

An Experimental Approach to *Concordantia Temporum* Violations in Spanish

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Introduction

The Spanish subjunctive generally obeys a sequence of tense requirement known as *concordantia temporum* (CT): a present tense in the main clause triggers a present tense in the subjunctive clause, while a matrix past tense triggers a past tense subjunctive clause. This requirement is said to hold only when the main clause predicate is a causative, directive and volitional (Quer (1998)), but even then, CT is claimed not to be required if the context allows for a Double Access Reading (DAR), in which the embedded event can be interpreted as either simultaneous with, or posterior to, matrix and utterance time (Laca 2010), as in (2).

- (1) Quería que vengas mañana.
 want.1S.PAST. IND that come.2S.PRES.SUBJ tomorrow
 ‘I wanted you to come tomorrow’

There are two concerns about the general view just described. On the one hand, some speakers report that they do not accept sentences like (1), calling into question whether the DAR phenomenon actually exists. On the other hand, some varieties of Spanish appear to use present subjunctive embedded under past tense in a much broader range of environments than those expected given DAR. In this paper, we address these concerns directly by conducting an experiment probing the acceptability of CT violations with and without DAR among speakers of three varieties: Argentinean, Mexican and Peninsular Spanish. Our goal is to determine whether the claimed DAR effect is real and whether some varieties allow CT violations in other environments as well.

Experiment

In a formal sentence acceptability experiment, with a 3x2x2 design, we crossed the factors MAIN PREDICATE (causative vs. directive vs. volitional), SUBJUNCTIVE TENSE (present vs. past), and INTERPRETATION (past vs. future). The factor INTERPRETATION refers to the temporal interpretation of the embedded subjunctive clause, which was signaled by an overt adverbial in the embedded clause (e.g., *ayer* ‘yesterday’ (past) vs. *mañana* ‘tomorrow’ (future)). Sample stimuli are presented in (2).

- (2) **Hizo/pidió/quería** que Juan se **vaya/ fuera** **ayer/mañana**.
make/ask/want.PAST that Juan reflex go.**PRES/PAST.SUBJ** **yesterday/tomorrow**
 ‘He made/asked/wanted Juan (to) leave yesterday/tomorrow.’

We used a Latin Square design, and participants saw 5 tokens of each condition. 68 fillers representing a range of acceptability were included, so each participant saw 128 stimuli. 110 people participated (34 from Argentina, 38 from Mexico, 38 from Spain); all were natives of and residents in their respective countries. The results were converted to z-scores and then we ran mixed effect models on the data. The results are presented in Fig 1-3.

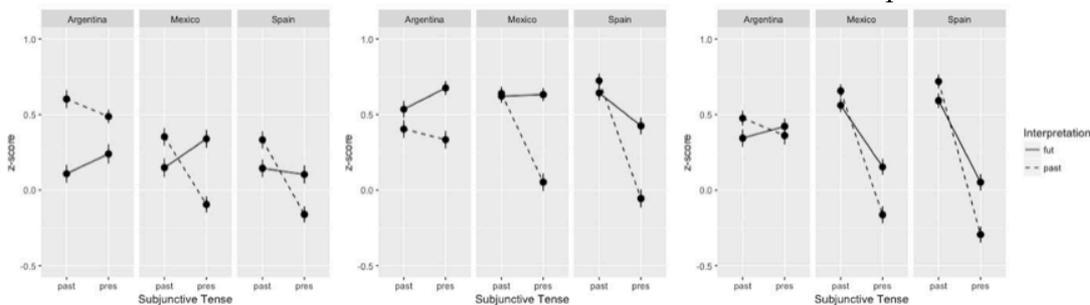


Fig 1. Causative

Fig 2. Directive

Fig 3. Volitional

We focus here on two aspects of these results. First, looking just at the past interpretation (dashed line), where DAR is not an issue, we see that the difference between past and present subjunctive tense is significant in Mexico and Spain (Mexico: *causative/directive/volitional* $p < 0.001$; Spain: *causative/directive/volitional* $p < 0.001$), but not in Argentina (*causative*: $p = 0.19$, *directive*: $p = 0.46$, *volitional*: $p = 0.12$). Second, there also appear to be differences across countries in the size of the DAR effect, in that in Mexico and Spain, the substantial degradation that occurs when present subjunctive tense is embedded under a matrix past verb is partly alleviated when the embedded clause has a future interpretation, but in Argentina, this effect is milder. This apparent difference may be explored quantitatively by computing the DAR effect as a DD (difference in differences) score, as in (3) (Sprouse et al. 2012).

$$(3) \text{ DD score} = (\text{past} - \text{pres})_{\text{Interpretation:Past}} - (\text{past} - \text{pres})_{\text{Interpretation:Fut}}$$

Intuitively, (3) takes the difference between past tense and present tense with a past interpretation as the baseline and then subtracts from this the difference between the two tenses when they have a future interpretation. The larger the score, the larger the DAR effect, while 0 or a negative score indicate no DAR effect. Resulting DD scores are in (4).

(4)

	Argentina	Mexico	Spain
causative	0.26	0.64	0.45
directive	0.16	0.64	0.57
volitional	0.21	0.4	0.47
Total	0.22	0.54	0.49

Discussion

Given the results just seen, we can draw two main conclusions. First, present subjunctive tense has a different status in Argentina than in Mexico and Spain. It is as compatible as past subjunctive tense in past interpretation environments, suggesting that it is not specified as [-PAST]. Second, the DAR effect seems to be real. That is, in future interpretation environments, present subjunctive tense embedded under a past tense verb is significantly more acceptable than would be expected, given what we see in past interpretation environments. This effect is less evident in Argentina, since present subjunctive tense under matrix past verbs is not very degraded to begin with.

Returning to our questions from the introduction, we can now see that DAR seems to be a very robust phenomenon, especially in Mexico and Spain. DAR sentences are not always highly acceptable, which is no doubt why some speakers say they do not accept them, but our results show that there is nonetheless a very clear effect, as in Fig. 1-3 and (4). In addition, we have seen that there are important differences across varieties of Spanish regarding CT. Most notably, Argentina allows some CT violations in non-DAR environments (suggesting that present subjunctive tense has a different status in this variety, as mentioned above).

At a larger level, the present study shows how formal acceptability experiments can be a valuable tool for exploring very subtle behavior in the syntax of tense and the dialectal differences associated with it.

References

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