

On the interpretation of proper temporal adverbs in Italian: the role of P and D.

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1. The aim of the talk

We will provide an analysis able to account for the punctual *vs.* habitual reading of proper temporal names in Italian, focusing on names of days, which clearly signal a difference in their possible aspectual encoding at the morphosyntactic level. When these items appear as adverbials modifying an event:

- i) such event is interpreted as a habitual one if the temporal name is preceded by a definite determiner or an adpositional item;
- ii) it is interpreted as a punctual one if the temporal name is ‘bare’.

2. The data

In Italian, we find a puzzling interpretive difference with a set of ‘proper’ temporal adverbials modifying verbal events, namely *days of the week* (e.g. *Lunedì*, Monday, *Martedì*, Tuesday, etc.).

Consider the data provided in (1):

- (1)
- | | | | | | | |
|----|---|--------|--------|--------|--------|--------------------|
| a. | vado | al | cinema | di | lunedì | = habitual reading |
| | I.go | to.the | cinema | of | Monday | |
| | ‘I (usually) go to the cinema on Mondays’ | | | | | |
| b. | vado | al | cinema | il | lunedì | = habitual reading |
| | I.go | to.the | cinema | the.sg | Monday | |
| | ‘I (usually) go to the cinema on Mondays’ | | | | | |
| c. | vado | al | cinema | | lunedì | = punctual reading |
| | I.go | to.the | cinema | | Monday | |
| | ‘I go to the cinema next Monday’ | | | | | |

Interpretively, according to our native judgements, (1a) and (1b) mean that the event is habitually iterated, namely it takes place on every temporal frame signalled by the proper temporal adverbial (*Monday*, in the present case). On the contrary, (1c) means that the event is punctual, namely it takes place only on a specific temporal target (here, next Monday). This split seems to be active in irrealis contexts only, as illustrated in (2), motivating a realis/irrealis divide shaped by morphosyntax (Manzini 2018).

- (2) a. ??sono andato al cinema di lunedì = punctual reading, if any
 I.was gone to.the cinema of Monday
 ‘I went to the cinema last Monday’
- b. ??sono andato al cinema il lunedì = punctual reading, if any
 I.was gone to.the cinema the.sg Monday
 ‘I went to the cinema last Monday’
- c. sono andato al cinema lunedì = punctual reading
 I.go to.the cinema Monday
 ‘I went to the cinema last Monday’

Actually, the realis/irrealis contrast has been claimed to pertain to the realm of modality (and indeed the habitual vs. punctual reading for proper temporals is available with imperatives, subjunctives, conditionals, etc.), but crucially include other areas that are not traditionally viewed as modal in nature (Mauri & Sansò 2012), such as, precisely, future (tense) or habitual (aspect) (cf. Bybee 1998, De Haan 2012, among others).

To sum up, from an empirical point of view, we observe that when the temporal modifier is introduced by the (usually genitive) preposition *di* (of) (1a) or a definite determiner (1b), the event is interpreted as a habitual one, in a given time-frame, while when the proper temporal modifier is ‘bare’, the event is perceived as punctual, non-iterable.

We assume that this asymmetry in the aspectual interpretation of the event described is triggered by the peculiar behaviour of ‘proper’ temporal adverbs. Indeed, in Italian, other time adverbs cannot be employed with definite determiners or preposition, independently of their realis or irrealis orientation, as illustrated in (3) and (4), respectively. Thus, they can convey only a punctual interpretation of the event, just like the ‘bare’ adverbials we have introduced in (1c).

- (3) sono andato al cinema ieri/*di ieri/*il ieri

I.am gone to.the cinema yesterday/of yesterday/the yesterday
 ‘Yesterday I went to the cinema’

- (4) vado al cinema oggi/*di oggi/*il oggi
 I.go to.the cinema today/of today/the today
 ‘Today I go to the cinema’

Notice that some time adverbs employed in irrealis contexts allow the presence of an indefinite determiner, as shown in (5). Specifically, in (5b) the (canonical) punctual interpretation of the event in (5a) is lost and interpretation is that of an undefined time-span in the future, which is not linked to the proper lexical content expressed by the adverb.

A similar effect is available also with names of days (verrò al cinema un lunedì = I will come to the cinema in an undefined Monday in the future). On the grammar of (fully) deictic/punctual time adverbs see Demirdache & Uribe-Etxebarria (2007).

- (5) a. andrò al cinema domani
 I.will.go to.the cinema tomorrow
 b. andrò al cinema un domani/*il domani
 I.will.go to.the cinema a tomorrow/the tomorrow
 ‘Tomorrow I will go to the cinema’

Interestingly, other proper temporal names - when employed as adverbial items - cannot be encoded as ‘bare’ adverbs in Italian. Consider the case of names of months in (6). According to our native judgements, either the genitive preposition *di*, the locative preposition *in* or the dative preposition *a* are allowed in such contexts. No definite determiners can appear with names of months. Thus, a distinct punctual versus habitual interpretation is not possible on the basis on the morphosyntactic encoding provided by the different adpositions/determiners/bare temporal names involved in (6).

- (6) a. Vado a Milano *Aprile/*l’Aprile/in Aprile/di Aprile /ad Aprile
 I.go to Milan April the April/in April/of April/to April
 ‘I will go to Milan next/in April’

Things are not different with season names, as illustrated in (7).

- (7) Vado a Milano *primavera/?*la primavera/di primavera/in primavera/a
 I.go to Milan spring/the spring/of spring/in spring/to
 primavera
 spring
 ‘I go to Milan next/during the Spring’

The peculiar behaviour of proper temporal names has not passed unnoticed in the literature. Anderson (2003, 2007) claims that proper temporal names, or *calendrical names* (cf. Quirk & Greenbaum 1973) are hybrid, in the sense that they are deictically restricted names that can also be used as count nouns (see Anderson 2003: 367).

The same ambiguity is observed by Langendonck (2007: 223). Consider the sentences in (8).

- (8) a. June is (usually) a hot month.
 b. June was hot.

In (8a) we find what Langendonck labels a ‘recursive (cyclic, generic, habitual)’ interpretation of the month name June. In (8b) we have a non-recursive, hence more ‘prototypical’ deictic reading of this proper name.

This state of affair is clearly linked to the punctual vs. habitual (or bounded vs. unbounded) value that can be attributed to Italian proper temporal names based on the bare/P/D alternation we have illustrated above. As we will show in our analysis in some details, there must be a way to turn a proper name into a countable entity in order to obtain a habitual/iterative value for the event described by means of proper temporal adverbials.

In what follows we will provide an analysis able to account for the punctual vs. habitual reading of time names in Italian, focusing on names of days, which appear to clearly signal the different possible encodings mentioned above at the morphosyntactic level, as we have seen: with the presence of a definite determiner or an adpositional item, the event is interpreted as a habitual (unbounded) one, whereas with a ‘bare’ proper time name, the event is assumed to be punctual (bounded).

The difference in the behaviour of days vs. months and seasons in Italian illustrated above may be linked to the fact, noticed by Langendonck (2007: 229), that there are “categories that may have to be situated at the boundary between proper name and common noun [...]” A well known case is constituted by the names of seasons. For instance, in English, they take no article in

sentences in which the season name is subject. Hence, English appears to favor the proper name solution. By contrast, in Dutch the article *de* is obligatory, so the common noun strategy is favored, as illustrated in (9).

- (9) a. Summer is the warmest season. *English*
 b. **De** zomer is het warmste seizoen. *Dutch*

An important aspect of our analysis will be to determine why adpositions and definite determiners seem to bear the very same habitual/iterative meaning when introducing the sub-set of proper temporal names denoting days of the week. We will assume that these are two possible strategy to turn a (deictic) name enabling the identification of her/his/its referent into a countable item .

3. A morphosyntactic analysis for the interpretive asymmetry of names of days

3.1 A N-to-D movement for individual reference

Let's start considering the data in (10).

- (10) a. vado al cinema il prossimo lunedì/il lunedì
 I.will.go to.the cinema the next Monday/the Monday
 prossimo
 next
- b. vado al cinema lunedì prossimo/*prossimo lunedì
 I.will.go to.the cinema Monday next/next Monday

In Italian, like 'canonical' proper names (see Longobardi 1994 and subsequent literature), also proper temporal adverbials are able to rise to D, as illustrated in (10b). Note that there are no interpretive differences between (10a) and (10b): the event is necessarily perceived as punctual, given the presence of the temporal adjective *prossimo* 'next' (cf. Larson & Cho 2003).

What is strictly relevant here is that the proper time adverb can move to a D position, as illustrated by the rough structure in (11): in (10b) the nominal item climb over the adjective and is spelt out in D.

- (11) [_{IP} [_{VP} vado [_{1SG} [_{PP} al cinema] [_{DP} Lunedì ... [_{NP} Lunedì]]]]]

The fact that the adverbial in (11) bears nominal features (and hence is embedded within a D structure) is ensured by the fact that it can function as the nominal head of a relative clause, as illustrated in (12a). It can also be selected by an indefinite determiner (triggering a non-defined, but punctual interpretation of the event), as in (12b). Furthermore, the adverbial item agrees in phi-features with a modifier, as shown in (12c).

- (12) a. vado al cinema(il) lunedì che viene
 I.go to.the cinema(the) Monday that come
 ‘I will go to the cinema next Monday’
- b. ho visto il film un lunedì.
 I.have seen the movie a Monday
 ‘I have seen the movie one of the past Mondays’
- c. vengo lunedì prossimo / domenica prossima
 I.come Monday.m.sg next.m.sg Sunday.f.sg next.f.sg
 ‘I will come next Monday/next Sunday’

Notice also that the contrast between names of days vs. names of months/seasons is confirmed by the impossibility/clear markedness for the latter to appear determiner-less in the structures in (13), at least according to our grammatical judgements.

- (13) a. verrò il prossimo Aprile/l’ Aprile prossimo/*?Aprile
 I.will.come the next April/the April next/April
 prossimo
 next
- b. verrò il prossimo Inverno/l’ Inverno prossimo/*?Inverno
 I.will.come the next winter/the winter next/winter
 prossimo
 next

Given the facts roughly illustrated above, we assume that the interpretive asymmetry illustrated in (1) and repeated in (14) for ease of reference, is due to the different morphosyntactic properties of the structures involved.

- (14) a. vado al cinema di lunedì
 I.go to.the cinema of Monday
- b. vado al cinema il lunedì
 I.go to.the cinema the.sg Monday
- c. vado al cinema lunedì
 I.go to.the cinema Monday

As for sentences like (14c) we have already seen that the proper temporal item rises to D, as illustrated in (10), determining a punctual and bounded interpretation. Indeed, it is arguable that the N-to-D movement/chain crucially triggers an individual-like reference as pointed out in Longobardi (2005, 2008) (cf. also Roberts 2019), so that the event may be perceived only as punctual.

We are now faced with the puzzle regarding the presence of a preposition or a definite determiner, both triggering a habitual reading in (14b) and (14c).

3.2 Turning a name into a (countable) noun: two different morphosyntactic devices

We start by considering the case of definite determiners introducing proper temporal adverbials. We assume that the (singular) definite determiner in (1b)=(14b) introduces a generic (plural) reading for temporal names, comparable to the effect highlighted in (15) (cf. Chierchia 1998, Delfitto 1998, 2002, Storto, 2001, Zamparelli 2002, Falco & Zamparelli 2019, among others).

- (15) a. Il dodo è estinto
 the dodo is extinct (=All dodos are extinct)
- b. Il cane è fedele
 The dog is loyal (=All dogs are loyal)

Thus, the sentence in (14b) means that the event depicted by the verbal predicates is a habitual one, namely it takes place every Monday, due to the generic meaning encoded by the determiner *il*. Longobardi (1994, 2005) accounts for this assuming that the definite construal reflects the presence of a null D position: when the D superstructure is absent, the generic reading becomes available and the overt definite determiner is an expletive, as in (16).

- (16) [ϕ il [NP lunedì]] = 'Monday'

Notice that also plural definite determiners are allowed with names of the days, as illustrated in (17), matching - in the contexts taken into account here - the generic value encoded by singular ones (cf. Carlson 1977 and subsequent literature). Again, what we obtain is a habitual reading, turning a definition into a countable item.

- (17) vado al cinema il lunedì = vado al cinema i lunedì
 I.go to.the cinema the.sg Monday I.go to.the cinema the.pl Monday
 ‘I go to the cinema on Mondays’

The same interpretive effect is obtained with another morphosyntactic tool, namely by use of the adposition *di*, as in (1a)=(14a). In this case, things are less clear-cut.

First of all, we must say that the adposition *di* is not linked in any respect to the partitive determiner *dei*, as illustrated in (18). The sentence in (18a) turns out to be fully ungrammatical if a partitive determiner is employed to introduce a temporal adverbial in irrealis contexts. It can appear (marginally) grammatical only in realis contexts, referring to an undefined set (of days) in the past, as shown in (18b). Furthermore, the adpositional value of the morpheme *di* - as we have seen above - is confirmed by the fact that (cognate) names of seasons and names of months require to be introduced by an adposition (locative *in* or dative *a*) in adverbial contexts.

- (18) a. *verrò al cinema *dei lunedì
 i.will.come to.the cinema of Monday/det.indf.pl Monday
 b. ?Sono andato al cinema dei Lunedì
 I.am gone to.the cinema det.indf.pl Monday
 ‘I went to the cinema some Mondays (in the past)’

Following Manzini & Savoia (2011), Franco & Manzini (2017a,b), we assume that the adposition *di* instantiate an ‘inclusion/sub-set’ relator (\subseteq). The same characterization is provided by these authors for the ‘dative’ adposition *a* (the genitive=dative syncretism is one of the most widespread in natural languages, cf. also Caha 2009). This characterization of *di*, *a* as an elementary predicate can explain the different context in which this morpheme appears and can be extended to the locative item *in* (cf. Franco and Lorusso 2019, Franco, Manzini and Savoia, ahead of print).

In the particular case of names of days, the relation between the eventive predicate and the proper temporal NP can be syntactically shaped through a sub-set relation (expressed by *di*)

between the event and the set of temporal frames, which (are able to) include it. The fact that we are on the right track is confirmed by the possible use of the preposition *in*, *a* for proper ‘month’ modifiers of verbal predicates in Italian, as in (19) (see also the example in (6)). Remember, however, that month adverbs do not allow a ‘bare’ (i.e. punctual) encoding, as well as an accompanying singular D, possibly due to the fact that months are intrinsically interpreted as plural entities, i.e. sets (of days).

- (19) a. vado a Pantelleria in/di/a Marzo
I.go to Pantelleria in/of/to March
- b. ?*Vado a Pantelleria il Marzo
I.go to Pantelleria the March
- c. *Vado a Pantelleria Marzo
I.go to Pantelleria March

These facts are reminiscent of the contrast that can be seen within the class of proper names of location in Italian: locative PPs introduced by *a* can be used in Italian together with DPs referring to cities, villages and small islands as in (20a), while *in* is required with DPs referring to countries, continents or big islands, as in (20b).

- (20) a. Gianni è/va a/*in Pantelleria/Conversano/Siena
‘Gianni is/goes at/in Pantelleria/Conversano/Siena’
- b. Gianni è/va *a/in Italia/Africa/Sicilia
‘Gianni is/goes at/in Italy/Africa/Sicily’

The generalization provided by Renzi & Salvi (1988: 513, cf. also Folli 2008: 210, Matushansky 2016) to account for this pattern is that “*a* is required with locations which can be conceived of as ‘pointed’ in our mental representation of their geographical nature.” The same observation can be clearly made for names of days vs. names of months or seasons: so while days are seen as punctual and would work like the ‘pointed’ location (cf 20a), months and seasons work more like a ‘container of days/months’.

Crucially, Franco & Lorusso (2019) link the different use of the preposition *a* vs. *in* within the class of proper names of location with a parameter on D: individual-like entities like the ones in

(20a) do not allow a determiner and can raise to D, while ‘broad’ location items (20b) are obligatorily accompanied by a D, as illustrated in (21).

(21) (*1a) Pantelleria ha una superficie di 83 km² / *(il) Portogallo ha una superficie di 92.212 km²
 ‘Pantelleria has an area of 83 sq km /Portugal as an area of sq km 92.212’

The generalization that follows from the data introduced here is that only ‘punctual’ proper names of locations or periods in time can appear bare (and raise to D). Items which are perceived as set of individuals must be accompanied by a D morpheme.

At this point, the question is: where does the set (habitual) interpretation (i.e. the adpositional embedding) for the days of the week come from? Notice that the temporal item in structures like (1a)=(14a) is arguably a simple NP, devoid of any D structure above it. Indeed, Italian structures like those in (22a), where the proper adverbial embedded under the adposition takes a modifier on its left, are completely ungrammatical. If the proper adverb embedded under an adposition raises to D, as in (22b), we have again a very marked structure: it is quite difficult to assume a punctual reading if the *di* item is present. Notice that in a standard genitive structure, when temporal proper names modify an NP and not an event, the result is grammatical, as in (22c).

(22)	a.	*andrò	al	cinema	di	prossimo	lunedì
		I.will.go	to.the	cinema	of	next	Monday
	b.	??andrò	al	cinema	di	lunedì	prossimo
		I.will.go	to.the	cinema	of	Monday	next
	c.	andrò	alla	riunione	di	martedì prossimo/del prossimo martedì	
		I will.go	to.the	meeting	of	Tuesday next/of.the	next Tuesday

We may assume that the sub-set interpretation is triggered by the relator *di* because the temporal NP embedded under the adposition *di* does not climb up to a (Div) position high enough to ensure a countable reading, following Borer (2005), or when the D superstructure is absent, in Longobardi (1994)’s terms. In essence, the temporal NP in contexts like (13a) is substance/mass-like (Seppanen 1974) or are predicates (as argued by Stowell 1989, Longobardi, 1994, Moro 1998) and can be interpreted only as a whole/class/set (the set of Mondays) on which the relator *di* can apply saying that ‘there is a given event which is included (takes place) in the class of Mondays’. This fact actually forces a habitual (non-specific) interpretation. Specifically, the encoding of the class of temporal names in generic noun phrases with the aid of a definite determiner refers to the class as

represented by a typical specimen, while the same encoding with the use of a part/whole relator selecting for a NP without any D superstructure, refers to the totality (maximality, exhaustivity, cf. Link 1983, Chierchia 1998y) of the members of the class. In both cases, the effect can be labelled of anti-individuation, necessarily triggering a habitual/iterative reading.

We provide in (23) the relevant structures for the examples in (14), showing how subtle morphosyntactic differences in the encoding of proper modifying terms can enhance different interpretive facts.

- (23) a. [IP [VP vado [1SG [PP al cinema] [C di [NP Lunedì]]]]]
 b. [IP [VP vado [1SG [PP al cinema] [DP_{generic} il [NP Lunedì]]]]]
 c. [IP [VP vado [1SG [PP al cinema] [DP_{individual} Lunedì [NP ~~Lunedì~~]]]]]

4. Conclusion

In this talk, we have provided an analysis able to account for the punctual *vs.* habitual reading of proper temporal names in Italian, focusing on names of days, which clearly signal the a difference in their possible aspectual encoding at the morphosyntactic level: when these items appears as adverbials modifying an event, such event is interpreted as a habitual one, if the temporal name is preceded by a definite determiner or an adpositional item, while it is interpreted as a punctual one if the temporal name is ‘bare’.

We have argued, following Longobardi (2005, 2008) that with bare proper time names, a N-to-D movement/chain triggers an individual-like reference given that the event may be perceived only as punctual. An important aspect of our analysis has been to determine why adpositions and definite determiners seem to bear the very same habitual/iterative meaning when introducing the sub-set of proper temporal names denoting days of the week. We have assumed that these are two possible strategy to turn a (deictic) name enabling the identification of her/his/its referent into a iterable item: definite Ds introduce a generic reading for the temporal names, while a P ‘sub-set’ relator is used to ‘include’ a given event within a class of temporal individual (intervals).

Selected References (for the full list of references email us)

- Anderson, John M. 2003. On the structure of names. *Folia Linguistica* 37: 347-398.
 Anderson, John M. 2005. On the grammatical status of names. *Language* 80: 435--474.
 Borer, Hagit. 2005. *Structuring Sense, Vol. 1: In name only*. Oxford: Oxford University Press.

- Demirdache, Hamida and Myriam Uribe-Etxebarria. 2007. The syntax of time arguments. *Lingua* 117: 330-366.
- Folli, Raffaella. 2008. Complex PPs in Italian. In A. Asbury, J. Dotlačil, B. Gehrke, R. Nouwen (eds.), *Syntax and Semantics of Spatial P*, 197–220. Amsterdam: John Benjamins.
- Franco, Ludovico, & M. Rita Manzini. 2017. Instrumental prepositions and case: Contexts of occurrence and alternations with datives. *Glossa* 2(1). 1–47.
- Franco, Ludovico, & Paolo Lorusso. 2019. The expression of proper location and beyond: motion-to and state-in in Italian spatial adpositions. In M. Baird and J. Pesetsky. NELS 49: Proceedings of the Forty-Ninth Annual Meeting of the North East Linguistic Society: Volume 1, 279–290 GLSA: University of Massachusetts, Amherst.
- Langendonck, van Willy. 2007. *Theory and typology of proper names*. Berlin: Mouton De Gruyter.
- Larson, Richard, & S. Cho. 2003. Temporal adjectives and possessive DPs. *Natural Language Semantics* 11: 217-247.
- Longobardi, Giuseppe. 1994. Reference and Proper Names: a Theory of N- Movement in Syntax and Logical Form. *Linguistic Inquiry* 25(4): 609-665.
- Longobardi, Giuseppe. 2005. Toward a Unified Grammar of Reference. *Zeitschrift für Sprachwissenschaft* 24: 5-44.
- Longobardi, Giuseppe. 2008. Reference to individuals, person, and the variety of mapping parameters. In *Essays on Nominal Determination: from morphology to discourse*, ed. by Alex Klinge and Henrik Høeg Müller, 189-211. Amsterdam: John Benjamins,
- Manzini, M Rita, & Leonardo M. Savoia. 2011. Reducing 'case' to denotational primitives. *Linguistic Variation* 11: 76-120.
- Manzini, M. Rita. 2018. Micro- and macro-variation. From pronominal allomorphies to the category of irrealty/non-veridicality. In Mirko Grimaldi, Rosangela Lai, Ludovico Franco, Benedetta Baldi, eds. *Structuring Variation in Romance Linguistics and Beyond. In honour of Leonardo M. Savoia*, 111-120. Amsterdam: John Benjamins,
- Matushansky, Ora. 2016. On the syntax of place names. Hand-out of a talk presented at Workshop “Namengrammatik”, March 2016, Delmenhorst, Germany.
- Renzi, Lorenzo & Giampaolo Salvi. 1988. *Grande Grammatical Italiana di Consultazione*, Volume II. Bologna: Il Mulino.
- Zamparelli, Roberto. 2008. Dei ex machina: a note on plural/mass indefinite determiners. *Studia Linguistica* 62: 301–327.