Analogy and Irregularity in Romance Verbal Morphology

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Abstract

In this paper I will focus on connections between analogy and irregularity; in particular, I aim at exploring the possibility of establishing to what degree analogical processes, which are usually considered arbitrary in traditional linguistic literature, can be predicted. I am mainly going to analyse a special kind of analogy, that is the rise and spreading of a group of irregular verbs as a *class* able to attract new members.

As is well known, Romance verbal morphology is characterized by great irregularity. A diachronic perspective reveals that irregularity is not only the result of regular processes of a purely phonological nature: a significative part of irregular verbal forms are the result of analogical processes. It seems obvious that phonological changes produce some results that are "unnatural" as regarding the verbal system, because they are blind to the paradigmatic configuration; onthe contrary, it is a surprising fact that analogy can produce irregularity, since its motivation is intrinsically morphological. Since analogy can originate irregularity, then shall we conclude that morphological change is completely arbitrary?

1.   Some terminology

Before entering the main issue, it is necessary to give some preliminary explanation as regards some terminology I am using. The expression "Basic Stem" (hereafter BS, S in the tables), from Aronoff 1994 and Pirrelli&Battista 2000a, will be employed to refer to the basis for the formation of the stem or stems in a verbal paradigm[1]; then a BS is *synchronically* unpredictable on the basis of another stem in the paradigm. The BS is unique in the completely regular verbs, while the BS number increases according to irregularity in the considered paradigm, as we can see in tables 1 and 2. In these tables we can observe the present of the indicative and the subjunctive of three verbs presenting different degrees of irregularity, in Castilian and Galician: the first one, *andar*, is wholly regular, with only one BS both in the indicative and in the subjunctive; on the other hand, *conocer* and *ver* show two BSs, *venir* and *facer* three. (Note that in Galician the grapheme <x> corresponds to the fricative prepalatal voiceless phoneme /ʃ/).

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[1] "Hereafter, we then will use the Aronovian notion of basic stem to refer to basic stem roots rather than stems proper" (Pirrelli&Battista 2000a: 316).

PRESENT INDICATIVE and SUBJUNCTIVE					
ANDAR ('to walk')		CONOCER ('to know')		VENIR ('to come')	
S_1 *And-o*	S_1 *And-e*	S_2 *Conozc-o*	S_2 *Conozc-a*	S_2 *Veng-o*	S_2 *Veng-a*
S_1 *And-as*	S_1 *And-es*	S_1 *Conoc-es*	S_2 *Conozc-as*	S_3 *Vien-es*	S_2 *Veng-as*
S_1 *And-a*	S_1 *And-e*	S_1 *Conoc-e*	S_2 *Conozc-a*	S_3 *Vien-e*	S_2 *Veng-a*
S_1 *And-amos*	S_1 *And-emos*	S_1 *Conoc-emos*	S_2 *Conozc-amos*	S_1 *Ven-imos*	S_2 *Veng-amos*
S_1 *And-áis*	S_1 *And-éis*	S_1 *Conoc-éis*	S_2 *Conozc-áis*	S_1 *Ven-ís*	S_2 *Veng-áis*
S_1 *And-an*	S_1 *And-en*	S_1 *Conoc-en*	S_2 *Conozc-an*	S_3 *Vien-en*	S_2 *Veng-an*

Table 1: Castilian

PRESENT INDICATIVE and SUBJUNCTIVE					
ANDAR ('to walk')		VER ('to see')		FACER ('to do')	
S_1 *And-o*	S_1 *And-e*	S_2 *Vex-o*	S_2 *Vex-a*	S_2 *Fag-o*	S_2 *Fag -a*
S_1 *And-as*	S_1 *And-es*	S_1 *V-es*	S_2 *Vex-as*	S_3 *F-as*	S_2 *Fag -as*
S_1 *And-a*	S_1 *And-e*	S_1 *V-e*	S_2 *Vex-a*	S_3 *F-ai*	S_2 *Fag -a*
S_1 *And-amos*	S_1 *And-emos*	S_1 *V-emos*	S_2 *Vex-amos*	S_1 *Fac-emos*	S_2 *Fag -amos*
S_1 *And-ades*	S_1 *And-edes*	S_1 *V-edes*	S_2 *Vex-ades*	S_1 *Fac-edes*	S_2 *Fag -ades*
S_1 *And-an*	S_1 *And-en*	S_1 *V-en*	S_2 *Vex-an*	S_3 *F-an*	S_2 *Fag -an*

Table 2: Galician

Index 1 is assigned to the unmarked BS, that is the most widely distributed one throughout the paradigm.

Another important definition coming from Pirrelli&Battista 2000a is that of "partition class". The partition class is the set of verbal forms sharing the same BS in one paradigm. For example, as we can see in tables 1-2, the partition class of the BSs *conozc-* and *veng-* (in Castilian), or *vex-* and *fag-* (in Galician) consists of the 1st person of present indicative and all the persons in the subjunctive. We underline that this is a set of forms which are completely heterogeneous from a semantic and a morphosyntactic point of view, and that synchronically this partition has no other justification than the morphological one: that's what Aronoff 1994 calls "morphome".

Maiden's diachronic analysis shows very clearly that even though the origin of these morphomic structures, or partition classes, is phonologically motivated, their survival and persistence within the Romance verbal system go beyond the etymological reasons: after their phonological rise, they began living their own life and spreading to verbs lacking the basic phonological conditions.

Thus, analogical change gives clear proof of the existence of the morphome and of its morphological autonomy, following the patterns shaped by the partition classes. But now we'll see that, observing different types of analogical processes. Maiden classifies them under the label of coherence, convergence and attraction. We will accept and develop his classification.

2.   Typologies of analogical processes

Today we're going to examine only analogical processes regarding stems, and we will leave out from our analysis the processes on inflectional endings. According to the effects and directions of analogical changes on stems, we can classify them as it follows:

- intraparadigmatic regularization, which includes
    a. partial levelling and
    b. morphomic coherence;

- interparadigmatic adaptation, or convergence;

- morphomic productivity, split up in
    c. attraction and
    d. enlargement.

In this paper we're going to deal mainly with the third type, the morphomic productivity, which is more meaningful to our analysis.

2.1.   Intraparadigmatic regularization

It can be described as a tendency towards the regularization of a paradigm, by decreasing radical allomorphies or suppletion inherited from Latin. It has two mechanisms of expression: partial levelling and morphomic coherence.

2.1.1. Partial levelling

The partial levelling shows the unity between the forms of the same partial paradigm (for example, the present indicative): the substitution of a BS with another occurs within a partial paradigm, but not within the whole verbal paradigm. Some examples are given in (1), (2) and (3).
Some Romance languages remove or decrease the radical suppletivism in the inflection. Let us considere, for instance, the present indicative of 'to go':

(1)   old Castilian:
         present indicative*: voy, vas, va, imos, ides, van;*
         subjunctive *vaya, vayas, vaya, vayamos / vamos, vayades / vades, vayan*

         modern Castilian:
         present indicative: *voy, vas, va, vamos, vais, van;*
         subjunctive *vaya, vayas, vaya, vayamos, vayáis, vayan*

(2)   Catalan:
         present indicative: *vaig, vas, va, anem, aneu, van,*
         (but) perfective periphrasi: *vaig, vas, va, vam, vau, van*;

(3)   some Lombard dialects (cfr. AIS VIII, 1692).:
         a dialect spoken near Milan: *vo, ve, va, vem, ve, van*;
         Como *vu, vet, va, vem, vi, van*

2.1.2. Morphomic coherence

The regularization can operate in a subtler way, when it uniforms from a phonological point of view the forms of a partition class. This is the analogical type called coherence by Maiden. It shows that the mutual implication between the forms of the same partition class keeps on being intact (e.g. 1st person pres. ind. <=> pres. cong.), in spite of their phonological and functional difference. Practically this means that a phonological change affecting one form could equally affect all the other forms of the same partition, regardless of the different phonological conditions.

A clear example for this analogical type is found in the Ibero-Romance perfective basic stems, characterised now by a high vowel [i] or [u] in all the partition class (preterite, imperfect subjunctive and future subjunctive); but the high vowel is phonologically regular only in the 1st person of the preterite, as shown in the medieval phases. This case has been discussed by Maiden 2001; we add here some data from Galician in Table 3.

LATIN PERFECTIVE STEM	OLD GALICIAN PERFECTIVE STEM		MODERN GALICIAN UNIQUE PERFECTIVE STEM
	1p preterite (metaphonic)	other forms of the partition	
POSU-	pus	pos-	pux- ('put')
POTU-	pude	pod-	puid- ('could')
FEC-	fiz	fez-	fix- ('did')
SEDU-	sive	sev-	(fu-) ('was')
CREDU-	crive	crev-	(reg. cre-) ('believed')
(TENU-)	tive	tev-	tiv- ('had')
(STET-)[2]	estive	estev-	estiv- ('stood')

Table 3: morphomic coherence of the Galician perfective basic stems

2.2. Interparadigmatic adaptation

So far, we have quickly seen an analogical process with a phonologically motivated origin for every verb, at least in one form of the paradigm; but sometimes a phonological feature analogically extended acquires such a relevance that it becomes a sort of mark, and then it is taken up by paradigms completely lacking the basic phonological conditions. It is the second analogical type, the interparadigmatic adaptation, or convergence (Maiden).

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[2] *Tive* and *estive* are analogical to *sive* (the regular form *estede* is rarely attested); let us notice, in the paradigm of *ser*, 'to be', the suppletive forms from SEDERE in medieval Galician, from which not only the old preterite derives, but the modern present subjunctive as well: SEDEA > *seja* > *sexa*.

Table 4 presents some strong preterites in Castilian: the verbs of group 3, anduve, cupe, hube, etc., present in the actual perfective stem a high vowel, which is neither etymological -as in group 1- nor the outcome of coherence -as in group 2-. This high vowel is, indeed, an effect of the adaptation to the general feature of strong perfective stems, though these verbs lack the phonological conditions for the vocalic rising. Even for the preterite of traer, traje, a stem truj- is locally attested (truje(n)..., trujera..., trujese...) e.g. in León (Paradaseca do Bierzo, ALGa maps 386, 387, 391).

LATIN PEFECTIVE STEMS	OLD CAST. PERFECTIVE STEMS	MODERN CAST. PERFECTIVE STEMS	VERBAL LEXEME
GROUP 1	S WITH AN ETYMOLOGICAL HIGH VOWEL		
CINX-	Cinx-	(Reg. > ceñí)	Ceñir, 'to encircle'
DUX-	(Con)duj-	(con)duj-	Conducir, 'conduct'
DIX-	Dij-	dij-	Decir, 'to say'
SCRIPS-	Escris-	(Reg. > escribí)	Escribir, 'to write'
FU-	Fu- (/Sov-)	fu-	Ser, 'to be'
MIS-	Mis-	(Reg. > metí)	Meter, 'to put'
VID-	Vid-	> vi-	Ver, 'to see'
VIX-	Visqu-	(Reg. > viví)	Vivir, 'to live'
GROUP 2	S WITH A METAPHONETIC HIGH VOWEL IN 1p (EXTENDED FOR COHERENCE)		
COGNOU->*CONOV-	Conuv- / conov-	(Reg. > conocí)	Conocer,'to know'
STET-	Estid- / ested-	(> estuv-)	Estar, 'to stay'
FEC-	Hiz- / hez-	> hiz-	Hacer, 'to do'
POT(U)-	Pud- / pod-	> pud-	Poder, 'can'
POS(U)-	Pus- / pos-	pus-	Poner, 'to put'
QUAES(IU)-	Quis- /ques-	quis-	Querer, 'to want'
VEN-	Vin- /ven-	vin-	Venir, 'to come'
GROUP 3	S WITH A COMPLETELY ANALOGICAL HIGH VOWEL		
(*AND-)	Andov-	anduv-	Andar, 'to walk'
*CAPUI- > *CAUP-	Cop-	> cup-	Caber, 'to go into'
(CREDID-)	Crov-	(Reg. > creí)	Creer, 'to believe'
HABU- > *HAUB-	Ov-	> hub-	Haber, 'to have'
PLACUI- > *PLAUC-	Plog-	> plug-	Placer, 'to please'
SAPU- > *SAUP-	Sop-	> sup-	Saber, 'to know'
(TENU-)	Tov-	> tuv-	Tener, 'to have got'
IACUI- > *IAUC-	Yog-	Reg. > yací	Yacer, 'to lie'
TRAX-	Traj-	traj- (truj-)	Traer, 'to bring'

Table 4: perfective stems in Castilian

We find wide and clear evidence for convergence in the Romance languages, but I will limit myself here to show some data from Galician.

In table 5 we can see the present subjunctive of a group of very irregular Galician verbs. The regular phonological evolution made these subjunctive stems highly marked, and peculiar to the subjunctive alone. These paradigms converge from a morphological point of view, because they share this peculiar distribution of the subjunctive basic stem. In the column on the left there are the standard forms, which are

in large part etymological[3]; but the microvariation throughout the Galician territory reveals some interesting outcomes splitting off from the etymological ones: we can observe such variations in the four columns on the right (the data come from ALGa, maps 230 to 389). Each variation pattern shows a phonological sequence analogically acquired from one or more "leading" verbs, e.g: by analogy with *teña* and *veña* we find

- *feña* (instead of *faga*),
- *deña*, *esteña* (instead of *dea*, *estea*),
- and *seña* (instead of *sexa*),

and so on (the geographical distribution is given in the note 4).

The relevant issue is the following one: some paradigms which already share a morphological -that is distributive- convergence, after this process has taken place, they share a phonological convergence as well. The morphomic structure becomes then more strongly compact.

VERBAL LEXEME	Standard subj.	"analogizing" S feature			
		-eñ+a	-x-+a	-aiC+a	-dipht.+a
dicir 'to say' facer 'to do'	DIGA FAGA	feña		faiga	faia
ir 'to go' traer 'to bring' oír 'to hear'	VAIA TRAIA OIA		vaixa oixa		VAIA TRAIA OIA
dar 'to give' estar 'to stay'	DEA ESTEA	deña esteña	estexa		deia esteia
pór 'to put' ter 'to have got' vir 'to come'	POÑA TEÑA VEÑA	POÑA TEÑA VEÑA			
haber 'to have' ser 'to be' ver 'to see'	HAXA SEXA VEXA	seña	HAXA SEXA VEXA	haixa / haiba	haia seia
poder 'can' querer 'to want' saber 'to know'	POIDA QUEIRA SAIBA			POIDA QUEIRA SAIBA	

Table 5 : irregular subjunctives in Galician[4] (<x> = / ∫ /).

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[3] Lat. DEM, STEM mediev. Galician *dé*, *esté* (modern Galician adds -a); FACJAM > med. Gal. *faça*; *faga*, attested from the XVth century, is probably originated by morphomic coherence with the 1st person *fago* (analogical to *digo*); HABEAM > *haja* > *haxa*; VIDEAM > *vexa*; SEDEAM > *seja* > *sexa*, but also *sea* (se+a) is attested from the XIIIth century, and nowadays emploied in an area of Galicia; VADAM > *vaa* > *vaja* (-j- anti-hyatus); POSSAM > med. Gal. *possa*; *poida* is analogical to *queira* and *saiba* (< *QUAERIAM, SAPIAM); PONEAM, TENEAM, VENJAM > *poña, teña, veña* (cfr. Ferreiro 1999: §§ 204-223).
[4] Geographical distribution of the subjunctives in table 5:
- *feña, deña, esteña, seña*: Asturias and northern of Lugo and A Coruña provinces (*feña...* is attested only at Calvario de Salave, Asturias). S*eña* is the most widely spred; - *vaixa, oixa, estexa*: provinces of Lugo (Pobra do Brollón), A Coruña (Mesoiro), Pontevedra (Fefiñáns), but *estexa* is also a literary form; - *faiga, haiba, haixa*: *haixa* in some localities of the provinces of Pontevedra, Lugo and A Coruña (Mesoiro); *haiba* in the northern part of A Coruña; *faiga* well attested in the provinces of Lugo, A Coruña and in Asturias; - *faia, deia, esteia, haia, seia*: mainly in the province of Pontevedra.

2.3.   Morphomic productivity

There's a kind of analogy in which we can observe the extension and reproduction not only of some phonological features of the morpheme (as it happens in convergence), but also of its structure, which is acquired by paradigms that didn't share it before. For instance, in the Galician dialect of Asturias we find, in the paradigm of ser 'to be', in addition to the analogical subjunctive seña (see table 5), the 1st person of present indicative seño instead of son.

This is a meaningful fact, for the following reason: ser, 'to be', in Galician as in the other Romance languages, is so irregular that it escapes from any distributive generalization and has its own partition. The partition of ser lacks that correlation between the subjunctive and the 1st person, which is so systematic in other verbs. What happened? In addition to the phonological sequence -eñ- characterising the subjunctive (*teña, veña* > analogical *seña* replacing *sexa*), from the verbs ter, vir what spreads in this case is the partition class, that in ter and vir includes, along with the subjunctive, the 1st person of present indicative (*teño, veño > seño*). This is a case of morphomic productivity, called "attraction" by Maiden. We'll distinguish the cases of attraction stricto sensu (in § 2.3.1) from some phenomena that we define enlargement of the basic stem (in § 2.3.2): they are two processes sharing the morphomic origin, but with very different modalities and issues.

2.3.1.   Attraction

In the process of attraction, as we have just seen, the morpheme spreads both some phonological features and its own distributional pattern. One more example: in Galician, groups of irregular verbs of 2nd and 3rd conjugationshow in their basic stem a vocalic opening alternation which is not always etymological.
Galician verbs with a mid vowel in their unmarked basic stem show an alternation between a closed vowel and an open vowel; this variation is not phonological in all the cases. The observation of this phenomenon is relevant for the present indicative and subjunctive and for the imperative, where we find an alternation between stressed and unstressed stems (elsewhere the unmarked stem is always unstressed, and the mid vowel is automatically closed, unless we have the case of analogical levelling on the basis of the open vowel).

In the 1[st] conjugation the alternation, if it is applied, is automatic, since it depends on stress position: mid vowels are open if stressed, closed if unstressed, as shown in (4) and (5):

(4)   *levar* 'carry':
      pres. ind. l[ɛ]v-o, l[ɛ]v-as, l[ɛ]v-a, l[e]v-<u>a</u>mos, l[e]v-<u>a</u>des, l[ɛ]v-an
      Pres. subj. l[ɛ]v-e, l[è]v-es, l[ɛ]v-e, l[e]v-<u>e</u>mos, l[e]v-<u>e</u>des, l[ɛ]v-en

(5)   *rogar* 'pray':
      pres.ind. r[ɔ]g-o, r[ɔ]g-as, r[ɔ]g-a, r[o]g-<u>a</u>mos, r[o]g-<u>a</u>des, r[ɔ]g-an
      Pres.subj. r[ɔ]gu-e, r[ɔ]gu-es, r[ɔ]gu-e, r[o]gu-<u>e</u>mos, r[o]gu-<u>e</u>des, r[ɔ]gu-en

But in the 2nd conjugation, except for some paradigms levelling their vocalic opening (a coherence effect), most verbs with a mid vowel in the unmarked stem present an opening variation even within root-stressed forms: let's look at the tables 6 and 7 (4th and 5th persons are colourless, having unstressed root vowels, naturally closed):

FERVERE > *ferver*, 'to boil'				
PRESENT INDICATIVE		PRESENT SUBJUNCTIVE		
FERV-EO > *ferv-o*	[e]	FERV-EAM > *ferv-a*	[e]	
FERV-ES > *ferv-es*	[ɛ]	FERV-EAS > *ferv-as*	[e]	
FERV-ET > *ferv-e*	[ɛ]	FERV-EAT > *ferv-a*	[e]	
(FERV-EMUS > *ferv-emos*) (FERV-ETIS > *ferv-edes*)		(FERV-EAMUS > *ferv-amos*) (FERV-EATIS > *ferv-ades*)		
FERV-ENT > *ferv-en*	[ɛ]	FERV-EANT > *ferv-an*	[e]	

Table 6

MOVERE > *mover*, 'to move'				
PRESENT INDICATIVE		PRESENT SUBJUNCTIVE		
MOV-EO > *mov-o*	[o]	MOV-EAM > *mov-a*	[o]	
MOV-ES > *mov-es*	[ɔ]	MOV-EAS > *mov-as*	[o]	
MOV-ET > *mov-e*	[ɔ]	MOV-EAT > *mov-a*	[o]	
(MOV-EMUS > *mov-emos*) (MOV-ETIS > *mov-edes*)		(MOV-EAMUS > *mov-amos*) (MOV-EATIS > *mov-ades*)		
MOV-ENT > mov-en	[ɔ]	MOV-EANT > *mov-an*	[o]	

Table 7

We can notice that some mid vowels are closed despite bearing stress, in the 1st person of present indicative and 1st, 2nd, 3rd and 6th of subjunctive; the origin of the vocalic rising is metaphony on Latin short E and O followed by a glide in the subsequent syllable. But the relevant fact is that we can find the same alternation pattern in many paradigms lacking the phonological condition (Latin short E or O followed by a glide); in (6) and (7) we have some examples. All these verbs share the alternation pattern as seen in tables 6 and 7, but their Latin vowel didn't undergoes metaphony, or there was no glide, or both of them:

(6)   verbs whose Latin mid vowel could not undergo metaphony:

- mexer 'to swing': pres. ind. MISCEO... > m[e]x-o, m[ɛ]x-es, m[ɛ]x-e, (mex-emos, mex-edes), m[ɛ]x-en; pres. subj. MISCEAM... > m[e]x-a, m[e]x-as, m[e]x-a, (mex-amos, mex-ades), m[e]x-an
- temer 'to fear': pres. ind. TIMEO... > t[e]m-o, t[ɛ]m-es, t[ɛ]m-e, (tem-emos, tem-edes), t[ɛ]m-en; pres. subj. TIMEAM... > t[e]m-a, t[e]m-as, t[e]m-a, (tem-amos, tem-ades), t[e]m-an

- poñer 'to put': pres. ind. *PONEO... > p[o]ñ-o, p[ɔ]-s, p[ɔ]-n, (poñ-emos, poñ-edes), p[ɔ]ñ-en; pres. subj. *PONEAM... > p[o]ñ-a, p[o]ñ-as, p[o]ñ-a, (poñ-amos, poñ-ades), p[o]ñ-an
- beber 'to drink': pres. ind. BIBO... > b[e]b-o, b[ɛ]b-es, b[ɛ]b-e, (beb-emos, beb-edes), b[ɛ]b-en; pres. subj. BIBAM... > b[e]b-a, b[e]b-as, b[e]b-a, (beb-amos, beb-ades), b[e]b-an
- vender 'to sell': pres. ind. VENDO... > v[e]nd-o, v[ɛ]nd-es, v[ɛ]nd-e, (vend-emos, vend-edes), v[ɛ]nd-en; pres. subj. VENDAM... > v[e]nd-a, v[e]nd-as, v[e]nd-a, (vend-amos, vend-ades), v[e]nd-an
- correr 'to run': pres. ind. CORRO... > c[o]rr-o, c[ɔ]rr-es, c[ɔ]rr-e, (corr-emos, corr-edes), c[ɔ]rr-en; pres. subj. CORRAM... > c[o]rr-a, c[o]rr-as, c[o]rr-a, (corr-amos, corr-ades), c[o]rr-an

(7)   verbs without a glide in the final syllable:

- perder 'to loose': pres. ind. PERDO... > p[e]rd-o, p[ɛ]rd-es, p[ɛ]rd-e, (perd-emos, perd-edes), p[ɛ]rd-en; pres. subj. PERDAM... > p[e]rd-a, p[e]rd-as, p[e]rd-a, (perd-amos, perd-ades), p[e]rd-an
- volver 'to come back': pres. ind. VOLVO... > v[o]lv-o, v[ɔ]lv-es, v[ɔ]lv-e, (volv-emos, volv-edes), v[ɔ]lv-en; pres. subj. VOLVAM... > v[o]lv-a, v[o]lv-as, v[o]lv-a, (volv-amos, volv-ades), v[o]lv-an
- coller 'to catch': pres. ind. COLLIGO... > c[o]ll-o, c[ɔ]ll-es, c[ɔ]ll-e, (coll-emos, coll-edes), c[ɔ]ll-en; pres. subj. COLLIGAM... > c[o]ll-a, c[o]ll-as, c[o]ll-a, (coll-amos, coll-ades), c[o]ll-an

Synchronically we can't explain this alternation, and probably it couldn't exist, if a morphomic structure (as we see in table 8) had not become a systematic distributional pattern, during the language evolution (2nd-3rd -6th ind. / 1st -4th -5th ind. + subj.). Its origin is phonologically motivated, but the partition classes have been fixed beyond the diachronic reason, and have been reinforced by attraction of new members.

Distributional pattern	
PRESENT INDICATIVE	PRESENT SUBJUNCTIVE
1	1
2	2
3	3
4	4
5	5
6	6

Table 8

We will not analyse now the more complex alternations in the 3rd conjugation of Galician. We only point out that in such a complex interaction of different alternations only a few ones are etymologically motivated,while the others have analogically

assumed a shape like that shown in table 8, with 2 basic stems, or like the one in table 9, with 3 BSs:

Distributional pattern	
PRESENT INDICATIVE	PRESENT SUBJUNCTIVE
1	1
2	2
3	3
4	4
5	5
6	6

Table 9

2.3.2. *Enlargement of the unmarked basic stem*

The analogical process defined "morphomic productivity" could operate differently from attraction, when the unmarked basic stem S1 in a verb undergoes an enlargement process. The material used for enlargement comes from marked basic stems Sx (x = index higher than 1) of other verbs (generally from light verbs), so we can classify this process an expression of morphomic productivity. An example is given in (8):

Italian regular preterite of 2nd conjugation presents a morpheme *-ett-*, together with or in place of the inflectional endings of persons 1st, 3rd, 6th:

(8)   preterite of *temere* ('to fear'):

1 *tem-ei /* *tem-ett-i*	**2** *tem-esti*	**3** *tem-é /* *tem-ett-e*	**4** *tem-emmo*	**5** *tem-este*	**6** *tem-erono /* *tem-ett-ero*

The origin of -ett- is found in the strong preterite of *stare* 'to stay', in table 10:

preterite of *stare*
1p STETUI > stetti
2p STETUISTI > stesti
3p STETUIT > stette
4p STETUIMUS > stemmo
5p STETUISTIS > steste
6p STETUERUNT > stettero

Table 10

In many Central and Southern Italian dialects, this morpheme is more widespread, going beyond the 2nd conj., first of all extending to the 3rd, and in some dialects even to the 1st, though remainig generally limited to persons 1st, 3rd and 6th. There are some examples in (9), (10) and (11):

(9)   Spoleto (Umbria): *disetti-disette-disettero* ('to say'); *fasetti-fasette-fasettero*
         ('to do'); Foligno *etti-ette-ettero* ('to have'); 2nd -3rd conj.   Moretti 1987.

(10)   Western Abruzzo and Molise: *kandette,* 'he sang' (1st conj.), *vedette,* 'he   saw' (2nd), *dormette*, 'he slept' (3rd) (Giammarco 1979); all conjugations.

(11)   Neapolitan: *pərdettə, fənettə, sapettə, facettə* (2nd-3rd conj.; 1st with -a-*candattə*). Rohlfs 1968: §§ 577-578.

We underline that the original morphomic structure keeps intact in its distribution, but at the same time its markedness disappears: in these cases the enlargement process has a "stabilizing" effect: from a marked basic stem of a light verb *a morphomic sequence is isolated and reanalysed as morphemic,* and then extended. Even the strong preterite of *stare, stette,* in light of this process, is synchronically reanalyzed as a regular preterite built on the unmarked basic stem S_1 st- + ett-, instead of marked S_X stett-. In (12) and (13) we have two schemes showing this change of the status of -ett- in the speaker's analysis:

(12)   from morphomic sequence (where -ett- is a part of strong perfective BS   in 1st, 3rd and 6th persons):

STETT+i = **S_x**+-i (e.g. *pers*+i 'I lost', *fec*+i 'I did', *voll*+i 'I wanted'...)

strong perfect	
1p **stett**-i	Sx
2p st-esti	S1
3p **stett**-e	Sx
4p st-emmo	S1
5p st-este	S1
6p **stett**-ero	Sx

(13)   to enlargement (unmarked BS + -ett- as a part of a "complex inflectional ending"):

ST+**étti** = **S_1** + -étt-i (e.g. *perd+étti* 'I lost')

regular perfect	
1p st-**ett**i	S1
2p st-esti	S1
3p st-**ett**e	S1
4p st-emmo	S1
5p st-este	S1
6p st-**ett**ero	S1

For "stabilizing effect" we mean two possible situations:

1. a strong preterite becoming weak (by the change Sx > S1): *pers-i > perd etti*;

2. a weak preterite, e.g. *perd-ei*, acquiring (or being replaced by) a doublet (allotropic variant), that is a second weak preterite with -ett-, phonologically more "stable" having all the inflectional endings bisyllabic.

strong preterite		etymological weak preterite		analogical weak preterite	
1p **pers**-i	Sx	1p perd-ei	S1	1p perd-**etti**	S1
2p perd-esti	S1	2p perd-esti	S1	2p perd-esti	S1
3p **pers**-e	Sx	3p perd-é	S1	3p perd-**ette**	S1
4p perd-emmo	S1	4p perd-emmo	S1	4p perd-emmo	S1
5p perd-este	S1	5p perd-este	S1	5p perd-este	S1
6p **pers**-ero	Sx	6p perd-erono	S1	6p perd-**ett**ero	S1

Table 11

But we can find a morphomic sequence extended to the whole partial paradigm (preterite) in all conjugations; it's a sort of ideal "completion" of the enlargementprocess, and we can call it thematization, or morphologization.

2.3.2.1.   *Morphologization*

That's the last analogical subtype. The phonological sequence extracted from the basic stem of a verb is morphologized, that is it acquires some functional features, and becomes a suffix for the formation of derived stems (Aronoff's *constant thematic functions*), or a distinctive mark for a partial paradigm.
Such a process involves the speaker's reanalysis of the original *morphomic* sequence (-ett-, in our example), once again as a *morphemic* one, but this time without keeping its original distribution.
      It is schematically shown in (14); in table 12, we have a "virtual" representation of the reanalysis of -ett- as a suffix.

(14)   morphologization: ST+**étt**+i = S_1 + **mood-tense suffix** + inflectional
         ending -i

regular perfect	
1p st-ett-i	S1
2p *st-ett-esti	S1
3p st-ett-e	S1
4p *st-ett-emmo	S1
5p *st-ett-este	S1
6p st-ett-ero	S1

Table 12

We find a concrete example for the generalized extension of -ett- in Engadinese, a Rhaeto-Romance dialect, where the morphemes *-et(t-)* (1st, 2nd, 3rd conj.) and *-it(t-)* (4th conj.) characterise the whole preterite in all the verbs (Stimm & Linder in LRL III; Haiman & Benincà 1992: 89-90).

Below, the preterite of *portar* 'to carry' in two different Engadinese dialects:

putér dialect:

1 *purt-et-Ø*	**2** *purt-ett-ast*	**3** *purt-et-Ø*	**4** *purt-ett-ans*	**5** *purt-ett-as*	**6** *purt-ett-an*

vallader dialect:

1 *port-et-Ø*	**2** *port-ett-ast*	**3** *port-et-Ø*	**4** *port-ett-an*	**5** *port-ett-at*	**6** *port-ett-an*

One more example: in medieval Occitan the regular preterite (e.g. *cantèi, cantèst, cantèt, cantèm, cantètz, cantèron*) originated with the influence of *estèi* < STETI and *dèi* < DEDI (Lafont in LRL V, 2). But as it happened in Engadinese, in some dialects -et- was extended to other persons, as in Auvergne:

(15)   4p   *cant<u>et</u>em,*
             5p   *cant<u>et</u>etz.*

Differently from the cases of enlargement previously analysed, in the latter we notice the disappearance of the morphome even from a distributional point of view. That's an extreme effect of morphomic productivity: that is building derived stems from basic stems.

To summarize: morphomic productivity operates in large part by reproducing morphomic structures (attraction), thus making the verbal system more marked. On the other side, it reproduces phonological sequences giving an opposite effect of "stabilization" of the verbal system (enlargement). In this case the morphomic sequence can mantain its distribution, or spread throughout the verbal system: thus it reaches the maximum degree of productivity, but at the same time the *morphome is paradoxically cancelled*, since its distribution is cancelled.

3.   Conclusions

At the beginning of this paper we have formulated the question whether morphological change is completely arbitrary, considering the relation between analogy and irregularity. I hope to have shown that, even though analogical change spreads irregularity, at the same time it originates or reinforces some distributive regularities, balancing the arbitrariness of stem formation, and sometimes also some idiosyncratic phonological evolutions.

The morphomic structures that undergo analogical processes, as convergence or attraction, are reinforced so as to constitute, despite their markedness, subregularities within the verbal system, and *so as to provide some strategies in language learning and production*.

Also analogy then displays some "rules", and these rules make analogy somehow predictable, that is to say we can risk predictions: once a protoype and the "analogizing" feature have been focused, we can formulate hypotheses both on the lexemes involved, and on the direction and extension of the change through one paradigm (by considering partition classes).

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