Spanish time constructions with hacer: gradient judgments and corpus data to solve a syntactic conundrum

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Abstract: The present work studies the grammatical properties of Spanish time constructions involving *hacer* 'to make' from an empirical, quantitative perspective with insights from both competence and language use. The results show a big difference between the properties of the so-called clausal and adverbial constructions, something unnoticed until now. Whereas *hacer*, in the former, has properties not significantly different from other verbs, in the latter, it shows a strong erosion of its verbal and clausal properties like TAM morphology, negation, time adjunction or word order freedom. This contradicts earlier contributions to the topic and argues against those formal proposals positing a synchronic derivational relation between the two constructions.

Keywords: temporal *hacer*, Spanish, competence, quantitative, corpus.

1. Introduction and interest

Expressions for the deictic localization in the past¹ of a certain event, like Eng. ago, Rus. nazad, Sp. hace etc. are often quite idiosyncratic. First of all, they are amongst the most likely candidates for postposition cross-linguistically, even in prepositional languages (Plank 2011, Herce 2017). Secondly, the grammatical category of many of these expressions is disputed. English ago, for instance, as mentioned by Kurzon (2008), has been analyzed variously as a postposition, as an adverb and as a preposition. Its properties, however, cannot be captured fully by traditional Aristotelian categorization (Culicover 1999: 71-74) and thus classification into one of the traditional categories can only be made by arbitrarily attributing more weight to some properties than others. Its Italian equivalent fa is also exceptional and, arguably, the only postposition in that language.

The Spanish expression, cognate with the Italian one (i.e. from Latin *facere*) is still more remarkable. Unlike in the Italian expression, productive verbal morphology (e.g. future or imperfect) continues to appear in *hacer* in these time expressions but its prepositional properties are also prominent. Also unlike in standard Italian, there are two different constructions in which temporal *hacer* can occur (see Section 3.1) whose mutual stand (derivation or base-generation) is disputed. Because of these interesting properties, there has been a fair amount of research around these Spanish expressions (e.g. Rasmussen 1981, Pérez Toral 1992, Rigau 1999, Howe 2011, Brucart 2015, Fábregas 2016) but disagreement still prevails concerning both the nature (i.e. grammatical category) of *hacer* in these constructions, as well as the relationship between the two constructions where temporal *hacer* can appear.

These differences are not only the result of different theoretical standpoints, but also of many disagreements concerning the actual grammatical possibilities of the two constructions. Without being exhaustive, disagreements include the possibility for pronominalization of the object NP, the tense-aspect-mood (TAM) morphological possibilities of *hacer* or the possibility for *hacer* to have time adjuncts in the adverbial construction. This illustrates the necessity for linguists to transcend individual introspective grammaticality judgements and to move towards quantitative empirical data. One of the goals of the present paper is to illustrate the merits of quantitative approaches to

¹ These expressions have been labeled in different ways in previous literature; among others, they have been called "temporal deictic expressions" by Kurzon (2008), "temporal distance markers" for distance-past by Haspelmath (1997) and "past distancers" by Herce (2017).

syntactic variation and the advantages of the use of multiple methods for data-collection. With these tools, my aim here is to provide a detailed picture of the grammatical properties of Spanish temporal *hacer*, paying attention to both competence (Section 4) and language use (Section 5), and, in the face of the data, to propose a tentative answer to the riddles discussed in earlier insights into the topic (Section 6).

2. An overview of Spanish *hacer*

Spanish *hacer* 'to make' has both temporal and non-temporal uses. Using *hacer* preceding an NP containing a time measure is the most widespread way of expressing the distance-past time relation in contemporary Spanish:

(1) Estuve en Londres hace dos años be.PST.1SG in London make.3SG two years 'I was in London two years ago'

The expression is also very frequently used to express an up-to-now time relation:

(2) Hace 2 años que soy socio make.3SG 2 years that am member 'I have been a member for two years'

In its non-temporal uses, the verb *hacer* is very general in meaning and, even in its core uses (3), quite desemanticized. It occurs as well in impersonal constructions, were it is often semantically empty and close to an existential like in (4) and (5):

- (3) Juan hace los deberes a las seis
 John make.3SG the homework at the six
 'John does his homework at six'
- (4) Hace falta más madera make.3SG need more wood 'More wood is needed'
- (5) Hace un frío horrible make.3SG a cold terrible 'It is terribly cold'

The *hacer* of the time constructions which we analyze here has also been termed "existential" by some authors (Rigau 1999). The verb is at any rate also impersonal in these uses and some parallelisms are bound to exist. In this vein, authors like Perez Toral (1992) have analyzed some of these constructions together. Here, however, focus is on temporal *hacer* exclusively since the links to other non-temporal uses are not considered strong enough to demand a unitary approach.

3. The grammar and semantics of temporal hacer

3.1. Two different constructions

The more traditional grammatical descriptions of Spanish (e.g. RAE-ASALE 2009; Demonte & Bosque 1999) in agreement with most linguists state that, under *hacer*+time there are two different constructions that need to be distinguished. Adopting (or rather translating) the terms used by RAE-ASALE (2009: 1832-1840) I will speak here of a clausal construction in the examples (6) and (7)² and of an adverbial construction in (8):

² Some authors (e.g. Rigau 1999, Fábregas 2016) do not believe (6) and (7) are comparable constructions. These allegations will be explored later.

(6) Hace diez años que murió makes.3SG ten years that died.3SG 'It has been ten years since (s)he died' Clausal construction

(7) Hace diez años de su muerte make.3SG ten years from his/her/their death 'It has been ten years since (s)he died'

Clausal construction

(8) Ha llegado a casa hace diez minutos has arrived to home make.3SG ten years '(S)he arrived home ten minutes ago'

Adverbial construction

Despite superficial similarity, the syntax of the two constructions might be very different. Their syntactic description is, in fact, a much debated issue and little agreement exists in this respect. This will be debated in later sections. For the moment I will focus on a more accessible superficial difference in order to distinguish the two constructions consistently in subsequent argumentation: Whereas in the clausal construction of (6) and (7) hacer appears to be the main verb of the sentence, since its phrase cannot be freely omitted, it appears not to be so in the adverbial construction (8), since the phrase it heads, hace diez minutos, is a fully optional adverbial expression there. This will be the relevant criterion to discriminate the two constructions throughout the present paper.

It is worth pointing out that adopting the terms used by RAE-ASALE (2009) does not imply full agreement with the way in which they or other authors define each construction. For example, RAE-ASALE (2009: 1832) states that the clausal construction requires either a *que*-clause like (6) or a PP like (7) to be considered so. That constituent, however, may sometimes be omitted. This should not mean that we are automatically dealing with the adverbial variant in that case. RAE-ASALE (2009: 1837), for example, considers the following an instance of the adverbial construction, which I believe is not:

(9) Pronto hará cinco años, si no los ha hecho ya soon make.FUT.3SG five years if NEG them has made already 'It will soon be five years if it is not five years already'

As can be seen, *hacer* is, evidently, and despite the absence of a *que*-clause or an eventive PP, still the main verb in the sentence and according to the present definition of the expressions, a clausal and not an adverbial construction.

3.2 Expressed time relations and semantics

The adverbial and the clausal time constructions with *hacer* can express not only the distance-past meaning in (6-8) but also, as was mentioned in Section 2, an up-to-now meaning. Here, the event is not located on the time axis at some point in the past but rather extends from some point in the past until the present. This meaning is fully legitimate in the clausal construction (10) but is nowadays less frequent in the adverbial construction (11), where speakers tend to use a preposition *desde*³ before *hacer* to unambiguously indicate the up-to-now meaning. Other prepositions in use with other time adverbials like *ayer* 'yesterday', *el lunes* 'monday' etc. are also allowed before the phrase headed by *hacer* (12) (13) which would be a unique case in the language, as many authors point out, if this phrase were regarded as a VP:

(10) Hace mucho que trabajo aquí make.3SG a.lot that work.1SG here 'I have been working here for a long time'

³ Some authors (e.g. Fábregas 2016) directly assign an ungrammatical status to these up-to-now sentences lacking *desde* but, as Brucart (2015: 5) shows, they continue to appear nowadays.

- (11) Trabajo aquí (desde) hace mucho work.1SG here since make.3SG a.lot 'I have been working here for a long time'
- (12) Trabajaba aquí hasta hace poco work.IPF.3SG here until makes.3SG little 'He used to work here until recently'
- (13) Las ciudades de hace 100 años the cities of make.3SG 100 years 'The cities of 100 years ago'

When the clausal and the adverbial constructions express the same time relation, no difference in meaning can be found. However, there is a clear pragmatic distinction which I have tried to reflect in their English translations in (6-8). Many authors have reflected on this (e.g. Brewer 1987 or Rasmussen 1981) and have attempted to explain it in different ways. A representative expression of this sentiment is that of Rasmussen (1981: 131) who commented that "when the main verb is hacer, the measurement of time prevails semantically; When it is subordinate, the action of the verb is more important" (translation mine). This constitutes a parallel with clefts and other focalizing constructions and may be suggestive of a derivational relation between the clausal (cleft-like) and the adverbial constructions, which is something some authors (Rigau 1999; Fábregas 2016) propose. Many others (e.g. García Fernández 1999), however, have noted as well that hacer is eventive in the clausal but not in the adverbial construction. Note, for instance, that it can be asserted in the former but not in the latter:

(14) Sí hace diez años que murió yes make.3SG ten years that died.3SG 'It HAS been ten years since (s)he died' (15) *Murió sí hace diez años died.3SG yes make.3SG ten years ('(S)he died ten years ago')

This along with many other differences in the syntactic and morphological properties of the constructions that will be presented in subsequent sections make it, in my opinion, difficult, to sustain a derived status for the clausal construction.

4. A competence-based approach to the synchronic properties of the adverbial construction with *hacer*

It has been mentioned earlier that the syntactic analysis of the *hacer*+time constructions is quite controversial. One of the most common debates concerns the nature (i.e. grammatical category) of *hacer* in these constructions, especially in the adverbial. RAE-ASALE (2009: 1837) for example, argued that "even if it has been proposed that *hacer* has an adverbial or prepositional nature in these constructions, there are more arguments in favor of a verbal nature". They go on to mention a series of verbal properties that, in their opinion, suggest that we are here dealing with a *bona fide* verb. Among others, they mention the availability of time inflectional morphology (16), the possibility for *hacer* to have time adjuncts (17) in this construction or to negate it (18) or to use verbal periphrases (19):

- (16) La había visto hac-ía un año her have.IMP.1SG seen make-IPF.3SG one year 'I had seen her one year before'
- (17) Abandonó la ciudad pronto hará tres meses

 left.3SG the city early make.FUT.3SG three months

 'It will be soon three months since (s)he left the city' (RAE-ASALE 2009: 1837)

- (18) Se casó no hace ni un mes
 REFL married.3SG NEG make.3SG even one month
 '(S)he got married less than one month ago' (RAE-ASALE 2009: 1837)
- (19) Se divorciaron debe de hacer dos años o así

 REFL divorced.3PL must make two years or so

 'It must have been two years or so since they got divorced' (RAE-ASALE 2009: 1837)

Many native speakers of Spanish may already be somewhat suspicious at reading these last sentences. Especially (17-19) are likely to sound far from natural to many. For this reason, in order to know what the synchronic possibilities of the construction really are in the speech community, a questionnaire⁴ has been designed to check native speakers' intuitions on precisely these borderline cases and other unclear properties.⁵

The results seem to support my initial reserves concerning the properties exemplified by the sentences (16) to (19). When evaluating (from 0 to 10) the acceptability of a sentence containing a time adjunct to adverbial *hace* (20), speakers assigned it a mean score of only 2.26, which shows that the grammaticality of those sentences is more than dubious synchronically:

(20) Tuve el accidente mañana hace tres años (rated 2.26/10) had.1SG the accident tomorrow make.3SG three years 'Tomorrow it will be three years since I had the accident'

Note that the corresponding clausal construction would be perfectly well formed. Still more interesting is the fact that there seem to be important differences between different age groups. Whereas speakers under 30 rated (20) with only 1.66 on average, the sentence received 3.06 points on average among speakers over 50. This might be suggestive of a diachronic change in progress. The adverbial construction with *hace* may, therefore, be on its course to becoming compulsorily deictic, with the time distance therefore counted always from the present and thus disallowing time modifiers.

The use of <u>non-present forms</u> of *hacer* in the adverbial construction was also found to be marked at best by speakers, as sentence (21) received an average rating of 4.24 out of 10:

(21) Baj-ó la basura har-á dos días (rated 4.24/10) take.down-PST.3SG the garbage make-3SG.FUT two days '(S)he took out the rubbish around two days ago'

Similarly, a sentence like (22) was strongly preferred to a sentence like (23), especially by younger speakers, which again points toward a progressive loss of the morphological possibilities of *hacer* in the adverbial construction, maybe as a result of its deictization:

⁴ The questionnaire was distributed in written form and was filled in the presence of the researcher. Data were provided by 17 native speakers of Peninsular Spanish between the ages of 17 and 29 and by 18 speakers between the ages of 50 and 74.

Moving beyond the linguist's grammaticality judgements is necessary, specially in less clear-cut cases like these. As has been advanced earlier, we see many disagreements concerning what is and what is not possible in this construction. Pérez Toral (1992) and RAE-ASALE (2009), for example, believe pronominalization of the argument of *hacer* is possible whereas Sáez del Álamo (1987) and Fábregas (2016) believe it is not. Fábregas (2016) writes, as well, that in the clausal construction one finds only the subjunctive, the imperfective past, the future and the present, which is much less than the variety posited, for example, by RAE-ASALE (2009). Rasmussen (1981) mentioned that time adjuncts cannot occur in the adverbial construction while García Fernández (1999) or RAE-ASALE (2009) believe they are possible. All in all, many black-or-white judgments and contrasts are presented which arouse suspicion that they might have been influenced by the will of the linguist to provide evidence in support of their analysis of the construction, disregarding or dismissing evidence on the contrary.

- (22) Había estado contigo dos días antes had.1SG been with.you two days before 'I had been with you two days before'
- (23) Había estado contigo hac-ía dos días had.1SG been with.you make-IPF.3SG two days 'I had been with you two days before'

The results concerning the availability of the <u>up-to-now meaning</u> in the adverbial construction also point toward a change in progress. The mean rating of a sentence like (24) was 4.98, that is, almost exactly on the equator between perfect grammaticality and complete ungrammaticality. However, for younger speakers the mean was 3.68 compared to a 6.54 from the older speakers:

(24) No estoy con tu hermana hace una semana (rated 4.98/10)

NEG be.1SG with your sister make.3SG one week

'I haven't been with your sister for a week'

Similarly, the results also showed an almost absolute preference from younger speakers to use *desde* in sentences like (25) whereas the preference was much weaker in older speakers. This points, as has been said, to a progressive loss of the ability of *hacer* by itself to denote a time interval in the adverbial construction.

(25) No visito a tu familia (desde) hace dos meses NEG visit.1SG your family since make.3SG two months 'I haven't visited your family for two months'

<u>Pronominalization</u> is another one of the properties which are sometimes attributed to the adverbial construction. RAE-ASALE (2009:1837), the same as Pérez Toral (1992:105), believed it was possible there. This, I believe, is a confusion derived from the way the adverbial construction was defined by them *vis a vis* the clausal. Pérez Toral, for example, gives the following example:

(26) _¿Estás esperando hace dos horas? _Sí, las hace. (Pérez Toral:105) be.2SG waiting make.3SG two hours Yes them make.3SG '_Have you been waiting for two hours? _Yes, it has been two hours'

The answer provided here by Pérez Toral, I believe, does not match the question, which I have attempted to show in the English translations. It would be a suitable answer to ¿Hace dos horas que estás esperando? It should classify, therefore, as an instance of the clausal, not the adverbial construction. Attributing this property to the adverbial construction may be, thus, the product of an unsuitable definition of the construction if exclusively those constructions with overt queclauses are classified as clausal as was proposed by RAE-ASALE (2009). This cannot be the reason, however, for Pérez Toral's (1992:120) acceptance of the following sentence as grammatical:

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(27) Murió un año hace (rated 0.30/10) died.3SG a year make.3SG 'He died a year ago' (Pérez Toral, 1992:120)
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This, which was taken as evidence that the <u>pre-posing of the time NP</u> in the adverbial construction is acceptable, is an ungrammatical sentence for the vast majority (if not all) speakers of contemporary Spanish. Logically, it received a mean rating of a mere 0.30 in my questionnaire.

<u>Negation</u>, unlike the above mentioned properties, is a issue which has been left untackled by most linguists who have addressed these constructions (e.g. Pérez Toral 1992; García Fernández 1999; Rigau 1999; RAE-ASALE 2009; Brucart 2015 and Fábregas 2016). When mentioned, it has been suggested that it is hardly an interesting feature because there are barely any differences between the behavior of negation in the clausal and in the adverbial construction or between the possibilities for negation in *hacer*+time as opposed to other verbs and constructions. Rasmussen (1981: 99), for example, commented that in the adverbial construction negation introduces "very

few changes in the syntax, combinatorial possibilities and the semantics" (translation mine). This is clearly not true and even the examples he provided can be used to prove it. These included:

- (28) Vive usted allí no hace mucho tiempo live.3SG you there NEG make.3SG a.lot time 'You haven't lived there for a long time' (Rasmussen 1981:100)
- (29) Era usted de nuestra opinion no hace mucho tiempo be.IPF.3SG you of our opinion NEG make.3SG a.lot time 'You agreed with us not long ago' (Rasmussen 1981:100)
- (30) Lo habían maltratado no hacía mucho him had.3PL abused NEG make.IPF.3SG a.lot 'They hadn't abused him long before' (Rasmussen 1981:100)

All of Rasmussen's (1981) examples involve the use of *mucho* 'a lot', which is already revealing. In fact, if that expression *mucho* or *mucho* tiempo is replaced by other time expressions (e.g. 12 días '12 days', poco 'little', años 'years'...) the result is an ungrammatical or very unnatural sentence:

- (31) *?Vive usted allí (desde no) hace 12 días live.3SG you there since NEG make.3SG 12 days ('You haven't lived there for 12 days')
- (32) *?Era usted de nuestra opinion no hace poco be.IPF.3SG you of our opinion NEG make.3SG little ('You agreed with us not long ago')
- (33) *?Lo habían maltratado no hac-ía años him had abused NEG make-IPF.3SG years 'They hadn't abused him years before'

Notice that without negation the sentences become again grammatical. This shows that negation is in fact, unlike most grammarians and linguists have previously assumed, extremely restricted in the adverbial construction. In my opinion, *no hace mucho* is just a quasi-lexicalized, frequent word string in which negation has managed to survive longer.

An internal linguistic pressure to get rid of negation in the adverbial construction with *hace* is easy to understand. Since *hacer* synchronically does not denote in this construction any event and is just an ancillary grammatical element, true polarity is simply excluded from it. In fact, *no hace mucho* is here no longer a negation of *hace mucho* but rather means *hace poco* 'a short time ago' which is maybe the reason that the expression has managed to survive. All signs indicate, however, that negation will eventually also lose this last stronghold, since the alternative *hace no mucho* has been introduced from the mid 20th century (first appearance in CORDE in the 1940') and has been gaining ground since then.

5. A usage-based approach to the synchronic properties of *hacer*+time

The competence of native speakers has already been seen to show important deviations from the assumptions of previous theoretical analyses. It is time to ask how this competence translates into usage. Howe (2011), with a corpus-based approach to present-day spoken Spanish, attempted to show that the *hacer*+time construction in the Spanish of Spain is neither purely clausal nor adverbial but rather displays mixed features. According to him, "older" more clausal properties are retained better in non-present forms of *hacer* while the most frequent *hace* has advanced further along the grammaticalization path. Howe (2011) found that, on his corpus, present *hace* constituted an impressive 96% of the total instances of temporal *hacer* while imperfective *hacía*, future *hará* or past *hizo* contributed a mere 3%, 0.6% and 0.3% of the total respectively.

This shows, in his opinion, that *hacer*+time is not a normal verbal construction, which I believe few linguists would be willing to suggest. His corpus analysis, despite many useful observations, has a major shortcoming, in my opinion, in the absence of a consistent separation of the data from the clausal and the adverbial constructions. This might be a conscious 'commitment not to be committed' to previous theoretical analyses but I believe is detrimental for the meaningful interpretation of the various data he presents.

Regarding the previous percentages, for instance, the fact that he often lumps together adverbial pre-verbal and clausal constructions, by virtue of their both being pre-verbal, obscures the frequency of each of the constructions. Only with a rule of three can one recover for example the actual percentages he assembled for the clausal construction. From Howe's results we infer that only 15.6% of the cases with *hace* he analyzed were clausal constructions compared to 46% in the case of *hacía*. This indicates that the proportion of non-present forms of *hacer* in the clausal construction is much higher than that mere 4% which was true for *hacer*+time as a whole, thus providing weaker evidence to regard the clausal construction as non-verbal and highly grammaticalized. Howe (2011:276) mentioned that "the predominance of the present tense collocate in the data suggests that the verbal features of *hacer*+time have been largely neutralized". For the reasons given I believe this is largely true of the adverbial construction but not of the clausal.

Other novel observations by Howe (2011: 276) included, for instance, an "increased compatibility of the present tense collocate of *hacer*+time with a past-shifted right boundary modification". That is, he found sentences like:

(34) Le había visto hace dos días him had seen make.3SG two days 'I had seen him two days before'

Those occurrences are interpreted as suggesting a leveling of the properties across the whole *hacer*+time. I do not reject that possibility out of hand since the adverbial and the clausal constructions must be indeed connected in the mind of the speaker and some mutual influence would not be unexpected. There is, however, an alternative possibility: that sentences like (34) above illustrate, in fact, an increasing difference between the clausal and the adverbial constructions as the latter increasingly rejects non-present forms of *hacer* while they continue to occur freely in the largely autonomous clausal construction.

Possible levelings aside, I consider that the grammatical properties and pragmatic contribution of the clausal and the adverbial constructions with *hacer* show enough differences to demand a separate look at their usage. Given that Howe's (2011) approach to *hacer*+time did not sort out data consistently on that premise, an independent corpus search has been carried out to discover the usage patterns of each construction.

5.1 Methodology

The present corpus study has been carried out in the Corpus del Español del Siglo XXI (CORPES) of the Real Academia Española. For reasons of homogeneity and comparability with Howe (2011) I have limited my study to the Spanish of Spain, more specifically to the oral and internet subsections of the corpus as those probably reflecting spontaneous speech of the community more closely. I do not believe that the results that will be presented here differ substantially from those that would be found in most other Spanish speaking regions of America. Research would be, of course, needed.

The time constructions involving *hacer* as a whole have been the research target of this study. The search, however, has focused on the present (*hace*) and the imperfect (*hacía*) forms of the verb.

This is something largely imposed by the fact that, given the small frequency of other verb forms like the past (hizo) or the future (hará), it would have been impossible to reach a statistically relevant number of tokens. In addition, I believe that the most relevant difference of present vs non-present can still be successfully observed by comparing the present and the imperfect. The temporal constructions were further classified as for whether they were preceded by a preposition or not. Those which were not were further classified according to different parameters:

- -Type of construction instantiated (clausal or adverbial)
- -Time relation expressed (durative/up-to-now or punctual/distance-past)
- -Negation of the temporal verb (Presence or absence of negation in *hacer*)
- -Negation of the main event (Presence or absence of negation in the verb other than *hacer*)
- -Time adjunction (Presence or absence of time modifiers of temporal *hacer*)
- -Position of the temporal verb (hacer preposed or postposed to its time NP)

5.2 Results

The search has resulted in a total of 1111 tokens of the temporal construction. 52 of these were not classifiable for some of the parameters under study and were excluded from further analysis, leaving 1059 tokens. Only 10,9% (N=115) of these occurred in clausal constructions whereas the remaining 89,1% (N=944) occurred in the adverbial construction. These numbers show that the adverbial construction constitutes the most frequent use in contemporary Spanish despite not being so in earlier periods (Herce forthcoming). The raw frequency of *hacer*+time as a whole in the explored sections was found to be 442 tokens per million words.

When analyzing the morphological form of *hacer* (present *hace* vs imperfect *hacía*) it can be found, as expected and in agreement with Howe (2011), that the present tense is overwhelmingly the most frequent one, accounting for 96% (N=740) of the tokens whereas the imperfect constitutes a mere 4% (N=31) of the total. The distribution of present and imperfect forms across the two constructions is, however, very remarkable. The vast majority of the tokens of *hace* (91,2%, N=1026) appear in adverbial constructions. By contrast, the majority of the tokens of *hacía* (75,8%, N=25) appear in clausal constructions.

It was the difference in raw frequency between temporal *hace* (96%) and *hacía* (4%) which was understood by Howe (2011) as indicative of a loss of the verbal properties of the construction. However, as it is shown here, the overall number hides two very different realities: Whereas the clausal construction constitutes only a marginal proportion of temporal *hace*, it represents the majority of temporal *hacía*:

Table 1: Morphological exponence in *hacer* and instantiating construction

	Clausal Adverb				
hace	90	936			
hacía	25	8			

The proportions of Table 1 are very much in line with the figures which Pérez Toral (1992: 94) provided for the clausal construction in the twentieth century⁶ which suggests that the observed pattern is sound. Needless to say, Chi-squared test classifies the differences in Table 1 as extremely statistically significant (p < 0.0001).

⁶ She found in her count a total of 72 instances of present *hace* vs. 27 for imperfect *hacía* in the clausal construction during the 20th century. For the adverbial construction (page 172), during the 19th and 20th centuries, she found 133 tokens of *hace* vs. 13 of *hacía*, which already showed a considerable difference from the numbers of the clausal construction even if nothing comparable to the predominance of the present tense found in present-day Spanish.

We see, therefore, that when the clausal construction is analyzed separately from the adverbial, two very different patterns emerge. The present tense *hace* continues, of course, to be the most frequent (78.3%) in the clausal construction, as it is in most verbs. Overall, however, *hacer* shows here a much more balanced distribution of its TAM morphology, which points towards a full verbal status for *hacer* in the clausal construction. Once the clausal construction is removed from *hacer*+time, the adverbial construction is found to be still more unbalanced toward the use of the present tense, which occurs in more than 99% of the cases.

There are other marked differences in the properties of the constructions apart from their morphological possibilities. For instance, it has been found that 98,3% (N=645) of the adverbial constructions have a distance-past punctual meaning whereas 60,9% (N=70) of the clausal constructions had a durative up-to-now meaning. Thus, despite both meanings being attested in both constructions, each of them seems specialized in a different one:

Table 2: Time relation and instantiating construction

	Durat. Punct				
Adverb.	11	645			
Clausal	70	45			

The differences shown in Table 2 are also statistically extremely significant. According to Chisquared test p<0.0001.

A last *a priori* unexpected significant difference which emerged from the data concerned the negation of the main event. By this I mean the negation of the verb other than *hacer*, either when this is the main verb, which will be in the adverbial construction, or when it is in the *que*-clause subordinate to *hacer*, which will be in the clausal construction. Thus, the main event is negated in only 1.8% of the cases in adverbial constructions but in 60.5% of them in the clausal construction.

Table 3: Negation of the main event and instantiating construction

	Neg.	No-neg.
Adverb.	8	648
Clausal	41	74

Again these differences are statistically extremely significant (p<0.0001) according to the Chisquared test. What is important at this point, however, is that these numbers suggest the existence of a very frequent pattern *hace tiempo que no... / hacía tiempo que no...* Clausal *hacer* thus shows a predilection for a negated verb in its *que*-clause, which, if the clausal construction were derived from the adverbial, would be difficult to explain (i.e. why would a time adverbial affect the polarity of the main verb?).

I would like to finish this section with a cautionary tale regarding the use of corpora to investigate the grammatical properties of constructions. As has been seen so far, corpora may be very useful as a way of spotting and quantifying the usage of frequent constructions, but are not so well suited to gain a knowledge of more infrequent constructions or variants. As it is frequently expressed, absence of evidence is not evidence of absence (but see Stefanowitch 2008). This must always be kept in mind when working with corpora, especially in more infrequent constructions. Howe (2011: 257) noted, for instance, that despite the possibility of typical verbs to pre-pose their object in non-interrogative cases, this construction variant did not occur in his corpus analysis of spoken Spanish temporal *hacer*. This is, I believe, nothing but an accidental gap in Howe's data. Notice the indisputable grammaticality of sentences like (35):

(35) Dos años hace que no le veo two years make.3SG that NEG him see.1SG 'It has been two years since I last saw him'

This gap in Howe's corpus research can be explained by the combined effect of two factors: 1) The relatively small proportion of clausal constructions, which is where pre-posing is possible, within the general *hacer*+time and 2) the low frequency of preposing in non-interrogative contexts in general even in prototypical verbs. It is therefore not unexpected that in his limited sample he finds no instances of preposing like the perfectly grammatical (35). A corpus approach to the constructions analyzed here has allowed us, therefore, to discover and quantify their most frequent patterns of use but cannot easily inform us about less frequent or marginally grammatical properties which is why data about competence was also gathered in Section 4.

6. The relationship between the adverbial and clausal constructions.

Along with the verbal or prepositional nature of *hacer* in adverbial contructions, a much debated issue is that of the relationship between the clausal and the adverbial constructions. Some like Brucart (2015) consider they are independent constructions while others like Rigau (1999) or Fábregas (2016) argue they are derivationally related and that the phrase headed by *hacer* is, in clausal constructions, a constituent fronted from its position in the adverbial construction and thus not the main verb.

The fact that the *que*-clause appears to contain the most salient predicative content in clausal sentences and that it does not have an immediately clear role in the main sentence seems to support the derived status. In fact, many in my opinion unsatisfactory analyses have been proposed concerning the syntactic role of the *que*-clause (Rebollo Torío 1979; García Fernández 1999) to try to make it 'fit' into the main clause. If we compare the clausal construction to other semantically synonymous sentences, however, these problems are largely solved:

- (36) a. Han pasado dos años desde que se casaron = b. Hace dos años que se casaron have.3PL elapsed two years since that REFL married.3PL make.3SG two years that REFL married.3PL 'It has been two years since they married'
- (37) a. Lleva diez días sin salir = b. Hace diez días que no sale take.3SG ten days without go.out make.3SG ten days that NEG go.out.3SG 'He hasn't been out for ten days'

Sentence (36) shows that many verbs, especially those which do not have animate or agentive arguments, may be not too prominent regarding their semantic content without this, hopefully, casting doubt upon their role as the main syntactic verb in a sentence. Sentence (37) in turn, shows that, once the formal difference of finiteness is removed from the equation, the semantic contribution and syntactic role of the *que*-clause in the main sentence can be accommodated more easily into a more classical schema. The fact that *que no sale* does not constitute a suitable answer to any particular question asked to the verb while *sin salir* does constitute a suitable answer to *cómo* (how) is just a result of the greater elaboration and clausality of the first *vis a vis* the second. In any case, the phenomenon of hypotaxis, sometimes called cosubordination, has been repeatedly observed in the literature (Hopper & Traugott 2003:177-181, Lehmann 1988 among others) so finding a construction which is not semantically embedded but which is syntactically dependent should not be considered striking nowadays.

Main clause phenomena, sometimes called root phenomena, such as illocutionary force or speaker-related adverbs could be used to try to provide evidence in favor of a main clause status for the *que*-clause. It is widely known (Haegeman 2012, Aelbrecht et al. 2012), however, that

subordinate, especially adverbial clauses may display these main clause phenomena as well, so these would have provided only a weak evidence if they were indeed to be found in the *que*-clause. However, even these we do not find:

- (38) *Hace tres días que sí le vi make.3SG three days that yes him see.PST.1SG ('*It has been three days since I did see him')
- (39) *Hace tres días que seguramente le vi/viera make.3SG three days that probably him see.PST.1SG/see.SBJV.1SG ('*It has been three days since probably I saw him')

It looks thus difficult to postulate a main clause status for the *que*-clause rather than for the clause with *hacer* on these accounts. Most linguists who argue that the clausal construction is derived from the adverbial have not paid attention to these issues. Fábregas (2016), for example, seems to base this derived analysis on the fact that the clausal construction, like the adverbial, rejects NPs other than measure phrases:

(40) *Hace todo el día que no tengo señal make.3SG whole the day that NEG have.1SG signal ('I haven't had a signal for the whole day') (Fábregas 2016: 77)

This time NPs which are not measure phrases can apparently yield a grammatical sentence in a Spanish variety from Argentina. Fábregas analyzes this clausal construction not as derived as in most other varieties which reject (40) but rather as an independent, base-generated construction. Other semantically similar constructions, like the one with *llevar* (41) which does not have a comparable adverbial construction, do allow definite time NPs, which seems to support the derived analysis:

(41) Llevo todo el día sin señal take.1SG whole the day without signal 'I haven't had a signal for the whole day'

I believe, however, that this observation is not solid enough to reach any conclusion. On the one hand, if the *raison d'être* of the clausal construction is, as many authors have argued (e.g. Rasmussen 1981), to measure time, the observed restriction might well be semantic in nature and analogous to the one found in other verbs of physical measurement:

(42) *Este tomate pesa todo el kilo this tomato weighs whole the kilo ('*This tomato weighs the whole kilo')

On the other hand, in other languages, time clausal constructions which lack a corresponding adverbial variant from which they could possibly derive show a similar dislike for NPs other than measure phrases:

(43) ?It has been the whole day since I last saw you

These last two sentences show that it is possible for the clausal and the adverbial constructions to have the same constraint involving measure phrases without making it unlikely that they are independent. To argue that the two constructions are indeed synchronically unrelated, Brucart (2015) presents sentences like (44):

(44) Hace tres meses de su muerte make.3SG three months from his/her/their death 'It has been three months since (s)he/they died'

To get around the problem posed by sentence (44) where there is no clause in which *hace tres meses* could have been base-generated, Rigau (1999) and Fábregas (2016) posit that the clausal

construction with *de* is indeed base-generated but that it is a construction altogether different from the clausal construction with *que*. I consider this *ad hoc* since their properties are very similar, if not identical. With the intention of presenting evidence that the two constructions (the one with *de* and the one with *que*) are different, Rigau (1999:324) presents this sentence:

(45) *Ayer hizo tres meses de su licenciatura y que tú te caíste al río yesterday make.PST.3SG three months of her graduation and that you REFL fell to.the river ('Yesterday it was three months since she graduated and you fell into the river')

This does suggest, like Rigau herself mentions, that the two constituents are different, which is something evident from the beginning from their external composition alone (PP vs CP). This, however, does not prove the unrelatedness of both constructions, as suggested by these examples:

- (46) *Pasaron años y los siglos pass.PST.3PL years and the centuries ('Years and centuries went by')
- (47) Ayer hizo tres meses de su licenciatura y de que tú te caíste al río yesterday make.PST.3SG three months of her/his/their graduation and of that you REFL fell to.the river 'Yesterday it was three months since she graduated and you fell into the river'

Sentence (46) shows that two constituents may be of a different kind and impossible to coordinate while appearing in the same position and structure in a bigger construction. I am assuming here that *pasaron años* 'years elapsed' and *pasaron los siglos* 'centuries elapsed' are two instances of the same construction. Sentence (47), in turn, suggests that the clash presented by Rigau (1999) in (45) might be rather superficial, since it can be overcome just by the insertion of a preposition.

Even after all this argumentation, I still consider that the problem posed by (44) for a derivational analysis of the clausal construction with *hacer* may not be insurmountable. Time adverbials are indeed possible in non-clausal (or at least non-verbal) constituents which, like *su muerte* in (44), are eventive and possibly therefore more clausal-like than could be initially thought:

(48) El atraco al banco el pasado martes supuso el décimo en lo que va de mes the robbery to.the bank the last tuesday was the tenth in what goes of month 'Last tuesday's robbery of a bank was the tenth this month'

It could therefore still be maintained that there is a derivational relation if one wants to pursue that hypothesis to the limit, but more evidence is yet available which suggests otherwise:

- (49) *Hace tres meses que no le vi make.3SG three months that NEG him see.PST.1SG ('I didn't see him three months ago')
- (50) Hace tres días hizo un año que murió mi abuelo make.3SG three days make.PST.3SG one years that die.PST.3SG my grandfather 'Three days ago it was one year since my grandfather died'

Sentence (49) is problematic from a derivational position because in principle, unless intervention effects are mediating as a result from movement, it would be expected to be grammatical, since the corresponding adverbial sentence (*No le vi hace tres meses*) is indeed possible.

Sentence (50) shows simultaneously in a single sentence the clausal and the adverbial constructions. From a derivational perspective, with only one true clause (*murió mi abuelo*) one would in principle be able to generate only one *hace*-phrase, unless we want to argue, quite *ad hoc*, that the structure of these expressions is recursive. The simultaneous presence of the basegenerated and the derived structures with different time measures is, therefore, in my opinion, difficult to explain derivationally. For (50) it is more parsimonious to acknowledge that *hacer*+time+*que*-clause constitutes a verbal template in its own right which denotes an event; an

event which can, like any other, be located on the time axis with adverbial expressions of any kind including *hace*-headed phrases.

These last sentences, consequently, appear to weaken the hypothesis of a derivational relation between the clausal and the adverbial constructions synchronically. In addition to this, as the previous competence and usage data have shown, there is a long list of grammatical properties which differ from the adverbial construction to the clausal and which lead me to argue here in favor of a synchronic independence of the two:

Clausal Construction

Adverbial Construction

a) Up-to-now meaning grammatical (51) a. Hace un año que trabajo aquí make.3SG a year that work.1SG here

Up-to-now meaning ungrammatical b. ?Trabajo aquí hace work.1SG here make.3SG a year 'I have been working here for a year'

b) Time adjuncts to *hacer* grammatical

Time adjuncts to *hacer* ungrammatical (52) a. Mañana hace un año que te vi b. ?Te vi mañana hace tomorrow make.3SG a year that you see.PST.1SG you see.PST.1SG tomorrow make.3SG a year 'Tomorrow it'll be a year since I saw you'

c) Negation of *hacer* always available

Negation of *hacer* restricted b. ??Te vi no hace 10 días

(53) a. No hace 10 días que te vi NEG make.3SG 10 days that you see.PST.1SG

'It hasn't been 10 days since I saw you'

d) Subjunctive mood grammatical

Subjunctive mood ungrammatical

vou see.PST.1SG NEG make.3SG 10 days

(54) a. Puede que haga b. *Puede que haga un año te vi un año que te vi may.be that make.SBJV a year that you see.PST.1SG may.be that make.SBJV a year you saw.PST.1SG 'It may be one year since I saw you'

e) Compound tenses grammatical

Compound tenses ungrammatical

(55) a. Va a hacer un año que te vi It.is.going.to.make a year that you see.PST.1SG

b. *Te vi va a hacer un año you see.PST.1SG it.is.going.to.make a year 'It will soon be a year since I saw you'

f) Split of hacer and time NP allowed

Split of *hacer* and time NP ungrammatical

Pedro dos años (56) a. Hace que murió make.3SG that die.PST.3SG Peter two years

b. *Hace Pedro dos años murió make.3SG die.PST.3SG Peter two years 'It has been two years since Peter died'

g) Pre-posing of time NP grammatical

Pre-posing of time NP ungrammatical b. *Pedro murió dos años hace Pedro Peter die.PST.3SG two years make.3SG

(57) a. Dos años hace que murió two years make.3SG that die.PST.3SG Peter

'It has been two years since Peter died'

h) Negation of the main event in distance-past ungrammatical

distance-past grammatical dos años no te vi

(58) a. *Hace dos años que no te vi make.3SG two years that NEG you see.PST.1SG

make.3SG two years NEG you see.PST.1SG

Negation of the main event in

'Two years ago I didn't see you'

This of course does not preclude the existence of some other properties which are shared. Among these we can mention:

- i) The rejection of NPs other than measure phrases.
- j) The availability of the distance-past meaning.
- k) The preference for a pre-position of hacer with respect to the time NP.
- I) The continued use of non-present forms of *hacer* (e.g. *hacía*).

The properties of the clausal and adverbial temporal constructions with *hacer* have been shown to be quite different, concerning both usage as well as native speakers' competence. Their sets of properties constitute disjointed albeit overlapping groups:

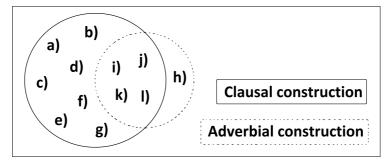


Figure 1: Grammatical properties of Clausal and Adverbial Constructions

This is the reason why I consider the most parsimonious explanation of these differences to regard both constructions as synchronically independent. Note that, in a truly derived construction (e.g. in the cleft *Fue hace dos años que/cuando te vi*), none of the above-mentioned properties of the *hacer*-phrase change with respect to the adverbial source construction.

Given the properties previously observed, clausal *hacer* should be analyzed as being nearer to a prototypical verb than to any other grammatical category. As far as we have seen, the only typically verbal property it lacks is the ability to take a subject. On the contrary, on account of its synchronic properties, adverbial construction *hace* should be better placed in the continuum between verbs and prepositions (see e.g. Haspelmath 1998: 330) but, probably, nearer to adpositions than to prototypical verbs.

Adverbial construction *hacer*, has been found to have some properties typical of adpositions, such as an obligatory complement and the impossibility of taking a subject. These were found in clausal construction *hacer* and is found in other verbs as well. However, adverbial construction *hacer*, it is argued, either has or is very near to acquiring many other typically prepositional properties not present in the *hacer* of the clausal construction: It is the head of a syntactically optional constituent, it must be placed compulsorily before its complement, it is very near to becoming invariable and morphologically simple, it is very near, as well, to losing its capacity of being modified by time adverbs or negated and it may even be close to becoming phonetically unstressed, at least in its most frequent, sentence-final position. It is, therefore, not surprising, that Hagège (2010:161-162, 301-302) decided to include expressions like Spanish *hace* or French *il* y a in his monograph about adpositions despite the persistence of some verbal properties.

The distance between the clausal and the adverbial constructions which has been exposed up to now speaks, I believe, in favor of their synchronic independence. This analysis, however, does not imply that in the mind of the speaker there is absolutely no connection between the two constructions. I do not even dismiss the possibility that some individual speakers or variants may have indeed a clausal construction derived from the adverbial. Examples like (59) could suggest it might be so, as the subjunctive mood, in the clausal construction, appears on the verb other than

⁷ Note that on diachronic terms the situation is probably the opposite. Most likely one of the variants must have emerged from the other at some stage. However, in this case, the adverbial construction might be the one diachronically derived from the clausal construction (Herce forthcoming).

hacer, thus suggesting for it a higher hierarchical position:

(59) Tiene dinero a montones que le viene del marqués aunque hace rato que se have.3SG money loads that her come.3SG from.the marquess despite make,3SG a.while that REFL hayan divorciado a causa de la marihuana y otras razones parecidas have.SBJV.3PL divorced because of the marijuana and other reasons similar 'She has lots of money which she got from the marquess even if it is long since they got divorced as a result of marijuana and similar reasons'⁸

I believe, however, that examples such as this are isolated and not representative of the most frequent usage and native speaker linguistic competence which has been analyzed here so far. In addition, this example could also be an on-line production error from the author or his character and need not necessarily represent an underlying syntactic structure different from that which has been proposed so far. Such examples do show, however, that the two constructions do influence one another, unsurprisingly on account of their semantic and formal similarities.

I believe that, probably, it is precisely the analogy with the clausal construction that has prevented the complete loss of the verbal properties of *hacer* in the adverbial construction. On the one hand we see that Spanish and French still have clausal constructions with *hace* and *il y a* respectively where their verbal properties are prominent. It is these languages that have also managed to preserve some of the verbal characteristics of the expressions in adverbial position, where features like TAM morphology, negation of the verb, time adjuncts... continue to appear, albeit infrequently, in the modern language. On the other hand we have Italian, which lost the clausal construction with *fare* or English, which lost *ago* as a verb. Thus, without the moderating influence of their source construction, the grammaticalization process in the adverbial constructions with *fare* or *ago* was unchecked and in modern Italian and English all traces of verbality (negation, TAM morphology, word order flexibility etc.) have been lost.

The degree of grammaticalization of the Italian expression fa (or of English ago for that matter) is, thus, synchronically higher than the one of Spanish adverbial hacer. However, we have also presented evidence throughout this section, that adverbial hacer does show important differences from clausal construction hacer and from more typical verbs. Are these expressions then synchronically grammatical (i.e. a part of the grammar) or lexical? To answer this question, focalization may be used as a test, as proposed by Boye & Harder (2012). The construction which is used here constitutes a common way to focalize verbs in Spanish. Note that it can be applied successfully to lexical (60) but not to grammatical (i.e. auxiliary) verbs (61):

- (60) Talar talará el árbol, pero le va a costar horas chop-down chop-down.FUT.3SG the tree, but him/her will.cost hours '(S)he will eventually chop down the tree, but it will take him/her ages'
- (61) *Haber ha comprado algo, pero nada bueno have has bought something but nothing good ('He has bought something but nothing good')

⁸ Documented in Ceremonias:230 by Julio Cortázar and cited by Rasmussen (1981: 49). This sentence is ungrammatical in Peninsular Spanish. The most common alternative involves a subjunctive in *hacer* rather than in *divorciarse*: i.e. *Tiene dinero a montones que le viene del marqués aunque <u>haga</u> rato que se <u>han</u> divorciado a causa de la marihuana y otras razones parecidas. This would support a higher hierarchical position for <i>hacer* than for *divorciarse* in the clausal construction. In the case of the adverbial construction, given that here *hacer* is indeed subordinate, the subjunctive would be assigned like in Cortazar's example: *Tiene dinero a montones que le viene del marqués aunque <u>hace</u> rato se <u>hayan</u> divorciado a causa de la marihuana y otras razones parecidas.*

⁹ This question makes probably more sense on the assumption that there is synchronically a sharp distinction between the grammar and the lexicon but even if one believes there is not, the synchronic degree of grammaticalization of different expressions is worth investigating in search of differences.

- (62) Hacer hace una semana que se fue pero llevaba meses sin hablar-me make make.3SG a week that left.3SG but take.IPF.3SG months without talk-to.me 'It has been only a week since he left but he hadn't talked to me in months'
- (63) *Se fue hacer hace una semana pero llevaba meses sin hablar-me leave.PST.3SG make make.3SG a week but take.IPF.3SG months without talk-to.me ('It has been only a week since he left but he hadn't talked to me in months')

Boye and Harder's (2012) test for synchronic grammaticalization thus classifies the *hacer* of clausal constructions as a lexical element whereas *hacer* in adverbial constructions appears to be a grammatical element. This is in line with the greater rigidity we have observed throughout this paper in the adverbial construction in comparison with the clausal (see Figure 1) and constitutes further evidence of the distance which synchronically separates the two constructions.

7 Conclusion

This paper has explored the grammatical properties of Spanish temporal constructions involving hacer. These expressions tend to be quite idiosyncratic cross-linguistically and the Spanish constructions are not an exception to this. For this reason, they have been a frequent target of research but disagreement prevails concerning their grammatical properties. A good understanding of the synchronic grammatical possibilities of the construction in the speech community necessarily has to precede any formalization efforts. The present work has, therefore, sought to provide a comprehensive picture of the construction hacer+time in present-day Peninsular Spanish.

An empirical, quantitative approach has been used to collect data from both competence and usage. The gathered evidence points to a wide gap between a much more flexible clausal construction and a much more rigid adverbial construction. Whereas in the former there are no significant differences in TAM morphological possibilities, negation, time adjunction, movement etc. with respect to other verbs, in the latter these typically verbal features are much more eroded or absent entirely. The grammatical differences between the clausal and the adverbial constructions with *hacer*, which had never been noticed before to my knowledge, argue against those formal analyses which posit a derivational relation between them.

While on synchronic terms, it is more parsimonious to regard the constructions as independent, diachronically it is most likely that the two constructions do indeed have a single origin. A grammaticalization process of the adverbial construction seems to have probably played a role in the divergence between the two (Herce forthcoming). This highlights the need to take diachrony into consideration when explaining synchronic patterns, something which is often neglected.

The present contribution, in addition, has provided evidence that different methods for the collection of data can and often should be used together in syntactic research. As shown in the present paper, corpus data can complement traditional grammaticality judgements as a source of evidence for the syntactic analysis of particular constructions. In addition, the full adoption of quantitative approaches in general is the only way out of the fiction that syntax is made up exclusively of all-or-nothing rules. It remains to be seen how/whether gradient judgments or quantitative usage data can be integrated into formal models of syntax. I leave that for the future.

ANNEX 1. Usage data for *hacer*+time.

Clausal construction: Spain, oral and internet (CORPES).

	Meaning		Neg. hace		Neg. event		Time adjunc. to hace		Hace preposed to time NP	
	Durat.	Punct.	Yes	No	Yes	No	Yes	No	Yes	No
Hace 90	47	43	2	88	24	66	17	73	89	1
Hacía 25	23	2	0	25	17	8	3	22	25	0
Total 115	70	45	2	113	41	74	20	95	114	1

Adverbial construction: Spain, oral and internet (CORPES).

	Meaning		Neg. hace		Neg. event		Time adjunc. to hace		Hace preposed to time NP	
	Durat.	Punct.	Yes	No	Yes	No	Yes	No	Yes	No
Hace 650	11	639	23	627	8	642	10	640	650	0
Hacía 6	0	6	0	6	0	6	0	6	6	0
Total 656	11	645	23	633	8	648	10	646	656	0

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