

Gesturing the discourse marker *entonces* in native speakers and learners of Spanish

Abstract

This chapter presents the results of a study of gestures co-occurring with the Spanish discursive marker *entonces* ('then'/'so') in the Spanish narrations of 15 native speakers and 15 learners of Spanish as a foreign language from Hong Kong with a proficiency level close to A2. *Entonces* is a multi- and poly-functional discourse marker, with interactive, discursive and logico-argumentative functions as well as being a temporal adverb (functions also found in its English translations 'then' and 'so'). In general, novice speakers resort to this marker often, even from the initial levels, particularly with an interactive function but their gestures indicate other functions too.

Key words: *entonces*, Spanish, foreign language learners, discourse markers

Research Focus

This paper explores how native speakers and learners of Spanish use gestures with the discourse marker *entonces* ('then'/'so') when narrating a cartoon-based story. We analyzed gestures occurring with *entonces* to identify form-meaning relationships based on their recurrent nature and investigated the possible metadiscursive functions of those instances of *entonces* and their gestures, comparing the two groups of speakers. The data was first quantitatively analyzed followed by a qualitative analysis to give a summary of our observations. Among all the gestures noted, we observed two that recurred in many speakers: arcs, where one hand or both turn at the wrist, often with a sideways movement away from the body; and drops of one palm forcefully onto the other. We will discuss these two gestures in particular.

Background

Discourse markers (DMs) are pragmatically and semantically polyfunctional, with the ability to convey various meanings within the same context but also different meanings when the context changes (Fraser, 1999). However, in the Foreign Language (FL) classroom the tendency is towards simplification. In lower proficiencies, Spanish FL textbooks seldom focus on DMs or their polyfunctionality (e.g., de Santiago Guervós, 2014), despite some, like *entonces*, being very frequent units in the production of A1-A2 speakers (beginner level, Common European Framework of Reference for Languages). Learners familiar with the polyfunctionality of 'then'/'so' in English, give *entonces* a range of values that are not always obvious from the content of the discourse but are nevertheless relevant and comprehensible to the interlocutor (see Example 1 below). These values can be interpreted from the gestures, often recurring in both native speaker and learner discourse, that co-occur with the marker.

Discourse markers

According to Fraser (1999), DMs form a category of lexical expressions mainly derived from conjunctions, adverbs, prepositional phrases, and sometimes idioms. These expressions typically indicate a connection between two segments, where the second segment (S2) is

interpreted in relation to a prior segment (S1). DMs have procedural meaning, that is, they help process conceptual information, but their specific interpretation depends on the linguistic and conceptual context in which they are used. For example, compare the meaning of: ‘We have no gas but the petrol station is near’ vs. ‘The petrol station is near but we have no gas’ (Lázaro, González & Ornat, 2020).

Borreguero Zuloaga (2015) proposes three main macrofunctional discursive categories for DMs: interactive, metadiscursive and cognitive. The interactive function refers to conversational control (e.g. turn taking, asking for confirmation, calling the interlocutors’ attention and attenuating or intensifying the message); phatic and emotional functions; and reactions by the interlocutor. The metadiscursive function includes linguistic formulation (e.g. sequencing and reformulation) and organizing information (e.g. indicating topic changes, digressions). The cognitive function includes inferential and logico-argumentative connections (e.g. cause, finality, opposition, contrast) and modality (e.g. distance from the message, evidentiality).

*Discursive functions of *entonces* (‘then’/‘so’)*

The core semantic value of *entonces* is temporal, it indicates a time different from ‘the now’, even if this value is not always present in modern uses of the marker (Borreguero Zuloaga 2015). Romera and Elordieta (2002) note that *entonces* establishes a relationship between two propositions, which can be: semantic, indicating sequential temporality; logico-argumentative pragmatic; or an anaphoric textual one.

The anaphoric nature of *entonces* has expanded to refer to a previously cited event or state (not necessarily consecutive), often to retake the turn or to offer a clarification, thus giving it an interactive or metadiscursive function. From this anaphorical temporal value, *entonces* has developed a number of discourse-organizing functions, often without its core temporal connotations, to sequence events or to provide logico-argumentative information where segment 2 (S2) is a logical inference of segment 1 (S1), its most frequent use (Romera & Elordieta, 2002). Other interactive functions of *entonces* in oral speech include stressing a part of the utterance, using the marker as a filler, and both keeping and giving the turn. It can also be used by the interlocutor to respond or ask for clarification.

Discourse Markers in Spanish as a Foreign Language

Despite their important pragmatic function, DMs are seldom introduced in depth in textbooks of Spanish as a FL (and never in the lower proficiency levels). Analysis of textbooks confirms that DMs are presented as discourse connectors without delving into their specific functions. Their importance in providing cohesion and coherence to the discourse is seldom stressed and neither are their logico-argumentative functions, which aid the interlocutor to infer and interpret information (de Santiago Guervós, 2014).

DM functions are difficult to learn in any new language, as they need to be explicitly explained, and they take time to process as procedural knowledge (de Santiago Guervós 2014; Romero Trillo, 2002). This means that, although comprehension of DMs in advanced learners

might be similar to that of native speakers, their production is usually slower – often showing L1 transfer (Zufferey et al., 2015).

Gestures

The field of gestures includes all body movements involved in the communicative act: head, body, gaze, hands. For the purposes of this study, we only focused on arm and hand movements. Specifically, we analyzed spontaneous movements of the hands, co-occurring with speech that allowed us to observe how ideas are conceptualized (McNeill, 2005).

Gestures are traditionally categorized based on their relationship with the speech content (McNeill, 2005). Referential gestures, of a representational nature (iconical or metaphorical) or of a deictic nature (pointing at a real or imaginary entity), have a semantic relationship with the content of the speech while non-referential beat gestures relate mostly to stress and prosody and other pragmatic functions. Functional categorizations focus on the semantic or pragmatic meaning of the gesture (Kendon, 1995) overlapping with the referential categorization, thus a metaphorical gesture could have a semantic or pragmatic function (or both). Metaphorical pragmatic gestures have been observed to recur in different speakers and contexts (recurrent gestures, Ladewig, 2014). Form-based analysis (Müller, Bressem & Ladewig, 2014) has confirmed that recurrent gestures hold a range of discursive pragmatic functions (among German speakers, Bressem & Müller, 2014a; French, Calbris, 2011; UK English, Harrison, 2010; Italian, Kendon, 2004), not dissimilar to those of DMs (Lopez-Ozieblo, 2020). These studies highlight how recurrent gestures share form and meaning across speakers (see also Eskildsen, 2021 *inter alia*). From a functional perspective, based on their discursive nature, gestures can be further subdivided following the same categorization as that used with DMs: interactive (controlling the interaction), metadiscursive (organizing information) or cognitive (indicating connections or modalizing the statement) (Lopez-Ozieblo, 2020). This categorization will be used to analyze the gestures in the study.

Method

Participants

The participants in this study were all students at tertiary institutions in Spain (15 native Spanish speakers) or Hong Kong (15 Spanish language learners). They all spoke English with a range of proficiency levels from an intermediate high level (B2, according to the Common European Framework of Reference for Languages) to fluent C2. The Spanish proficiency of the Hong Kong participants was around the lower A2 level. Culturally, they were cut-off from the Spanish speaking context, save for their contact with the teacher and their Spanish lessons. The Hong Kong participants were all Cantonese speakers but they self-reported to translate from English into Spanish rather than from Cantonese into Spanish as English and Spanish are closer lexically and syntactically than Cantonese and Spanish. The participants were not informed that we would be looking at gestures.

Procedure

Participants were asked to watch the first half of a video and narrate it to a trained listener in either Spanish or English, and then to watch the second half and narrate it in the other language.

Only the Spanish data was used for this study. The video selected was the *Canary Row* episode (Freleng, 1950) from the *Tweety and Sylvester* series (a television cartoon). In this story, the cat Sylvester is forever trying, and failing, to capture and eat Tweety who lives with his owner (Granny). Sessions were video-recorded with participants' consent. The speech and gestures in the recordings were transcribed using *PRAAT* (Boersma & Weenink, 2019) and *ELAN* (Sloetjes, 2017).

Analysis

To identify the DMs, we followed a multimodal discourse analysis approach based on Redecker (1991). The key relations between the speech units were identified according to the linguistic and discourse content and context as well as how the utterances were segmented via pauses. The functions of the markers were identified following Borreguero Zuloaga's framework (2015), and the *Towards a Grammar Gesture approach* (Müller et al., 2014), a form-based analysis of gesture meaning. Form-based analysis considers gestural meaning "not only as visual action but also as a form of dynamic embodied conceptualization" (Müller et al., 2014, p. 707). Meaning can be partly reconstructed from the form of the gesture within a given context. Lopez-Ozieblo (2020) was followed to categorize the discursive function of the gestures. Transcription of the speech and gestures was done by three independent researchers and then compared. Speech inconsistencies were analyzed again and resolved; differences in the functions of *entonces* and gesture forms were discussed by two of the researchers until agreement was reached.

The primary functions of the *entonces* observed and the gestures co-occurring with them were tallied and quantitatively compared between the Spanish natives and learners. A qualitative analysis was also carried out to further analyze the form of the gestures used with *entonces*.

Findings

This section begins by describing the discursive functions of these 65 cases of *entonces* noted, followed by an analysis of the gestures used with the DM, specifically the two most observed gestures, arcs and hand drops. To facilitate reading the examples provided participants' utterances are divided into segments (S1 and S2). These are given in Spanish and then translated word for word with the gesture phrases marked with [...]. If the speaker produces linked gestures, the end of the gesture phrase is not noted until the hands come to a resting position. The location of the stroke (or core) of the gesture occurring with *entonces* is underlined (given at an approximated place in the English translation). A non-literal translation is also provided with annotations marked {...}. Appendix 1 explains these symbols.

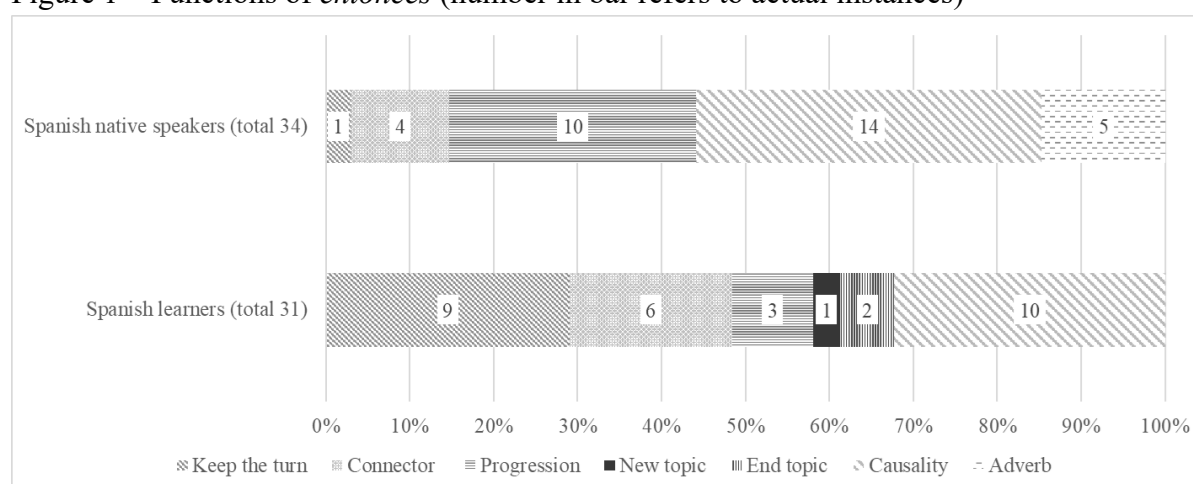
Discursive functions of entonces

Among the Spanish native speakers 11 (73%) produced 34 instances of *entonces* in a corpus of 4366 words and among the Spanish learners 7 (47%) produced 31 in a corpus of 5190 words (including cut-off words). The functions observed with *entonces* were (distribution of uses is represented in Figure 1):

- Interactive:

- Keep the turn – usually indicating disfluent speech, often with additional fillers such as *eh*;
- Metadiscursive
 - Connector – a meaning similar to *and*
 - Progression – to move the narrative along indicating a sequence of events, with a meaning similar to *after that*
 - Introduce a new topic – a meaning similar to *next*
 - End a topic – a meaning similar to *finally*
- Cognitive
 - Indicate a logical connection, causality, inference, objective – a meaning similar to *that's why, despite this, thanks to this*;
- Temporal adverb – referring to a specific time

Figure 1 – Functions of *entonces* (number in bar refers to actual instances)



Both groups of speakers employed *entonces* with a range of functions (the interactive was not so common as the corpus is a monologue). However, learners' functions are more varied, even if not always the best to describe the relationship between the segments, although they do not use *entonces* as a temporal adverb. There is also an overuse of *entonces* (not always incorrect) providing redundant information or used instead of other lexical units that learners might be less familiar with. Another difference is that *entonces* is often employed by the learners to indicate a speech difficulty (also observed by Bestgen, 1998), with an interactive function similar to that of disfluencies such as 'eh' or 'ehm' (Clark, 1996), to maintain the speaking turn.

Gestures

Gestures were categorized based on whether they performed a semantic or pragmatic function. Pragmatic gestures were further categorized as interactive (controlling the interaction), metadiscursive (organizing information) or cognitive (indicating connections or modalizing the statement). Out of the 34 instances of *entonces* observed in the Spanish native speakers' corpus there were 28 gestures (82% of *entonces*-uses), 7 (25%) of which were referential gestures, referring to the semantic content of the utterance, either representational or deictic; and 15 (53%) discursive. We also observed 6 (21%) adaptors, these are self-touching

gestures, usually associated with anxiety, that answer a bodily need such as scratching an arm or the face. In the Spanish learners' 31 instances of *entonces*, a similar percentage (81%, 25 instances) were also produced with gestures, which were mostly discursive (23 instances, 92%), and only two referential (8%). Our discussion below focuses on the gestures with a discursive function.

Interactive functions

Interactive gestures can indicate the wish to speak or to pass the turn to the other person, to refer to the interlocutor, or to seek agreement (Bavelas et al., 1992). They can be used to indicate that the information is being received and how (e.g. indicating approval or disapproval) or just to establish a relationship with the interlocutor.

The interactive gestures noted were used with disfluencies to indicate that the speaker intended to keep the turn and was to continue the narration. Among the native Spanish speakers there were no obvious interactive gestures, although some adaptors, such as running the hands together could be an expression of stress and, together with an averted gaze, could also indicate to the interlocutor that the speaker was thinking (one instance, 3% of 34 gestures). In the Spanish learners we observed 8 instances of interactive gestures (26% of 31 gestures), three of which were repeated *entonces*, these gestures were mostly turns of the wrist ending in Palm Up Open Hand gestures (PUOH) (Müller, 2004; Kendon, 2004). This gesture is associated with presenting or offering information (Müller, 2004), as well as with the absence of information (Cooperrider, Abner & Goldin-Meadow, 2018). See Lopez-Ozieblo (2020) for examples of PUOH in speakers of different languages. Future studies should expand the investigation of *entonces* and other DMs from narrations to multiparticipant interactions where more interactive gestures could be expected.

Metadiscursive functions

The metadiscursive function refers to the organizational flow of the discourse or “parsing” (Kendon, 2004) which includes gestures used to link events, to signal the introduction of new information, closing a segment or to emphasize parts of the utterance (Bavelas et al., 1992 called these “interactive”). Native speakers produced 14 gestures (40% of the 34 instances of gestures) with this function and learners 12 (39% of the 31 instances of gestures). The most often observed metadiscursive gesture was the arc, or “bridging gesture [expressing] a transition between two temporally ordered events” (Cooperrider & Núñez, 2009), often used with DMs such as ‘later’ or ‘then’. It occurs in two axes, the horizontal and the vertical, with the hand, or a finger, moving from a body centered position up and then either left or right. Cooperrider and Núñez (2009) stress that the time-synchronicity of the gesture with the marker is key to identifying whether the speaker is making salient the relationship between events, rather than the event itself. When the arc is carried out with the whole hand, usually rotating at both the wrist and the elbow, the end position is from the PUOH family of gestures.

In Example 1 a native Spanish speaker is narrating how the building does not allow cats or dogs, and Sylvester has tried to get in, but as it is a cat, it is thrown out. The gesture is a small arc that connects the two segments, S2 being the consequence of S1.

Example 1

- S1 no están permitidos ni perros ni gatos /
 S2 [/ entonces: [lo echan de allí]
 S1 no are allowed neither dogs nor cats
 S2 / [/ then: [it kicked-out from there]
 (arc)
 S1 neither dogs nor cats are allowed
 S2 then { = so } it gets kicked out

Another gesture observed in both groups of speakers, with variations, was a forceful, usually downwards movement of one hand, or two, sometimes ending with a palm down onto the other, palm up, producing a clapping sound. This dropping-hand gesture often marks the beginning or end of segments. In Example 2 the speaker begins an utterance, stops herself and decides to add a clarification. However, the *entonces* – together with the *y* and *pues* ('and' and 'well') – indicates that she was planning to connect two ideas before she thought the clarification was necessary. The gesture, on the other hand, suggests either a conclusion or the start of a new topic, rather than a less emphatic clarification, encouraging the interlocutor to pay attention to what comes next.

Example 2 – Native speaker



Figure 2

- S1 ~~está mirando hacia el edificio de silvestre /~~
 S2 ~~y en[tonces pue:] [/ silvestre hace todo lo~~
~~7ylveste para poder subir hasta la ventana~~
 S1 ~~it is looking towards the building of 7ylvester~~
 S2 ~~/~~
~~and t[then wel:] [/ 7ylvester does all it~~
~~possible for being able to go up to the~~
~~window~~
 S1 ~~It is looking towards Sylvester's building~~
 S2 ~~and then { = next } Sylvester does all he can to~~
~~get to the window~~

Example 2 – Native speaker

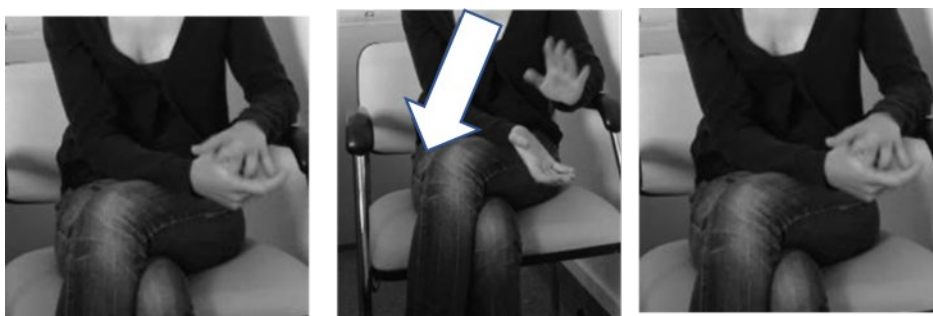


Figure 2

- S1 está mirando hacia el edificio de silvestre /
 S2 y en[tonces pue:] [/ silvestre hace todo lo posible para poder subir hasta la ventana
 S1 it-is looking towards the building of sylvester /
 S2 and t[then wel:] [/ sylvester does all it possible for being-able to-go-up to the window

Fig.2 (hand drops)

- S1 It is looking towards Sylvester's building
 S2 and then {= next} Sylvester does all he can to get to the window

These gestures might be a variation of the “dropping of hand” recurrent gesture identified by Bressemer and Müller (2014b, p. 1584), which they associated with a dismissive function. We suggest here it indicates the end of the narration (metaphorically bringing things together, or to an end), in this case, the last attempt. This downward clapping gesture seems to be the equivalent of ‘finally’ or ‘in summary’.

Gestures with a cognitive function

Cognitive functions refer to those that provide logical connections between the content of the discourse (logico-argumentative) and that allow the interlocutor to interpret it correctly either thanks to previous shared knowledge (inferences) or to modal markers that indicate how the speaker feels about the utterance (modalization). Native speakers produced 14 instances of gestures with a cognitive function (40% of the 34 gestures) and learners 9 (21% of the 31 gestures). Arcs and dropping hands were again observed with cognitive functions, the context and content interacting with the gesture to provide meaning.

In Example 3, the S2 refers to the fact that the cat cannot enter, leading him to rethink his strategy because he still wants to catch the bird. This logical process has to be (partly) inferred by the interlocutor and that is what *entonces* indicates. The gesture is a large arc ending in an oblique PUOH, the amplitude of the arc stresses the lexical unit it accompanies and metaphorically picks up the first segment and presents it as the reason for the second one.

Example 3 – Native speaker

- S1 lo echan porque es un gato evidentemente] y no: puede: no puede: entrar
 S2 [/ entonces e: esta [empieza a pensar cómo: cómo poder llegar hacia cómo puede llegar hacia piolín
 S1 he kicked-out because is a cat obviously] and no: can: no can: go-in
 S2 [/ then i: is [starts to think how: how can arrive towards how can arrive towards tweety
 (arc)
 S1 he {the cat} is kicked out because he is obviously a cat and he is not allowed in
 S2 then {= therefore} he is he starts to think how to get to tweety

We observed similar gestures among the Spanish learners. In Example 4, the speaker is narrating that the cat got hurt when trying to catch the bird, but despite being hurt and having failed, he did not give up and the following day was again planning how to catch the bird. With *entonces* the speaker produces a large arc with an additional movement forward of the PUOH at the end (Figure 3). The gesture relates the two segments in a way which is not obvious from the speech alone. With *día después* ('following day'), the speaker produces a gesture to his right to place the action in the narrated future (e.g., Walker & Cooperrider, 2015), whereas the arc gesture is likely to refer to the logical relationship (e.g. 'the cat was hurt, he lost the bird, however, he is about to try again') rather than stressing the timeline. The interlocutor is required to infer a considerable amount of information, but the gesture helps make this inference.

Example 4 – Learner



Figure 3

- S1 [{inaudible} [/eh pero: he[rido- / [/ esta herido /]
 S2 [y entonces eh la la- día después[s eh esta- el gato está estudiando matemáticas
 S1 [(inaudible) [/eh but: hu[rt- / [/ is hurt /]
 S2 [and the[n eh the the- day after eh is- the cat is studying mathematics

Fig. 3 (arc)

S1 but he is hurt

S2 and then {= so} the day after he is studying mathematics

In Example 5, a Spanish learner, is referring to another failed attempt to catch the bird and begins to narrate the next and final attempt. The first *entonces* is used to buy time but the gesture suggests that the speaker is indicating causality (Figures 4a & 4b). The gesture is a small arc (left hand) ending in a PUOH, which, as mentioned, is often associated with presenting information or absence of information. Example 5 also illustrates the use of our other focal gesture, the forceful dropping of the hand (Figures 4c and 4 d), where the left wrist flexed downwards while the right-hand lifted to then come quickly on top of the left. In that example, the gesture in concert with *entonces* indicated finality. Native speakers also produced this gesture for the same purpose.

Example 5 – Learner



Figure 4a

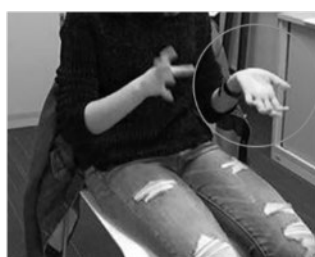


Figure 4b



Figure 4c



Figure 4d

S1 [/ esta vez esta vez [/ el gato [/ no puedo [/ no puede [de tener / una [/ cosa amarilla /
S2 y / [entonces / ehm / [/ entonces / ehm / [el gato [/ quiere /
[/ eh: / caminar / caminar / en / en: / los / cables

S1 and this time [/ the cat [/no I-can [/ no he-can [of have / a [/thing yellow /

S2 and / then / ehm [/then / ehm [the cat [/wants /

Figs. 5a & b (arc) Figs, 5c & d (hand drops)

[/eh:/ walk / walk / in / in:/ the / cables

S1 this time the cat cannot have the yellow thing

S2 and then {= so, he tries again} then {= finally} the cat wants
to walk on the cables

Through these few examples we have highlighted how the gestures of both native speakers and learners of Spanish that co-occur with *entonces* showed recurring form-meaning relationships with functional subtleties. In particular we noted the two gestures discussed above: (1) arcs, with small and large amplitudes (5 instances among native speakers and two in learners); and (2) dropping one palm forcefully onto the other or both together, in a variation of the gesture (two instances among native speakers and three in learners). These recurred in different speakers and were mostly used with metadiscursive and cognitive functions.

Conclusions

The data analyzed in this study confirms Borreguero Zuloaga's (2015) classification of the functions of *entonces* and shows how gestures can contribute to clarify its various meanings (Lopez-Ozieblo, 2020). Although our corpus was limited by the number of participants and the type of task performed, we identified, in both native speakers and learners of Spanish, examples of the three metadiscursive functions in the *entonces*-gesture, including keeping the turn (interactive), metadiscursive (connecting, indicating start and end of segments, sequence and clarifications) and cognitive (marking causality and inference). As learners had only been introduced to *entonces* as a connector, it is very likely that their English knowledge influenced their usage (as many instances are similar, House, 2010).

The high percentage of *entonces* co-occurring with a gesture indicates that these are often key lexical units within the discourse which carry important information to understand how segments are related. The form of the gestures observed in our corpus was often a small arc, or twist of the wrist to indicate causality and a larger arc suggesting an inference (cf. Yoshioka & Iwasaki, this volume, on the use of enlarged gesture in ambiguous contexts), while a downwards movement indicated either a segment border or a conclusion or summary. The gesture analysis supplements previous linguistic analysis confirming that *entonces* is more than a segmentation marker (as suggested by Bestgen, 1998) or a simpler connector. The findings also illustrate how meanings of specific linguistic items and recurring gestures are coupled, as discussed in the introduction.

The functions of *entonces* among language learners should be further explored to understand their intended meaning at each proficiency level and explicitly taught to foreign language learners. Transfer of DMs from other languages can aid learners, but their functions should be explored and explained, using gestures when possible to illustrate them. Further studies could explore whether mother tongue differences affect how learners of Spanish gesture with *entonces*; or whether there are observable differences depending on the proficiency level of the learner, the type of task, topic under discussion and interlocutor. Another line of research could be whether speakers and learners of other languages produce similar gestures with equivalent DMs, such as 'then'/'so' in English.

Appendix: Transcription Conventions

The annotation of the speech transcription is adapted from Lopez-Ozieblo (2020) and gestures transcription from McNeill (2005).

S1 / S2	Segment 1 / Segment 2 (first in Spanish, then direct and semantic translations)
<@>	Laughter quality in speech
word:	Elongation
-	Cut-off
/	Pause
{word}	Note to clarify meaning; {f} = feminine; {m} = masculine
[word]	Gesture phase (from the first movement of the gesture to either a rest position or the next gesture starting)
<u>word</u>	Gesture stroke (only marked with <i>entonces</i>)

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References

- Bavelas, J., Chovil, N., Lawrie, D.A., & Wade, A. (1992). Interactive gestures. *Discourse Processes* 15(4), 469-489. <https://doi.org/10.1080/01638539209544823>
- Bestgen, Y. (1998). Segmentation markers as trace and signal of discourse structure. *Journal of pragmatics*, 29(6), 753-763. [https://doi.org/10.1016/s0378-2166\(97\)00082-9](https://doi.org/10.1016/s0378-2166(97)00082-9)
- Boersma, P., & Weenink, D. (2019). *Praat: doing phonetics by computer*. Version 6.0.54. [Computer program]. Retrieved from: <http://www.praat.org/>
- Borreguero Zuloaga, M. (2015). A vueltas con los marcadores del discurso: de nuevo sobre su delimitación y sus funciones. In: A. Ferrari, L. Lala, & R. Stojmenova (Eds.), *Testualità. Fondamenti, unità, relazioni* (pp. 151-70). Rome, Italy: Cesati.
- Bressem, J., & Müller, C. (2014a). A repertoire of German recurrent gestures with pragmatic functions. In: C. Müller, A. Cienki, E. Fricke, S. H. Ladewig, D. McNeill, & S. Teßendorf (Eds.), *Body - Language – Communication* (pp. 1575-1592). Berlin, Germany: Walter de Gruyter. <https://doi.org/10.1515/9783110302028.1575>
- Bressem, J., & Müller, C. (2014b). The family of Away gestures: Negation, refusal, and negative assessment. In C. Müller, A. Cienki, E. Fricke, S. H. Ladewig, D. McNeill, & S. Teßendorf (Eds.), *Body - language - communication: An international handbook on multimodality in human interaction, Volume 2*, (pp. 1592-1604). Berlin, Germany: De Gruyter Mouton. <https://doi.org/10.1515/9783110302028.1592>
- Calbris, G. (2011). *Elements of meaning in gesture*. Amsterdam, Netherlands: John Benjamins Pub. Co. <https://doi.org/10.1075/gs.5>

- Clark, H. H. (1996). *Using language*. MA.: Cambridge University Press. <https://doi.org/10.1017/cbo9780511620539>
- Cooperrider, K., & Núñez, R. (2009). Across time, across the body: Transversal temporal gestures. *Gesture*, 9(2), 181-206. <https://doi.org/10.1075/gest.9.2.02coo>
- Cooperrider, K., Abner, N., & Goldin-Meadow, S. (2018). The palm-up puzzle: meanings and origins of a widespread form in gesture and sign. *Frontiers in Communication*, 3 (23). <https://doi.org/10.3389/fcomm.2018.00023>
- de Santiago Guervós, J. (2013). Reflexiones teóricas sobre la didáctica de la conexión discursiva. In J. M. Bustos Gisbert, & J. J. Gómez Asencio, (Eds.), *Procedimientos de conexión discursiva en español: adquisición y aprendizaje* (pp. 127-142). Bern, Switzerland: Peter Lang. <https://doi.org/10.3726/978-3-0351-0705-0/13>
- Eskildsen, S. W. (2021). Embodiment, semantics and social action: The case of object-transfer in L2 classroom interaction. *Frontiers in Communication*. <https://doi.org/10.3389/fcomm.2021.660674>
- Fraser, B. (1999). What are discourse markers?. *Journal of pragmatics*, 31(7), 931-952. [https://doi.org/10.1016/s0378-2166\(98\)00101-5](https://doi.org/10.1016/s0378-2166(98)00101-5)
- Freleng, F. [Director] (1950). Canary Row. In *Tweety and Sylvester*. Time Warner.
- Harrison, S. (2010). Evidence for node and scope of negation in coverbal gesture. *Gesture*, 10(1), 29-51. <https://doi.org/10.1075/gest.10.1.03har>
- Haselow, A. (2011). Discourse marker and modal particle: The functions of utterance-final then in spoken English. *Journal of Pragmatics*, 43(14), 3603-3623. <https://doi.org/10.1016/j.pragma.2011.09.002>
- House, J. (2010). The pragmatics of English as a lingua franca. In A. Trosborg (Ed.), *Pragmatics across languages and cultures* (pp. 363–390). Berlin, Germany: Mouton de Gruyter. <https://doi.org/10.1515/9783110214444.2.363>
- Kendon, A. (1995). Gestures as illocutionary and discourse structure markers in Southern Italian conversation. *Journal of pragmatics* 23 (3), 247-279. [https://doi.org/10.1016/0378-2166\(94\)00037-f](https://doi.org/10.1016/0378-2166(94)00037-f)
- Kendon, A. (2004). *Gesture: Visible action as utterance*. MA.: Cambridge University Press.
- Ladewig, S. (2014). Recurrent gestures. In: C. Müller, A. Cienki, E. Fricke, S.H. Ladewig, D. McNeill, & S. Teßendorf (Eds.), *Body - Language – Communication* (pp. 1558-1574). Berlin, Germany: Walter de Gruyter. <https://doi.org/10.1515/9783110302028.1558>
- Lázaro, J. P., González, M. E. S., & Ornat, S. M. (2020). Partículas discursivas e instrucciones de procesamiento. In M. V. Escandell-Vidal, J. Amenós Pons, & A. K. Ahern (Eds.), *Pragmática* (pp. 284-302). Madrid: Akal. <https://doi.org/10.1353/hpn.2022.0047>
- Lopez-Ozieblo, R. (2020). Proposing a revised functional classification of pragmatic gestures. *Lingua*, 247, 102870. <https://doi.org/10.1016/j.lingua.2020.102870>

- McNeill, D., (2005). *Gesture and Thought*. IL.: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226514642.001.0001>
- Müller, C. (2004). Forms and uses of the Palm Up Open Hand: A case of a gesture family. In: C. Müller, & R. Posner, (Eds.), *The Semantics and Pragmatics of Everyday Gestures* (pp. 233-256). Berlin, Germany: Weidler.
- Müller, C., Bressemer, J., & Ladewig, S. H. (2014). Towards a grammar of gestures: A form-based view. In: C. Müller, C., A. Cienki, A., E. Fricke, E., S.H. Ladewig, D.S. H., McNeill, D., & S. Teßendorf, S. (Eds.), *Body - Language – Communication* (pp. 707-733). Berlin, Germany: Walter de Gruyter. <https://doi.org/10.1515/9783110261318.707>
- Redeker, G. (1991). Linguistic markers of discourse structure. *Linguistics*, 29 (6), 1139-1172.
- Romera, M., & Elordieta, G. (2002). Características prosódicas de la unidad funcional del discurso "entonces": implicaciones teóricas. *Oralia: análisis del discurso oral*, 5, 247-263. <https://doi.org/10.25115/oralia.v5i1.8450>
- Romero Trillo, J. (2002). The pragmatic fossilization of discourse markers in non-native speakers of English. *Journal of pragmatics*, 34(6), 769-784. [https://doi.org/10.1016/s0378-2166\(02\)00022-x](https://doi.org/10.1016/s0378-2166(02)00022-x)
- Sloetjes, H. (2017). *ELAN* [Computer program]. Version 5.0.0. Retrieved from: <https://archive.mpi.nl/tla/elan>.
- Walker, E. & Cooperrider, K. (2015). The Continuity of Metaphor: Evidence From Temporal Gestures. *Cognitive Science* 40, 481-495. <https://doi.org/10.1111/cogs.12254>
- Zufferey, S., Mak, W., Degand, L., & Sanders, T. (2015). Advanced learners' comprehension of discourse connectives: The role of L1 transfer across on-line and off-line tasks. *Second language research*, 31(3), 389-411. <https://doi.org/10.1177/0267658315573349>