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## When the present lies in the past: [Present under Past] in subjunctive clauses in Uruguayan Spanish

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On the basis of corpus and experimental evidence, this paper claims that the ongoing process of change affecting the use and interpretation of the [Present under Past] pattern in subjunctive argument clauses in some Spanish varieties is sensitive to the syntactic/semantic type of the clause. The pattern deviates from Sequence-of-Tense grammar in not giving rise to double access effects. In the variety explored in this paper, this only happens in the argument clauses of causative, directive, and volitional predicates, i.e. in a type of clause which is held to be lower in a scale of clausehood than the argument clauses of predicates of belief and assertion.

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## 1. Introduction

The use and interpretation of subjunctive tenses in the Romance languages have attracted considerable attention since Picallo (1984; 1985) formulated the hypothesis that they are anaphor-like reflexes of the tense of the matrix clause. In this paper, we study the use and interpretation of subjunctive tenses in three types of argument clauses. Our study concerns a variety, Uruguayan Spanish, in which we observe a gradual increase in the use of the present subjunctive embedded under a past matrix clause as in (1a), so that the patterns [Past under Past] and [Present under Past] freely alternate in some contexts (1b):

- (1) a. Yo solo quería que la gente **sepa** mi punto de vista.  
 I only want.IND.PST that the people know.SBJV.PRS my point of view  
 ‘I only wanted for people to know my point of view.’
- b. yo no quería que él me **demuestre** eso, sino que **supiera**  
 I not want.IND.PST that he me prove.SBJV.PRS that but that know.SBJV.PST  
 que yo no me animaba a decirle muchas cosas.  
 that I not me dare.IND.PST to tell = him many things  
 ‘I didn’t want him to prove me that, I just wanted for him to know that there were many things I didn’t dare tell him.’

Moreover, in this variety, the situation described in the subjunctive clause in the [Present under Past] pattern may hold *before* and not *at* Speech Time, as in (1c). Thus, the interpretation of (1c) does not comply with the *double access requirement* associated with the [Present under Past] configuration in Sequence-of-Tense languages:

- (1) c. No me gustó que no **esté** con nosotros en ese momento,  
 not me like.IND.PST that not be.SBJ.PRS.3SG with us in that moment  
 cuando siempre estaba.  
 when always be.IND.PST  
 ‘I didn’t like it for him/her not to be with us at that moment, since he/she was always there.’

According to the *double access requirement* (see below §2.1.2), the present tense of the embedded clause should be calculated both with regard to the time of the matrix clause *and* with regard to Speech Time. In (1c) the situation described in the embedded clause (‘failing to be with us’) is non-past with regard to the matrix time, but it is past with regard to Speech Time.

We claim that the interpretation of the [Present under Past] pattern in this variety offers indirect evidence for the syntactic typology of subjunctive argument clauses proposed by Quer (1998) and for a dissociation between the feature specification of morphological tenses and the clausal property of bearing syntactic/semantic Tense. In a nutshell, in the variety under study, [Present under Past]-sequences with an interpretation in which the situation described

in the argument clause lies in the past of Speech Time occur more frequently and are more acceptable in a particular type of clauses, classified as *intensional subjunctive clauses* in Quer (1998). This type of clause had been identified early on by Raposo (1985) as the proper locus of the “tenselessness” attributed by Picallo (1984; 1985) to Romance subjunctive morphology as such. In the more recent literature on the typology of argument clauses (cf. for instance Wurmbrand 2014 on infinitival clauses, Wurmbrand & Lohninger 2020 on the cross-linguistic hierarchy of complementation), this type of clause is held to instantiate a defective clausal architecture, lacking a full-fledged C- or T-domain.

The issue of the alleged “tenselessness” of the subjunctive has two sides to it: either it is a (possible) property of subjunctive morphology as such, with subjunctive tenses being mere anaphoric or agreement reflexes of the matrix tense, or it is a (possible) property of a particular type of clausal structure that is flagged by subjunctive morphology and whose architecture lacks a full-fledged T-domain. Historically, both sides of the issue have not been sufficiently teased apart.

Thus, approaches to subjunctive tenses may be split into two main groups: those that propose that “the subjunctive” is temporally defective, lacking a semantically independent temporal specification, and those that propose that subjunctive morphology follows the same patterns as indicative morphology and exhibits parallel Sequence-of-Tense effects. In this paper, we discuss both types of approaches and assess their predictions against data drawn from corpus and experimental studies. Our results suggest that the data collected for Uruguayan Spanish, which differ clearly from those of Standard Spanish, can be accounted for by a version of the tenselessness hypothesis restricted by an independently postulated scale of clausehood. According to our findings, the possibility of [Present under Past] without double access effects in this variety is circumscribed to clauses which are low on the scale of clausehood. Therefore, it cannot be accounted for by the assumption of a change in the feature specification of the morphological form present subjunctive as such.

This paper is organized as follows. In section 2, we present our theoretical background. We provide an overview of the approaches to subjunctive tense in the Romance languages in section 2.1 and a review of the cross-dialectal variation in the interpretation of the present subjunctive in Spanish in section 2.2. In section 2.3, we discuss the motivation for our investigation. In section 2.4 we introduce our main hypothesis, according to which variation and change in the interpretation of the [Present under Past] pattern are sensitive to the type of subjunctive clause involved. In section 3, we detail an exploratory corpus assessment, in which we investigated the use of present and past subjunctive in argument clauses under a past matrix verb. In section 4, we present an experiment which aimed at establishing whether there are differences in the acceptability of the [Present under Past] pattern with different types of clauses. Finally, in section 5, we discuss the results of our empirical investigation and its implications.

## 2. Background

### 2.1. Subjunctive tenses, “tenselessness”, and Sequence of Tense

The use and interpretation of subjunctive tense morphology in the Romance languages has been a subject of debate at least since Picallo (1984; 1985). The debate concentrates on subjunctive forms occurring in argument clauses and opposes proponents of what we will call the tenselessness-hypothesis (Picallo 1984; 1985; Raposo 1985) to those who defend the sequence-of-tense (SoT)-hypothesis (Suñer & Padilla-Rivera 1987; Suñer 1990; Quer 1998; Laca 2010). For the former, subjunctive tense morphology is syntactically or semantically defective, devoid of independent temporal content; for the latter, subjunctive tense morphology follows the same regularities which characterize SoT in indicative argument clauses.<sup>1</sup>

#### 2.1.1. The “tenselessness” hypothesis

Proponents of the “tenselessness”-hypothesis predict strict concordant combinations between the value of the matrix tense and the value of the subjunctive tense for languages with a present/past-subjunctive morphological contrast, as in (2a-b):

- (2) a. Patricia **quiere** que le **den**/ **\*dieran**  
 Patricia want.IND.PRS that him/her give.SBJV.PRS 3PL/\*give.SBJV.PST 3PL  
 un premio.  
 a prize  
 ‘Patricia wants (for him/her) to be given a prize.’
- b. Patricia **dudaba** que Pedro **\*esté**/ **estuviera** enfermo.  
 Patricia doubt.IND.PST that Pedro \*be.SBJV.PRS/be.SBJV.PST ill  
 ‘Patricia doubted that Pedro was ill.’

Such concordant combinations<sup>2</sup> are the only ones to be expected if subjunctive tense morphology, lacking temporal content, is entirely determined by agreement with the matrix tense. The

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<sup>1</sup> The difficulties inherent to deciding between the two hypotheses are illustrated by Giorgi (2010), who after claiming for Italian that “the present or past morphology appearing on the [subjunctive] verbal form is a pure agreement morpheme” (2010: 37) goes on to state that “on a closer look, however, the subjunctive morphology does not seem totally devoid of temporal content – even if it *looks* like that in most cases” (2010: 42).

<sup>2</sup> Some authors, as for instance Giorgi (2010: 33) and Guajardo & Goodall (2019) refer to strict concordant combinations as *Consecutio Temporum* (CT). It is crucial to distinguish between the requirement for strict concordant combinations, allegedly derived from tenselessness, on the one hand, and SoT, on the other. SoT relies on fully tensed argument clauses with a time of evaluation set to that of the matrix clause, and it may be satisfied by [Present under Past] configurations that comply with the double access requirement. Obviously, [Present under Past] does not satisfy strict concordance.

prediction is, however, easily falsified by the acceptability of non-concordant combinations, such as those exemplified in (3a-b):

- (3) a. El ministro **niega** que **hubiera** un acuerdo previo.  
 The minister deny.IND.PRS that have.SBJV.PST 3SG a previous agreement.  
 ‘The minister denies that there was a previous agreement.’
- b. El ministro **negó** que **haya** un acuerdo previo.  
 The minister deny.IND.PST that have.SBJV.PRS 3SG a previous agreement  
 ‘The minister denied that there is a previous agreement.’

This has prompted a reformulation of the “tenselessness” hypothesis, according to which defectivity in temporal content is not a property of subjunctive morphology as such, but a structural property of a particular type of subjunctive clause. The embedded clauses in sentences such as (3a-b) would be fully specified for (syntactic or semantic) Tense, whereas temporal specification would be defective in the particular type of subjunctive clause instantiated by (2a). The original reformulation goes back to Raposo (1985), who claims that only clauses embedded under a class of predicates comprising verbs of volition and directives (his *W-predicates*) lack a tense operator in the C-domain. The reformulated “tenselessness” hypothesis predicts that subjunctive clauses embedded under *W-predicates*, which will be more precisely identified as *intensional subjunctive clauses* below (see §2.4), will behave differently than other subjunctive clauses (and than indicative clauses) because they lack a tense operator in the C-domain. One manifestation of this differential behavior could be the enforcement of strict concordant combinations, which does not hold for other subjunctive clauses (nor for indicative clauses). As we will argue in this paper, the variety we describe exhibits another possible manifestation of this differential behavior: an unexpected interpretation for the non concordant [Present under Past] pattern that does not seem to extend to other subjunctive clauses (nor to indicative clauses).

### 2.1.2. The Sequence of Tense-Hypothesis

For the SoT-hypothesis, the distribution and interpretation of subjunctive tenses in languages with a present/past-subjunctive morphological contrast obey the same regularities operating for indicative tenses. In a SoT-language, these involve two hallmarks:

- (i) [Past under Past] configurations may convey simultaneity (non-pastness) of the embedded clause with the local evaluation time provided by the matrix tense, and
- (ii) [Present under Past] configurations, when at all possible, produce double access readings (DAR), in which the embedded clause is simultaneous (non-past) both with regard to the local evaluation time *and* to Speech Time.

Both (i) and (ii) characterize indicative and subjunctive argument clauses in Standard Spanish,<sup>3</sup> as shown by the parallel makeup and interpretation of (4a-b) and (5a-b):

- (4) a. Me dijo                    que **iba**                    a la reunión de ayer.  
       me tell.IND.PST.3SG that go.IND.PST.3SG to the meeting of yesterday  
       ‘S/he told me s/he would go to yesterday’s meeting.’
- b. Me dijo                    que **va**                    a la reunión \*(de ayer).  
       me tell.IND.PST.3SG that go.IND.PRS.3SG to the meeting \*(of yesterday)  
       ‘S/he told me s/he will go to (\*yesterday’s/the) meeting.’
- (5) a. Me dijo                    que **fuera**                    a la reunión de ayer.  
       me tell.IND.PST.3SG that go.SBJV.PST.1SG to the meeting of yesterday  
       ‘S/he told me to go to yesterday’s meeting.’
- b. Me dijo                    que **vaya**                    a la reunión \*(de ayer).  
       me tell.IND.PST.3SG that go.SBJV.PRS.1SG to the meeting \*(of yesterday)  
       ‘S/he told me to go to (\*yesterday’s/the) meeting.’

In the [Past under Past] configurations in (4a) and (5a), the event described in the embedded clause is non-past with regard to the time of the matrix sentence. In the [Present under Past] configurations in (4b) and (5b), the event is non-past with regard to the time of the matrix sentence, but it must also be non-past with regard to Speech Time, as shown by the unacceptability of the modifier “yesterday”, which locates the event *before* Speech Time.

Whereas the issue as to the best formal account for (i) is currently a matter of debate (see Ogihara & Sharvit 2012; Zagona 2014; Altshuler 2016; Kauf & Zeijlstra 2018 among many others), there is general consensus on the idea that (ii), that is to say, the DAR requirement, is accounted for by the indexical nature of the present tense in SoT-languages: over and above being located with regard to the local evaluation time provided by the matrix tense, the present has to be located with regard to Speech Time.

According to the SoT-hypothesis, unacceptable non concordant configurations such as those in (6a-b) are excluded by the same principles which exclude them in parallel indicative clauses (7a-b):

- (6) a. \*Patricia **quiere**            que le                    **dieran**                    un premio.  
       Patricia want.IND.PRS that him/her give.SBJV.PST.3PL a prize  
       \*‘Patricia wants (for him/her) to have been given a prize.’

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<sup>3</sup> “Standard Spanish” refers to the variety taught as first or second language in formal instruction, the one on which most theoretical and descriptive work on the Spanish subjunctive relies, and the one described in major reference works such as RAE-ASALE (2009: Chap. 24).

b.?\*Patricia **dudaba** que Pedro **sea** sincero.  
 Patricia doubt.IND.PST that Pedro be.SBJV.PRS honest  
 ?\*‘Patricia doubted that Pedro is honest.’

(7) a. \*Los economistas **pronostican** que se **produjo** una crisis.  
 the economists forecast.IND.PRS that REFL produce.IND.PST a crisis.  
 \*‘Economists forecast that there was a crisis.’

b.?\*Los economistas **pensaban** que **estamos** en crisis.  
 the economists think.IND.PST that be.IND.PRS.1PL in crisis.  
 ?\*‘Economists thought that we are going through a crisis.’

Accounting for the unacceptability of [Past under Present] in (6a) and (7a) is relatively straightforward: the embedding verbs are future-oriented, requiring that the event in the embedded clause not precede the time of the attitude expressed in the matrix clause, but the embedded past tense locates it *before* the time of the attitude, which overlaps Speech Time.<sup>4</sup>

As for [Present under Past], its acceptability in SoT languages is known to be variable and restricted -over and above the general requirement of DAR- by a number of less-well understood factors, among them the semantics of the embedding verb. Thus, Giorgi and Pianesi (2000) assume that [Present under Past] is restricted to embedding under verbs of communication, while Altshuler (2016: 109–116) shows, on the basis of a corpus investigation, that its distribution in English is sensitive to the stative-eventive contrast: unlike stative predicates, eventive embedding predicates turn out to be good predictors for the occurrence of [Present under Past]. Whichever the ultimate array of factors is that make [Present under Past] degraded in indicative clauses such as (7b), for SoT-theorists these factors should also explain its unacceptability in subjunctive clauses such as (6b).

To summarize, the reformulated “tenselessness” hypothesis suggests that there is a special type of subjunctive argument clause characterized by a defective clausal architecture that manifests itself, among other things, in the requirement for concordant tense combinations. In contrast, the SoT-hypothesis predicts that the factors that either favor or exclude non concordant tense combinations will be the same for all subjunctive and indicative argument clauses.

As shown in this section, Standard Spanish appears to clearly substantiate the SoT-hypothesis: (i) non-concordant combinations are possible in subjunctive and indicative clauses alike, (ii) [Past under Present] is excluded when the embedding verb is future-oriented in subjunctive and indicative clauses alike, (iii) [Present under Past] complies with the DAR-requirement in subjunctive and indicative clauses alike, and (iv) in subjunctive and in indicative clauses,

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<sup>4</sup> Whereas future orientation is categorical for all directive and causative predicates among subjunctive selectors, matters are much more complex for the heterogeneous class of volitionals, as discussed in Laca (2015).

[Present under Past] is possibly degraded in similar environments (for instance, when the embedding verb is not a verb of communication or is stative, as in (6b) and (7b) above). But, as we will presently see, some Spanish varieties tell a different story.

## 2.2. Cross-dialectal variation in the use and interpretation of [Present under Past]

In a recent experimental investigation of three Spanish varieties, Guajardo & Goodall (2019) have tested the predictions of the SoT-hypothesis for a subset of subjunctive clauses, those embedded under three main predicates, volitional *querer* ‘to want’, causative *lograr* ‘to manage’ and directive *pedir* ‘to ask’. The experiment was a sentence acceptability task in which the stimuli were biclausal sentences with a matrix past tense and a subjunctive complement clause. In addition to the three different main predicates, stimuli varied according to two factors, subjunctive tense (past or present) and temporal interpretation. Temporal interpretation refers to the presence of a future (*mañana* ‘tomorrow’) or a past adverbial (*ayer* ‘yesterday’), with the future adverbial meant to fulfill the DAR requirement for [Present under Past] (the event in the embedded clause being non-past with regard to both the local evaluation time and Speech Time) and the past adverbial meant to violate it (the event in the embedded clause being past with regard to Speech Time).

In their assessment of the experiment results, the SoT-hypothesis fares quite well for Mexico and Spain. For speakers of these varieties, there are clear subjunctive tense effects, with the [Past under Past] configuration being preferred over the [Present under Past] configuration. But these effects are coupled with temporal interpretation effects, with stimuli fulfilling the DAR-requirement considerably enhancing the acceptability of [Present under Past]. Such temporal interpretation effects are predicted by the SoT-hypothesis, but not by the “tenselessness” hypothesis: if subjunctive tense morphology was entirely determined by agreement with the matrix tense, whether or not the non concordant configuration complies with DAR should be of no consequence.

However, speakers of the Argentinian variety show a different behavior. There are no main subjunctive tense effects, that is to say, no significant preference for either [Past under Past] or [Present under Past]. Although there is a small temporal interpretation effect ([Present under Past] stimuli fulfilling DAR are more acceptable than those violating it), this interaction between interpretation and subjunctive tense is only significant with the causative main predicate *lograr* ‘to manage’.<sup>5</sup> The smallness of the temporal interpretation effect goes against the predictions of the SoT-hypothesis: according to the SoT-hypothesis, [Present under Past] must necessarily fulfill the DAR requirement. The explanation Guajardo & Goodall (2019) suggest for the

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<sup>5</sup> This small temporal interpretation effect with *lograr* ‘manage’ might be related to the peculiarities of non-control constructions with causatives. See Grano (2017) on non-control *try*.



differences between Mexico and Spain, on the one hand, and Argentina, on the other, is that the morphological form present subjunctive has a different feature specification in Mexico and Spain, where it is [-past], and in Argentina, where it is not specified for tense (in contrast with the past subjunctive, which is specified as [+past]).

Guajardo & Goodall's (2019) experimental evidence for this cross-dialectal difference is consistent with the results of the corpus study reported in Guajardo (2017: Chapter 3), which investigates the relative frequency of the [Present under Past] pattern for the same three varieties in the *Web/Dialects* subcorpus of Davies' (2016) *Corpus del español*. In this case, the main verbs explored were two causative verbs, *lograr* 'to manage' and *hacer* 'to make', and two volitional verbs, *querer* 'to want' and *esperar* 'to hope'. The [Present under Past] pattern accounts for an average of 30% of the occurrences of a subjunctive embedded under a past tense form of these four main verbs in Argentina, whereas it only reaches an average of 6.32% in Mexico and 3.50% in Spain.

Guajardo (2017) and Guajardo & Goodall (2019) provide thus solid empirical evidence for cross-dialectal variation in the use and interpretation of the [Present under Past] pattern in subjunctive clauses. They establish for Argentina that this pattern is significantly more frequent and more acceptable than in the two other varieties and, crucially, that it is also acceptable when it violates the DAR requirement characterizing [Present under Past] in SoT languages. Unlike the present subjunctive in Mexico and Spain, for which the data indicate that it complies with the DAR-requirement, the present subjunctive in Argentina appears not to comply with it. Guajardo & Goodall (2019: 16) propose as "a plausible possibility" that the present subjunctive in Argentina is not specified for tense. Against the background of most current theories of SoT (see above §2.1.2), their experimental findings seem to suggest that, at the very least, the present subjunctive in Argentina is non-indexical: recall that the DAR-requirement is generally thought to be induced by a present tense that is indexical, that is to say, that has to be located with regard to Speech Time.

However, this experimental evidence only bears on *one* type of subjunctive argument clauses, those embedded under causative, volitional and directive predicates. And this is precisely the type of clause for which the reformulated "tenselessness" hypothesis predicts a special temporal behavior. Thus, the question arises as to whether the phenomenon described by Guajardo (2017) and Guajardo & Goodall (2019) for Argentinian Spanish uniformly affects all subjunctive argument clauses. There are reasons to suspect that this is not the case. Sessarego (2010) finds that the class of the embedding verb is a significant factor for the occurrence of [Present under Past] subjunctives violating the DAR requirement across dialects; Crespo del Río (2014) finds that [Present under Past] subjunctives violating the DAR requirement are produced more frequently by Peruvian speakers when the embedding verb is a volitional or an emotive-factive predicate than when the embedding verb is an epistemic verb; Laca (2019) claims that the [Present under

Past] pattern in Argentinian Spanish has different properties in intensional subjunctive clauses than it has in other subjunctive clauses or in indicative clauses.

### 2.3. Motivation for this research

With this research, we would like to ascertain whether [Present under Past] violating the DAR requirement extends to all subjunctive argument clauses or whether it is confined to a particular type of subjunctive clause. We hypothesize:

- (i) that there is a change in progress in some Spanish varieties that leads to the present subjunctive being interpreted non-indexically, and thus gives rise to [Present under Past] violating the DAR requirement;
- (ii) that this change originates in argument clauses that are low in a scale of clausehood to be defined below (see §2.4) and might possibly spread from there to cover the whole domain of subjunctive clauses.<sup>6</sup>

We explore the second hypothesis by conducting a corpus investigation and an acceptability experiment for Uruguayan Spanish. The reason for this choice is the following: Uruguayan Spanish is very close indeed to Argentinian Spanish (both being usually treated under the cover term *Rioplatense* Spanish), but anecdotal evidence suggests that it is at a less advanced stage of the change affecting the [Present under Past] pattern in subjunctive clauses, which appears to characterize mostly the speech of younger adults in the Uruguayan variety. This is also suggested by Eddington (2020), who finds a major usage difference between both varieties concerning the frequency of [Present under Past] for 17 matrix verbs triggering the subjunctive in the *Web/Dialects* subcorpus of Davies (2016). If we want to identify the type of context in which the change originates, it is advisable to start from the variety at the less advanced stage.

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<sup>6</sup> Understanding this change is not only intrinsically important for Spanish, but also from a comparative Romance perspective: one of the Romance languages, Contemporary French (cf. Sveberg 1998) seems to have brought an analogous process to its conclusion. The present subjunctive in Contemporary French has become non-indexical across the board, that is to say, it need not be interpreted with regard to Speech Time. This is not to say, however, that it is “tenseless”: it still requires simultaneity or posteriority (thus excluding anteriority) with regard to the time of the matrix clause. We speculate that the change begins with a present subjunctive that is indexical (as is to be expected in a language that is typologically a SoT language), that the form in question starts to be interpreted non-indexically in a particular syntactic environment that is temporally defective (that of intensional subjunctive clauses), that non-indexicality spreads from there to the semantically closely related domain of emotive-factive clauses, and then possibly to all subjunctive clauses. This is, at the present stage of research, mere speculation, but it might help understand the interest of the question.

## 2.4. Three types of subjunctive argument clauses and the scale of clausehood

Following Quer (1998), we distinguish three types of subjunctive argument clauses, intensional subjunctive clauses (8a), polarity subjunctive clauses (8b), and emotive-factive subjunctive clauses (8c):

- (8) a. Patricia *logró/* *quería/* *pidió* *que le*  
 Patricia manage.IND.PST / want.IND.PST / ask.IND.PST that him/her  
*dieran* *un premio.*  
 give.SBJV.PST.3PL a prize  
 ‘Patricia managed /wanted/asked to be given a prize.’
- b. Patricia *negó/* *no creía/* *descartó* *que le*  
 Patricia deny.IND.PST / not believe.IND.PST /exclude.IND.PST that him/her  
*dieran* *un premio.*  
 give.SBJV.PST.3PL a prize  
 ‘Patricia denied/ didn’t believe/ excluded that she would get a prize.’
- c. A Patricia *le molestó/* *gustó/* *pareció* *raro* *que*  
 to Patricia her disturb.IND.PST / please.IND.PST / seem.IND.PST strange that  
*le dieran* *un premio.*  
 him/her give.SBJV.PST.3PL a prize  
 ‘Patricia was upset/liked/found it strange to be given a prize.’

Intensional subjunctive clauses, which are embedded under causative, volitional and directive predicates, differ from polarity subjunctive clauses, in which subjunctive mood is licensed by a negative semantic environment, in at least four properties. Two of them are evidence for the selected status of subjunctive mood in intensional subjunctive clauses: subjunctive mood does not alternate with the indicative, and mood choice is strictly local, that is to say, the subjunctive is not licensed in more deeply embedded complement clauses.<sup>7</sup>

The other two properties can be read as symptoms for an impoverished or defective clausal structure. First, only intensional subjunctive clauses exhibit the subject obviation effect, banning co-reference between the matrix and the embedded subject, as shown in (9a) versus (9b):

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<sup>7</sup> Polarity subjunctive clauses license subjunctive mood in the complement clauses they may embed (i), whereas this does not hold of intensional subjunctive clauses (ii), cf. Quer (1998: 36–38):

- (i) No *creo* [*que piense* [*que le conviene/ convenga*]]  
 not believe.IND.PRS.1SG that think.SBJ.PRS that him/her suit.IND.PRS/ suit.SBJ.PRS  
 ‘I don’t believe he/she thinks that it is good for him/her’
- (ii) *Quiero* [*que piense* [*que le conviene/ \*convenga*]]  
 want.IND.PRS.1SG that think.SBJ.PRS that him/her suit.IND.PRS/\*suit.SBJ.PRS  
 ‘I want him/her to think that it is good for him/her’

- (9) a. Patricia<sub>i</sub> logró/ quería que [pro<sub>\*i/j</sub>] obtuviera un premio.  
 Patricia manage.IND.PST/ want.IND.PST that [pro<sub>\*i/j</sub>] get.SBJV.PST a prize.  
 ‘Patricia managed/wanted him/her to get a prize.’
- b. Patricia<sub>i</sub> negó/ descartó que [pro<sub>i/j</sub>] obtuviera un premio.  
 Patricia deny.IND.PST/exclude.IND.PST that [pro<sub>i/j</sub>] get.SBJV.PST a prize  
 ‘Patricia denied/excluded that s/he had got a prize.’

Whatever its ultimate analysis,<sup>8</sup> subject obviation is a form of anti-control and undoubtedly signals a tighter dependency between properties of the embedded and the matrix clause than there is in cases in which the interpretation of the embedded subject is unconstrained.

Secondly, intensional subjunctive clauses exhibit temporal restrictions banning [Past under Present] (10a) as well as the periphrastic future form in the embedded clause (10b):

- (10) a. \*Patricia logra/ quiere que le dieran un premio.  
 Patricia manage.IND.PRS/ want.IND.PRS that him/her give.SBJV.PST.3PL a prize  
 \*‘Patricia manages/wants to have been given a prize.’
- b. \*Patricia logra/ quiere que le vayan a dar  
 Patricia manage.IND.PRS/ want.IND.PRS that him/her go.SBJ.PRS to give.INF  
 un premio.  
 a prize  
 \*‘Patricia manages/wants to be going to be given a prize.’

In the literature on control and infinitives, analogous temporal restrictions are interpreted as evidence for the lack of independent Tense (Landau 2004) or for the lack of Tense altogether (Wurmbrand 2014) in the embedded clause. Notice that, just like the tenselessness hypothesis, this presupposes a dissociation between the semantic-syntactic property of having (independent) Tense and the morphological property of bearing tense morphology.<sup>9</sup>

As for emotive-factive subjunctive clauses (8c), they do not fall neatly on either side of the intensional-polarity divide: in them, subjunctive mood is by and large obligatory, but mood choice is not strictly local, and they do not exhibit subject obviation (11a) nor temporal restrictions other than those derived from their factive nature (11b).

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<sup>8</sup> For an overview of the different proposals to account for subject obviation, see Kempchinsky (2009); Romero Mérida (2013).

<sup>9</sup> Thus, according to Wurmbrand (2014), “simultaneous” propositional attitude infinitives (in the complement of *believe/claim*-verbs) in English lack morphological tense, but exhibit syntactic/semantic Tense. In contrast, C(ontrol)-subjunctives in the Balkan languages exhibit morphological tense but lack independent Tense, according to Landau (2004).

- (11) a. Patricia<sub>i</sub> lamentó que [pro<sub>i/j</sub>] no hubiera obtenido el premio.  
 Patricia regret.IND.PST that [pro<sub>i/j</sub>] not have.SBJV.PST.3SG gotten the prize.  
 ‘Patricia regretted that she hadn’t gotten the prize.’
- b. Patricia lamenta que Pedro no pudiera asistir.  
 Patricia regret.IND.PRS that Pedro not can.SBJV.PST.3SG attend.  
 ‘Patricia regrets that Pedro was not able to attend.’

However, emotive-factive subjunctive clauses share with at least a subset of intensional subjunctive clauses the property of involving not merely representations of states of affairs, but rather orderings (“preferences”) on states of affairs (Anand & Hacquard 2013). The semantics of the emotive-factive predicates that introduce them comes sometimes very close to the semantics of volitionals (Heim 1992; Laca 2015), and the patterns of complementation of both types of predicates are cross-linguistically similar.

Quer’s distinction among three types of subjunctive clauses can be correlated with the implicational complementation hierarchy (ICH) proposed by Wurmbrand & Lohninger (2020). This hierarchy constitutes a reinterpretation of Givón’s (1980) Binding Hierarchy building on a more indirect relationship between morphosyntactic coding and the different degrees of integration of complement clauses according to the “size” of the semantic object they denote. Relying on Ramchand & Svenonius (2014) for the characterization of these semantic objects, the hierarchy poses the cross-linguistic existence of three broad groups of complement clauses along a scale of clausehood, namely, from most clausal to least clausal, (*tensed*) *propositions*, *situations*, and *events*.<sup>10</sup>

These three groups can be briefly characterized as follows. (Tensed) propositions can be attributed a truth value, are temporally independent (in the sense of not having a pre-specified temporal orientation), and may involve Speaker oriented parameters. Situations are not assessed for truth, they are typically future-oriented (irrealis), and they lack Speaker-oriented properties. Finally, events lack temporal parameters and their temporal interpretation is necessarily simultaneous to that of the matrix verb. For additional details on the cross-linguistic criteria used in this typology, the reader is referred to Wurmbrand & Lohninger (2020).

The semantic complexity scale for the three types of clauses as conceived by Wurmbrand and Lohninger is represented in **Table 1**.

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<sup>10</sup> A type of complement clause is said to be “more clausal” than another if it is more independent (exhibiting for instance an independent subject or a tense that is not determined by that of the matrix clause), less transparent, that is to say, less permeable to certain syntactic dependencies or processes, such as restructuring and control, and syntactically more complex (spanning more functional domains).

	<b>Proposition</b>	<b>Situation</b>	<b>Event</b>
Minimally required domains	Operator domain TMA domain Theta domain	TMA domain Theta domain	Theta domain
Complexity	most complex	intermediate	least complex

**Table 1:** Complement composition.  
(from Wurmbrand & Lohninger 2020, Table 13).

Syntactically, the minimally required domains correspond broadly to the CP, TP and v/VP projections of the generative tradition. These projections may be assumed to have a more fine-grained internal structure, so that transition points between domains may be identified. Thus, for Ramchand & Svenonius (2014), the Aspect projection defines the transition between the v/VP and the TP, and the Finiteness projection defines the transition between the TP and the CP.

Importantly, there is no 1-to-1 mapping between the semantic type of complement clause and morphosyntactic coding, neither cross-linguistically nor in one and the same language. Thus, for instance, non-finite clauses in English may represent complements of different “sizes” (see Wurmbrand 2014), as in (12a-c):

- (12) a. Clara claimed to have left early. (*tensed proposition*)  
b. Clara wanted to leave early. (*situation*)  
c. Clara managed to leave early. (*event*)

And, correspondingly, one and the same “size” of complement may be expressed by finite or non-finite clauses, as in (12a-b):

- (13) a. Clara claimed to have left early. (*tensed proposition*)  
b. Clara claimed that she had left early. (*tensed proposition*)

The relationship between semantic type of complement clause, morphosyntactic coding, and the complexity of the syntactic architecture is, however, not free, but regulated by the ICH. The ICH establishes certain “lower bounds” of syntactic complexity for complements.<sup>11</sup> Thus, for instance, a (tensed) proposition, according to Wurmbrand and Lohninger (2020), minimally requires a CP-domain hosting operators, whereas a situation only requires *some* TMA specification relating to the TP-domain. The ICH also predicts certain mappings to morphosyntactic coding. Thus, for instance, no language that does not allow morphological finiteness for tensed propositions could

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<sup>11</sup> It is important to note that the ICH defines lower bounds but no upper bounds for syntactic complexity. As a result, it explicitly predicts syntax-semantic mismatches in which there may be (vacuous) syntactic structure that has no consequences for interpretation (Wurmbrand & Lohninger 2020).

allow it for events; if a language exhibits transparency effects such as restructuring phenomena (e.g. clitic-climbing) for situations, it will also exhibit it for events.

The absence of subject obviation and of temporal restrictions indicates, in our view, that polarity subjunctive clauses in Spanish correspond to (tensed) propositions, like their indicative counterparts. In contrast, intensional subjunctive clauses, which exhibit a tighter dependency from the properties of the matrix clause, correspond either to situations (in the complement of volitionals or directive predicates) or to events (in the complement of causatives):

- (14) a. Patricia negó que le dieran un premio. (*tensed proposition*)  
 Patricia deny.IND.PST that him/her give.SBJV.PST.3PL a prize  
 ‘Patricia denied that she would get a prize.’
- b. Patricia quería que le dieran un premio. (*situation*)  
 Patricia want.IND.PST that him/her give.SBJV.PST.3PL a prize  
 ‘Patricia wanted to be given a prize.’
- c. Patricia logró que le dieran un premio. (*event*)  
 Patricia manage.IND.PST that him/her give.SBJV.PST.3PL a prize  
 ‘Patricia managed to be given a prize.’

As for emotive-factive subjunctive clauses, as stated above, they do not show symptoms of being “less clausal” than polarity subjunctive (or indicative) clauses: they lack a pre-specified temporal orientation and, in contrast with intensional subjunctive clauses, they do not exhibit dependencies between the interpretation of their subject and that of the matrix clause (no subject obviation as a form of anti-control). This, together with the fact that they can be assessed for truth (their truth is actually presupposed) leads us to regard them as expressing tensed propositions.<sup>12</sup>

We hypothesize that the change leading to a non-indexical interpretation of the present subjunctive starts at the lower end of the scale of clausehood, with events and situations, which either lack a full fledged TMA domain or an Operator domain.

### 3. Corpus Assessment

In order to explore our hypothesis according to which the change affecting the indexical nature of the present subjunctive originates in intensional subjunctive clauses, which are low in the scale of clausehood, we carried out an exploratory corpus analysis, in which we sorted out the three types of subjunctive clauses (intensional, emotive-factive and polarity) and

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<sup>12</sup> See however Haegeman (2006) and de Cuba (2007) for some evidence that factive complement clauses are structurally less complex than non-factive complement clauses.

coded whether they instantiated the [Past under Past] or the [Present under Past] pattern. For the latter pattern, we tried to ascertain whether its instances complied with the DAR requirement or violated it. The results of our corpus assessment suggest that the [Present under Past] pattern is comparatively less frequent in intensional subjunctive clauses than in the two other types, but at the same time, and more importantly, that intensional subjunctive clauses give rise to more violations of the DAR requirement than polarity and emotive-factive clauses.

### 3.1. Methods

Our corpus investigation was conducted on the Uruguay section of the *Web/Dialects* subcorpus of Davies' (2016) *Corpus del español*, which contains a substantial portion of material from blogs and forum discussions and therefore covers more informal registers quite well. The Uruguay section of the 2 billion word subcorpus comprises 41.386.594 words.

The queries used in our corpus search targeted constructions containing a matrix predicate in an indicative past tense and a present or a past subjunctive up to 6 words to its right. The past tense on the matrix predicate was either the simple (perfective) past (LEMMA.vPRET) or the imperfect (LEMMA.vIMPF). For the past subjunctive, we searched both for the *-ra* form (*cantara*) and for the much less frequent *-se* form (*cantase*), which are for all practical purposes allomorphic.

The matrix predicates selected were distributed in three categories according to their ability to combine with intensional, emotive-factive, or polarity subjunctive clauses. For intensional subjunctive clauses, 16 matrix predicates were selected:<sup>13</sup> *conseguir* 'to manage', *desear* 'to wish', *disponer* 'to prescribe', *evitar* 'to avoid', *exigir* 'to demand', *impedir* 'to prevent', *indicar* 'to suggest', *intentar* 'to try', *lograr* 'to manage', *mandar* 'to order', *necesitar* 'to need', *ordenar* 'to order', *permitir* 'to allow', *proponer* 'to propose', *querer* 'to want', *tratar* 'to try'.

For emotive-factive subjunctive clauses, we selected 16 matrix predicates: *agradar* 'to please', *agradecer* 'to be thankful for', *alegrar* 'to cheer, to rejoice', *celebrar* 'to celebrate', *decepcionar* 'to disappoint', *doler* 'to hurt', *encantar* 'to delight', *enojar* 'to annoy', *extrañar* 'to wonder, to find strange', *gustar* 'to please', *indignar* 'to outrage', *joder* 'to piss off', *lamentar* 'to regret', *molestar* 'to disturb', *preocupar* 'to concern', *sorprender* 'to surprise'. Those lemmata are on the whole low in

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<sup>13</sup> The selection of predicates started from a list similar to that in Eddington (2020) and aimed at getting comparable samples for causatives, directives and volitionals. We targeted middle or low frequency lemmas in order to keep the sample manageable for manual analysis. Since the lexical frequencies of the lemmas instantiating the subtypes differ widely, with the core volitional *querer* having high lexical frequency, we included more items for causatives and directives than for volitionals.



frequency, so that we further added 1 complex predicate, *hacer gracia* ‘to amuse’ and 2 complex predicate patterns, *dar* ‘to give’ + emotion noun (e.g. *pena* ‘shame’, *rabia* ‘anger’) and *parecer* ‘to seem, to look’ + evaluative phrase (e.g. *bien* ‘well’, *grave* ‘grave’, *una pena* ‘a shame’) in order to obtain a reasonable number of examples.

For polarity subjunctive clauses, 13 matrix verbs were selected: *confirmar* ‘to confirm’, *considerar* ‘to consider’, *creer* ‘to believe’, *descartar* ‘to exclude’, *imaginar* ‘to imagine’, *mencionar* ‘to mention’, *notar* ‘to remark’, *negar* ‘to deny’, *oir* ‘to hear’, *parecer* ‘to seem, to look’, *pensar* ‘to think’, *saber* ‘to know’, to which three complex predicates (*dar* ‘to give’ + *garantías* ‘assurance’/ *la sensación* ‘the feeling’/ *la impresión* ‘the impression’) were added in order to increase the number of examples.<sup>14</sup>

The results of the automated searches were manually scanned to make sure that they instantiated the targeted syntactic construction, and examples of the [Present under Past] pattern were annotated for compliance with or violation of the DAR-requirement (+/-DAR). Examples in which the eventuality described in the subjunctive clause precedes Speech Time were coded as -DAR, as for instance (15a-b); examples in which it either holds at or follows Speech Time were coded as +DAR, as for instance (16a-b).

- (15) a. No me gustó que no esté con nosotros en ese momento,  
not me like.IND.PST that not be.SBJ.PRS.3SG with us in that moment  
cuando siempre estaba.  
when always be.IND.PST  
‘I didn’t like it for him/her not to be with us at that moment, since he/she was  
always there.’
- b. El padre tan solo quería que su hijo trabaje en la fábrica, pero  
the father so only want.IND.PST that his son work.SBJ.PRS in the factory but  
él ni eso quiso.  
he not that want.IND.PST  
‘The father just wanted his son to work at the factory, but he didn’t even consider  
it.’
- (16) a. Dos familiares de Castro negaron recientemente que se encuentre grave.  
two relatives of Castro deny.IND.PST recently that REFL find.SBJ.PRS grave  
‘Two relatives of Castro’s have recently denied that he is gravely ill.’

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<sup>14</sup> Actually, although some of the verbs in the list are rather frequent, the number of occurrences of the subjunctive mood in their complement clauses is low. The reason is that polarity subjunctives need to be licensed by a negative environment, and even in such a licensing environment, the subjunctive is not mandatory.

- b. Es importante destacar que se logró que el costo del click  
 is important stress.INF that REFL manage.IND.PST that the cost of+ the click  
 sea muy bajo.  
 be.SBJ.PRS very low  
 ‘It should be stressed that we succeeded in having a very low cost per click.’

The annotation for DAR was carried out by three annotators who analyzed every single example taking into account its wider context.

### 3.2. Results

For the intensional subjunctive category, we extracted a total of 1450 occurrences of subjunctive clauses under the 16 lemmata in the simple (perfective) past or in the imperfect. Out of these 1450 sentences, 179 followed the [Present under Past] pattern and 1271 the [Past under Past] pattern. We concentrated on the temporal interpretation of the 179 occurrences of [Present under Past], trying to ascertain whether they comply with the DAR-requirement. Recall that this is to be expected if SoT is active in this environment and the present subjunctive is indexical. By contrast, if the [Present under Past] pattern violates the DAR-requirement, that is to say, if the eventuality in the subjunctive clause precedes Speech Time, this constitutes evidence against SoT in this environment.

Even if the issue of locating the eventuality in the subjunctive clause with regard to Speech Time is tricky in the case of embedding under directives and volitionals, which are future-oriented and do not entail realization of the event (see Laca 2019 for discussion), annotators agreed on the analysis of the vast majority of the examples, of which only 5 were considered undecidable, 94 complied with the DAR-requirement, and 80 violated it. That is to say, in nearly half of the examples of [Present under Past] in intensional subjunctive clauses we find evidence against the indexical interpretation of the present subjunctive, and therefore against SoT.

For the emotive-factive subjunctive category, we collected a total of 225 occurrences of subjunctive clauses under the 19 selected matrix predicates in the simple (perfective) past or in the imperfect. Out of these 225 sentences, 53 followed the [Present under Past] pattern and 172 the [Past under Past] pattern. As for the temporal interpretation of the 53 occurrences of [Present under Past], 4 were undecidable, 42 complied with the DAR requirement, and only 7 violated it.

Finally, for the polarity subjunctive category, we found 258 occurrences of subjunctive clauses under the 16 selected matrix predicates. Out of these 258 sentences, 82 instantiated the [Present under Past] pattern and 176 the [Past under Past] pattern. 81 out of the 82 [Present

under Past] instances complied with the DAR requirement, and only 1 (namely (17) below) could be interpreted as violating it, with the eventuality described in the subjunctive clause preceding Speech Time.

- (17) pero yo nunca vi que nos dejen 1 minuto más porque el cuadro  
 but I never see.IND.PST that us let.SBJ.PRS.3PL 1 minute more because the team  
 contrario hacía tiempo  
 opposite make.IND.PST time  
 ‘But I never saw them allow us one more minute because the other team was playing  
 for time.’

The results are summarized in **Table 2**.

Type of clause	Tense pattern	Occurrences	DAR-requirement	
Intensional	Past under Past	87.55% (1271/1450)		
	Present under Past	12.34% (179/1450)	-DAR	44.69% (80/179)
			+ DAR	52.51% (94/179)
			undecidable	2.79% (5/179)
Emotive-factive	Past under Past	76.89% (172/225)		
	Present under Past	23.55% (53/225)	-DAR	13.46% (7/53)
			+ DAR	78.84% (42/53)
			undecidable	7.69% (4/53)
Polarity	Past under Past	68.34% (176/258)		
	Present under Past	31.66% (82/258)	-DAR	1.21% (1/82)
			+ DAR	98.78% (81/82)
			undecidable	0

**Table 2:** Distribution of subjunctive tenses and DAR effects according to type of clause.

### 3.3. Discussion

Our corpus queries show an uneven distribution for intensional subjunctive clauses as compared to emotive-factive and polarity subjunctive clauses: for a comparable number of matrix predicates in each search category, intensional subjunctive clauses return 3 times more hits than the two other categories combined (1450/483).

As to the rate of occurrence of [Present under Past], the 12.34% of [Present under Past] in intensional subjunctive clauses situates the Uruguayan variety between the Argentinian and the Mexican variety, for which Guajardo (2017) obtains averages of 30% and 6.32%, respectively (see above §2.2). This is compatible with our initial assumption that the Uruguayan variety is at a less advanced stage of change than the Argentinian variety.

With due allowance for the uneven distribution of the types of subjunctive clauses, our exploratory corpus investigation suggests that subjunctive argument clauses do not behave uniformly regarding the temporal interpretation of the [Present under Past] pattern. Violations of the DAR-requirement make up for almost half of the cases of intensional subjunctive clauses, they are almost non-existent for polarity subjunctive clauses, and they reach one seventh to one eighth of the cases of emotive-factive subjunctive clauses.

This non-uniform behavior would be unexpected if the Uruguayan variety complied with the implications of the analysis of the present subjunctive suggested by Guajardo & Goodall (2019) for the Argentinian variety: if the present subjunctive as a morphological form is not specified for tense, we would expect violations of the DAR-requirement to distribute more evenly in all three types of clauses. What we find, however, is that [Present under Past] violating the DAR-requirement and thus not conforming to SoT behavior characterizes intensional subjunctive clauses and is also attested to some extent with emotive-factive subjunctive clauses. Our corpus findings appear to be compatible with our hypothesis of a change originating in those subjunctive clauses that are lower on a scale of clausehood, the intensional subjunctive clauses on which Guajardo (2017) and Guajardo & Goodall (2019) exclusively concentrate their attention.

## 4. Experiment

The exploratory corpus investigation suggests that subjunctive argument clauses do not behave uniformly regarding the interpretation of the [Present under Past] pattern. In a nutshell, only intensional subjunctive clauses violate the DAR-requirement in a substantial proportion of cases. However, as pointed out by an anonymous reviewer, this does not show conclusively that DAR-violations are strongly dispreferred in the two other environments: it may be that they do not occur in the corpus for accidental reasons (recall, for instance, that the samples extracted for emotive-factive and polarity subjunctive clauses are much smaller). Given these results, we conducted an acceptability judgment experiment<sup>15</sup> in order to test whether the generalization suggested by the

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<sup>15</sup> A reviewer remarks that a controlled production test could have been useful as well. We agree with this remark, but at the present stage of our research, an acceptability judgement task offers a more direct way of ascertaining whether speakers are sensitive to the type of clause when evaluating sequences that violate DAR.

corpus investigation holds in a controlled environment, which would corroborate the hypothesis that the type of subjunctive clause involved is a decisive factor in the non-SoT (non indexical) interpretation of [Present under Past]. In this experiment, the [Present under Past] vs. [Past under Past] patterns were investigated by varying the type of the subjunctive clauses, which were embedded in intensional, emotive-factive, or polarity environments. Relying on the observations drawn from corpus data and on previous hypotheses found in the literature, we can assume the following: If what accounts for [Present under Past] violating the DAR requirement is the feature specification of the present subjunctive form as such, no variation across the different types of subjunctive clauses is expected. If the present subjunctive is indexical, we expect [Present under Past] to be degraded in environments violating the DAR requirement regardless of the type of subjunctive clause. If the present subjunctive is not indexical (or if it lacks temporal specification altogether),<sup>16</sup> we expect [Present under Past] in environments violating the DAR requirement to be acceptable across the board.

The current experiment aims to ascertain whether the phenomenon affects the temporal feature specification of the present subjunctive as such, as implied by Guajardo (2017) and Guajardo & Goodall (2019) for Argentinian Spanish, or the interpretation of the present subjunctive in a particular type of subjunctive argument clause, as we hypothesize on the basis of the reformulated “tenselessness”-hypothesis and our exploratory corpus investigation. The experiment is designed to test the relative acceptability of [Present under Past] in an environment excluding a DAR-interpretation in the three types of subjunctive argument clauses we distinguish.

#### 4.1. Design and Predictions

The experiment employed a  $3 \times 2$  within-participants and within-items design. The factor **Type of clause** had three levels (intensional, polarity and emotive-factive) and the factor **Subjunctive tense**, which corresponds to the tense of the subjunctive clause, had two levels (present and past). **Table 3** summarizes and exemplifies each experimental condition.

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<sup>16</sup> A morphological tense is not indexical if it need not be computed with regard to Speech Time, but must only be computed with regard to a contextual evaluation time supplied, for instance, by a matrix clause. The “relative present” discussed in Ogihara & Sharvit (2012) and Altshuler (2016: 135–138) is non-indexical in this sense. A form lacks temporal specification altogether if it does not specify a temporal relation to an anchor. As stated in footnote 5 above, the present subjunctive in Contemporary French is not indexical, but it has a temporal specification as [–past]. Lack of temporal specification entails non-indexicality, but the inverse entailment does not hold.

Subjunctive Tense	Type Of Clause	Stimulus
Past	Intensional	Pedro pidió que <b>vinieran</b> .SBJ.PST todos sus amigos. Por suerte estaban todos presentes. ‘Pedro asked for all his friends to come. Fortunately, they were all there’
Past	Polarity	Pedro dudó que <b>vinieran</b> .SBJ.PST todos sus amigos. Por suerte estaban todos presentes. ‘Pedro doubted that all his friends would come. Fortunately, they were all there’
Past	Emotive-factive	A Pedro le agradó que <b>vinieran</b> .SBJ.PST todos sus amigos. Por suerte estaban todos presentes. ‘Pedro was pleased that all his friends came. Fortunately, they were all there’
Present	Intensional	Pedro pidió que <b>vengan</b> .SBJ.PRS todos sus amigos. Por suerte estaban todos presentes. ‘Pedro asked for all his friends to come. Fortunately, they were all there’
Present	Polarity	Pedro dudó que <b>vengan</b> .SBJ.PRS todos sus amigos. Por suerte estaban todos presentes. ‘Pedro doubted that all his friends would come. Fortunately, they were all there’
Present	Emotive-factive	A Pedro le agradó que <b>vengan</b> .SBJ.PRS todos sus amigos. Por suerte estaban todos presentes. ‘Pedro was pleased that all his friends came. Fortunately, they were all there’

**Table 3:** Sample experimental stimuli.

We outline the three following possible predictions:

- (i) If SoT is active and the present subjunctive is indexical, we expect no effect of the Type of clause on acceptability judgments, but a significant effect of the Subjunctive tense, with present being less acceptable than past, regardless of the type of clause.
- (ii) If the morphological form present subjunctive is not specified for tense, as suggested by Guajardo & Goodall (2019) for Argentinian Spanish, we should fail to find a significant effect of the Type of clause or of the Subjunctive tense.
- (iii) If the reformulated “tenselessness”-hypothesis is correct, we expect an interaction Type of clause\*Subjunctive tense, with no significant difference in acceptability between present and past intensional subjunctive clauses, contrasting with a significant

difference between an acceptable past and an unacceptable present in polarity and emotive-factive subjunctive clauses. In other words, we expect a non-SoT pattern for intensional subjunctive clauses, whereas we expect an SoT pattern for the other two.

## 4.2. Methods

### Participants

Eighty-three students from the University of the Republic in Montevideo, Uruguay voluntarily participated in this experiment (age:  $M = 25.6$  years,  $SD = 7$ ). Participants were native speakers of Uruguayan Spanish. They gave their informed consent before taking part and the research was approved by the Ethics Committee of the School of Humanities and Education of the University of the Republic in Uruguay (approval communication on 8/11/2020).

Twenty-one participants were discarded from further analysis because they scored below the average (0.9) in the comprehension questions (which had correct and incorrect answers). The results are thus based on the responses of 62 participants.

### Materials

Forty-eight experimental items were created,<sup>17</sup> each consisting of two-sentence sequences. The first element was a biclausal sentence with a simple (perfective) past tense in the matrix and a subjunctive embedded clause. The second sentence, the coda, was designed to exclude a DAR-interpretation by signalling that the issue as to the occurrence of the event described in the subjunctive clause had been settled before Speech Time (see examples in **Table 3**). Sentence final past temporal adverbials – those used in the experiment reported in Guajardo (2017) and Guajardo & Goodall (2019) – may be interpreted as modifying the reference time of the past matrix clause, and thus are not guaranteed to exclude a DAR-interpretation. Therefore, we preferred fixing a non-DAR interpretation by means of a coda sentence instead of using temporal adverbials.

Stimuli were constructed using a  $3 \times 2$  design crossing the factors Type of clause (intensional, polarity and emotive-factive) and Subjunctive tense (present and past), yielding six different experimental conditions per item, as illustrated in **Table 3**. The factor Subjunctive tense corresponded to the tense of the verb in the embedded clause of the first sentence. The factor Type of clause corresponded to the head verb of the main clause. Intensional subjunctive clauses were introduced by the verbs *impedir* ‘to prevent’, *lograr* ‘to manage’, *ordenar* ‘to order’, *permitir* ‘to allow’, *pedir* ‘to ask’, and *querer* ‘to want’. Polarity subjunctive clauses were introduced by the negative verbs *dudar* ‘to doubt’ and *negar* ‘to deny’ and by *asegurar* ‘to claim’, *confirmar* ‘to confirm’, *creer* ‘to believe’, and *imaginar* ‘to imagine’ under sentential negation. Emotive-factive

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<sup>17</sup> One of the experimental items had to be discarded from the analysis due to an error in the distribution of subjunctive tenses. The results are thus based on the responses on 47 items.

subjunctive clauses were introduced by the verbs *agradar* ‘to please’, *alegrar* ‘to make happy’, *gustar* ‘to like’, *impresionar* ‘to impress’, *lamentar* ‘to regret’, and *sorprender* ‘to surprise’.<sup>18</sup>

Six versions of the experiment were created, such that each item appeared in a different condition in each version following a Latin square design. Each version of the experiment consisted in 48 experimental items (eight per condition) interspersed with 55 filler items. The filler items were acceptable two-sentence sequences from unrelated experiments.

## Procedure

The experiment was run online using the IboxFarm platform (Drummond 2014). Participants were asked to rate the acceptability of two-sentence sequences on a five-point Likert scale, as illustrated in **Figure 1**. They were instructed to use the full scale according to how natural (*normal*) or strange (*rara*) a two-sentence sequence was.

progress

Pedro no creyó que la noticia se diera a conocer inmediatamente. Por suerte la publicaron.

(Rara) 1 2 3 4 5 (Normal)

Seleccione un número del 1 al 5 para evaluar la frase de arriba.

**Figure 1:** A screenshot sample of the judgment task.

Participants started by completing a basic information form that included questions on their age, education level and whether they had lived abroad for more than ten years, as well as a declaration of informed consent. After that, they had three items to practice before starting the experiment (practice items were two-sentence sequences, of which one was fully grammatical and coherent, one was fully grammatical but contradictory, and one violated strong grammatical constraints). Four control sentences were inserted at the end of the experiment, in order to ensure that participants were attentive throughout the whole experiment. Two of them violated strong grammatical constraints and the other two were perfectly acceptable. Furthermore,

<sup>18</sup> A larger selection of verbs was initially drawn, in which we tried to have items within the same range of lexical frequency. The task of creating natural sounding stimuli in each experimental item by varying only the embedding verb was quite difficult, and the final selection was dictated by this aim.



comprehension questions were inserted in twenty percent of the items, thus introducing some variety in the tasks and having a measure to ensure participant's attention to the experiment. The comprehension questions were binary choice questions, such as in the filler item in (18):

- (18) Supongo que los estudiantes darán los próximos exámenes en setiembre. Los últimos fueron en julio.

'I guess the students will take their next exams in September. The last ones were in July. '

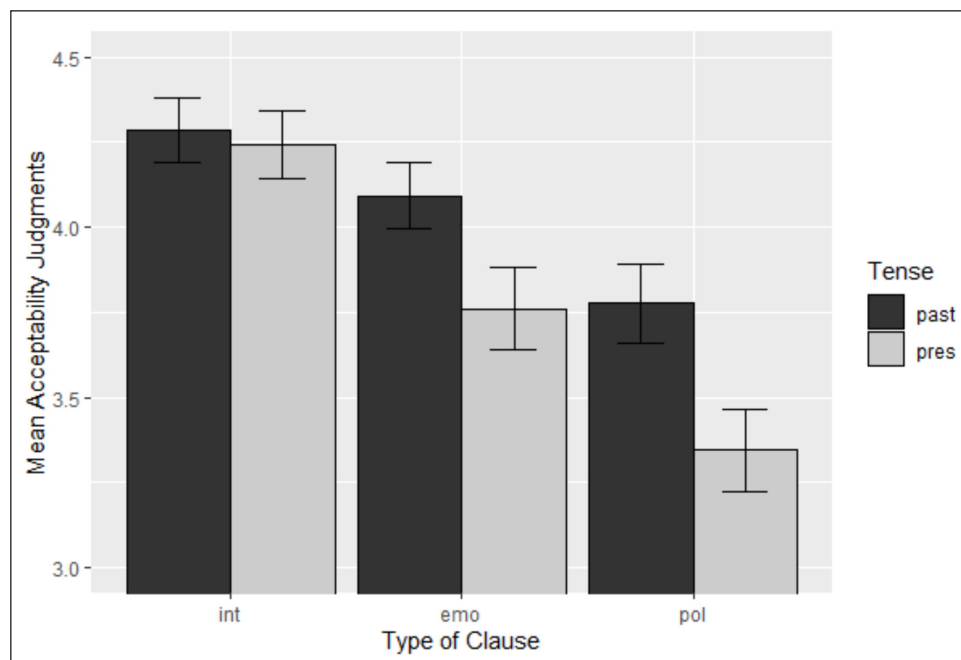
¿Cuándo fueron los últimos exámenes? (a) En mayo (b) En julio

'When were the last exams held? (a) In May (b) In July'

The experiment lasted for about 30 minutes. Data were only stored and analysed when participants completed the experiment.

### 4.3. Results

**Figure 2** presents the mean acceptability ratings for the three types of clause (intensional, polarity and emotive-factive) in the past and present subjunctive tense. While [Present under Past] sequences were rated at almost the same level than [Past under Past] sequences for intensional subjunctive clauses, [Present under Past] sequences were judged less acceptable than [Past under Past] sequences in emotive-factive and polarity subjunctive clauses.



**Figure 2:** Mean Acceptability Judgments in the six experimental conditions (error bars represent the confidence intervals).

Data were analysed with linear mixed effects models (Baayen, Davidson & Bates 2008) using the packages *lme4* (Bates, Mächler, Bolker & Walker 2015) and *lmerTest* (Kuznetsova, Brockhoff & Christensen 2017) in R statistical software (R Core Team 2021). Linear mixed models have been recommended for analysing Likert-scale data (see e.g., Gibson, Piantadosi & Fedorenko 2011; Cunnings 2012). For all the reported analyses, the dependent variable was the acceptability ratings transformed into z-scores. Z-transformation corrects for the potential that individual participants treat the scale differently (Schütze & Sprouse 2014). We applied mean-centered coding for the two fixed factors (present:  $-0.5$ , past:  $+0.5$  for Subjunctive tense; intensional:  $+0.066$ , emotive-factive:  $-0.33$ , polarity:  $-0.33$  for Type of clause). We first adopted the maximal random effects structure justified by the design (Barr, Levy, Scheepers & Tily 2013). This included by-participant and by-item random intercepts, and by-participant and by-item random slopes for every main effect and interaction term in the fixed effects. Random correlations were removed for the models to converge as recommended by Barr et al. (2013). We then removed random effects with (close to) zero variance to avoid singularity, which led us to exclude the interaction in the by-participant and by-item random slopes. The model was fit using the *bobyqa* optimiser. **Table 4** summarizes the fixed effects.

Fixed effects	Estimate	Standard error	t-value	p-value
(Intercept)	4.834e-03	6.283e-02	0.077	0.93886
Intensional vs. Polarity	-5.404e-01	6.096e-02	-8.864	1.08e-12***
Intensional vs. Emotive	-2.637e-01	5.732e-02	-4.600	2.98e-05***
Present vs. Past	1.902e-01	5.906e-02	3.221	0.00209**
Intensional vs. Polarity : Present vs. Past	2.212e-01	7.569e-02	2.922	0.00351**
Intensional vs. Emotive : Present vs. Past	2.025e-01	7.653e-02	2.646	0.00820**

**Table 4:** Fixed effect estimates.

Note: \*\* $p < 0.01$ \*\*, \*\*\* $p < 0.001$ .

The model indicated that acceptability rating was significantly affected by the type of clause (for the intensional vs polarity comparison,  $t = -8.86$ ,  $p < .001$  and for the intensional vs emotive comparison,  $t = -4.6$ ,  $p < .001$ ): intensional subjunctives clauses were judged more acceptable than emotive-factive subjunctive clauses and polarity subjunctive clauses. The model also revealed a main effect of Subjunctive tense ( $t = 3.22$ ,  $p < .01$ ), indicating that acceptability judgments for present tense were significantly lower than for past tense. Crucially, a significant interaction between Subjunctive tense and Type of clause was observed (for the intensional vs

polarity comparison,  $t = 2.92$ ,  $p < .01$  and for the intensional vs emotive-factive comparison  $t = 2.64$ ,  $p < .01$ ), indicating that the effect of the Subjunctive tense differed depending on the Type of clause.

To further investigate the interaction, we ran the maximal model with Subjunctive tense as fixed factor for each subset of the data (intensional, polarity and emotive-factive). These models revealed that participants judge significantly less acceptable present tense compared to past tense in polarity ( $estimate = .264$ ,  $SE = .0788$ ,  $t = 3.347$ ,  $p < .01$ ) and emotive-factive subjunctive clauses ( $estimate = .25$ ,  $SE = .084$ ,  $t = 2.977$ ,  $p < .01$ ), whereas no significant difference in acceptability judgments was observed between past and present tense in intensional clauses ( $estimate = .054$ ,  $SE = .0783$ ,  $t = .693$ ,  $p = .491$ ).

#### 4.8. Discussion

The results obtained show non-uniform behavior for the three types of subjunctive clauses. The main effect we find for Type of clause, with intensional subjunctive clauses scoring higher than the other two types, might correlate with the fact that subjunctive mood is mandatory in finite clauses embedded under predicates introducing intensional subjunctives, whereas it is known to alternate with indicative mood in the other two cases (RAE-ASALE 2009: §25.5.b, §25.7).

The significant interaction between the two factors Type of clause and Subjunctive tense substantiates prediction (iii) in §4.1. above: there is no significant difference in acceptability between present and past in intensional subjunctive clauses, and this contrasts with a significant difference between a more acceptable past and a less acceptable present in polarity and emotive-factive subjunctive clauses. Neither prediction (i) nor prediction (ii) in §4.1. above, which involve uniform behavior for the three types of subjunctive clauses, are substantiated by our results: there is a robust effect of subjunctive tense in polarity and emotive-factive subjunctive clauses and this effect is absent in intensional clauses.

The results for polarity and emotive-factive subjunctive clauses comply with what is expected for a SoT system, insofar as [Present under Past] is less acceptable than [Past under Past] in a context ensuring that the DAR-requirement is violated. By contrast, the high acceptability of [Present under Past] in the case of intensional clauses suggests that SoT is not active in this type of clauses.

Non-uniform behavior and the sharp contrast between polarity and emotive-factive subjunctive clauses, on the one hand, and intensional subjunctive clauses, on the other, are compatible with the reformulated tenselessness-hypothesis (§2.1) according to which defectivity in temporal content is not a property of subjunctive morphology as such, but rather a structural property of a particular type of subjunctive clauses. Furthermore, they are also compatible with our hypothesis that the change affecting the indexical status of the present subjunctive originates

in precisely those environments which show symptoms of a defective clausal structure (§§2.3, 2.4).

## 5. General Discussion

A comparison of the results of our experiment with those of the corpus analysis helps clarify one issue that may be raised as to our experimental design. The experiment as such measures the relative acceptability of [Present under Past], and does not tell us whether the acceptability rates concern the pattern itself or the pattern with a particular interpretation (the DAR-violation induced by the coda). Given the relatively high frequency with which the pattern is attested in the corpus for polarity subjunctive clauses (31.66% of 82 cases) and for emotive-factive subjunctive clauses (23.11% of 53 cases), we can be reasonably confident that it is violation of the DAR-requirement that accounts for lower acceptability rates of [Present under Past] in these two types of clause.

Beyond that, the results of the experiment align on the whole with those of the corpus assessment:

- (i) With polarity subjunctive clauses, [Present under Past] violating the DAR-requirement is documented in only 1 out of 82 occurrences in the corpus. Participants in the experiment judged the pattern to be clearly less acceptable than [Past under Past].
- (ii) With intensional subjunctive clauses, [Present under Past] violating the DAR-requirement is documented in almost half of the cases in the corpus. Participants in the experiment judged the pattern at least as acceptable as [Past under Past].

We take these results to substantiate our hypothesis that the change affecting the indexical nature of the present subjunctive in the Uruguayan variety originates in intensional subjunctive clauses, which are low in the scale of clausehood and show symptoms of a lack of semantic Tense.

The differential interpretation of [Present under Past] according to the type of clause both in our corpus data and in the experimental results cannot be simply accounted for by the feature specification of the present subjunctive. In fact, the present subjunctive in Uruguayan Spanish behaves as an indexical, temporally specified form in polarity and emotive-factive clauses, but as a non-indexical form in intensional clauses. In this regard, polarity and emotive-factive clauses exhibit SoT grammar, but intensional clauses deviate from SoT grammar in a way that can be captured by the reformulated tenselessness hypothesis.

It is interesting to compare this situation with the findings of Guajardo (2017) and Guajardo & Goodall (2019) for the Mexican and European varieties (cf. §2.2). In these varieties, which come close to the prescriptive Spanish standard, intensional subjunctive clauses appear to follow SoT, but only insofar as [Present under Past] becomes more acceptable when the temporal

interpretation complies with the DAR-requirement. Nonetheless, the acceptability of [Present under Past], the non-concordant combination, is overall lower than that of the concordant combination [Past under Past] (Guajardo & Goodall 2019: 13, Fig. 6).<sup>19</sup> Unfortunately, we lack data for the other types of subjunctive clauses in these varieties, apart from the general observation that a requirement for strict concordant combinations does not hold for polarity subjunctive clauses, where the choice of subjunctive tense is independent from that of the matrix clause (Guajardo & Goodall 2019: 3).

## 6. Concluding remarks

The Spanish-internal process of change that underlies variation in the use and interpretation of [Present under Past] has been shown to be sensitive to the type of subjunctive clause in the Uruguayan variety, which indirectly confirms the syntactic/semantic heterogeneity of subjunctive argument clauses. In the prescriptive Spanish standard, clauses low in the scale of clausehood tend to impose strict concordant combinations that are undistinguishable from the effects of SoT. In the variety studied in this paper, such clauses diverge from SoT grammar in exhibiting a non indexical present. Understanding the details of this stage of the change is important from a theoretical point of view, because it involves a dissociation between morphological and syntactic/semantic tense, with the same morphological form having a different semantic interpretation depending on the syntactic environment it appears in.

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<sup>19</sup> The acceptability is not consistently lower across predicates. The exceptions are (i) stimuli with the causative predicate *lograr* ‘to manage’ complying with the DAR-requirement for Mexico and Spain (Guajardo & Goodall 2019: 13, Fig. 6) and (ii) stimuli with the directive predicate *pedir* ‘to ask’ complying with the DAR-requirement for Mexico (Guajardo & Goodall 2019: 13, Fig. 7). It is interesting to note that in Mexico and Spain the non-concordant pattern is at least as acceptable as the concordant pattern in the complement of *lograr* ‘to manage’, which is lowest in the scale of clausehood.

## Abbreviations

IND = indicative, INF = infinitive , PL = plural, PRS = present, PST = past, REFL = reflexive clitic, SBJV = subjunctive, SG = singular

## Data availability

Experiment data and the R-script for the analysis are available at <https://osf.io/b8yg7/>

## Ethics and consent

The experiment was approved by the Ethics Committee of the School of Humanities and Education, Universidad de la República, Uruguay (approval communication letter 8/11/2020).

The participants handed in a signed informed consent form and did not receive any compensation for their participation.

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## Competing interests

The author has no competing interests to declare.

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