Movement triggers and the etiology of grammaticalization: the case of Italian postposition fa^1

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Resum. Els desencadenants del moviment i l'etiologia de la gramaticalització: el cas de la postposició italiana fa. Aquest article se centra en l'anàlisi de la partícula italiana fa, que combinada amb expressions de temps localitza un esdeveniment en un punt concret anterior al moment de l'elocució. L'objectiu és mostrar com aquesta partícula ha evolucionat des de l'italià antic fins al present, partint de la base que fa era originalment la 3a persona del singular del verb fare "fer". A partir de dades històriques, suggereixo una anàlisi basada en el moviment, argumentant l'existència d'un procés de gramaticalització generat pel moviment que és el responsable de l'origen d'aquesta partícula/adposició. Aquest procés és interessant perquè d'una banda confirma la predicció derivada de la visió estàndard sobre la gramaticalització (Roberts and Rousseau 2003), en el sentit que el mecanisme de gramaticalització es la pèrdua gradual de moviment, i d'altra banda qüestiona aquesta visió perquè els elements moguts cap a l'esquerra no són els destinataris de la gramaticalització, suggerint per tant una etiologia vinculada al procés que transforma els verbs de suport en partícules.

Keywords: gramaticalització, italià, moviment, verb, partícula.

Abstract. Movement triggers and the etiology of grammaticalization: The case of Italian postposition *fa.* This work deals with the Italian particle *fa* "ago", which together with expressions of time measure localizes an event in a certain point preceding the moment of elocution. The aim

^{1.} I would like to thank three anonymous referees for their helpful comments. All remaining errors are mine.

is to show how the particle developed from Old Italian to present, assuming that *fa* was originally the 3rd person singular of the verb *fare* "to make/to do". Drawing on historical data, I suggest an analysis based on movement, arguing for a movement-driven grammaticalization process responsible for the origin of this particle/adposition. This process is interesting because, on the one hand it confirms the prediction of standard theoretical views on grammaticalization (Roberts and Rousseau 2003), so that the mechanism of grammaticalization is the gradual loss of movement, and on the other hand it challenges these views because the items moved leftward in the process are not targets of grammaticalization, suggesting a parasitic etiology of the process that turns light verbs into particles.

Keywords: grammaticalization, Italian, movement, verb, particle.

1. Introduction

This paper deals with the Italian particle *fa* "ago", which together with an expression of time measure (three years, five days, two weeks, etc.) localizes an event in a certain point preceding the moment of elocution. The aim of the paper is to show how the particle developed from Old Italian to present, assuming that it was originally the 3rd person singular of the verb *fare* "to make; to do".

I will try to suggest an analysis based on movement, thus arguing for a movement-driven grammaticalization process² responsible for the origin of the particle *fa* (an item symmetrical to its English counterpart, *ago*). The present analysis implies, *prima facie*, a reconstruction from a bi-clausal architecture (1a) to a mono-clausal one (1b).

(1)	a.	[_{yp} Fanno	due	anni	[xp che	Gianni	è	partito]]
		Make _{.3PL.PRES}	two	years	that	Gianni	is	left
		.,						
	b.	[xp Gianni	è	partito	due	anni	fa]	
		Gianni	is	left	two	years	ago	
	'Gianni left since two years'/ 'Gianni left two years ago'							

As Kurzon (2008) has shown in details (with examples from Indo-European, Semitic, Caucasian and Austronesian languages), the categorical status of the (deictic) particles similar to fa and ago^3 cross-linguistically is quite controversial, but the empirical

^{2.} Grammaticalization is standardly defined as the process by which new grammatical morphemes are created (Hopper and Traugott 2003).

^{3.} Ago is generally considered to be a postposition, preceded by its complement, a temporal NP (see Kurzon 2008; Hagège 2009). Another possibility, explored in Williams (1994), is that ago behaves like an intransitive preposition, namely a preposition that does not license a complement. Italian fa is generally treated as a

fact that all natural languages have temporal deictic expressions referring to the gap of time between the moment of speaking and a previous point (or string) in time is uncontroversial⁴. Haspelmath (1997) dubbed {DISTANCE-PAST} their semantic function as anchors in time⁵. Notice that in contemporary Italian bi-clausal constructions, as the one represented in (1a), are still an attested possibility (i.e. high/formal registers, dialectal variations, etc., see Munaro 2009). They have been labelled *temporal existential constructions* by Rigau (2001), who showed that they are ubiquitous in Romance languages and analyzed them as involving a layered complementizer's field, along the lines of Rizzi (1997)⁶. I will show that these temporal structures are sorts of oblique-clefts (along the lines of what has been originally proposed by Benincà *et al.* 1988). After a description of comparative and historical data, we will see in which way movement is responsible of the dynamics of the grammaticalization process of the particle *fa*.

In previous work on the topic, Vanelli (2002) argues that whereas the deictic value of the Old Italian expression resulted from the compositional meaning of the single elements which formed it (in the bi-clausal construction), in Modern Italian the syntactic transparence is lost and the modern form has become lexically deictic.

The standard Old Italian way to express {DISTANCE-PAST} value is given in (2) below (Vanelli 2002).

postposition, which is unique among all the prepositions in the language (Haspelmath 1997). Two hints for the adpositional nature of *fa* are the following: (i) Italian uses the preposition *fral tra* ("in", "between") (e.g. *Gianni partirà fra tre settimane*, "Gianni will leave in three weeks") to express the symmetrical {DISTANCE-FUTURE} function, namely to mark the distance of a point in the future from the time of speech; (ii) fa can alternate with the item *addietro*, "ago, "back" (e.g. *Gianni è partite due anni addietro*, "Gianni left two years ago"), which is traditionally considered an adverb in Italian grammars (e.g. *Vocabolario degli Accademici della Crusca*, 4th ed., *vol. I*, 54), but is clearly composed by the simple preposition *a* "to" and the locative preposition *dietro* "behind, back".

- 4. Following Haspelmath (1997), it can be said that all languages have a temporal deictic expression referring to the 'elapsed time' between the moment of speech and a previous instant in time. As shown by Kurzon (2008), the type of expression used to relate to this gap of time varies among natural languages between adpositional phrases, on the one hand (either prepositional phrases as, for instance, in German, Czech or Polish or postpositional phrases as, for instance, in Persian, Turkish or Finnish) and adverbial phrases on the other (as, for instance, in Russian, Afrikaans, Bengali or Tagalog).
- 5. Another possible tag is 'Deictic Scalar Localization in the Past' (Bourdin 2011).
- 6. Boeckx (2007) argues for a similar analysis of pseudo-clefts. Basically, a layered (stretched) CP allows leftward derivational analyses of cleft-like structures (e.g. by fronting the remnant site of movement across the moved constituent).

A very interesting difference between bi-clausal constructions such as the one represented in (1a) and mono-clausal constructions such as the one represented in (1b) is the following: the particle *fa* in the bi-clausal construction behaves like a verb, not only because it is inflected in the third plural if the time units are plural, as shown in (1b) above, but also because the anchoring is not necessarily deictic, as shown in (3). Moreover, the verb *fare* can have different tenses besides present indicative, as you may see in (4).

- (3) Domani fanno due anni che Gianni è partito
 Tomorrow make_{3,PL.PRES} two years that Gianni is left
 'Tomorrow it will be two years *since* Gianni left'
- (4) Ieri faceva un anno che Gianni è partito Yesterday make_{.38G.PST.IMPRF} a year that Gianni is left 'Yesterday it was a year *since* Gianni left'

It appears clearly that in the bi-clausal structure, in which the time measure expression and the verb *fare* agree, the anchoring is not necessarily deictic but can be also anaphoric to a point in time recoverable from the context⁷, as shown above in (3) and (4), while the mono-clausal expression with the invariable particle fa is necessarily deictic, as shown in (5) below.

- (5) a. * Domani Gianni è partito due anni fa 'Tomorrow Gianni left two years ago'
 - b. ?? Gianni é partito due anni fa domani. 'Gianni left two years ago tomorrow'

Hence, while *fa* is frozen in 3rd singular present indicative, in the bi-clausal structure the verb *fare* can be inflected in different moods and tenses.

2. Evidence for a verbal origin of fa

The grammaticalization pattern I argue for here, namely {(light/auxiliary/dummy) verb / adposition/particle}, is widespread across natural languages (Heine and Kuteva 2002, Roberts and Rousseau 2003, Bowen 2008, Kayne 2009, and especially Hagège

^{7.} It is interesting to note that, in English, until 1900, expressions such as *ten years ago* were in competition with constructions instantiated by *ten years since*, in order to convey {DISTANCE PAST} functions (Bourdin 2011). Cross-linguistic examples of such a competition/tension –between *ago*-like items and *since*-like items– seems to be quite common (Haspelmath 1997, p. 40-42).

2009, p. 151-162). Specifically, Hopper and Traugott (1993, p. 108) include light verbs (labelling them *vector* verbs) and auxiliaries as optional stages on the grammaticalization cline. We assume here that the Italian light/dummy verb *fare* "to make, to do" is the source of the particle *fa*.

The first step is to exclude other possible sources involved in the process. Elerick (1989, p. 93) assumes that fa has an adverbial origin; namely, this postposition would be "a hypercorrective reflex of Latin ab", enhancing a diachronic shift from the Latin adverb $abhinc \rightarrow a(b) \rightarrow ha \rightarrow fa$. This proposal seems unappealing, especially when Italian is compared to other Romance languages. In particular, Elerick (1989) assumes that the same process occurs in Spanish, in which however, *hace* "ago" is intuitively/immediately linked to the verb *hacer* "to do". See the example in (6).

(6) Hace cinco años murió Soraya ⇐⇒ Soraya murió hace cinco años Ago five years die_{3sg, PAST} Soraya 'Soraya died five years ago'

In Portuguese and Sicilian⁸, the words for *ago* are also derived from a light verb/existential copula, *haver/avìri* meaning "to have", giving *há/àvi* "ago", as in (7a, b).

(7)	a.	há	cinco	anos	Portuguese
		Have .3SG.PRES	five	years	
		'five years ago'			
	b.	àvi	wòttu	ywòrna	Sicilian
		have .3SG.PRES	eight	days	
		'eight days ago'			

French, in which the verb *avoir* "to have" is used in combination with the adverb y "there", as in (8), is even more transparent in this sense⁹ (see Kurzon 2008 and Hagège 2009 for extended cross-linguistic surveys of these temporal deictic items).

^{8.} Note that in Sicilian expressions like *cincu ywòrna fa* "five days ago", parallel to Italian, are also quite popular. Furthermore two more formulas with the same function, also quite common, are: (i) *cincu jorna oji* "five days ago" (lit. "five days today") and (ii) *du ann ora* (specialized for years) "two years ago" (lit. "two years now"). Comparing the three examples given here, it appears that in one case we have a measure of time and the grammaticalized verb *fa*, while in the other two cases there is no grammaticalized verb (*fa* or *avi*, or other), and the time of elocution is overt (now, today).

^{9.} The verbal nature of the French formula is quite evident because it can be used with different tenses e.g. *Il y aura un an dans quelques jours...* "In a few days, it will be a year *since...*". As already noted here for Italian, also in French the anchoring is not necessarily deictic (Hagège 2009, p. 301-302). Nevertheless, for evidence of the prepositional nature of *il y a* in contemporary French, see Kurzon (2008, p. 216). Also, interestingly Haitian Creole, a language based largely on 18th to 21st-century French, uses the particle *fe*

(8) J'ai vu le film il y a trois semaines I saw the movie ago three weeks 'I saw the movie three weeks ago'

Finally, Romanian uses two formulas: (i) an adverbial in the form of a PP (*in urm*ă) after the temporal NP, as in (9) and (ii) the prenominal particle *acum* (now), as in (10) to express {DISTANCE-PAST} meaning.

- (9) cu două zile *î*n urmă 'two days ago'
- (10) Am fost în România acum cinci ani 'I went to Romania five years ago'

Interestingly, the item *urm*ă in (9) derives from a *weak* form of 3rd person singular of the verb *a urma*, *a urm*ări "to follow", as shown below in (11), taken from Sánchez Miret (2006, p. 39):

(11) Cum boala *urm*ă bolnavul **Ș**i-l pune **î**n pat, a**Ș**ijdere **Ș**i scumpeatea *urmaz*ă scumpulu **Ș**i-l pune la s**ără**cie

'As sickness follows the sick and prostrates him in bed, so stinginess follows the stingy man and brings him to poverty'

Moreover, diachronic data clearly show that the bi-clausal structure of (1a) originates far earlier than the mono-clausal structure of (1b). The first occurrence of a simple clause with *fa* being used with an adpositional value that I have retrieved from my queries on Old Italian corpora dates ca. 1380 AD, while bi-clausal architectures are attested since the earliest stages/documents covered by the available databases¹⁰.

See the examples in (12) and (13) below.

(12) a. Or fa un anno, vìtama, che 'ntrata Now make. a year my-life, that entered

(derived from the verb "to make") for {DISTANCE-PAST} expressions, like Italian and Spanish. See the example in (i) below taken from Haspelmath (1997, p. 87):

(i) Jodi-a fè jou, lakay mouin kat mouin té make four day I house my PAST 'Four days ago I was in my house'

10. The examples in (12) and (13) are taken from the OVI (Opera del Vocabolario Italiano) databases, which include most of the known Old Italian texts from 1200 to 1400, approximately (see http://www.ovi.cnr.it).

mi se' ['n] mente
CL_ISGLDAT are in mind
'My life, you came into my mind a year ago'
[Cielo d'Alcamo, Contrasto, 1231/50, Sicilian-Tuscan]

- Ь. Poco ch' io tornai make. I come-back. Short that dalla chiesa from-the church 'I came back from the church, short time ago' [Libro dei Sette Savi, XIII Century, Tuscan]
- XXVI giorni, che 10 Marco c. Oggi fa re Today make. 3SG.PRES XXVI days M. that the king borghi [...] entrò negli came in-the villages... 'King Marco came into the villages twenty six days ago, today...' [Tavola ritonda, first half of XIV Century, Florentine]
- (13) a. Boninsengna molto tempo fa à deto [...]

 Boninsengna long time ago have_{3sg,pres} said

 'Boninsengna has said long ago...'

 [Bassano da Pessina- Fr.Datini, 17.05.1384 Milan-Florence]
 - b. Io salai un porco forse otto dì fa maybe eight put-salt a pork days ago 'I seasoned a pork with salt maybe eight days ago' [Sacchetti, Trecentonovelle, second half of XIV Century, Florentine]
 - Non il lavorio principiato c. Not $\text{CL}_{_{\text{IMP}}}$ make. the work started già uno mese already month ago a 'We do not do the work started a month ago' [Fr. Datini - Lapo Mazzei, Prato, near Florence, October 1394]
 - d. òlla incominciata già fa sette mesi have_{. ISG.PST}-CL_{.3SG.ACC} started already ago seven months 'I have already started it seven months ago"
 [Libro di Sidrach, 1383, Florentine]

Interestingly, as shown above, in Old Italian (from ca. 1380 AD), it is attested the simultaneous existence of structures like (13 a, b), that would have become standard in contemporary Italian and constructions like (13 c, d), which resemble, for instance, the ones described above in (6) for contemporary Spanish. Notice also the lack of agreement of the verb *fare* with the plural expression *XXVI giorni* "twenty-six days" in (12c).

3. A sketch of the analysis

Data-comparison of Romance languages gives solid grounds for a verbal origin of the Italian adposition fa and historical data show that the form [YP [XP]] is attested at least one century and a half before the form [XP], so that it is easily conceivable an elapsed process of clause contraction.

I will try to show here that this phenomenon has been driven by syntactic movement. Specifically, I will argue for a movement of the embedded clause to the specifier position of the CP of the matrix clause, which lead to a reanalysis of the subordinate clause as a root.

There are (at least) three different structural possibilities arguable for the bi-clausal pattern of (1a): (a) pseudo-relative clause (e.g. Rizzi 2000), of the type *ho visto Maria che...* "I saw Mary that..."; (b) restrictive object-relative clause; (c) cleft construction.

The only reasonable possibility seems to be (c), because it is crucially the only option which allows fronting of the embedded CP. Only a cleft –in the aforementioned set of conceivable structures– can do it in Italian. Thus, it is reasonable to consider expressions such as (1a) as involving an oblique cleft. See the examples below in (14), in which movement of the embedded constituent is used as a test of grammaticality. The grammaticality of this operation is crucial, given that the present analysis assumes movement as the trigger of the grammaticalization process.

pseudo-relative

b. *Che comprava i giornali ho visto M.'I saw Maria that was buying the newspapers'

restrictive relative

- d. *Che mi hai chiesto ho fatto la torta
 'I made the cake that you asked me'
- e. E' Gianni che ha sposato Maria Is Gianni that have married Maria

cleft

- f. Chi ha sposato Maria è Gianni vs. *che ha sposato Maria è Gianni 'It was Gianni, who [that] married Maria'
- g. Fanno due anni che Gianni è partito] = (1a)

oblique/temporal cleft

h. Che G. è partito fanno due anni 'Gianni left two years ago'

Interestingly, given the Complementizer to Wh-item conversion-phenomenon¹¹ in (14f) (which turn out to be a sort of free relative), we may hypothesize a movement of the embedded clause to the specCP of the root (cleft) clause, which roughly give rise to a structure like the one represented in (15). The same process is argued for the temporal oblique cleft of (1a) repeated in (14g) above.

(15)
$$\left[\text{CP}_{\text{embedded clause}} \left[\text{C}_{\text{root}} \left[\dots \left[\text{VP}_{\text{light verb/auxiliary}} \left[\dots \left[\text{CP}_{\text{embedded clause}} \right] \right] \right] \right] \right]$$

Evidence that this analysis is on the right track comes again from the historical development of Italian. Structures such as $(14h)^{12}$ are attested in Old Italian and may be interpreted as an intermediate stage in the process that has lead to the appearance of the standard way to express {DISTANCE-PAST} value in contemporary Italian. See the examples below in (16). Notice here again the partial overlap of values (a DISTANCE-PAST} function expressed in English with *ago* and a time-function which, following Haspelmath (1997, p. 40), is "actually a mixture of location, distance and extent adverbial", standardly

^{11.} This phenomenon is particularly interesting in light of recent syntactic analyses that assume an identity of (at least some) complementizers and relative/demonstrative/interrogative pronouns in Germanic and Romance languages. See, for relevant discussion, Kayne (2010), Manzini and Savoia (2003), Sportiche (2011) and Roussou (2010).

^{12.} Results from a small survey that I conducted demonstrate that examples such as (14h) seem to be perfectly grammatical for speakers of central and southern varieties of Italian, but slightly degraded for speakers of northern varieties.

expressed in English with *since*) with the mean of the same lexical item: the particle *fa*. Notice also the lack of agreement of *fa* with the temporal NP in (16a).

(16) a. Che '1 male del fianco ha assalito that the pain of-the attacked side have CL LEG DAT già fa due ďì already makes two days 'It already makes two days since I had stitch' [Sacchetti, Trecentonovelle, second half of XIV Century, Florentine]

Che no-110 h. avie veduto già not- CL 2SG.ACC that have. already seen fa grande tempo makes long time 'It's already a long time since I saw him' [Morte di Tristano, 1375, Tuscan]

From a theoretical viewpoint, there are (at least) two possible lines of analysis for these moved-over cleft items: (a) a cartographic derivation, along the lines of reasoning of Belletti (2008), which assumes an intra-clausal movement, arguing that the complementizer *che* is not the realization of the force head in clefts, such as in examples (14e,g), but the realization of finiteness, the lowest head in the layered CP field; (b) an inter-clausal movement analysis which seems easily allowed along the lines of reasoning of Grohmann (2003), who splits clause structure into prolific domains (so that movement across clauses targets a position within the next higher/leftward prolific domain of the same type).

For the purposes of this work, we can remain agnostic about the exact nature of the underlying fine-grained mechanisms of the movement in (15). The important fact here is that the movement of the constituent embedded under the light (matrix) verb is a grammatical option for temporal clefts.

Notice that it is perfectly reasonable that the verb *fare* may act as a dummy/auxiliary here: see, in fact, the minimal pair of (1a,b) repeated here in (17a,c) and consider that (a) *fare* has actually the same distribution of *essere* "to be", as shown in (17b); (b) *fa* has the same distribution of the particle *or sono / orsono* ¹³ "ago" (lit. "now-are"), as shown in (17d).

(17) a. Fanno due anni che Gianni è partito

^{13.} Crucially, *or sono / orsono* is also compatible with a singular temporal expression for most Italian speakers (e.g. *un anno or sono* "a year ago". Actually, I have found ca. 160,000 occurrences of this phrase in a Google-based search). This suggests that *or sono / orsono*, which is mainly used in formal and literary registers of Italian, is a frozen item (i.e. it does not display agreement).

- b. Sono due anni che Gianni è gone are, was two years that Gianni is partito
- c. Gianni è partito due anni fa
- d. Gianni è partito due anni or sono/orsono Gianni is gone two years ago

In Old Italian, we may observe again the same distribution of *fare* and *essere* in expressing {DISTANCE-PAST} (and related) functions, as shown in (18). Notice in particular the intermediate (fronting) stage of (18b).

- (18) a. pigliasti sono sette anni che voi mi CL_ISGACC take.2 seven vears that are you. 'It's seven years since you took me' [Libro dei Sette Savi, XIII Century, Tuscan]
 - b. ch' i' ò soferta, çà sono anni duy that I have suffered, already are years two 'It's already ten years since I have suffered'
 [Nicolò de' Rossi, Rime, XIV Century, Tuscan-Venetian]
 - c. morì forse ora sono dieci anni died _{3sg.pst} maybe now are ten years 'He died maybe ten tears ago'
 [Cavalca, Dialogo di San Gregorio, 1342, Pisan]

These facts, incidentally, seem to suggest that cleft verbs are dummy verbs and not copula¹⁴. However, this is an issue that is beyond the topic of this work.

4. A set of reanalyses

At this point, a set of possible reanalyses are conceivable. First, we may consider (quirky) agreement erosion of the tense/agreement features of the light verb *fare* (e.g. when the verb appears with plural temporal NPs). There is a rich textual evidence reported in the literature for initial alternations between 3rd singular and 3rd plural forms such as *falfanno* (especially with postposed subjects) in earlier stages of Italian

^{14.} The debate between an idea of clefts as {PRONOUN + COPULA + PREDICATE COMPLEMENT + RELATIVE CLAUSE} *vs.* an idea of clefts as {DUMMY SUBJECT + DUMMY VERB + SUBJECT + PREDICATE} goes back to Jespersen (1927) and beyond.

(Salvi 2001, p. 231). Also, lack of agreement¹⁵ is still widely attested in contemporary Florentine (Brandi and Giannelli 2001), as shown in (19).

(19) Fu fatto le chiese was made._{3sc} the churchs 'The churchs were build'

Similar cases of fossilization of 3^{rd} singular agreement in Italian that involve fa are found in mathematical calculations (e.g. 2+2 fa 4 "2+2 equals four", replacing older, attested, 2+2 fanno 4).

Furthermore, Cardinaletti (1998) observed that examples such as (20) are perfectly grammatical, at least for many Central Italian varieties, and Antinucci and Cinque (1977) offer a description of the phenomenon of marginalization in Italian.

(20) Questo lo *fa* sempre i bambini (Cardinaletti 1998)

This Acc [they] it Acc does always the children 'Children always do this'

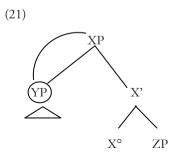
Assume now that the embedded clause in SpecCP in (15) is reanalyzed as the root. This is perfectly reasonable considering the diachronic data¹⁶ collected, for instance by Heine and Kuteva (2002), but I think that recent developments in formal syntax prompt us with a tool in order to simplify this step. If we agree with a liberal version of the nanosyntactic¹⁷ principle of Phrasal Spell-Out (see Starke 2011 and Williams 2003,

^{15.} The possibility of agreement with a covert expletive (Brandi and Cordin 1989 and Fuß 2005, among many others) will not be explored here, since it is not relevant to the present discussion.

^{16.} Just to give other two examples, consider (a) the Taiwanese clause-final particle *kong* derived from the verb *kong* "to say", which instantiate an evidential Mood/C0, created when an original bi-clausal structure is simplified as a mono-clausal structure and the predicate of the original matrix clause is reinterpreted as a high functional head in the novel mono-clausal structure (Wu 2004; see also Chappell 2008 for a comprehensive survey of the grammaticalization of complementizers from *verba dicendi* in Sinitic languages); (b) phenomena of long distance agreement between a matrix light verb and an argument of its complement clause, described for instance by Haspelmath (1999) for Godoberi, a Nakh Dagestanian language, and interpreted as a symptom of an on-going process of grammaticalization of the complement taking light verb.

^{17.} Nanosyntax is a research paradigm on the architecture of grammar under development in CASTL, Tromsø over the last few years. Nanosyntax is partially interrelated with the cartographic paradigm and originated with the works of Michal Starke on allomorphy patterns in English irregular verbs from competition in spelling out syntactic trees (Starke 2009). For a detailed illustration of the architecture of Nanosyntax you may refer to Caha (2009). A key-point of nanosyntax is Phrasal Spell-Out, which states that Spell-Out applies to syntactic phrases (see also Neeleman and Szendröi 2007) and that more than mere terminals are stored in the lexicon. This leads to the consequence that there can't be any lexicon before syntax.

for a relevant discussion), which states that you can spell-out an arbitrary stretch of the syntactic structure, as long as it forms a continuous stretch, it is possible to argue for a sort of re-ranking of SpecCP to CP, as shown in (21).



In the structure above, YP is re-ranked (i.e. spelled-out) as XP and this step isn't expensive (nodes are adjacent, hence forming a continuous stretch of structure). The process outlined in (21), utterly speculative at first sight, can possibly explain interesting empirical phenomena, such as categorial shifts and (intermediate steps of) categorical gradience (Corver and Rijemsdik 2001, Roberts 2010). Just to give a possible example, we may consider the fact that, almost universally, natural languages allow the realization of noun phrases without nouns (Dryer 2004). For example, a numeral can act as a noun in the Italian example below.

(22) a. I fantastici quattro '(The) fantastic four'

b. #I tre fantastici quattro '(The) three fantastic four'

Notice that (22b) is semantically odd, but syntactically plausible. If we agree with an articulation of the extended noun phrase, as the one proposed, for instance, by Cinque (2005, 2010a), we may interpret (22a) as a NumP to XP (i.e. the functional projection, which hosts the numeral as its specifier) re-ranking, which in turn drive to the *reboot* of the extended projection and the consequent reanalysis of the numeral as the noun¹⁸.

^{18.} For a formal definition of *Extended Projection Reboot Principle*, from which reboot is necessary in order to avoid Anti-symmetry violations, see Franco (2011). For relevant discussion, see the analysis of Romance VN compounds (such as Spanish *limpiabotas* "bootblack" or Italian *portalettere* "postman") given by Bok-Bennema and Kampers-Mahne (2006), in which precisely a modifier to head-noun conversion phenomenon is assumed.

Independently of this tentative explanation, and independently of the formal features to be checked by, when movement is performed as in (15), the matrix light verb becomes defective, and then, as shown step-by-step below in (23), definitely looses its original status.

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(23) a. ⇒ movement of the embedded clause:

[EMBEDDED YP che Gianni è partito [EMBEDDED YP] che Gianni è partito [EMBEDDED YP] fanno due anni [EMBEDDED YP]]]
b. ⇒ agreement features [f] erosion

[EMBEDDED YP] Che Gianni è partito [EMBEDDED YP] fa ff] due anni [EMBEDDED YP]]]
c. ⇒ reanalysis of the former matrix verb via re-ranking plus ban of overt C in a root¹9

[YP = ROOT XP] Che Gianni è partito fa [Verb>particle] due anni]

Lit. 'Gianni left ago two years'
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The stage in (23c), interestingly, seems to exactly match the pattern found in contemporary Spanish, as shown in (6), contemporary French, as shown in (8), and Old Italian, as shown in (13c,d), where it co-occurred with the form, as in (13a,b), that would have become standard in contemporary Italian.

The relevant question is now: what triggers the movement of the temporal NP across *fa* (or particles with the same distribution and the same meaning like the aforementioned *or sono* or *addietro*, which literally means "to/at-behind") in contemporary standard Italian? A possible proposal could be the one according to which, following Belletti (2004, 2008), VP has a periphery that closely resembles the CP left periphery. If a cleft in Italian normally expresses {+contrastive} identificational focus, it is arguable that the temporal NP (e.g. *anno* "year", *mese* "month", *tempo* "time" etc.), moves to a matching FocP immediately above the (former) matrix verb (see also Sleeman 2010, for a relevant discussion concerning infinitival relatives), in order to retain its informational/interpretative features in the unified clause²⁰.

The informational status of the moved temporal NP is however fuzzy on conceptual grounds, due to the fact that the verb has become a (deictic) particle. Crucially, in Italian the movement of the temporal NP across *fa* seems to block any use of the particle apart from a deictic {DISTANCE-PAST} function. On the contrary, in Spanish *hace* can enter a syntactic derivation in order to express {DISTANCE-POSTERIOR} temporal extent function²¹, as shown in the examples in (24).

^{19.} See Emonds (1976) and Heycock (2006), among many others.

^{20.} Another possibility is to consider as involved here a full QP containing a numeral. Possibly, numerals are inherently contrastive (e.g. Verkuyl 1981 or Szabolcsi 2010) and thus require in the case of Italian overt raising to the relevant SpecFocCP, thereby deriving, for example, the order 3 anni fa 3 anni.

^{21.} Following Haspelmath (1997), {DISTANCE-POSTERIOR} function can be thought of as a combination of a {POSTERIOR-DURATIVE} function (as in 'since the beginning of the school') and the {DISTANCE-PAST} function.

(24)	a.	Maria	vive	en	Madrid	desde	hace	tres	años
		Maria	lives	in	Madrid	since	ago	three	years
		Spanish							
	Ь.	Maria	vive	a	Madrid	da	tre	anni	(*fa)
		Maria	lives	in	Madrid	from	three	years	(ago)
		Italian							
	'Maria has lived in Madrid for three years'								

Hence, in Italian, the functional projection to which the temporal NP moves, seems to *froze* the particle fa, which is inherently reanalyzed with the expression of a sole deictic (time of reference \approx time of speech) {distance-past} value. Drawing on insights from cartography (Cinque and Rizzi 2010, Svenonius 2006), we may (synchronically) consider fa as a deictic head (time of reference \approx time of speech), in the extended projection of a (abstract) head-noun time. Notice that many languages (e.g. Persian, Turkish, Lezgian, Armenian, Hungarian, etc.) use the same lexical item to express simple anterior meaning (e.g. *before*) and deictic {distance-past} meaning (ago), enhancing Cinque's (2010b, p. 3) claim in its discussion of spatial prepositions: "phrases composed of spatial prepositions, adverbs, particles, and DPs do not instantiate different structures but merely spell-out different portions of one and the same articulated configuration".

Further notice that, interestingly, many languages employ only clausal adverbials in order to express distant past functions (Haspelmath 1997). An example of these biclausal constructions²², which match the Italian (1a) type, is given here in (25), for Babungo, a West African language.

```
(25) Ŋ wớ kû. ndwớ lùu Ŋ ứsō bòo

[he die] [now be years two]

'He died two years ago'

Lit. 'He died. It's now two years'
```

Crucially, as shown in (24), there are languages such as Spanish, where the overt marking is transparently composed of these two features/markers. This phenomenon is attested in other Indo-European languages, for example in Persian, as shown in (i) below:

```
(i) Maria az se sâl-e piš dar Madrid zendegi mi-kon-ad
Maria from three year-<sub>EZAFE</sub> ago in Madrid life <sub>IMPF</sub>-do-<sub>3SG</sub>
'Maria has lived in Madrid for five years'
```

^{22.} Also, in Middle English (Bourdin 2011) distance past bi-clausal contructions are attested (e.g. *It is ago seven yere that ye were made fyrste*, from 1489. W. Caxton, "The right plesaunt and goodly historie of the four sonnes of Aymon").

5. Conclusion

In this work, drawing both on historical and cross-linguistical data, and theoretical assumptions, we have given a sketch of a possible analysis of the process which had led to the formation of the temporal deictic particle fa in Italian. The described process of "grammaticalization triggered by movement" is interesting because, if from one side confirms the prediction of standard theoretical views of grammaticalization (Roberts and Rousseau 2003), so that the basic mechanism of grammaticalization is the gradual loss of movement (i.e. items lose memory of their traces), from the other side challenges these views because the items moved leftward in the process (the embedded clause and the temporal NP) are not targets of grammaticalization (hence, suggesting a parasitic etiology of the process that turns the light verb/existential copula into adpositions/ particles). An operation of re-ranking of the complement clause as the root, possibly along the lines of a liberal application of Phrasal Spell-Out as illustrated in (21), seems to be the best option to describe the facts. Notice also, that a phrase-to-head economydriven process along the lines of Gelderen (2004) seems not applicable here. By the way, economy plays a disheveled role here in this sense: "if you can, do everything you have to do in a (root) clause".

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