Variation in Perfect/Past compatibility with temporal adverbials in English and Spanish

Introduction. The *present perfect puzzle* states that "the present perfect does not go with an adverbial referring to the past" (Klein 1992: 526), so the *Simple Past* has to be used instead:

(1) Chris **has left* / *left* York **today at six**.   (adapted from Klein 1992: 546, (ex.45))

However, other languages (French, Italian, German, Dutch) do allow their corresponding PERFECT markers to combine with past referring adverbials (e.g., Squartini & Bertinetto 2000), showing that this constraint does not necessarily hold crosslinguistically. Peninsular Spanish seems to reflect an intermediate point in its availability to combine with past-referring temporal adverbials (e.g. Harris 1982):

(2) Chris se *ha ido* / *#fue* de York **hoy a las seis**.   'Chris *has left* / *left* York **today at six**'.
(3) Chris se **ha ido* / *fue* de York **ayer**.   'Chris *has left* / *left* York **yesterday'.**

As (2) indicates, Spanish is not subject to the *present perfect puzzle* as long as the temporal adverbial (*hoy a las seis* 'today at six') creates the relation E=R $\subseteq$ day(S). That is, when the event E is temporally located within the day of utterance S, the Spanish PERFECT form –the *Pretérito Perfecto Compuesto*– can be used. Conversely, when the event E is anchored to a past reference time R before the day of utterance S, as in (3), with the adverb *ayer* 'yesterday', only the (Perfective) PAST –the *Pretérito Indefinido*– is allowed. This has led some authors to define the Spanish PERFECT as a hodiernal marker (e.g., Schwenter 1994).

Other work in English has provided indications that *deictic* temporal adverbials (i.e., adverbials whose reference is calculated with respect to the speaker's time/space center of reference) behave differently with respect to their (in)compatibility with the PERFECT (e.g., Hitzeman 1995). Different from (1), the *Present Perfect* seems to be able to combine with deictic past-time referring adverbials that include the speech time S, like *this afternoon*, as (4) shows:

(4) Chris *has left* / *left* York **this afternoon**.

To our knowledge, the role of deixis in the use of the Spanish PERFECT form has not been studied. Here we test the acceptability of different past time adverbials with the PERFECT and PAST markers of English and Spanish. We consider a twofold distinction of temporal adverbials. First, (2) and (3) indicate variation between adverbials related to the day of utterance and those that are not. Second, (1) and (4) drive a distinction between deictic and non-deictic adverbials.

Method. We investigate UK English and Peninsular Spanish use of PERFECT and PAST markers with different temporal adverbials distinguished by two variables: (i) **+/-T**: In +T cases, adverbials relate to day (S) by being included in it (e.g., *this morning*), overlapping with it (e.g., *today*) or including it (e.g., *this month*). This is a broader notion of strict hodiernality that intends to incorporate the 'extended now' (e.g, Portner 2003). Conversely, -T adverbs, such as *last month*, do not include, overlap or are included in day (S); (ii) **+/-D**: In +D adverbs, the temporal reference of the adverbial is deictic. For example, to place *yesterday* on the timeline, we need information about the speaker's current temporal location. Conversely, -D adverbials, such as *in November*, can be placed on the timeline independently from the speaker's center of reference.

We ran an online acceptability judgment task using a 2x2x2 design with three independent variables (+/-T, +/-D, and marker). We created 64 stimuli (+96 fillers) in a Latin Square design. 160 subjects per language (from all UK and Spain regions, but mostly from the Greater London and the Madrid areas respectively) rated sentences on a 5-point Likert scale. Each stimulus was displayed separately and was accompanied by an introductory context. All sentences presented an achievement to control for lexical aspect. An example item in English is shown in (5):

(5) Peter and Theresa are planning to go to a concert next weekend. Peter offers to go get the tickets later today, but Theresa tells him: I *purchased / have purchased* mine **this morning / at midnight / last month / in November.** It was cheaper that way.

Results. Mean acceptability scores are reported in Table 1. No effect of regional variation was found in English or in Spanish. Linear mixed-effect analysis (random intercepts: subject and item) show in English a significant effect of T*D*Marker ($\chi^2(2) = 6.373$; $p < .05$). In all T/D combinations, there is a significant effect of marker favoring the PAST over the PERFECT. There seems to be a less categorical difference in the +T,+D condition, but a post-hoc test still shows the effect of marker ($\beta= 0.394$; $p=.035$). Interestingly, if we subdivide +T,+D adverbials by considering whether the adverb includes the day (S) or is included in it, we find that in the first case the difference across markers is still significant ($\chi^2(1) = 6.771$; $p <.01$) and favors the PAST ($\beta= 0.593$; $p < .001$), but in adverbs included in the day (S), the difference across markers disappears ($\chi^2(1) = 0.594$; $p =.4408$; PERFECT = 4.25; PAST = 4.38). Spanish presents a significant interaction of T*Marker ($\chi^2(1) = 47.12$; $p < .001$), with no effect of deixis. In -T adverbials, there is a main effect of marker ($\chi^2(1) = 57.07$; $p < .001$), favoring the PAST over the PERFECT ($\beta = 1.353$; $p < .001$), but in the +T condition, there is no effect of marker ($\chi^2(1) = 0.016$; $p = .90$).

Type of adverbial	Marker	English	Spanish
+T, +D (*this morning)*	PERFECT	4.03	4.05
	PAST	4.42	4.31
+T, -D (*at midnight*)	PERFECT	3.34	4.33
	PAST	4.33	4.03
-T, +D (*last month*)	PERFECT	3.42	3.14
	PAST	4.51	4.53
-T, -D (*in November*)	PERFECT	3.44	3.21
	PAST	4.53	4.53

Table 1. Mean ratings per type of adverbial and tense-aspect marker in each language.

Discussion. Spanish speakers accept the PERFECT when the adverb is linked to the present. However, there is no preference for the *Pretérito Perfecto* in +T conditions: the *Pretérito Indefinido* receives similar ratings in these cases. English speakers prefer the *Simple Past* in all conditions but they accept the *Present Perfect* with deictic hodiernal adverbials, especially when the adverb is included in the day (S) (e.g., *this morning*). In sum, our work provides evidence that both deixis and hodiernality play a role in PERFECT-PAST crosslinguistic variation. While Spanish restricts PERFECT use to events that are connected in some way to the day of utterance, English only allows the use of this form in cases in which the event is not only properly included in day (S), but also computed from the speaker's center of reference.

References. Harris, M. 1982. The 'past simple' and 'present perfect' in Romance. In M. Harris (ed.), *Studies in the Romance Verb*. 42-70. // Hitzeman, J. 1995. A Reichenbachian Account of the Interaction of the Present Perfect with Temporal Adverbials. *NELS 25*, 17. // Klein, W. 1992. The Present Perfect Puzzle. *Language* 68, 525-552. // Portner, P. 2003. The (Temporal) Semantics and (Modal) Pragmatics of the Perfect. *Linguistics and Philosophy* 26, 459-510. // Schwenter, S. 1994. The Grammaticalization of an Anterior in Progress. *Studies in Language* 18, 71–111. // Squartini, M., & Bertinetto, P. 2000. The Simple and Compound Past in Romance languages. In Ö. Dahl, *Tense and Aspect in the Languages of Europe*. 403-440.