

The intricate inflectional relationships underpinning morphological analogy¹

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In Gévaudan varieties of Occitan (Gallo-Romance), exceptionless syncretism between preterite and imperfect subjunctive forms arises in the first and second person plural (e.g. *faguessiám* [fage'sjɔ̃n] 'do.PRET/IPF.SBJV.1PL', *faguessiatz* [fage'sjat] 'do.PRET/IPF.SBJV.2PL'). Reconstructing the historical emergence of this syncretism pattern reveals that it is crucially dependent on multiple and diverse implicational relationships of form, inferred and productively exploited by speakers: in particular, inherited identity between preterite and imperfect subjunctive stems, and identity between imperfect indicative forms of *èstre* [es'trɛ] 'be' and preterite or imperfect subjunctive desinences. The observed developments support a view of inflectional analogies as informed by intricate paradigmatic and implicational structure of the type proposed within 'abstractive', word-based theories of inflection.

KEYWORDS: abstractive morphology, analogy, implicational relationships, inflectional paradigms, Occitan, Romance, syncretism

1. INTRODUCTION

This paper presents a detailed analysis of the multiple processes, structures, and relationships which have contributed to an individual analogical change: namely, the emergence of syncretism between the preterite and the imperfect subjunctive in the first and second person plural (Table 1), attested for a small and geographically coherent cluster of Occitan² (southern Gallo-Romance) varieties spoken in the

[1] Versions of this study were presented, and received constructive discussion, at the workshop 'Analogical Patterns in Inflectional Morphology' (Berlin/online, 14 April 2022) on the invitation of Sascha Gaglia, and at the Romance Linguistics Seminar (Oxford, 28 April 2022) on the invitation of Martin Maiden. Erich Round gave invaluable advice on an early draft, and Xavier Bach on a later draft. The recommendations of three anonymous *JL* reviewers increased the precision, efficacy, and accessibility of the paper and its argument. Any remaining errors are the responsibility of the author alone.

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[2] Occitan forms are cited here in both IPA and orthographic forms: for mediaeval Occitan, attested orthographic forms; for modern Occitan, forms according to the widely used 'classical' orthographic system (Alibert 1976: 9–42), except when citing specific scholars who use alternative

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1SG	<i>fau</i>	<i>fague</i>	<i>fasiái</i>	<i>faguère</i>	<i>faguèsse</i>	<i>farai</i>	<i>fariái</i>
2SG	<i>fas</i>	<i>fagues</i>	<i>fasiás</i>	<i>faguères</i>	<i>faguèsses</i>	<i>faràs</i>	<i>fariás</i>
3SG	<i>fai</i>	<i>fague</i>	<i>fasiá</i>	<i>faguèt</i>	<i>faguèsse</i>	<i>farà</i>	<i>fariá</i>
1PL	<i>fasèm</i>	<i>faguem</i>	<i>fasiám</i>	<i>faguessiám</i>	<i>faguessiám</i>	<i>farem</i>	<i>fariám</i>
2PL	<i>fasètz</i>	<i>faguetz</i>	<i>fasiatz</i>	<i>faguessiatz</i>	<i>faguessiatz</i>	<i>faretz</i>	<i>fariatz</i>
3PL	<i>fàun</i>	<i>fàgon</i>	<i>fasiáu</i>	<i>faguèron</i>	<i>faguèsson</i>	<i>faràun</i>	<i>fariáuun</i>
1SG	'fɔw	'fage	fa'zʒej	fa'gɛrɛ	fa'gɛsɛ	fa'raj	fa'rjɛj
2SG	'fas	'fages	fa'zʒes	fa'gɛrɛs	fa'gɛsɛs	fa'ras	fa'rjɛs
3SG	'faj	'fage	fa'zʒɛ	fa'gɛt	fa'gɛsɛ	fa'rɔ	fa'rjɛ
1PL	fa'zɛn	fa'gɛn	fa'zʒɔn	fage'sjɔn	fage'sjɔn	fa'ren	fa'rjɔn
2PL	fa'zɛt	fa'gɛt	fa'zʒat	fage'sjɛt	fage'sjɛt	fa'ret	fa'rjɛt
3PL	'fɔw	'fagu	fa'zʒɛw	fa'gɛru	fa'gɛsu	fa'rɔw	fa'rjɛw

Table 1

Finite synthetic forms of faire ['fajrɛ] < FACERE 'make, do' in the variety of Saint Germain de Calberte, Lozère (ALLOr survey point 48.03). Above, orthographic forms according to the 'classical' system (Alibèrt 1976: 7–36); below, IPA conversion from original Gilliéron–Rousset transcription. Expected preterite forms based on related varieties would be first person plural *faguériám [fage'rjɔn], second person plural *faguériatz [fage'rjɛt] (compare data for Saint Martin d'Ardèche in Table 6).

Gévaudan area of France. In these varieties, the syncretism is exceptionless, applying to all verb lexemes (COMPLETE SYNCRETISM in the terms of Baerman, Brown & Corbett 2005: 59), and must therefore be considered an established structural regularity within the inflectional system. It is demonstrably an analogical innovation, neither etymological nor the product of regular sound change.

The Gévaudan syncretism pattern initially appears compact and straightforward, involving only four paradigm cells (the first and second person plural preterite and imperfect subjunctive). Yet its emergence proves to be crucially reliant on a wider-reaching network of structured similarities and contrasts between inflectional forms. As such, it furnishes an informative case study on the mechanisms of analogical change which apply within the specific context of inflectional paradigms.³

1.1 The mechanisms of analogy within inflectional systems

The range and nature of mechanisms postulated for analogical change within inflectional paradigms are reviewed by Fertig (2016) in a study examining two

orthographies (e.g. Ronjat 1937). The systems are complementary: IPA transcription facilitates precision and transparency in the discussion of inflectional data; 'classical' orthography allows abstraction over some elements of low-level phonetic variation not germane to the present study (particularly, the localised realisation of rhotics and final nasals), while also recognising the existing codification of the language.

[3] The term INFLECTIONAL PARADIGM is here understood to refer to the array of inflected wordforms associated with a given lexeme: in particular, what is more precisely termed the REALISED PARADIGM (see Stump 2016: 103–115), an array of pairings between phonological wordforms and bundles of feature combinations (including features classed as morphosyntactic, morphosemantic, and morphological within the typology established by Corbett 2012: 49–64).

principal claims: first, that there exist analogical mechanisms specific to inflectional paradigms and, second, that these mechanisms include PARADIGM LEVELLING, defined as ‘analogical innovation/change that consists only of the elimination or reduction of stem allomorphy’ (Fertig 2016: 424). Fertig adduces data indicating that both claims must be rejected: aside from the well-known empirical difficulty of segmenting stems (for which see also Spencer 2012), known cases of paradigm levelling are shown to implicate mechanisms common to other types of analogical change, including changes affecting non-stem material within inflectional paradigms, changes which maintain or extend stem allomorphy within inflectional paradigms, and changes which do not involve inflectional paradigms at all. This being so, Fertig concludes that ‘neither the mechanisms of innovation nor the biases that influence the course of analogical change have anything inherently to do with stem allomorphy’ (2016: 451), and that

the evidence does not point to a universal bias against stem allomorphy per se but rather to a preference for internal consistency in the patterns and structural properties of morphological (sub)systems. (Fertig 2016: 452)

A similar tendency for internal consistency is highlighted by Feist & Palancar (2021) based on fine-grained analysis of analogical changes affecting stem distribution within Chichimec (Oto-Pamean) verb inflection. These authors demonstrate that over time, the number of distinct alternation patterns (i.e. distributional patterns of stem allomorphy across inflectional forms) within the lexicon reduces considerably, whereas the number of distinct stems available for an individual verb lexeme remains constant. Furthermore, analogical changes consistently manipulate existing groups of inflected forms which share a stem and clusters of such groups. Feist & Palancar’s (2021) data indicate that a key factor shaping processes of analogical change is intricately structured knowledge of the inflectional system, including paradigmatic interrelationships between forms.

The present study provides additional evidence concerning the mechanisms of analogy within inflectional paradigms, demonstrating the complexity and detail of the structural properties to which speakers attend. The organisational properties pinpointed by Fertig (2016) and Feist & Palancar (2021) are shown to apply to the analogical redistribution of diverse inflectional material: internal consistency, structured interrelationships, and recurrent distributional patterning are favoured, and there is no strong preference for reduction of variants. The study concurs with Feist & Palancar (2021) in explicitly linking analogical change to the network of implicational relationships assumed to hold between inflectional wordforms within ABSTRACTIVE OF ITEM-AND-PATTERN theories of morphology (Blevins 2006, 2016; Ackerman & Malouf 2016; Bonami & Beniamine 2016, 2021; Beniamine, Bonami & Sagot 2017; Blevins, Ackerman & Malouf 2019). The fundamental tenet of such approaches is that the units which speakers encounter, store, and access are whole wordforms; inflectional MORPHS (i.e. subword units of form), more precisely termed RECURRENT PARTIALS (Blevins 2016: 74–75) have no intrinsic theoretical or

empirical status, instead representing generalisations inferred across multiple word-forms. Implicational relationships may hold across lexically and morphosemantically disparate groups of forms, and a key diagnostic for their reality is the diachronic incidence of morphological analogy, proceeding in a structured, constrained fashion traceable to systematic patterns of contrast and similarity in exponence (Maiden 2018, 2020). The interest of the syncretism pattern examined here is the strikingly intricate bundle of implicational relationships on which its emergence depends.

1.2 *Particularities of the Gévaudan syncretism pattern*

The scope and incidence of the Gévaudan syncretism pattern are laid out in Section 2. To the extent that this pattern has been discussed in the morphological literature (O'Neill 2011, 2014), it has been treated as a case of analogical levelling within a MORPHOME (Aronoff 1994; Maiden 2016, 2018), or METAMORPHOME,⁴ to use the more specific terminology introduced by Round (2015).

Metamorphomes are recurrent and systematic groupings of cells within an inflectional paradigm, based on full or partial identity of inflectional material. The role of metamorphomes as productive templates for analogy, and as domains constraining analogy, has been extensively documented for Romance languages (see e.g. Maiden 2009a, 2011a,b, 2018); among the general tendencies identified is progressive reinforcement of the similarity between inflectional exponents⁵ (e.g. roots, stems,⁶ thematic elements, stress placement) associated with the constituent cells of a given metamorphome. In the Occitan case examined here,

[4] For precision and consistency, Round's term will be used throughout the study, independently of the usage of individual authors; the cited works by Maiden and O'Neill systematically use the generic term MORPHOME (see Maiden 2018: 3, for discussion), which in Round's usage also covers other types of autonomously morphological phenomena, notably inflectional classes or RHIZO-MORPHOMES.

[5] For convenience, the term INFLECTIONAL EXPONENT will here be used as a general label for 'pieces' of form within inflected wordforms, roughly corresponding to MORPHS, but more precisely characterised as RECURRENT PARTIALS in the terminology of Blevins (2016: 74–75). A recurrent partial is a phonological substring which can be recognized as occurring across multiple inflectional wordforms (see also Ackerman, Blevins & Malouf 2009 for discussion); the full wordforms realise particular bundles of feature values, and the recurrent partial may be recognized to occur in a given set of wordforms, but the partial itself is a unit of form, having no intrinsic featural content (i.e. it is not a morpheme). Inflectional exponents may include roots or stems (leftmost exponents, typically correlated with lexical content), desinenes (rightmost exponents, typically correlated with morphosyntactic and morphosemantic content), thematic formatives (intermediate exponents, typically correlated with morphomic content), and stress assignment. These terms, and more general terms such as 'formatives', 'exponents', 'substrings', 'parts of inflectional forms', when used in the present study should be understood as referring to recurrent partials. For theoretical discussion of segmentation and the psychological status of exponents see particularly Blevins (2006, 2016), Spencer (2012), and Maiden (2020).

[6] A distinction between roots and stems is not crucial to the present study; for the theory-dependent nature of this distinction, see Aronoff (2012). For the purposes of the study, it will be sufficient to assume that roots and stems are both types of recurrent partial which occur at the leftmost edge of an inflected wordform. A stem can readily be divided into multiple recurrent partials; roots,

the TAM (Tense, Aspect, Mood) categories participating in syncretism are all members of a single Romance metamorpheme ('PYTA',⁷ Maiden 2001, 2005, 2018: 44–83); O'Neill (2011, 2014) treats the Gévaudan syncretism pattern as an extreme case of the tendency for increased similarity, attributing the pattern to a straightforward analogical extension of inflectional exponents originating in the imperfect subjunctive, into the preterite (Section 3).

Yet three specific features characterising this particular syncretism pattern remain to be accounted for. First, the innovation producing syncretism only ever affects first and second person plural forms, although the metamorphomic relationship between preterite and imperfect subjunctive applies for all person/number combinations. Second, the change is consistently directional (from imperfect subjunctive to preterite), although internal directionality is not generally noted as a prominent feature of metamorphemes. Finally, and most intriguingly, this syncretism pattern only develops in a small cluster of Occitan varieties, although preterite and imperfect subjunctive inflection is in general highly consistent across much of the Occitan-speaking area, both in terms of realised inflectional exponents and in terms of the distribution of inflectional exponents (Esher 2015, 2016, 2021a, b, c, 2022).

1.3 Accounting for the Gévaudan syncretism pattern

By combining methods from comparative and historical Romance linguistics, dialect geography and morphological theory, a more detailed account can be developed (Sections 4–6), explicitly motivating the characteristic features of the Gévaudan syncretism pattern.

Contrary to the implicit assumption of the morphomic levelling hypothesis, the selection of imperfect subjunctive forms as models is not directly motivated by the existing metamorphomic distribution pattern linking the preterite and imperfect subjunctive. Instead, the selection is mediated by a second pattern of inherited identity between inflectional exponents, linking the imperfect indicative forms of the single lexeme *èstre* 'be' with the desinences of the preterite. The precondition for introduction of inflectional exponents from the imperfect subjunctive into the preterite is shown to be the emergence of novel first and second person plural imperfect indicative forms of *èstre* (*siám* ['sjɔ̃] 'be.IPF.IND.1PL', *siatz* ['sjat] 'be.IPF.IND.2PL'), which display partial formal identity with the first and second person plural imperfect subjunctive forms (e.g. *faguessiám* [fage'sjɔ̃] 'do.IPF.SBJV.1PL', *faguessiatz* [fage'sjat] 'do.IPF.SBJV.2PL'). The emergence of the syncretism pattern is

thematic vowels and consonants may all be considered part of a stem. Thematic elements are not ordinarily incorporated into a root, though roots may be divided into recurrent partials, such as a root vowel and an initial consonant. Within the framework adopted here, roots are termed 'lexical' in that they pertain to a given lexeme; lexical meaning is associated with full inflected forms, not with recurrent partials such as roots.

[7] Abstract label based on the term *perfecto y tiempos afines* 'perfect and related tenses'; see Section 3.1.

crucially dependent on multiple and simultaneous relationships of formal identity and contrast, illustrating the wide range of inflectional properties which inform analogical innovation (Section 7). The multiplicity and intricacy of the relationships at stake correspond closely to the models of inflectional structure proposed by abstractive, item-and-pattern theories of morphology (Section 8).

2. THE GÉVAUDAN SYNCRETISM PATTERN

2.1 *Data and distribution*

The fullest published accounts of syncretism between preterite and imperfect subjunctive forms in the first and second person plural are provided in historical-comparative surveys of Occitan verb inflection by Ronjat (1937: 262; data reproduced in Table 2)⁸ and Camproux (1962: 428–432, 440–441); the pattern is also attested in individual dialect descriptions (Brunel & Camproux 1931: 23–29; Teissier 1964: 27–35;⁹ Rambier & Tichit 2006: 12–16) and as a sub-standard dialectal variant in Alibèrt's normative grammar (1976: 118, 121). Sources concur that this pattern occurs systematically across all lexemes and conjugational classes, and that it is almost exclusively confined to Occitan varieties spoken in the historical province of Gévaudan (coextensive with the modern département Lozère, in the région Occitanie).

The Gévaudan (Figure 1) falls within the geographical area covered by the regional atlases of the Massif Central (ALMC, Nauton 1957–1963) and eastern Languedoc (ALLOr, Boisgontier 1981–1986). Complete inflectional paradigms for a range of conjugational types were elicited for both atlases: the ALMC data were published in tabular form, while the ALLOr data remain as unpublished fieldwork transcriptions archived by the University of Toulouse. Of the 55 ALMC survey points and 86 ALLOr survey points (141 total), only 12 survey points attest the presence of the Gévaudan syncretism pattern: 11 points within Lozère and a further point within Gard (Figure 2).

The data for all 12 survey points confirm those given by Ronjat (1937: 262), Camproux (1962: 428–432, 440–441), and Alibèrt (1976: 118, 121). In the relevant varieties, only in the first person plural and the second person plural, there is complete syncretism between the preterite and the imperfect subjunctive. This syncretism consistently involves introduction of forms with thematic /es/ into the

[8] Ronjat lists the following variant forms for the imperfect subjunctive desinences: *-èssel-èssie* ([ˈɛsɛ]/[ˈɛsje]) in the first person singular; *-èsse/-èssie/-èssos* ([ˈɛsɛ]/[ˈɛsje]/[ˈɛsɔ]/[ˈɛs]) in the second person singular; *-èsse/-èssie/-èssol-ès* ([ˈɛsɛ]/[ˈɛsje]/[ˈɛsɔ]/[ˈɛs]) in the third person singular. The distribution of the variants is geographical, as set out by Camproux (1962: 440–441), who also notes variant third person plural forms in *-cèssyu>* ([ˈɛsju]): for the singular and third person plural forms, any given variety either has desinences with yod or desinences without yod.

[9] Teissier's data diverge from all other sources in indicating first and second person plural preterite forms with *-t/-* for first-conjugation verbs, and third person plural preterite forms with *-s/-* for the single lexeme *perdre* 'lose'. The sporadic nature of these attestations, together with the general typographical inconsistency of Teissier's grammar, indicate that they are erroneous.

THE INTRICATE INFLECTIONAL RELATIONSHIPS UNDERPINNING

	<i>tirar</i> 'drag'		<i>unir</i> 'unite'		<i>perdre</i> 'lose'	
	PRET	IPF.SBJV	PRET	IPF.SBJV	PRET	IPF.SBJV
1SG	<i>tirère</i>	<i>tirèsse</i>	<i>uniguère</i>	<i>uniguèsse</i>	<i>perdeguère</i>	<i>perdeguèsse</i>
2SG	<i>tirères</i>	<i>tirèsses</i>	<i>uniguères</i>	<i>uniguèsses</i>	<i>perdeguères</i>	<i>perdeguèsses</i>
3SG	<i>tirèt</i>	<i>tirèsse</i>	<i>uniguèt</i>	<i>uniguèsse</i>	<i>perdeguèt</i>	<i>perdeguèsse</i>
1PL	<i>tirèsson</i>	<i>tirèsson</i>	<i>uniguèsson</i>	<i>uniguèsson</i>	<i>perdeguèsson</i>	<i>perdeguèsson</i>
2PL	<i>tirèssiàt</i>	<i>tirèssiàt</i>	<i>uniguèssiàt</i>	<i>uniguèssiàt</i>	<i>perdeguèssiàt</i>	<i>perdeguèssiàt</i>
3PL	<i>tirèrou</i>	<i>tirèssou</i>	<i>uniguèrou</i>	<i>uniguèssou</i>	<i>perdeguèrou</i>	<i>perdeguèssou</i>
1SG	ti' RÈRÈ	ti' RESE	yni' GÈRE	yni' GÈSE	perde' GÈRE	perde' GÈSE
2SG	ti' RÈRES	ti' RESES	yni' GÈRES	yni' GÈSES	perde' GÈRES	perde' GÈSES
3SG	ti' RÈT	ti' RESE	yni' GÈT	yni' GÈSE	perde' GÈT	perde' GÈSE
1PL	tirè' sjøn	tirè' sjøn	ynige' sjøn	ynige' sjøn	perdege' sjøn	perdege' sjøn
2PL	tirè' sjat	tirè' sjat	ynige' sjat	ynige' sjat	perdege' sjat	perdege' sjat
3PL	ti' RÈRU	ti' RESU	yni' GÈRU	yni' GESU	perde' GÈRU	perde' GESU

Table 2

Preterite and imperfect subjunctive forms for the three traditional conjugations in the Gévaudan (Ronjat 1937: 262). Above, orthography as in source; below, conversion into IPA.



Figure 1

Map of southern France, showing location of the Gévaudan area.

preterite, contrasting with thematic /ɛt/ in the third person singular and thematic /ɛr/ in the other persons (note /r/ may be realised [r], [r̥] or [R] according to speech variety). Further illustrative examples, from ALLOr survey point 48.03 Saint Germain de Calberte (southern Lozère), are given in Tables 3 and 4.

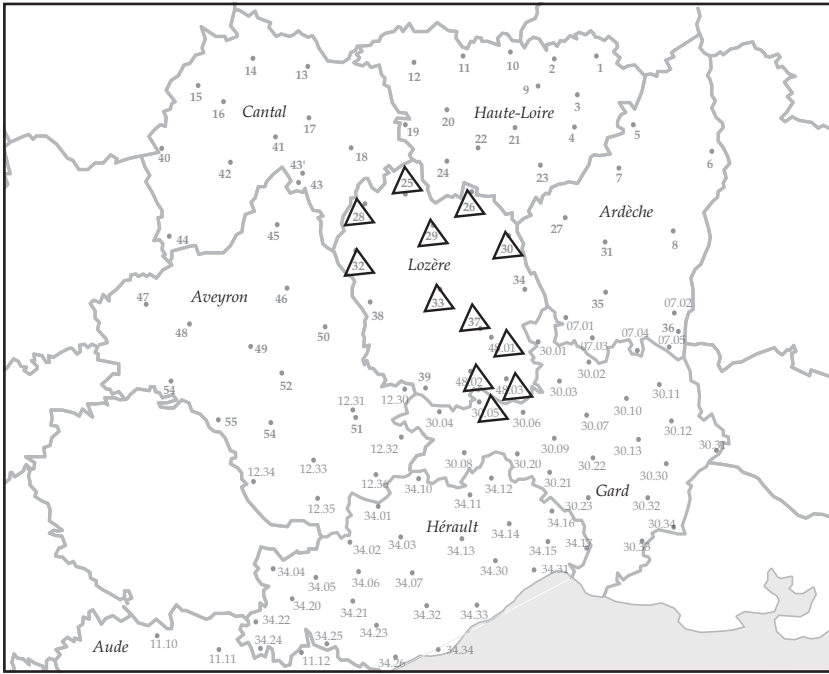


Figure 2

ALMC and ALLOr survey points at which the Gévaudan syncretism pattern is attested.

2.2 Historical context

The modern Occitan PRETERITE and IMPERFECT SUBJUNCTIVE comprise the surviving reflexes of Latin *perfectum* forms (for discussion of Latin *perfectum* and *infectum* inflection, see e.g. Stump 2016: 90–92; Maiden 2018: 29–33, 37–38). The modern imperfect subjunctive is a continuant of the Latin pluperfect subjunctive, while the modern preterite results from late-mediaeval conflation of inflectional series associated with two separate TAM categories: the continuant of the Latin perfect (mediaeval preterite) and the continuant of the Latin pluperfect indicative (mediaeval OLD CONDITIONAL or SECOND CONDITIONAL). Examples of the mediaeval series are shown in Table 5, based on the descriptions of Anglade (1921), Skårup (1997), and Wheeler (2012).

The history of all three series is characterised by pervasive analogical remodelling, including levelling of conjugational class distinctions. By the mediaeval period, only three broad conjugational types are found for the preterite, imperfect subjunctive, and second conditional. The majority of lexemes, including the large and productive first conjugation, present forms of the type shown in Table 5, with unstressed roots and thematic /ε/, reflecting widespread generalisation of Latin perfects in -DEDĪ, -DEDISTĪ, -DEDIT, -DEDIMUS, -DEDISTIS, -DEDĒRUNT (see e.g. Wheeler

	<i>cantar</i> 'sing'		<i>bastir</i> 'build'		<i>vendre</i> 'sell'	
	PRET	IPF.SBJV	PRET	IPF.SBJV	PRET	IPF.SBJV
1SG	<i>cantère</i>	<i>cantèsse</i>	<i>bastiguère</i>	<i>bastiguèsse</i>	<i>vendeguère</i>	<i>vendeguèsse</i>
2SG	<i>cantères</i>	<i>cantèsses</i>	<i>bastiguères</i>	<i>bastiguèsses</i>	<i>vendeguères</i>	<i>vendeguèsses</i>
3SG	<i>cantèt</i>	<i>cantèsse</i>	<i>bastiguèt</i>	<i>bastiguèsse</i>	<i>vendeguèt</i>	<i>vendeguèsse</i>
1PL	<i>cantessiám</i>	<i>cantessiám</i>	<i>bastiguessiám</i>	<i>bastiguessiám</i>	<i>vendeguessiám</i>	<i>vendeguessiám</i>
2PL	<i>cantessiatz</i>	<i>cantessiatz</i>	<i>bastiguessiatz</i>	<i>bastiguessiatz</i>	<i>vendeguessiatz</i>	<i>vendeguessiatz</i>
3PL	<i>cantèron</i>	<i>cantèsson</i>	<i>bastiguèron</i>	<i>bastiguèsson</i>	<i>vendeguèron</i>	<i>vendeguèsson</i>
1SG	kan'tere	kan'tese	basti'gere	basti'gese	bende'gere	bende'gese
2SG	kan'teres	kan'teses	basti'geres	basti'geses	bende'geres	bende'geses
3SG	kan'tet	kan'tese	basti'get	basti'gese	bende'get	bende'gese
1PL	kante'sjon	kante'sjon	bastige'sjon	bastige'sjon	bendege'sjon	bendege'sjon
2PL	kante'sjat	kante'sjat	bastige'sjat	bastige'sjat	bendege'sjat	bendege'sjat
3PL	kan'tèru	kan'tesu	basti'geru	basti'gesu	bende'geru	bende'gesu

Table 3

Preterite and imperfect subjunctive forms for the three traditional conjugations in Saint Germain de Calberte (ALLOr 48.03). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	<i>èstre</i> 'be'		<i>aver</i> 'have'		<i>far</i> 'do'	
	PRET	IPF.SBJV	PRET	IPF.SBJV	PRET	IPF.SBJV
1SG	<i>seguère</i>	<i>seguèsse</i>	<i>aguère</i>	<i>aguèsse</i>	<i>faguère</i>	<i>faguèsse</i>
2SG	<i>seguères</i>	<i>seguèsses</i>	<i>aguères</i>	<i>aguèsses</i>	<i>faguères</i>	<i>faguèsses</i>
3SG	<i>seguèt</i>	<i>seguèsse</i>	<i>aguèt</i>	<i>aguèsse</i>	<i>faguèt</i>	<i>faguèsse</i>
1PL	<i>seguessiám</i>	<i>seguessiám</i>	<i>aguessiám</i>	<i>aguessiám</i>	<i>faguessiám</i>	<i>faguessiám</i>
2PL	<i>seguessiatz</i>	<i>seguessiatz</i>	<i>aguessiatz</i>	<i>aguessiatz</i>	<i>faguessiatz</i>	<i>faguessiatz</i>
3PL	<i>seguèron</i>	<i>seguèsson</i>	<i>aguèron</i>	<i>aguèsson</i>	<i>faguèron</i>	<i>faguèsson</i>
1SG	se'gere	se'gese	a'gere	a'gese	fa'gere	fa'gese
2SG	se'geres	se'geses	a'geres	a'geses	fa'geres	fa'geses
3SG	se'get	se'gese	a'get	a'gese	fa'get	fa'gese
1PL	sege'sjon	sege'sjon	age'sjon	age'sjon	fage'sjon	fage'sjon
2PL	sege'sjat	sege'sjat	age'sjat	age'sjat	fage'sjat	fage'sjat
3PL	se'geru	se'gesu	a'geru	a'gesu	fa'geru	fa'gesu

Table 4

Preterite and imperfect subjunctive forms for *èstre* 'be', *aver* 'have', and *far* 'do' in Saint Germain de Calberte (ALLOr 48.03). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	IPF.SBJV		PRET		COND2	
1SG	<i>vendes</i>	ven'des	<i>vendei</i>	ven'dej	<i>vendera</i>	ven'dera
2SG	<i>vendesses</i>	ven'deses	<i>vendest</i>	ven'dest	<i>venderas</i>	ven'deras
3SG	<i>vendes</i>	ven'des	<i>vendet</i>	ven'det	<i>vendera</i>	ven'dera
1PL	<i>vendessem</i>	vende'sem	<i>vendem</i>	ven'dem	<i>venderam</i>	vende'ram
2PL	<i>vendessetz</i>	vende'sets	<i>vendetz</i>	ven'dets	<i>venderatz</i>	vende'rats
3PL	<i>vendesson</i>	ven'deso(n)	<i>venderon</i>	ven'dero(n)	<i>venderan</i>	ven'dera(n)

Table 5

Imperfect subjunctive, preterite, and 'second conditional' forms of *vendre* 'sell' in mediaeval Occitan (Anglade 1921: 294–295; Skårup 1997: 107–121; Wheeler 2012: 20). Left, attested orthography; right, IPA conversion.

2011, 2012). The exceptions to this pattern are reflexes of the Latin i-conjugation, which present forms with unstressed roots and thematic /i/ (e.g. *partí* [par'ti] 'leave.PRET.3SG', *partís* [par'tis] 'leave.IPF.SBJV.3SG', *partíra* [par'tira] 'leave.COND2.3SG'); and a small group of high-frequency lexemes which retain extensive root allomorphy, including stressed roots in a subset of preterite and second conditional forms (e.g. *dec* [dek] 'have_to.PRET.3SG', *degués* [de'ges] 'have_to.IPF.SBJV.3SG', *dégra* [de'gra] 'have_to.COND2.3SG').

Subsequently, both these patterns are replaced by the majority /ɛ/ type, but *perfectum* reflexes in non-first-conjugation verbs typically retain or develop a characteristic inflectional formative, often with a thematic velar (e.g. as in Table 3, a thematic augment /ig/ for verbs of the i-conjugation and a thematic augment /eg/ for verbs outside the a-conjugation and i-conjugation). The preterite and second

conditional are conflated into a single TAM category, a development favoured by the reduced functional load of the second conditional, and the formal similarity between the third person plural forms of each series (Ronjat 1937: 181; Camproux 1962: 430; Allières 1971: 255; Allières 1988; Esher 2021a,b,c, 2022). In modern Occitan, the third person singular preterite form consistently continues the mediaeval preterite; in the majority of varieties, all other person forms display a thematic /r/ originating in the second conditional, although localised variants are found in which the first and second person plural forms retain reflexes of the mediaeval preterite and, more rarely, in which the first person singular form retains a reflex of the mediaeval preterite (for a typology, see Bybee & Brewer 1980). The imperfect subjunctive retains its historically regular forms with thematic /s/. Illustrative examples from varieties in areas adjoining the Gévaudan are shown in Table 6.

2.3 *Syncretism, analogy, and take-over*

The Gévaudan first and second person plural preterite forms necessarily result from analogical innovation: in Occitan, there is no precedent for forms with thematic /s/ in the preterite, whereas such forms are etymological and systematic throughout the imperfect subjunctive, offering a potential template for analogical remodelling. Initial comparison of modern and mediaeval forms suggests that the Gévaudan development may be a case of TAKE-OVER (Carstairs 1987; Baerman et al. 2005: 151–160), i.e. syncretism resulting from replacement of certain full inflected wordforms in a lexeme by full inflected wordforms originating elsewhere in the inflectional paradigm of the lexeme. However, for the Gévaudan, take-over is at most only part of a more complex mechanism of change.

The interest of the Gévaudan syncretism pattern resides in the fact that, although obviously implicating the preterite and imperfect subjunctive, reference to these TAM categories alone proves inadequate to account for the specific features of the pattern: namely, its directionality (from imperfect subjunctive to preterite), the restricted paradigmatic incidence of syncretism (confined to first and second person plural forms), and the restricted geographical incidence of the syncretism pattern (confined to the Gévaudan). Section 3 discusses the insights and limitations of an account based on established patterns of formal relationship between imperfect subjunctive and preterite forms, prior to a more detailed examination of comparative dialect data (Section 4) which will identify the further-reaching formal relationships crucial to the emergence of the Gévaudan syncretism pattern.

3. METAMORPHOMES AND ANALOGICAL CHANGE

3.1 *The metamorphome PYTA*

The Gévaudan syncretism pattern is discussed by O'Neill (2011, 2014) in two studies which explore the definition and formalisation of morphemes (i.e. irreducibly morphological structures; Aronoff 1994; Maiden 2009a, 2016, 2018), particularly the

	Sorbs (34.10)		Saint Martin d'Ardèche (07.05)		Monteils (30.07)	
	PRET	IPF.SBJV	PRET	IPF.SBJV	PRET	IPF.SBJV
1SG	<i>vendère</i>	<i>vendèsse</i>	<i>vendeguère</i>	<i>vendeguèsse</i>	<i>vendeguère</i>	<i>vendeguèsse</i>
2SG	<i>vendèras</i>	<i>vendèssas</i>	<i>vendeguères</i>	<i>vendeguèsses</i>	<i>vendeguères</i>	<i>vendeguèsses</i>
3SG	<i>vendèt</i>	<i>vendèssa</i>	<i>vendeguèt</i>	<i>vendeguèsse</i>	<i>vendeguèt</i>	<i>vendeguèsse</i>
1PL	<i>vendèrem</i>	<i>vendèsssem</i>	<i>vendeguèriam</i>	<i>vendeguèssiám</i>	<i>vendeguèm</i>	<i>vendeguèssiám</i>
2PL	<i>vendèretz</i>	<i>vendèsssetz</i>	<i>vendeguèriatz</i>	<i>vendeguèssiátz</i>	<i>vendeguètz</i>	<i>vendeguèssiátz</i>
3PL	<i>vendèron</i>	<i>vendèsson</i>	<i>vendeguèron</i>	<i>vendeguèsson</i>	<i>vendeguèron</i>	<i>vendeguèsson</i>
1SG	ben'dère	ben'dese	vende'gère	vende'gese	vende'gère	vende'gese
2SG	ben'deros	ben'desos	vende'gères	vende'geses	vende'gères	vende'geses
3SG	ben'det	ben'deso	vende'ge	vende'gese	vende'ge	vende'gese
1PL	ben'deren	ben'desen	vendege'kjaŋ	vendege'sjaŋ	vende'gɛŋ	vendege'sjan
2PL	ben'deres	ben'deses	vendege'kjas	vendege'sjas	vende'gɛs	vendege'sjas
3PL	ben'deru	ben'desu	vende'gɛru	vende'gesu	vende'gɛru	vende'gesu

Table 6

Preterite and imperfect subjunctive forms of *vendre* 'sell' in the varieties of Sorbs (Hérault, ALLOr 34.10), Saint Martin d'Ardèche (Ardèche, ALLOr 07.05), and Monteils (Gard, ALLOr 30.07). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

Romance metamorphome ‘PYTA’ identified by Maiden (2001, 2005). Metamorphomes are conventionally given abstract labels in recognition of their intrinsic independence from functional motivations; the label ‘PYTA’ is derived from the conventional expression *perfecto y tiempos afines* ‘perfect and related tenses’ used in the Spanish grammatical tradition to refer to the surviving reflexes of Latin *perfectum* forms. In modern Romance varieties (Maiden 2018: 44–83), PYTA typically comprises continuants of the Latin perfect (Romance preterite), pluperfect subjunctive (Romance imperfect subjunctive in *-se*) and pluperfect indicative (Romance imperfect subjunctive or conditional in *-ra*). These categories are functionally diverse, but consistently share inflectional exponents; they are ‘related’ in terms of morphological form, independently of function.

The diachronic behaviour of PYTA across the Romance languages has been extensively documented (see e.g. Maiden 2001, 2005, 2009b, 2011a,b, 2016, 2018: 44–83; O’Neill 2011, 2014; Wheeler 2011; Esher 2015, 2016, 2017, 2021a, b,c, 2022). These studies consistently evidence the diachronic productivity of PYTA and thereby the psychological reality of this metamorphome for historical speakers (Maiden 2018: 12–17, 49–50). For any given lexeme, the Romance reflexes of Latin *perfectum* forms inherit a shared, often distinctive, lexical root or stem; while the inflectional exponents of these forms may undergo considerable historical changes, the inherited distributional pattern of identity between *perfectum* reflexes is robustly maintained. Thus, the constituent cells of PYTA in any given lexeme undergo the same analogical changes as each other (Maiden 2018: 50–54); and where lexemes have a distinctive PYTA root, this may acquire a characteristic phonological shape across lexemes, such as the presence of a high root vowel in Castilian and Portuguese (Maiden 2018: 63–64), a root-final long consonant in Italo-Romance (Maiden 2018: 66–67), a root-final sibilant in French and Romanian (Maiden 2018: 66–67), or a root-final velar in Catalan and Occitan (Wheeler 2011; Esher 2016, 2022).

Although metamorphomes typically act as templates for the distribution of inflectional exponents associated with the lexical root or stem, there are also indications that they can act as domains for the distribution of inflectional exponents correlated with morphosyntactic feature values such as person and number (Maiden 2009b, 2018: 60–62). For example, in Daco-Romance, a formative *-și* originating in the second person singular pluperfect form is spread across the second person singular forms of all and only TAM categories within PYTA (Maiden 2018: 61): in this example, the domain for analogical extension is jointly defined by the specific morphosyntactic feature value combination and the wider metamorphome.

3.2 *Abstractive morphology and analogical change within metamorphomes*

O’Neill (2011: 148–149, 2014: 63) treats the Gévaudan syncretism pattern as a further example of inflectional material undergoing extension within the bounds of an existing metamorphome:

Varieties of Occitan generally display a rhotic consonant in the majority of the endings of the preterite and the formative *-ess-* before the markers of person and number in the imperfect subjunctive, as demonstrated by [illustrative paradigms]. The distribution of these formatives invites the interpretation of them being respective markers of the preterite and imperfect subjunctive. The significance of the variety of Gévaudan is that the supposed marker of imperfect subjunctive has spread to the 1PL and 2PL preterite. (O'Neill 2014: 63)

The key insight of O'Neill's analysis (2011: 149–150, 2014: 63) is that the emergence of the modern Gévaudan system is incompatible with a constructive, morphemic account. Historically, *-ess-* occurred exclusively in imperfect subjunctive forms (see Tables 6, 9–10).¹⁰ Within a morphemic account, this distributional fact would be captured by treating *-ess-* as a morpheme embodying the inflectional features of the TAM category 'imperfect subjunctive' – in this case morphosemantic features (Corbett 2012: 49) – the imperfect subjunctive might be characterised as tense-neutral, aspect-neutral and subjunctive, see Maiden (2011a: 179). However, if speakers had made a morphemic analysis of this type, incompatibility between the morphosemantic features of the preterite (past, perfective, indicative) and the morphosemantic content of *-ess-* would preclude extension of *-ess-* to the preterite. Within a LEXICAL–REALISATIONAL approach (in the typology of Stump 2001) a speaker producing a preterite form would avoid selecting the morpheme *-ess-* because there is nothing in the feature specification of the preterite to license it; within a LEXICAL–INCREMENTAL approach, a speaker producing an inflectional form would introduce the morpheme *-ess-* bearing imperfect subjunctive meaning and thus create an imperfect subjunctive form rather than a preterite. The fact that, historically, speakers in the Gévaudan were able to extend the substring *-ess-* to the preterite, modifying the shape of the inflectional wordforms without modifying their function, indicates that these speakers did not make a morphemic segmentation associating *-ess-* with the meaning 'imperfect subjunctive' (O'Neill 2011: 150), or indeed with any specific TAM value. O'Neill argues instead for an abstractive approach, in which

the minimal meaningful unit is the word, and words are stored in their entirety in the lexicon and are connected to one another by virtue of shared semantic and formal features (2014: 64)

[10] O'Neill treats *-ess-* as a single item, although in practice there is alternation between *-èss-* ['ɛs] (singular and third person plural forms) and *-ess-* [es] (first and second person plural forms). Alternation initially results from historical differentiation between stressed and unstressed mid vowels. The original sound change is long complete and the resulting alternations in the root of the present indicative and subjunctive are demonstrably morphologised (see e.g. Maiden 2009a). Nevertheless, the vowel alternation remains correlated with, and thus recoverable from, synchronic phonological context: [ɛ] is licit only in stressed syllables, while [e] is licit in both stressed and unstressed syllables (Olivieri & Sauzet 2016: 322–324). The alternation pattern itself will not prove crucial to the account developed in this study.

a view which this study also supports.

In order to account for the Gévaudan syncretism pattern, O’Neill appeals to a principle of analogical levelling within metamorphomes: the imperfect subjunctive and the preterite are members of the same metamorphome (PYTA) and as such are liable to increase their formal similarity via analogical change (2014: 64; compare Section 3.1), with the ultimate similarity being full identity. Yet the concept of metamorphome-internal levelling falls short as an explanation for the Gévaudan syncretism pattern. It does not predict the distinctive properties of this pattern, namely the directionality of the syncretism, the paradigmatic restriction of the syncretism to the first and second person plural, and the geographical restriction of the pattern to a single small area. Take-over of the imperfect subjunctive by the preterite, or syncretism between preterite and imperfect subjunctive for any other person/number combination(s), would constitute equally good examples of metamorphome-internal levelling, yet neither is attested in southern Gallo-Romance varieties (to the author’s knowledge at the time of writing).¹¹ Furthermore, it is not clear that the Gévaudan syncretism pattern can legitimately be classified as an instance of levelling at all: the outcome of the change is a redistribution of allomorphy, not reduction or elimination (compare Fertig’s 2016 definition, cited in Section 1.1). In this respect, the Gévaudan development differs significantly from known examples of metamorphomes acting as productive domains for inflectional analogy: analogy affecting the stem or theme vowel typically generalises a single form to all constituent cells of a metamorphome, while analogy affecting personal desinences typically generalises a single form to all cells with the relevant person and number features within the metamorphome (Section 3.1).

3.3 *Maintaining an abstractive account*

O’Neill’s discussion of the Gévaudan syncretism pattern frames it as offering support for abstractive theories of inflectional systems and attempts to motivate the

[11] A pattern of syncretism more widespread in both Occitan and Catalan involves the analogical extension of first and second person plural imperfect subjunctive forms, e.g. *cantèssem* [kən 'tɛsɛn] ‘sing.IPF.SBJV.1PL’, *cantèsetsz* [kən 'tɛsɛs] ‘sing.IPF.SBJV.2PL’ (Concots, département Lot) into the corresponding person/number forms of the present subjunctive (Esher 2022). Such cases can also be analysed as involving analogy internal to PYTA, if one accepts the view held by Wheeler (2011; see also Maiden 2018: 294–295) that in Occitan (and Catalan) the present subjunctive has become integrated into PYTA; Wheeler’s proposal focuses on the lexical and paradigmatic extension of thematic velars, which in many Occitan and Catalan varieties occur throughout the present subjunctive as well as PYTA (compare e.g. *fague* [‘fage] ‘do.PRS.SBJV.1SG’, *faguère* [fa'gɛrɛ] ‘do.PRET.1SG’, *faguèsse* [fa'gɛsɛ] ‘do.IPFV.SBJV.1SG’ in Table 1). While the status of the relationships between PYTA and the present subjunctive will not prove crucial to the present study, the example of the present subjunctive serves to underline the range and diversity of analogical changes within metamorphomes and the need for a more specific account than a general principle of metamorphome-internal levelling. In the case of syncretism between the two subjunctives, alignment of stress alternations with stem alternations is a crucial factor determining the directionality and scope of the change.

emergence of the pattern via a trend for analogical levelling within metamorphomes. The attempt is ultimately unsuccessful, since the paradigmatic scope of the syncretism contrasts with existing examples of levelling within metamorphomes, and a general principle of levelling is not equipped to predict the specific directionality, paradigmatic distribution, and geographical distribution of the syncretism pattern. A more satisfactory account is developed here by reconstructing the detail and context of the historical change, based on comparative dialect data (Section 4) and implicating morphomic relationships well beyond PYTA (Sections 5–7). While the substance of this account differs considerably from O’Neill’s analysis, it will ultimately offer much stronger empirical support for O’Neill’s theoretical conclusions concerning the explanatory power of abstractive theories of inflection, and the crucial importance of relationships of form independently of relationships of function.

4. RECONSTRUCTION: THE SUBSTANCE OF THE CHANGE

In the absence of textual evidence directly attesting historical forms for the relevant area, the Gévaudan preterite forms prior to the emergence of syncretism must be reconstructed based on comparative evidence from other Occitan and Romance varieties. As outlined in Section 3.1, the Latin perfect indicative and pluperfect subjunctive consistently shared a stem, and in general their Romance reflexes continue to do so, including in mediaeval and contemporary Occitan varieties (see e.g. Anglade 1921; Ronjat 1937; Skårup 1997; occasional exceptions are discussed by Maiden 2018: 72). It is thus uncontroversial to assume that the Gévaudan preterite and imperfect subjunctive consistently shared a stem in all person/number combinations. The more substantive issue concerns the remaining inflectional formatives, including stress placement (lexically specified in Occitan), regarding which it will be useful to establish the range of possible systems, based on neighbouring varieties. The comparative data inventorying modern inflectional systems, and thus attested changes, are complemented by geographical distribution patterns from which directionality can be inferred (Wolfram & Schilling-Estes 2003; François 2014, 2017).

4.1 *Preterite and imperfect subjunctive inflection in neighbouring varieties*

Common and widespread patterns of preterite and imperfect subjunctive inflection found in Occitan varieties of the areas surrounding the Gévaudan are illustrated for the first-conjugation verb *cantar* [kan 'ta] ‘sing’ in Table 7 (for corresponding forms of *vendre* ['bendre]/['vendre] ‘sell’ in the same varieties, see Table 6).

The variety of Sorbs (northern Hérault, ALLOr 34.10) exemplifies a pattern typical of the Languedocien dialect area (Alibèrt 1976: 118), south-west of the Gévaudan. In this system, all preterite forms outside the third person singular are paroxytonic (i.e. stressed on the penult) with thematic /er/, and all imperfect subjunctive forms are paroxytonic with thematic /es/. The exponents following the thematic formative are

consistent across the two TAM categories (for Sorbs, [e] in the first person singular, [os] in the second person singular, [en] in the first person plural, [es] in the second person plural, [u] in the third person plural), excepting only the third person singular which has a unique preterite form in -[ʔɛt]. In this variety, thematic /r/ from the second conditional occurs in all preterite forms other than the third person singular. Primary stress in the first and second person plural has moved from the final syllable (the historically regular outcome; see Section 2.2) to the penult (historically expected in all other forms with thematic /r/, i.e. the first person singular, second person singular, and third person plural). Final [en] and [es] in the first and second person plural forms originate in the imperfect subjunctive, e.g. mediaeval Occitan *vendessem* [ven'desɛn] 'sell.IPF.SBJV.1PL' < UĒNDEDISSĒMUS, *vendesetz* [ven'desɛtʃ] 'sell.IPF.SBJV.2PL' < UĒNDEDISSĒTIS (see Section 2.2 and Table 5).

The variety of Saint Martin d'Ardèche (south-eastern Ardèche, ALLOr 07.05) exemplifies a pattern typical of the Provençal dialect area (Martin & Moulin 2007: 89), south-east of the Gévaudan. This system displays many distributional similarities with that exemplified by Sorbs: /r/ is present throughout preterite forms other than the third person singular; /s/ is present throughout imperfect subjunctive forms; inflectional formatives following thematic /r/ or /s/ are parallel across the two categories, as are thematic vowels preceding thematic /r/ or /s/. The Provençal type differs in that the first and second person plural preterite and imperfect subjunctive forms retain historically expected final stress, and maintain the historically regular alternation between stressed [ɛ] and unstressed [e].

Also of note in Saint Martin d'Ardèche is the phonological form of the first and second person plural desinences: *-eriam* [-e' rjaŋ], *-eriatz* [-e' rjas] in the preterite, and

Sorbs (34.10)		Saint Martin d'Ardèche (07.05)		Monteils (30.07)		
PRET	IPF.SBJV	PRET	IPF.SBJV	PRET	IPF.SBJV	
1SG	<i>cantère</i>	<i>cantèsse</i>	<i>cantère</i>	<i>cantèsse</i>	<i>cantère</i>	<i>cantèsse</i>
2SG	<i>cantèras</i>	<i>cantèssas</i>	<i>cantères</i>	<i>cantèsses</i>	<i>cantères</i>	<i>cantèsses</i>
3SG	<i>cantèt</i>	<i>cantèssa</i>	<i>cantèt</i>	<i>cantèsse</i>	<i>cantèt</i>	<i>cantèsse</i>
1PL	<i>cantèrem</i>	<i>cantèsem</i>	<i>canteriam</i>	<i>cantessiam</i>	<i>cantèm</i>	<i>cantessiam</i>
2PL	<i>cantèretz</i>	<i>cantèssetz</i>	<i>canteriatz</i>	<i>cantessiatz</i>	<i>cantètz</i>	<i>cantessiatz</i>
3PL	<i>cantèron</i>	<i>cantèsson</i>	<i>cantèron</i>	<i>cantèsson</i>	<i>cantèron</i>	<i>cantèsson</i>
1SG	kan'tere	kan'tese	kan'tere	kan'tese	kan'tere	kan'tese
2SG	kan'teros	kan'tesos	kan'teres	kan'teses	kan'teres	kan'teses
3SG	kan'tet	kan'teso	kan'te	kan'tese	kan'te	kan'tese
1PL	kan'teren	kan'tesen	kante'rjaŋ	kante'sjaŋ	kan'ten	kante'sjan
2PL	kan'teres	kan'teses	kante'rjas	kante'sjas	kan'tes	kante'sjas
3PL	kan'teru	kan'tesu	kan'teru	kan'tesu	kan'teru	kan'tesu

Table 7

Preterite and imperfect subjunctive forms of *cantar* 'sing' in the varieties of Sorbs (Hérault, ALLOr 34.10), Saint Martin d'Ardèche (Ardèche, ALLOr 07.05) and Monteils (Gard, ALLOr 30.07). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

-essiam [-e'sjaŋ], *-essiatz* [-e'sjas] in the imperfect subjunctive. The forms in this area were traditionally of the type *-eram* [-e'raŋ], *-eratz* [-e'ras], *-essam* [-e'saŋ], *-essatz* [-e'sas] (Ronjat 1937: 186), with stressed [a] as is historically expected in the second conditional: e.g. UENDEDE'RAMUS > *vende'ram* [vende'raŋ] 'sell.COND.1PL', UENDEDE'RATIS > *vende'ratz* [vende'ras] 'sell.COND.2PL' (compare Table 5). The modern forms with yod are due to analogical extension of formatives etymological in the synthetic conditional and non-first-conjugation imperfect indicative: e.g. UËNDË'BĀMUS > *vendiam* [ven'djaŋ] 'sell.IPF.IND.1PL', UËNDË'BĀTIS > *vendiatz* [ven'djas] 'sell.IPF.IND.2PL'; for the preterite, this extension is dated to the mid-to-late sixteenth century (Koschwitz [1894] 1973: 115–117; Ronjat 1937: 186).

Finally, the variety of Monteils (central Gard, ALLOr 30.07) exemplifies a system occurring immediately south of the Gévaudan and geographically intermediate between the Languedocien and Provençal types described above. The Gard system is characterised by conservatism of the first and second person plural preterite, which, like the third person singular preterite, retain reflexes of the mediaeval preterite without influence from the second conditional: oxytonic (i.e. final-stressed) forms without thematic /r/: *vendèm* [ven'dɛŋ] 'sell.PRET.1PL' < *ven'dem* [ven'dɛm] < UENDEDEMUS; *vendètz* [ven'dɛs] 'sell.PRET.2PL' < *ven'detz* [ven'dɛts] < UENDEDISTIS. In these varieties, strong formal parallelism between preterite and imperfect subjunctive forms for a given person/number combination is limited to the first person singular, second person singular, and third person plural. In varieties such as these, with first and second person plural preterite forms of the *-èm* [-'ɛŋ], *-ètz* [-'ɛs] type, first and second person plural imperfect subjunctive forms are always of the *-essiam* [-e'sjaŋ], *-essiatz* [-e'sjas] type.

4.2 Geographical distribution of inflectional types

Figure 3 shows the geographical distribution of first and second person plural preterite and imperfect subjunctive endings in the ALMC and ALLOr datasets;¹² the forms are given in 'classical' orthography (Alibèrt 1976: 7–36), abstracting over localised phonetic variation, particularly in the realisation of final consonants.

The inflectional patterns illustrated in Table 6 occur across the southern part of the survey area. The Provençal type *-eriam*, *-essiam* (e.g. Saint Martin d'Ardèche: [-e'rjaŋ], [-e'sjaŋ]), widespread further east, is visible along the south-eastern edge of the survey area, while the Languedocien type *-èrem*, *-èssèm* (e.g. Sorbs: [-'ɛrɛŋ], [-'ɛsɛŋ]) is robustly attested in the south-western part of the survey area. The Gard type *-èm*, *-essiam* (e.g. Monteils, [-'ɛŋ], [-e'sjaŋ]) with conservative preterite forms occupies a middle ground between these two. The *-èm*, *-essiam* and *-èrem*, *-èssèm*

[12] The zones are delineated approximately since some measure of internal variation occurs, especially in the northern area, and occasional mixed or transitional systems are encountered, typically involving overabundance in the first and second person plural preterite with forms characteristic of both adjacent areas. Detailed consideration of localised variation and individual systems is beyond the scope of the present study.

by syncretism between the first and third person plural forms, historically a take-over, which introduces the vowel [u] (etymological in the third person plural form) into the first person plural form, e.g. *-eriom* [-e' rjuŋ] as described by Moulin (2006) for the variety of Aubenàs (southern Ardèche), or *-erom* [ɛ' run] as attested in Quint's (1999) description of the variety of Albon (central Ardèche). Finally, in the north-eastern corner of the survey area, preterite forms are usually of the *-eram* type (occasionally *-erem*) and imperfect subjunctive forms of the *-essam* type (occasionally *-erem*).

4.3 *Inferring historical change from geographical distribution*

For first and second person plural forms, varieties along a corridor reaching from Cantal to Gard (see Figure 3; also Casagrande 2011: 174) display distinctive inflectional formatives, lacking the rhotic which these forms exhibit in other Occitan varieties (compare the illustrative examples in Table 6). At the northernmost and southernmost extremes of the corridor, conservative forms in *-èm*, *-ètz* are retained, while in the north-west a distinctive theme vowel is introduced (Sections 4.2, 5.3), and in the central area the original preterite forms are evicted by imperfect subjunctive forms. In all these areas, first and second person plural imperfect subjunctive forms are near-exceptionlessly of the oxytonic (final-stressed) *-essiam*, *-essiatz* type.

It is significant that the Gévaudan, with its unique innovative forms lacking /r/ in the preterite, is located in the midst of two conservative areas also lacking /r/ in the preterite. This geographical distribution argues against historical presence of rhotic preterite forms of the *-eriam*, *-eriatz* type in the Gévaudan. The most plausible reconstruction is instead that the historical preterite forms in the Gévaudan were initially of the conservative, oxytonic *-èm*, *-ètz* type (e.g. *cantèm* [kan'tɛn] 'sing. PRET.1PL', *cantètz* [kan'tɛt] 'sing. PRET.2PL', *aguèm* [a'gɛn] 'have. PRET.1PL', *aguètz* [a'gɛt] 'have. PRET.2PL') and were directly replaced by the corresponding oxytonic imperfect subjunctive forms (reflexes of the Latin pluperfect subjunctive, e.g. *cantessiam* [kante'sjɔn] 'sing. PRET/IPF.SBJV.1PL', *cantessiatz* [kante'sjat] 'sing. PRET/IPF.SBJV.2PL', *aguessiam* [age'sjɔn] 'have. PRET/IPF.SBJV.1PL', *aguessiatz* [age'sjat] 'have. PRET/IPF.SBJV.2PL'). This reconstruction is implicit in Casagrande's analysis:

Il peut aussi exister une explication morphologique: une large bande de territoire entre Cantal et Gard connaît un formant de Prét[é]rit spécifique pour ces deux personnes qui peut poser certains problèmes d'interprétation. Il n'est donc pas impossible que ces formes, plutôt que de se réaligner sur le paradigme de Prét[é]rit, aient été simplement remplacées par celles de Subj[onctif] Imp[erfectif] [ai]t.¹³ (Casagrande 2011: 174)

[13] 'There may also be a morphological explanation: a wide geographical strip between Cantal and Gard presents a unique preterite formative in the first and second person plural, which may pose

While Casagrande's view of the change as a morphological repair for speaker confusion is implausible, the substance of the change which he assumes (replacement of *-èm, -ètz* by *-essiam, -essiatz*) is entirely consistent with the comparative geographical evidence presented in Figure 3.

4.4 *Chronology of developments*

For most Occitan varieties in the Languedoc, Provence, and northern Occitan regions, forms with thematic /r/ emerged throughout the preterite (excepting the third person singular; see Bybee & Brewer 1980 for the resistance of this form to change), due to merger with the second conditional. Forms with thematic /r/ are robustly conserved, despite the close parallelism between preterite and imperfect subjunctive forms for any given person/number combination. Indeed, the parallelism of stress patterns and word-final exponents may result in part from metamorphome-internal levelling; but such levelling never eliminates the contrast between thematic /r/ in the preterite and thematic /s/ in the imperfect subjunctive. A variant development occurs within the corridor identified, where the spread of thematic /r/ through the preterite never extends to affecting the first and second person plural preterite. Subsequently, in a subpart of the corridor, an innovation occurs, in which the etymological first and second person plural preterite forms are replaced by imperfect subjunctive forms. The innovation spreads throughout Lozère, but does not attain the full geographical extent of the original corridor.

The potential window for the emergence of the Gévaudan syncretism pattern extends from the sixteenth to the nineteenth century. Textual evidence for other Occitan varieties indicates that the spread of [-r]- through the preterite took place between the mid-fifteenth and late sixteenth centuries (Esher 2021b,c), a development which the Gévaudan innovation must post-date. The data collated in the early twentieth-century *Atlas linguistique de la France* (Gilliéron & Edmont 1902–1910), although providing only scant information on verb inflection, clearly indicate use of reflexes of the Latin pluperfect subjunctive with the value of first person plural preterite in Lozère (see map 1154B *nous ne le revîmes pas* 'we did not see him again') and thus suggest that the introduction of these forms was at least well advanced, perhaps fully complete, by the end of the nineteenth century.

5. CRUCIAL TEMPLATES: THE IMPERFECT OF *ÈSTRE* 'BE' AND ITS RELATION WITH THE PRETERITE

Alternation between forms with /s/ (in the first and second person plural) and forms with /r/ (in the singular and third person plural) is not confined to the preterite, but is also found in the imperfect indicative of the single lexeme *èstre*

some difficulties for comprehension. It is thus not impossible that these forms, rather than being remodelled on the preterite paradigm, were simply replaced by the morphologically similar imperfect subjunctive forms' [my translation].

'be'. The historical relationships of partial formal identity between these categories pinpoint *èstre* as a crucial model in the development of the Gévaudan syncretism pattern.

5.1 Formal parallelism between the imperfect indicative of *èstre* 'be' and the second conditional

In most Occitan varieties, including those of the survey area, there exist four patterns for imperfect indicative inflection. First-conjugation verbs exhibit forms with thematic /av/, the regular reflex of Latin first-conjugation imperfect indicative forms in -ĀBAM, and so on (e.g. CANTĀBAT > *cantava* [kan'taβə] 'sing.IPF.IND.3SG'). Non-first-conjugation verbs exhibit final-stressed forms with thematic yod, which continue Latin imperfect indicative forms in -(I)ĒBAM, and so on (e.g. UENDĒBAT > *vendiá* [ben'djə] 'sell.IPF.IND.3SG'; see Esher 2018); among this group, the i-conjugation is distinguished by the analogical introduction of a thematic augment -*iss-* (e.g. *bastissíá* [basti'sjə] 'build.IPF.IND.3SG'; see Maiden 2004; Esher 2016). Finally, *èstre* 'be' retains reflexes of the idiosyncratic Latin forms ERAM, ERĀS, ERAT, ERĀMUS, ERĀTIS, ERANT, which were unique to the single lexeme ESSE 'be'.

The significance of the forms ERAM, etc. is that this series of full inflectional wordforms is near-identical with the rightmost inflectional formatives within Latin pluperfect indicative forms, as shown in Table 8. The two series are initially distinguished by stress placement for the singular and third person plural – on the penult in the imperfect indicative of 'be'; on the antepenult in the pluperfect indicative, but this distinction is lost between late Latin and mediaeval Romance due to haplogy: [ven'dederam] > [ven'deram] via deletion of unstressed [de] (see Wheeler 2012: 13–15, on whose reconstructions the present proposal is based). By mediaeval Occitan, systematic formal identity between the imperfect indicative forms of *èstre* and the endings of the second conditional is robustly established (for verbs of the majority *cantar* 'sing' and *vendre* 'sell' classes). The historical mechanisms by which this pattern of inflectional identity arises (conservation of inherited identity between forms; loss of inherited distinction between forms, due to regular sound change) are familiar from established cases of subsequently persistent and productive inflectional identity patterns (e.g. Maiden 2009a, 2011a,b, 2016, 2018; Esher 2017, 2018, 2020).

In the subsequent merger of the preterite and the second conditional, the majority of varieties retain the sequence /'er/ in the first person singular, second person singular and third person plural preterite forms (note that for the third person plural, this sequence was etymological in the preterite as well as in the second conditional, e.g. late Latin [ven'dederont] > mediaeval Occitan *vendero(n)* [ven'dero(n)] 'sell.PRET.3PL', see also Table 5), whereas the third person singular form is always a direct continuant of the preterite (e.g. *vendet* [ven'det] 'sell.PRET.3SG') and undergoes no influence from the second conditional (e.g. *vendera* [ven'dera] 'sell.COND2.3SG').

	'be', IPF.IND			'sell', PLPF.IND > COND2			
	Latin	mediaeval Occitan		classical Latin	late Latin	mediaeval Occitan	
1SG	'ERAM	<i>era</i>	'era	UEN'DIDERAM	ven'dederam	<i>vendera</i>	ven'dera
2SG	'ERĀS	<i>eras</i>	'eras	UEN'DIDERĀS	ven'dederas	<i>venderas</i>	ven'deras
3SG	'ERAT	<i>era</i>	'era	UEN'DIDERAT	ven'dederat	<i>vendera</i>	ven'dera
1PL	E'RĀMUS	<i>eram</i>	e'ram	UENDIDE'RĀMUS	vendede'ramus	<i>venderam</i>	vende'ram
2PL	E'RĀTIS	<i>eratz</i>	e'rats	UENDIDE'RĀTIS	vendede'ratis	<i>venderatz</i>	vende'rats
3PL	'ERANT	<i>eran</i>	'eran	UEN'DIDERANT	ven'dederant	<i>venderan</i>	ven'deran

Table 8

Historical development of imperfect indicative forms of *èstre* < **essere* 'be', and pluperfect indicative/second conditional forms of *vendre* < *UENDERE* 'sell', based on data from Anglade (1921: 294–295, 314), Skårup (1997: 99, 117), and Wheeler (2012: 13–15). Left, traditional orthographic forms; right, IPA conversion.

The first and second person plural forms show influence from the second conditional in many varieties, but not all; notably, varieties of the Cantal–Gard corridor discussed in Sections 4.2 and 4.3 retain first and second person plural forms uninfluenced by the second conditional.

A consequence of this merger is that in modern Occitan preterite inflection, a subset of person/number combinations display partial formal identity with the imperfect indicative forms of *èstre* 'be', i.e. they retain the inherited pattern of identity between reflexes of *ERAM*, and so on, and reflexes of the pluperfect indicative, despite functional reorganisation of the paradigm and some formal redistribution of inflectional material. Modern systems of this type are illustrated in Tables 9 and 10: the data from Sorbs include an example of shared analogical changes undergone by first and second person plural forms in the imperfect indicative of *èstre* 'be' and in the preterite, namely, the shift from final stress to penultimate stress, and the change in thematic vowel quality from [e] to [ɛ].

5.2 A novel alternation pattern in *èstre* as a model for the preterite

In a significant minority of Occitan varieties, the first and second person plural imperfect indicative forms of *èstre* 'be' are subject to analogical influence from other imperfect indicative inflection patterns. The source of influence is sometimes the majority first-conjugation type, as in the variety of Nice where innovative *eravam* [era'vaŋ] 'be.IPF.IND.1PL', *eravatz* [era'vas] 'be.IPF.IND.2PL' correspond to etymological *cantavam* [kanta'vaŋ] 'sing.IPF.IND.1PL', *cantavatz* [kanta'vaŋ] 'sing.IPF.IND.2PL' (Toscano 1998: 97, 100; Esher 2018; see also Anglade 1921: 314 for the marginal presence of *eravam*, *eravatz* in mediaeval Occitan). More commonly, however, the model for change is the non-first-conjugation type in *-iam*, *-iatz*, hence forms such as *seiam* [se'jan] 'be.IPF.IND.1PL', *seiatz* [se'jas] 'be.IPF.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1SG	<i>siái</i>	<i>siàgue</i>	<i>ère</i>	<i>siaguère</i>	<i>siaguèsse</i>	<i>serai</i>	<i>seriá</i>
2SG	<i>siás</i>	<i>siàgas</i>	<i>èras</i>	<i>siaguèras</i>	<i>siaguèssas</i>	<i>seràs</i>	<i>seriás</i>
3SG	<i>es</i>	<i>siàgue, siàga</i>	<i>èra</i>	<i>siaguèt</i>	<i>siaguèssa</i>	<i>serà</i>	<i>seriá</i>
1PL	<i>sem</i>	<i>siaguem</i>	<i>èrem</i>	<i>siaguèrem</i>	<i>siaguèsssem</i>	<i>serem</i>	<i>seriam</i>
2PL	<i>sètz</i>	<i>siaguetz</i>	<i>èretz</i>	<i>siaguèretz</i>	<i>siaguèssetz</i>	<i>seretz</i>	<i>seriatz</i>
3PL	<i>son</i>	<i>siàgon</i>	<i>èron</i>	<i>siaguèron</i>	<i>siaguèsson</i>	<i>seráun</i>	<i>seriáun</i>
1SG	'fjɔj	'fjage	'ere	'fja'gere	'fja'gese	se'raj	se'rjo
2SG	'fɔs	'fjagos	'eros	'fja'geros	'fja'gesos	se'ras	se'rjɔs
3SG	'es	'fjage, 'fjago	'ero	'fja'get	'fja'geso	se'ro	se'rjo
1PL	'sen	'fja'gen	'eren	'fja'geren	'fja'gesen	se'ren	se'rjan
2PL	'ses	'fja'get	'eres	'fja'geres	'fja'geses	se'res	se'rjas
3PL	'su	'fjagu	'eru	'fja'geru	'fja'gesu	se'rɔw	se'rjɔw

Table 9

Finite synthetic forms of *èstre* ['estre] 'be' in the variety of Sorbs (ALLOr 34.10), Languedocien type. Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1SG	<i>siái</i>	<i>siègue</i>	<i>ère</i>	<i>saguère</i>	<i>saguèsse</i>	<i>sarai</i>	<i>sariái</i>
2SG	<i>siás</i>	<i>siègues</i>	<i>ères</i>	<i>saguères</i>	<i>saguèsses</i>	<i>saràs</i>	<i>sariás</i>
3SG	<i>es</i>	<i>siègue</i>	<i>èra</i>	<i>saguèt</i>	<i>saguèsse</i>	<i>sarà</i>	<i>sariá</i>
1PL	<i>siam</i>	<i>saguem</i>	<i>eriam</i>	<i>saguèriam</i>	<i>saguèssiam</i>	<i>sarem</i>	<i>sariam</i>
2PL	<i>siatz</i>	<i>saguetz</i>	<i>eriatz</i>	<i>saguèriatz</i>	<i>saguèssiatz</i>	<i>saretz</i>	<i>sariatz</i>
3PL	<i>son</i>	<i>siègon</i>	<i>èron</i>	<i>saguèron</i>	<i>saguèsson</i>	<i>saràn</i>	<i>sarián</i>
1SG	'sjej	'sjege	'ERE	sa'gere	sa'gese	sa'raj	sa'rjej
2SG	'sjes	'sjejes	'ERES	sa'geres	sa'geses	sa'ras	sa'rjes
3SG	'es	'sjege	'ERO	sa'ge	sa'gese	sa'ra	sa'rje
1PL	'sjan	sa'geŋ	e'rjan	sage'rjan	sage'sjan	sa'reŋ	sa'rjan
2PL	'sjas	sa'ges	e'rjas	sage'rjas	sage'sjas	sa'res	sa'rjas
3PL	'suŋ	'sjequ	'ERU	sa'geru	sa'gesu	sa'raŋ	sa'rjeŋ

Table 10

Finite synthetic forms of *èstre* ['estre] 'be' in the variety of Saint Martin d'Ardèche (ALLOr 07.05), Provençal type. Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

IND.2PL' in Cantal, and *siam* ['sjan] 'be.IPF.IND.1PL', *siatz* ['sjas] 'be.IPF.IND.2PL' in Gard and Lozère (Camproux 1962: 442). These last examples also illustrate the eviction of etymological [er]-forms in favour of innovative [s]-forms, generalising an initial consonant common throughout the paradigm of *èstre*.¹⁴

[14] The tendency for innovation in first and second person plural across imperfect indicative forms of different conjugations is the subject of ongoing work by the author. A further intriguing example involves inceptive suppletion of forms of *aver* 'have' in *èstre* 'be' (shown in Figure 4; the

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1SG	<i>siái</i>	<i>siègue</i>	<i>ère</i>	<i>saguère</i>	<i>saguèsse</i>	<i>sarai</i>	<i>sariái</i>
2SG	<i>siás</i>	<i>siègues</i>	<i>ères</i>	<i>saguères</i>	<i>saguèsses</i>	<i>saràs</i>	<i>sariás</i>
3SG	<i>es</i>	<i>siègue</i>	<i>éra</i>	<i>saguèt</i>	<i>saguèsse</i>	<i>sarà</i>	<i>sariá</i>
1PL	<i>sèm</i>	<i>saguem</i>	<i>siam</i>	<i>saguèm</i>	<i>saguessiam</i>	<i>sarem</i>	<i>sariam</i>
2PL	<i>sètz</i>	<i>saguetz</i>	<i>siatz</i>	<i>saguètz</i>	<i>saguessiatz</i>	<i>saretz</i>	<i>sariatz</i>
3PL	<i>son</i>	<i>siègon</i>	<i>èron</i>	<i>saguèron</i>	<i>saguèsson</i>	<i>saràn</i>	<i>sariáun</i>
1SG	'sjɛj	'sjɛge	'ɛre	sa'gɛre	sa'gɛse	sa'raj	sa'rjɛj
2SG	'sjɛs	'sjɛges	'ɛres	sa'gɛres	sa'gɛses	sa'ras	sa'rjɛs
3SG	'es	'sjɛge	'ero	sa'gɛ	sa'gɛse	sa'ra	sa'rjɛ
1PL	'sɛn	sa'gɛn	'sjan	sa'gɛn	sage'sjan	sa'ren	sa'rjan
2PL	'ses	sa'gɛs	'sjas	sa'gɛs	sage'sjas	sa'res	sa'rjas
3PL	'su	'sjɛgu	'ɛru	sa'gɛru	sa'gɛsu	sa'ran	sa'rjɛw

Table 11

Finite synthetic forms of *èstre* ['ɛstre] 'be' in the variety of Monteils (ALLOr 30.07), Gard type. Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

An incidental consequence of the innovation which introduces *siam*, *siatz* into the imperfect indicative of *èstre* 'be' is the creation of a novel pattern of formal identity between first and second person plural forms, this time involving full imperfect indicative wordforms for *èstre* 'be' and the rightmost inflectional material in imperfect subjunctive wordforms, as exemplified in Table 11 (variety of Monteils, Gard). From the point of view of the paradigmatic distribution of inflectional formatives, systems such as that of Monteils are near-identical to those of the Gévaudan (e.g. variety of Saint Germain de Calberte, Lozère, Table 12). The inflectional similarity of these paradigms indicates that they are indeed closely related, lending weight to the hypothesis that, prior to the emergence of the Gévaudan syncretism pattern, verb inflection in Occitan varieties of the Gévaudan was of the type found in modern varieties of Gard (an argument developed in Section 4.3 with reference only to the preterite and imperfect subjunctive, but which the data in Tables 11 and 12 show to be of wider paradigmatic validity).

The difference between the systems in Tables 11 and 12 amounts to the respective absence or presence of syncretism between the preterite and the imperfect subjunctive for first and second person plural forms. For varieties with syncretism, the analogical extension of (originally) imperfect subjunctive forms into the preterite replicates a pattern of alternation which emerged in the imperfect indicative forms of *èstre* due to an independent innovation affecting the first and second person plural.

relevant locality is Saugues in Haute-Loire, ALMC survey point 24). The development of *siam* 'be.IPF.IND.1PL', *siatz* 'be.IPF.IND.2PL' is attributed in existing literature to the mediaeval Occitan present subjunctive forms *siam* 'be.PRS.SBJV.1PL', *siatz* 'be.PRS.SBJV.2PL' (Camproux 1962: 491), but this account is unsatisfactory, as influence of the present subjunctive on the imperfect indicative is otherwise unknown, and cannot motivate *seiam* 'be.IPF.IND.1PL'. The established general tendency for analogical extension of initial [s] through inflectional forms of *èstre* in Occitan (see Ronjat 1937: 281–289) is a more plausible factor in the development.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1SG	<i>siái</i>	<i>siègue</i>	<i>ère</i>	<i>seguère</i>	<i>seguèsse</i>	<i>serai</i>	<i>seriái</i>
2SG	<i>siás</i>	<i>siègues</i>	<i>èras</i>	<i>seguères</i>	<i>seguèsses</i>	<i>seràs</i>	<i>seriás</i>
3SG	<i>es</i>	<i>siègue</i>	<i>èra</i>	<i>seguèt</i>	<i>seguèsse</i>	<i>serà</i>	<i>seriá</i>
1PL	<i>sem</i>	<i>seguem</i>	<i>siam</i>	<i>seguessiám</i>	<i>seguessiám</i>	<i>serem</i>	<i>seriám</i>
2PL	<i>sètz</i>	<i>seguetz</i>	<i>siatz</i>	<i>seguessiatz</i>	<i>seguessiatz</i>	<i>seretz</i>	<i>seriatz</i>
3PL	<i>son</i>	<i>siègon</i>	<i>èron</i>	<i>seguèron</i>	<i>seguèsson</i>	<i>seráun</i>	<i>seriáun</i>
1SG	'sjj	'sjɛge	'ɛRE	se'gɛRE	se'gɛse	se'raj	se'rjɛj
2SG	'sjɔs	'sjɛges	'ɛROS	se'gɛRES	se'gɛses	se'ras	se'rjɛs
3SG	'es	'sjɛge	'ɛRO	se'gɛt	se'gɛse	se'rɔ	se'rjɛ
1PL	'sen	se'gen	'sjɔn	sege'sjɔn	sege'sjɔn	se'ren	se'rjɔn
2PL	'set	se'get	'sjat	sege'sjat	sege'sjat	se'ret	se'rjat
3PL	'su	'sjɛgu	'ɛRU	se'gɛRU	se'gɛsu	se'rɔw	se'rjɛw

Table 12

Finite synthetic forms of *èstre* ['ɛstre] 'be' in the variety of Saint Germain de Calberte (48.03), Gévaudan type. Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

This alternation involves a contrast within a given TAM category, between forms ending in [ʔɛRV(C)] in the first person singular, second person singular, and third person plural, and forms ending in [ʔsjVC] in the first and second person plural.

The data presented in Tables 11 and 12 indicate a plausible motivation for the extension of imperfect subjunctive forms (e.g. for Saint Germain de Calberte, *seguessiám*, *seguessiatz*) as opposed to the creation of novel forms (e.g. **segueriam*, *segueriatz* or **seguiam*, **seguiatz*): elsewhere in the inflectional system, there is a precedent for alternation between -[ʔɛRV(C)] and -[ʔsjVC] forms within a given TAM category, with exactly the distribution that would result from extension of imperfect subjunctive forms; and the series of wordforms in which this alternation pattern exists (imperfect indicative of *èstre*) already exhibits partial formal identity with the inflectional formatives occurring in the preterite.

If this hypothesis is correct, one would expect to find that the Gévaudan syncretism pattern only occurs in varieties in which forms of the *siam*, *siatz* type emerged in the imperfect indicative of *èstre*. Section 5.3 presents evidence that this is indeed the case.

5.3 Geographical and comparative evidence for the role of *èstre*

Figure 4 illustrates the variety and geographical distribution of first and second person plural imperfect indicative forms of *èstre* 'be' in the ALMC and ALLOr survey area, compared to first and second person plural preterite and imperfect subjunctive forms. The geographical range of the *siam*, *siatz* and *seiam*, *seiatz* types corresponds almost exactly to the corridor along which first and second person plural preterite forms are sharply distinguished from other preterite forms (Figure 3; Sections 4.2 and 4.3). Forms of the type *siam*, *siatz* and *seiam*, *seiatz* are thus attested over a much wider zone than the Gévaudan syncretism pattern, a finding

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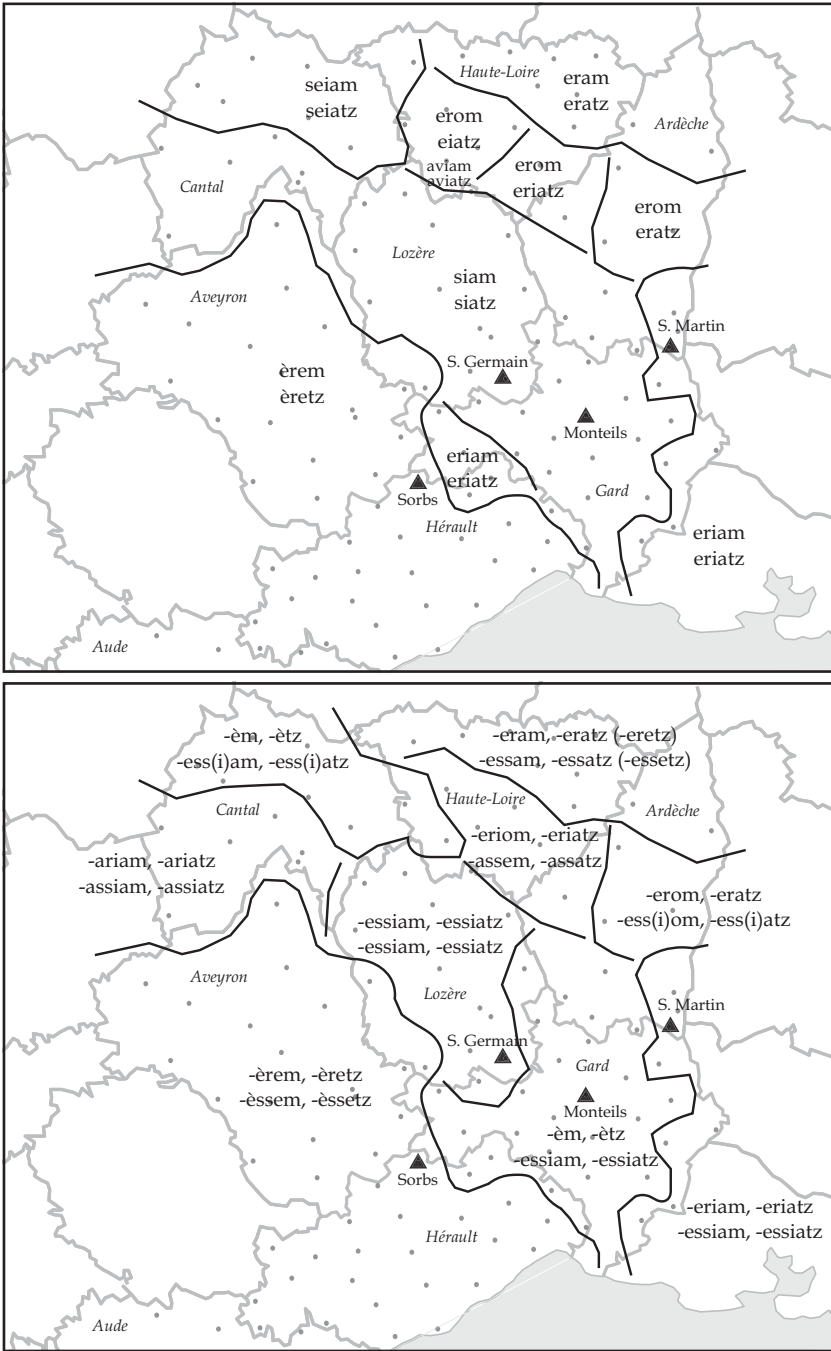


Figure 4

Comparison of geographical distribution: above, first and second person plural imperfect indicative forms of *être* 'be'; below, first and second person plural preterite and imperfect subjunctive formatives for all verbs (reproduction of Figure 3). Classical orthography, abstracting over localised phonetic variation. The exemplar varieties Saint Germain de Calberte (Gévaudan type), Sorbs (Languedocien type), Monteils (Gard type), and Saint Martin d'Ardèche (Provençal type) are marked with a triangle.

<i>tirar</i> 'drag'						
	PRET, Aurillac		IPF.SBJV, Aurillac area		PRET, 10–15 km east of Aurillac	
1SG	<i>tirère</i>	ti' rere	<i>tirèsse</i>	ti' rese	<i>tirère</i>	ti' rere
2SG	<i>tirères</i>	ti' reres	<i>tirèsses</i>	ti' reses	<i>tirères</i>	ti' reres
3SG	<i>tirèt</i>	ti' ret	<i>tirèssu</i>	ti' resu	<i>tirèt</i>	ti' ret
1PL	<i>tirorion</i>	tirɔ' rjɔn	<i>tirossion</i>	tirɔ' sjon	<i>tirossion</i>	tirɔ' sjon
2PL	<i>tirorias</i>	tirɔ' rjas	<i>tirossias</i>	tirɔ' sjas	<i>tirossias</i>	tirɔ' sjas
3PL	<i>tirèrou</i>	ti' reru	<i>tirèssou</i>	ti' resu	<i>tirèrou</i>	ti' reru

Table 13

Preterite and imperfect subjunctive forms for Aurillac (Ronjat 1937: 259); source orthography with IPA conversion.

consistent with the view that the emergence of *siam*, *siatz* and *seiam*, *seiatz* in the imperfect indicative of *èstre* occurs independently of, and prior to, the emergence of *-essiam*, *-essiatz* in the preterite.

Further evidence potentially corroborating the role of *siam*, *siatz* as a necessary though not automatically sufficient precondition for the emergence of the Gévaudan syncretism pattern is provided by Ronjat's (1937: 259) data for the locality of Aurillac in south-western Cantal (Table 13).¹⁵ Ronjat notes two patterns of preterite inflection: one, characteristic of Aurillac itself, in which first and second person plural preterite forms are of the *-ariam* [-ɔ' rjɔn], *-ariatz* [-ɔ' rja(s)] type, as in the ALMC data (see Figures 3 and 4); and a variant attested 10–15 km east of Aurillac, in which first and second person plural preterite forms exhibit syncretism with the corresponding imperfect subjunctive, as in the Gévaudan. Note that the theme vowel [ɔ] in first and second person plural forms originates in historical [a] (see Moulin 2006: 20), although mediaeval and comparative data indicate that [e] would be expected; [ɔ] is imported from the first and second person plural forms of the first-conjugation synthetic conditional (e.g. *tirorion* [tirɔ' rjɔn] 'drag.COND.1PL') and/or first-conjugation imperfect indicative (e.g. *tirobion* [tirɔ' βjɔn] 'drag.IPF.IND.1PL').

If the data given by Ronjat are indeed authentic, they indicate a sporadic innovation in this single locality: the replacement of established preterite forms in *-ariam*, *-ariatz* (found consistently across the southern part of Cantal) by forms syncretic with the corresponding imperfect subjunctive forms. It is significant that, although distant and isolated from varieties exhibiting the Gévaudan syncretism pattern, Aurillac falls within the zone where the imperfect indicative of *èstre* systematically instantiates alternation between [s]-forms in the first and second person plural, and [r]-forms in the other persons. These data are consistent with two separate actuations of the same

[15] Regrettably, it has not been possible to obtain demonstrably independent confirmation of Ronjat's data. Equivalent data are given by Alibèrt (1976: 118, 121), but the possibility that these are reproduced from Ronjat's grammar cannot be excluded. The network of ALMC survey points does not cover the relevant area; the nearest localities for which data are available are Saint Simon (ALMC survey point 42), approximately 5 km north-east of Aurillac, and Pierrefort (ALMC survey point 43), nearly 50 km east of Aurillac.

innovation (i.e. syncretism between preterite and imperfect subjunctive in first and second person plural, mediated by the inflectional precedent of *èstre*). The data for Aurillac further indicate that replacement of *-ariam* [-ɔ'ɾjɔn], *-ariatz* [-ɔ'ɾja(s)] forms by *-assiam* [-ɔ'sjɔn], *-assiatz* [-ɔ'sja(s)] forms is empirically possible. However, the sporadic nature of this change, which does not spread to adjacent varieties and is not attested in the ALMC data, suggests that *-ariam*, *-ariatz* preterite forms, which display close formal similarity to inflectional formatives of other TAM categories, are more resistant to analogical remodelling than the *-èm* [-'ɛn], *-ètz* [-'ɛs] preterite forms, which are more isolated within the inflectional paradigm.

6. CONTRIBUTING FACTORS: FREQUENCY AND PARADIGMATIC DISTRIBUTION PATTERNS

Formal, historical, and comparative data together indicate that the imperfect indicative of *èstre* 'be' acts as a crucial template for the Gévaudan preterite forms. For a single, high token frequency lexeme to influence the series of preterite desinences found for all lexemes is unexpected in the light of existing theoretical work on inflectional analogy, which instead identifies patterns of high lexical type frequency as preferred models for change (see e.g. Albright 2009).¹⁶ While the wider theoretical question cannot be resolved within the scope of the present paper, it is relevant to note a number of additional factors which conspire to favour the Gévaudan development.

6.1 *First and second person plural forms as a domain for analogical change*

Isolated instances of analogy affecting first and second person plural forms respectively across distinct TAM categories are noted by several authors for Gallo- and Ibero-Romance varieties (see e.g. Pato & O'Neill 2013; Esher 2018, 2022; Maiden 2018: 111, 291; also Note 11), where such analogies are ordinarily explicable in terms of propagating or aligning existing morphomic distributions of inflectional exponents (Enger 2014; Esher 2015). A more systematic study is conducted by Milizia (2016) for Italo-Romance verb inflection, whose findings offer an instructive comparison with the Gévaudan data.

Milizia's study documents cases in which desinential exponents originating in one TAM category are extended by analogy to another TAM category, resulting in syncretism either between desinential material or between entire wordforms. Consistently, both and only first and second person plural forms are affected, but diverse pairings of TAM categories are involved (preterite and imperfect subjunctive; preterite and imperfect indicative; imperfect subjunctive and conditional; imperfect

[16] The issue merits investigation since a number of possible diachronic examples have been suggested: these include, for Germanic, influence of the anaphoric pronoun on strong adjective inflection (Fulk 2018: 189, 209) and possible influence of *dom(i) 'I do' on weak verb inflection (Cowgill 1959: 11; Fulk 2018: 307–308), and, for Romance, influence of *fui* 'I was', etc., on the development of preterites with theme vowel /u/ or /y/ (Allières 1988).

indicative and conditional), with diverse directionalities (in some varieties, desinences originating in the preterite are extended into the imperfect subjunctive; in other varieties, desinences originating in the imperfect subjunctive are extended into the preterite). The data resist explanation in terms of inflectional feature values since no overall tendency can be discerned; in any case, there is no compelling functional reason why morphosyntactic distinctions of tense, aspect and mood should be of lesser importance in the first and second person plural than for other person/number combinations (Milizia 2016: 111–112).

Milizia argues instead for an account in terms of relative frequency, based notably on the low token frequency of first and second person plural cells compared to other personal forms for a given TAM category, and a principle of dispreference of cumulative exponents unique to low token frequency cells (2016: 90).¹⁷ Analogical extension of desinences from one TAM category to another typically evicts exponents uniquely associated with low token frequency forms, introducing exponents of higher paradigmatic type frequency in their place. Such extension may take the form either of SEMI-SEPARATE EXPONENCE in which desinences can be segmented into a formative correlated with TAM category and a formative correlated with person/number combination, maintaining existing contrasts while reducing cumulative exponence (2016: 102–108); or of COMPENSATORY SYNCRETISM between TAM categories for the relevant person/number combinations, which maintains cumulative exponence but neutralises existing contrasts (2016: 92–102).

6.2 *Applying Milizia's approach to Occitan*

For most Occitan varieties in the survey area, first and second person plural forms outside the present indicative (which is of comparatively high token frequency, Milizia 2016: 89) can be described in terms of semi-separate exponence. Of the four major systems discussed in the present study, three consistently combine a distinctive stem with one of two series of desinences: either *-em*, *-etz* (-['en], -['es]) or *-iam*, *-iatz* (-['jan], -['jats]). These are the Languedocien type (exemplified by the variety of Sorbs; Table 14), the Provençal type (e.g. Saint Martin d'Ardèche; Table 15), and the Gévaudan type with syncretism between preterite and imperfect subjunctive (e.g. Saint Germain de Calberte; Table 16).

The exception is constituted by the Gard type with conservative preterite forms (e.g. Monteils; Table 17), historically present in the Gévaudan. This type displays a third, additional series of desinences, unique to the preterite: *-èm*, *-ètz* (-['ɛn], -['ɛs]). The low token frequency and low paradigmatic type frequency of the unique first and second person plural preterite forms identify them as preferential targets for analogical remodelling.

[17] Frequency is calculated based on a sample of spontaneous speech and drama scripts (Milizia 2016: 89).

THE INTRICATE INFLECTIONAL RELATIONSHIPS UNDERPINNING

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1PL	<i>vendèm</i>	<i>vendem</i>	<i>vendiam</i>	<i>vendèrem</i>	<i>vendèssem</i>	<i>vendrem</i>	<i>vende(r)iam</i>
2PL	<i>vendètz</i>	<i>vendetz</i>	<i>vendiatz</i>	<i>vendèretz</i>	<i>vendèssetz</i>	<i>vendretz</i>	<i>vende(r)iatz</i>
1PL	ben'dɛn	ben'den	ben'djan	ben'deren	ben'desen	bend'ren	bende'jan
2PL	ben'dɛs	ben'des	ben'djas	ben'deres	ben'deses	bend'res	bende'jas

Table 14

Finite synthetic forms of *vendre* 'sell' in the variety of Sorbs (Languedocien type; ALLOr 34.10). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1PL	<i>vendem</i>	<i>vendeguem</i>	<i>vendiam</i>	<i>vendegueriam</i>	<i>vendeguessim</i>	<i>vendrem</i>	<i>vendriam</i>
2PL	<i>vendètz</i>	<i>vendeguetz</i>	<i>vendiatz</i>	<i>vendegueriatz</i>	<i>vendeguessimatz</i>	<i>vendretz</i>	<i>vendriatz</i>
1PL	ven'dɛŋ	vende'geŋ	ven'djaŋ	vendege'rjaŋ	vendege'sjaŋ	vend'reŋ	vend'rjaŋ
2PL	ven'dɛs	vende'ges	ven'djas	vendege'rjas	vendege'sjas	vend'res	vend'rjas

Table 15

Finite synthetic forms of *vendre* 'sell' in the variety of Saint Martin d'Ardèche (Provençal type; ALLOr 07.05). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1PL	<i>vendem</i>	<i>vendeguem</i>	<i>vendiám</i>	<i>vendeguessiám</i>	<i>vendeguessiám</i>	<i>vendrem</i>	<i>vendriám</i>
2PL	<i>vendètz</i>	<i>vendeguetz</i>	<i>vendiatz</i>	<i>vendeguessiatz</i>	<i>vendeguessiatz</i>	<i>vendretz</i>	<i>vendriatz</i>
1PL	ben'den	bende'gen	ben'djɔn	bendege'sjɔn	bendege'sjɔn	bend'ren	bend'rjɔn
2PL	ben'det	bende'get	ben'djat	bendege'sjat	bendege'sjat	bend'ret	bend'rjat

Table 16

Finite synthetic forms of *vendre* 'sell' in the variety of Saint Germain de Calberte (Gévaudan type; ALLOr 48.03). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

	PRS.IND	PRS.SBJV	IPF.IND	PRET	IPF.SBJV	FUT	COND
1PL	<i>vendem</i>	<i>vendeguem</i>	<i>vendiam</i>	<i>vendeguèm</i>	<i>vendeguessim</i>	<i>vendrem</i>	<i>vendriam</i>
2PL	<i>vendètz</i>	<i>vendeguetz</i>	<i>vendiatz</i>	<i>vendeguètz</i>	<i>vendeguessimatz</i>	<i>vendretz</i>	<i>vendriatz</i>
1PL	ven'den	vende'gen	ven'djan	vende'gen	vendege'sjan	vend'ren	vend'rjan
2PL	ven'des	vende'ges	ven'djas	vende'ges	vendege'sjas	vend'res	vend'rjas

Table 17

Finite synthetic forms of *vendre* 'sell' in the variety of Monteils (Gard type; ALLOr 30.07). Above, orthographic forms according to 'classical' system; below, IPA conversion from original Gilliéron–Rousselot transcription.

6.3 The metamorphome PYTA

Also of significance in these data is the consistency of inflectional formatives within the metamorphome PYTA, illustrated in Section 4.2. Imperfect subjunctive forms in *-èssèm, -èssetz* ([-'ɛsɛn], [-'ɛsɛs]), are consistently associated with preterite forms in *-èrem, -èretz* ([-'ɛrɛn], [-'ɛrɛs]) while imperfect subjunctive forms in *-essiam, -essiatz* ([-e'sjan], [-e'sjas]) are commonly associated with preterite forms in *-eriam, -eriatz* ([-e'rjan], [-e'rjas]), as shown in Tables 14 and 15; see also Figure 3.

Thus, for a variety of the type exemplified in Table 15, if the original preterite forms in *-èm, -ètz* ([-'ɛn], [-'ɛs]) undergo replacement, the novel forms are predicted to be of the *-iam, -iatz* type ([-'jan], [-'jas]). Such replacement would more closely resemble the metamorphome-internal levelling of personal desinences described for Daco-Romance in Section 3.1, in which a given rightmost exponent is spread to all cells with a given person/number combination within the metamorphome. The introduction of originally imperfect subjunctive forms into the preterite produces consistency between the desinences of the preterite and the imperfect subjunctive (i.e. within PYTA), in addition to replacing desinences of low paradigmatic type frequency with desinences of higher paradigmatic type frequency.

Among the notable properties of the Gévaudan development is that, at the historical period during which speakers sought to extend the identity between the preterite desinences and the imperfect indicative forms of *èstre* 'be', forms closely resembling the template 'PYTA stem + *siam/siatz*' were already available within the paradigm of each lexeme. Where imperfect indicative forms such as *seiam, seiatz* and potentially *siam, siatz* (see Section 5.2) did not previously occur within the paradigm of *èstre* 'be', imperfect subjunctive forms ending in *-siam, -siatz* were already familiar to speakers, occurring with equal lexical type frequency to the preterite forms they would ultimately replace, and could simply be co-opted into the preterite.¹⁸

[18] Evidence discriminating definitively between the selection of existing imperfect subjunctive forms and the analogical creation of novel forms is not readily available, due to the minimal difference between the expected products of each route, which is limited to the presence or absence of theme vowels in certain conjugations. The alternation pattern observed for *èstre* involves a contrast between *èr-* ['ɛr] and *s-* [s]. A straightforward introduction of this alternation pattern into the preterite would erroneously predict the occurrence of first and second person plural forms without a theme vowel, such as e.g. **tirsiam* [tir'sjɔn] 'drag.PRET.1PL', **tirsiatz* [tir'sjat] 'drag.PRET.2PL' (alongside *tirère* [ti'rɛrɛ] 'drag.PRET.1SG', *tirères* [ti'rɛrɛs] 'drag.PRET.2SG'), in place of attested *tiressiam* [tire'sjɔn] 'drag.PRET.1PL', *tiressiatz* [tire'sjat] 'drag.PRET.2PL'. However, for PYTA stems with final /g/, discrimination is not possible. In Occitan, the sequence [gs] is not licit word-internally or observable across word boundaries ([g] does not occur word-finally); thus **vendegsiam* [vendeg'sjɔn] 'sell.PRET.1PL' is impossible, and there is no strong evidence on which to propose alternative realisations such as [vendes'sjɔn] 'sell.PRET.1PL'. Instead, an epenthetic vowel is required, by default [e] in Occitan, giving a realisation [vendeg'e'sjɔn] 'sell.PRET.1PL' indistinguishable from the existing imperfect subjunctive. The extension of [g]-final stems is lexically gradual: for some lexemes, such as *aver* 'have' (Table 4), [g]-final stems occur in the earliest attestations of Occitan and certainly pre-date the emergence of syncretism; for other lexemes, introduction of [g]-final stems may pre- or post-date the emergence of syncretism.

7. THE INGREDIENTS OF ANALOGY IN THE GÉVAUDAN DEVELOPMENT

The historical pathway by which the Gévaudan syncretism pattern emerged is reconstructed in the preceding sections by combining comparative dialect data from descriptive works and linguistic atlases, together with analysis of similar phenomena in Italo-Romance. This process reveals that the emergence of the pattern cannot be reduced to a straightforward case of metamorpheme-internal levelling, but is reliant on similarities and contrasts in exponence between a wide and diverse set of inflected wordforms.

The principal stages in the development of the Gévaudan syncretism pattern are schematised in Figure 5. The starting point is that, within the Gévaudan area, the rightmost exponents of first person singular, second person singular, and third person plural preterite forms (for all lexemes) inherit an identity of phonological substance with the corresponding imperfect indicative forms of the lexeme *être* 'be' (stages I and II). Subsequently, and independently, the etymological first and second person plural forms of *être* 'be' are replaced by innovative forms, giving rise to a novel pattern of alternation between forms in *èr-* ['ɛr] and forms in *s-* [s]; these innovative forms coincide exactly with the rightmost exponents of first and second person plural imperfect subjunctive forms (stage III). Speakers then extend the pattern of identity observed in stage II [between the imperfect indicative of 'be' and the preterite] from the first person singular, second person singular, and third person plural into the first and second person plural, introducing into the preterite the existing first and second person plural imperfect subjunctive forms (stage IV).¹⁹

What is remarkable about the inflectional relationships involved is that they relate to formal identity between phonological substrings of wordforms, independently of the morphosemantic or lexical content associated with those wordforms. Selection of sources and targets for analogy is sensitive to person and number values (morphosyntactic features), but occurs independently of TAM values (morphosyntactic features) and also of lexical content: the formal identities driving the analogy hold across categories with contrasting TAM values (imperfect indicative, preterite, and imperfect subjunctive) and distinct lexemes. Furthermore, the formal identities at stake hold between full inflected wordforms and parts of inflected wordforms, a configuration which has not previously been documented in the literature on autonomous morphology.

The substance and frequency of existing first and second person plural forms additionally contribute to the innovation. For the Gévaudan, the original first and second person plural preterite forms are reconstructed as ending in the unique exponents *-èm*, *-ètz*. The low paradigmatic type frequency of these exponents does not directly actuate analogical change, but renders the exponents potentially vulnerable to analogical remodelling. By contrast, two distributional properties of first and second person plural forms in *-iam*, *-iatz* identify these forms as

[19] Note Figure 5 does not show the eighteenth-century introduction of the velar augment /eg/ into verbs of this type, which is not yet reliably dated with respect to Stages III and IV.

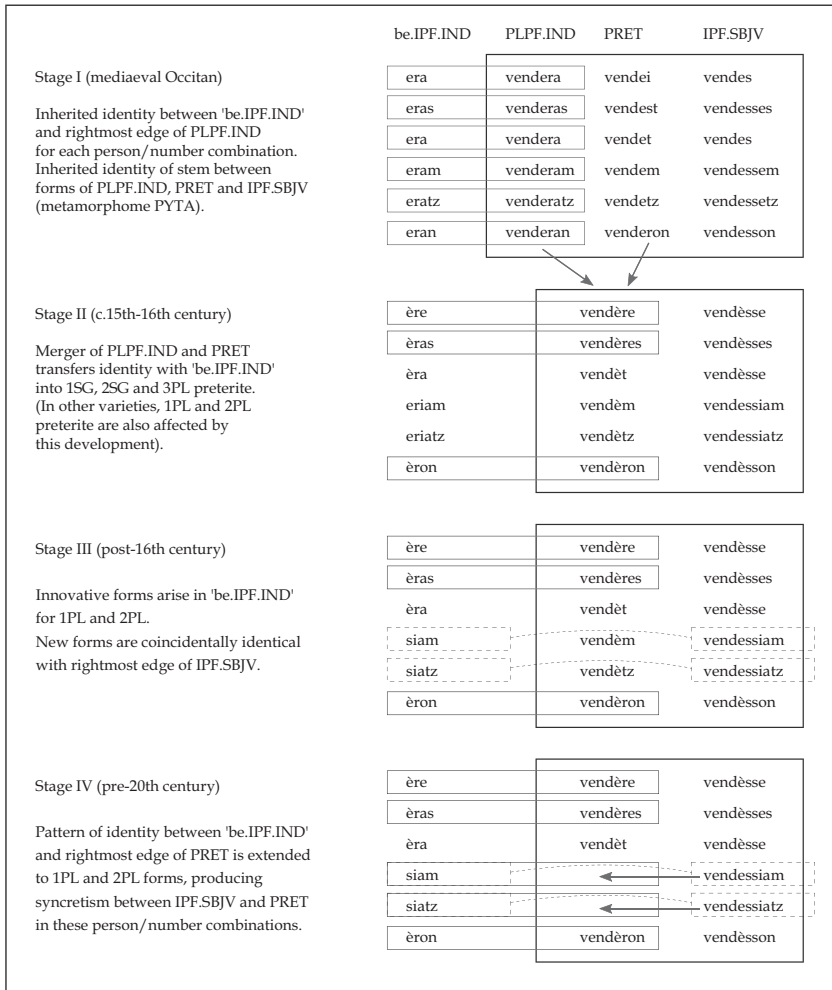


Figure 5
Four principal stages in the emergence of the Gévaudan syncretism pattern, exemplified for third-conjugation *vendre* 'sell'.

preferred sources for analogy. First, the exponents *-iam*, *-iatz* are of relatively high paradigmatic type frequency since they occur in multiple other TAM categories. Second, these exponents are also present within the imperfect subjunctive, a TAM category displaying consistent similarity of inflectional exponents (stress pattern and stem material) with the preterite. Both targets and sources for analogical remodelling occur in wordforms which share morphosyntactic feature values: first person plural forms of distinct TAM categories, or second person plural forms of distinct TAM categories.

The nature and detail of the multiple patterns underlying the emergence of the Gévaudan syncretism pattern indicate the diversity of information which is both available to speakers and productively exploited in the actuation of analogical innovations, evidencing its psychological reality and accessibility. Such information includes knowledge of: the phonological shape of inflected wordforms and substrings of wordforms (roots, thematics, desinences, stress patterns); the type frequency of these exponents within the inflectional paradigm; the patterns of their distribution within the inflectional paradigm and across lexemes, including co-occurrence between exponents and other inflectional material such as stems or stress placement; and the implicational relationships of systematic contrast or of systematic identity between inflectional forms.

8. CONCLUSION

The emergence of the Gévaudan syncretism pattern illustrates how morphological innovations can depend on multiple and intricate relationships between inflectional forms: between items ranging from substrings or individual segments to full inflected wordforms; and between distributional patterns of exponence which hold within domains ranging from a single TAM category or morphosyntactic feature combination, to domains spanning multiple, often diverse categories, or multiple lexemes. These data highlight the range of inflectional objects and formal identity patterns which can be accessed and manipulated by speakers in cases of morphological analogy. Notably, several patterns of identity at stake in the Gévaudan case hold between formatives of differing types: lexical roots or entire wordforms in the imperfect indicative correspond to thematic elements and desinences in the imperfect subjunctive and preterite. In these respects, the Gévaudan data contrast significantly with more familiar instances of morphological analogy, in which direct influence is exerted by one root alternant over another, or by one desinential exponent over another (see Fertig 2016 for examples).

Since analogy within inflectional paradigms instantiates more general morphological processes (Fertig 2016) and also closely reflects speaker knowledge of inflectional structure (Maiden 2018; Feist & Palancar 2021), an empirically plausible account of morphological analogy must be founded on a synchronic theory of morphology equipped to capture the inflectional objects and relationships implicated in observed analogical changes. In the case of the Gévaudan syncretism pattern, the dense and intricate network of relationships crucial to the emergence of the pattern instantiates precisely the inflectional structure assumed by abstractive, information-theoretic or item-and-pattern theories of inflection, advocated for by scholars including Blevins (2006, 2016), O'Neill (2014), Ackerman & Malouf (2016), and Bonami & Beniamine (2021). Such theories assign no definitive segmentation to wordforms, and no distinctive status to inflectional formatives below the level of the word. They are described by Blevins et al. (2019: 277–278) as 'defined less by the units [they] recognis[e] than by the relations they establis[h] between units', where the 'units' which speakers store and access are whole

inflectional wordforms, over which speakers abstract recurrent patterns of identity and alternation between substrings of individual wordforms; thus, each inflectional wordform enters into multiple simultaneous relationships of mutual implication and predictiveness (see Bonami & Beniamine 2021 for the ongoing development of approaches to explicit characterisation of relationships among aspects of inflectional form within paradigms).

These fundamental properties of inflectional systems in abstractive theories correspond exactly to the variable segmentations, diverse morphological units, and multi-faceted relationships which speakers demonstrably manipulate in the history of the Gévaudan syncretism pattern. The Gévaudan data thus provide persuasive empirical evidence in favour of adopting abstractive morphological theories which recognise inflectional paradigms and paradigmatic structure.

The data further highlight the wide range of inflectional information to which speakers attend, including but not limited to inventories of wordforms, substrings of wordforms, the bundles of feature values associated with wordforms, paradigmatic relationships of similarity and contrast between wordforms instantiating particular bundles of feature values, co-occurrence between substrings, and type and token frequencies of wordforms or substrings. The potentially high computational load associated with accessing and manipulating this information points to the limits on which factors speakers attend to, and the relative weighting of individual factors, as constituting key issues for further investigation; both fine-grained comparative examination of empirical diachronic changes and computational simulation of analogical change in controlled conditions (compare e.g. Albright 2009; Skousen 2009; Ackerman & Malouf 2015) offer promising avenues for elucidating these questions.

COMPETING INTERESTS

The author declares none.

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