'past participle' is very far indeed from being immune to morphological innovation, and formal splits can and do occur (cf. Bybee 1985: 91), e.g., English *melted—molten*, *worked—wrought*, *struck—stricken*, *rotted—rotten*, *learned—learnèd*, but also, e.g., Romanian *mort* 'dead'—*murit* 'died' (< Latin MORTUUS), *înțelept* 'wise'—*înțeles* 'understood' (< Latin INTELLECTUS), *stătut* 'stagnant, stale'—*stat* 'stood' (< Latin STATUS). See also Ledgeway (2009: 582–5) for formal splits between long and short forms of the past participle in Neapolitan which align, if not always with clear lexical semantic distinctions, at the very least with that between predicative, resultative adjectival uses of the participle, and its use in perfect and passive constructions. The point is, though, that however fragile the morphological integrity of a past participle may be, the split does not (but see note 13) follow the purely grammatical division between passive and perfect functions. Rather, splits correlate with various

[37] Such an innovation may commence because speakers simply 'fail to learn' the relevant alternation. But acceptance of such an innovation by the speech community at large is surely facilitated by the semiotic advantage it offers.

[38] For a more detailed this exposition of issue, see Maiden (2013a).

kinds of semantic idiosyncrasy. Where there is lexical identity, there is no split within morphomes.

Readers may object at this point that I am now entertaining as a possible diachronic explanation of the persistence of morphomes precisely the kind of criterion of which I was earlier so suspicious, namely 'complexity' or 'difficulty'. My idea is, indeed, that a situation in which the distribution of alternants could be erratically unpredictable from one lexeme to the next would indeed be shunned by speakers. What needs to be recognized, however, is that the type of complexity I am envisaging in this case is by orders of magnitude greater than anything which (at least from the Romance data) one would need to envisage for morphomes. For example, the L-pattern can be stated by the very simple formula 'subjunctive and first person singular form of the present', and other morphomes seem to be of similar orders of complexity (e.g., 'preterite, pluperfect, and non-present subjunctive' for the Portuguese PYTA morphome). Whether there exist in the world's languages morphomes with significantly higher degrees of formal complexity is an empirical matter, but it should be at any rate clear that the fairly simple formula for 'keeping track' of the pattern allomorphy in the Portuguese PYTA morphome is far easier to learn and retain than a potential situation in which lexeme A had the alternant distributed as above, lexeme B had it in the preterite and future subjunctive only, lexeme C had it in the imperfect subjunctive only, lexeme D had it only in the preterite, lexeme E had it in the pluperfect and imperfect subjunctive only, and so on and so forth (I have not even considered here further possible splits according to person and number). Learning different 'nonsensical' patterns of allomorphy for lexeme after lexeme would surely be a very hard task; learning it once for all lexemes a relatively easy one.

In conclusion, I need to enter a major caveat about everything I have said. We have seen that by observing language change we certainly have evidence for the role of morphomes in conditioning the way in which speakers *acquire* their morphological system. Once it is acquired, how it is *maintained* in the adult grammar might, in principle, be another matter, amenable to investigation only by psycholinguistic experimentation. Very little such experimentation has been carried out, at least on Romance languages, although an interesting and very recent exception is Nevins et al. (2015), involving an experiment on implicational generalization of the L-pattern in adult Portuguese, Italian, and Spanish speakers, and using novel alternation patterns. An assessment of their study would require a lengthier discussion than is possible here, but it remains unclear to me whether the experimental participants really understood that they were being asked to produce novel forms that were *lexically synonymous* with the input (in my view, an indispensable condition for the persistence of morphomic structures; cf. Maiden 2013a). In any case, the results appear to suggest that modern speakers have somehow 'lost' the L-pattern (for which the diachronic evidence remains undisputed). If this is correct, my own suspicion would be that the loss may not be in diachrony but in the lifetime of the speaker, since this

morphome (and others) may play a role in language acquisition which it does not necessarily retain into adult grammars, once the inflectional paradigms of all the relevant lexemes have been learned. But that is a matter for further discussion and research.

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