The rise and fall of illocutionary negation: evidence from Veneto

Abstract. In this paper we sketch a model which can describe Jespersen's cycle in two varieties spoken in Veneto, Venetian and Gazzolese. We compare the case of Veneto with previous descriptions of Jespersen's cycle in Italian. We show that the minimizer *mica* was reanalysed as illocutionary negation in Italian and Venetian because of the interplay between the economy principle 'Avoid Pragmatic Overload' (Eckardt, 2009) and markedness. We also show that the tension between these two factors eventually led Gazzolese to reach a more advanced step of the cycle, where *mia* denotes standard negation.

Keywords: Avoid Pragmatic Overload, reanalysis, Jespersen's cycle

1. Introduction

This paper tackles the renewal of negation, known as Jespersen's cycle (Dahl, 1979) in Italo-Romance. In particular, we will focus on two varieties (Venetian and Gazzolese), spoken in Veneto, a north-eastern Italian region. In these varieties, there is a particle *miga* or *mia* which, together with the preverbal negation *no*, reinforces negation.

A similar pattern can also be found for Italian. While standard negation in Italian is expressed by the particle non (1), it is possible to express a further type of negation by adding the postverbal particle mica. Mica denies a contextually-active proposition so that the latter does not enter the Common Ground (intended à la Stalnaker, 1978 and Allan, 2013). Encoding the speaker's intention and commitment to deny an active proposition, mica can be described as illocutionary negation. To illustrate this, we report the examples in (1) and (2). Example (1) expresses a simple denial where the logical operator \neg applies to the proposition p. On the other hand, example (2) is pragmatically more complex: a proposition p is being activated in the context. Here, by contextual activation, we mean the set of information belonging to the information packaging (Chafe, 1976, Prince, 1981), similarly to Visconti (2009)'s label of 'discourse-old' and givenness (but see also Schwenter, 2006). Back to our example (2), the speaker, by means of mica, remarks that the activated proposition p is false.

- (1) Non chiamo Gianni. NEG call.PRES.1SG Gianni 'I am not calling Gianni.'
- (2) A:Mi hanno detto che chiami Gianni. me have.3PL said that call.2SG Gianni 'A: They told me you are calling Gianni.'

B:Non chiamo mica Gianni. NEG call.1SG mica Gianni 'B: I am not calling Gianni at all.'

Note that in example (2) the proposition was activated by explicit mention. However, it is possible for *mica* to scope over implicit expectations, beliefs, and world-knowledge information, as long as that the denied proposition is uttered or believed by someone. In this case, the proposition is still activated, but it is inferred instead of being explicitly mentioned (Cinque, 1976).

(3) (out-of-the-blue context, entering a meat cold room)

Non fa mica freddo qui. NEG does mica cold here 'It is not cold in here.' (after Cinque 1976: 109)

Venetian employs a similar particle, miga, with the same functionality as mica (4).

(4) Ti ga dito che go ciamà Giani, ma no lo go you.SBJ.CL.2SG have.2SG said that have.1SG called Giani, but NEG him have.1SG miga ciamà.

mica called

'You said that I called Giani, but I didn't call him at all.'

As we mentioned, mica and miga have some restrictions on information structure: the denied proposition p must be active in the context (as in the previous examples) or it will be accommodated (in the sense of Beaver and Zeevat, 2007). In (5), the proposition p (Giani has called) was not explicitly activated in the context, but in order to accept the sentence as felicitous, p is accommodated. In this case, we expect that speaker A knew that speaker B was waiting for Giani's call. Now that the proposition p is inferred, it is activated by accommodation and can be denied as false.

(5) A:Parché ti pianzi? (Venetian) why you.SBJ.CL.2SG cry.PRES.2SG 'Why are you crying?'
B:Giani nol me ga *miga* ciamà.
Giani NEG.SBJ.CL.3SG me has *mica* called 'Giani hasn't called me.'

When brand-new information is directly asked as in a wh-question, the proposition can be difficult to accommodate, leading to the incompatibility with *miga*. The reply by speaker B in (6), who used illocutionary negation, can be roughly interpreted as 'It is false that I called Giani'. This latter interpretation is at odds with speaker A's question, yielding pragmatic infelicity.

(6) A:Chi xe che no ti ga ciamà? (Venetian) who is that NEG you.SBJ.CL.2SG have.2SG called 'Whom didn't you call?'
B:No go ciamà (*miga) Giani NEG have.1SG called mica Giani

'I haven't called Giani at all.'

However, there is another variety spoken in Veneto, Gazzolese, which can employ *mia* (another phonetic realisation of the same etymological item) in cases like (6).

In this variety, *mia* is the compulsory marker of standard negation and the preverbal particle *no* is optional. It follows that *mia* does not possess the same restrictions in information structure as Venetian *miga* or Italian *mica* (Magistro et al., 2022b). These properties are the aftermath of Jespersen's cycle, the diachronic pattern of renewal of negation (see Breitbarth et al., 2020 for a recent overview). According to this pattern, *mica | miga | mia* are replacing the former negator *no | non*. While Venetian and Italian still use the particle as illocutionary negation, Gazzolese is more advanced in the cycle and can already use it to denote standard negation. This source of microvariation allows us to appreciate the landscape of an ongoing change: we aim at deploying this variation to test the dynamics and mechanisms of Jespersen's cycle.

In particular, we want to illustrate the semantic reanalysis process which brought *mica* to the meaning of illocutionary negation and eventually to standard negation. First, we want to show that the different functions of *miga* and *mia* cause different semantic properties and behaviour. Second, we aim at enriching the existent diachronic analyses of Jespersen's cycle with the application of a principle proposed by Eckardt (2009), Avoid Pragmatic Overload (or APO). We show that this is useful in capturing the change of *mica* from minimizer to its intermediate stage of illocutionary negation. We also show that the same principle can be used to describe the final step found in Gazzolo, where *mia* is used to express standard negation, without restrictions depending on information structure.

The paper is organised as follows. First, we present a description of illocutionary negation in Venetian and Gazzolese, together with some diagnostic tests that have been previously employed in the literature. We also present a further test for distinguishing the illocutionary negation marked by mica from the function of standard negation. Then, we will move along a diachronic path: we start by reviewing the original meaning of mica in Latin and, based on previous literature, we show that it was able to activate scalar implicatures to deny a certain proposition. Then, we show the use of miga in old Venetan data. We show that the scalar implicature is lost, and what is preserved is the denial function, reanalysed as a special negator of contextually-activated propositions. In particular, we will propose that this reanalysis is moved from one side by the APO principle and by the other side by inter-subjectification, as a tendency describing the direction of reanalysis (Visconti, 2009). We will see this change as a balance between linguistic markedness and economy. We will finally look at the further stage of Jespersen's cycle in Veronese area (Gazzolo), where we will apply again APO to account for the loss of restrictions on the activated proposition. Our general theory on the change in Veneto is that there is a tendency towards the loss of pragmatic enrichment detectable by the APO principle. At the same time, we will also hypothesize that the markedness of the construction plays a role in curbing the reduction of pragmatic meaning. To sum up, we will show that the mechanism of change can be boiled down to a tension between economy factors (simplification of pragmatic overload) and maintenance of markedness.

2. Synchronic perspectives

2.1. Illocutionary negation

Before we start any diachronic survey on *mica*, it is essential to focus on its synchronic properties.

Cinque (1976) defined Italian *mica* as 'presuppositional negation' since it represents the 'denial

of a presupposition or expectation' (sic.). This definition has been recently criticised by Frana and Rawlins (2016), who show that it does not capture all of its distributional contexts, viz. biased polar questions and the denial of explicit content. Under this light, *mica* is able to deny both at-issue and not-at-issue content. Instead, Frana and Rawlins propose that *mica* represents a sort of meta-linguistic operator, which illustrates the speaker's attitude towards the truth of a proposition. More formally, they equate it to a FALSUM operator adopted from Repp (2013), whose entry is reported in (7).

$$[mica(p)] = [FALSUM(p)]_x = \lambda p_{\langle s,t \rangle} \lambda w. \forall w' \in Epi_x(w) [\forall w'' \in Conv_x(w') [p \notin CG]]$$

Some explanation for the notation: $Epi_x(w)$ is defined as the set of worlds conforming to x's knowledge in w; $Conv_x(w')$ is the set of worlds where all the conversational goals of x in w' are fulfilled (in a Gricean sense), and CG is the stalnakerian Common Ground at a world w, i.e. the set of propositions that the speakers assume to be true at w. To put it simply, mica indicates that the proposition p, on behalf of conversational goals, should not belong to the Common Ground, based on speaker's knowledge (see also Magistro (2022)). It must be mentioned that the definition given in formula (7) is based upon the tradition started by Höhle's (1992) VERUM, an illocutionary operator which expresses the speaker's commitment to the truth of a proposition. More specifically, Romero and Han (2002) proposed an entry for VERUM focus, where a prejacent proposition is considered to be true and hence must be added to the CG. Based on this, Repp (2013) built its reverse, FALSUM, adopted by Frana and Rawlins for mica.

Without introducing this convoluted notation, we will simply define Venetian *miga* as a form of illocutionary negation, which denies a proposition which is already salient in the discourse context C.¹

(8)
$$[miga(p)] = \lambda p. (p \in C). \neg p$$

A similar requirement of activated p in C was explicitly formalised in Bianchi and Bocci (2012) who introduce an *incomp* operator to describe contrastive focus. In the operational definition in (9), there is a precedent proposition p in a context C; when there is a new proposition p' which is logically incompatible with p, the initial p will be marked as false.

(9)
$$incomp(p, p', C) \leftrightarrow C \models p \land (C + p' \models \neg p)$$

Interestingly, this kind of denial can be compared to what has been defined in the syntactic literature as Polarity Focus (Breitbarth et al., 2013), i.e. an emphatic negator that contrasts an alternative positive polarity against its respective negative form p (Lohnstein, 2016). However, the role of information structure is essential here in distinguishing it from standard negation (Gazzolese mia). The illocutionary negation represents necessarily the reversal of the truth-value of a contextually activated proposition. Such a property makes this kind of denial pragmatically richer than the standard negative operator (\neg) .

Naturally, the proposition p can be activated in the context in the different ways. The most straightforward way for this is by an explicit utterance, but a certain proposition p can also be activated via implicature, presupposition or may simply belong to C as expected by the participant(s) in the discourse. We will present some examples later in the discussion on historical

¹Naturally, this condition makes miga more marked and emphatic. It expresses the commitment of the speaker that p is false.

data. It is for this informational requirement that emerging negators in Jespersen's cycle are often labelled as 'presuppositional negation' (Cinque, 1976; Zanuttini, 1997; Pescarini, 2009). In the next section we will illustrate some differences between the two stages.

2.2. Illocutionary versus Standard Negation

We will now presents some tests that Venetian miga and Gazzolese mia are two separate entities and have therefore different properties. The first two tests come from the description of Italian mica provided by Frana and Rawlins (2016), which are also applicable for Venetian miga. in (10), the logical operator \neg can scope over or under the modal, yielding respectively an interpretation of unnecessity or prohibition (Cormack and Smith, 2002). When miga is inserted, such ambiguity does not rise anymore and the only interpretation available is the unnecessity one (11) (and, naturally, the denied proposition must be active in the context). ²

(10)	No ti	ga	da ciamar Giani. (Venetian)			
	NEG you.SUBJ.CL have.2SG to call.INF Giani					
	(i) 'You don't have to call Giani.' $\neg > \square$					
	(ii) 'You must not call Giani.' $\square > \neg$					
(11)	No ti	ga	miga da ciamar Giani. (Venetia	n)		
	NEG you.SUBJ.CL have.2SG mica to call.INF Giani					
	'You don't have to call Giani.' $\neg > \square$					

On the other hand, Gazzolese *mia* can be used as a standard negator and can interact with the modal as in (10), scoping over or under the modal.

- (12) No te ghe *mia* da ciamar Giani. (Gazzolese)
 - (i) 'You don't have to call Giani.'
 - (ii) 'You must not call Giani.'

Here, we propose another test which is insightful in capturing the scope effects of miga. Repp (2006) showed that negations operating as speech act operators, because of their position in CP, display only a wide scope reading with gapping, instead of embedding within the proposition. Let us take example (13) to illustrate this effect: in this case, the illocutionary negation does not embed within the disjunction ($\neg(A \lor B)$?), viz. the question concerns the action of calling, be the called person either Giani or Luca. Vice versa, with the standard negation no alone (14), a further interpretation is available, as to ask whether it was Giani or Luca who was not called, i.e. negation is able to embed in the disjunction ($\neg A \lor \neg B$?). Note that the two constructions can be differentiated by a distinct intonation.

- (13) Nol ga *miga* ciamà Giani o Luca? (Venetian) NEG.he has *mica* called Giani or Luca? 'Didn't he call Giani or Luca?'
- (14) Nol ga ciamà Giani o Luca? (Venetian) NEG.he has called Giani or Luca?

²The explanation for such a behaviour, according to Frana and Rawlins, can be found in the merging site of the operator FALSUM. FALSUM has been traditionally described as an operator standing high in the clause, hence it outscopes the modal ($\neg > \square$). The same effect can be reached by paraphrasing the presence of FALSUM as 'It is false that you have to call Gianni'.

- (i) 'Didn't he call Giani or Luca?'
- (ii) 'Whom didn't he call? Giani or Luca?'

Since Gazzolese *mia* can be compared to standard negation, the scopal ambiguity is restored: negation can scope both externally and internally.

(15) Nol ga mia ciamà Giani o Luca? (Gazzolese)

NEG.he has mica called Giani or Luca?

- (i) 'Didn't he call Giani or Luca?
- (ii) 'Whom didn't he call? Giani or Luca?'

Another property found by Frana and Rawlins is the type of bias triggered in polar questions (Ladd, 1981). In example (16), the questioned proposition p ('Have you called Giani?') can be either expected (i) or unexpected (ii).

- (16) No ti ga ciamà Giani? (Venetian)
 - (i) 'Didn't you call Giani?' (I thought you did it)
 - (ii) 'You did not call Giani, right?' (I expected you not to do it)

If we add *miga* to sentence (16), only the interpretation (ii) will be possible, with the negative prior bias. As usual, this restriction does not hold in Gazzolese anymore and both types of bias are available.

This series of tests allows us to tell apart illocutionary negation from standard negator markers.³ It is important to remember that while Venetian *miga* necessarily works as illocutionary negation and restricts to activated propositions, Gazzolese *mia* behaves as standard negation, and can be used both plain negation and in emphatic contexts as the denial of an active predicate. In other terms, an emphatic reading is available in Gazzolese *mia*, as well (as it happens for other grammaticalized negator such as French *pas* and English *not*).

Another noteworthy difference between Venetian *miga* and Gazzolese *mia* lies in their phonetic properties. As documented in Magistro et al. (2022b) and Magistro and Crocco (2022a), Venetian *miga* represents a metrically strong head and is typically associated with a pitch accent in the shape of a rising tone (figure 3 in section 3.5.2). Vice versa, Gazzolese *mia*, when used in standard negation, does not show the same degree of prominence: it is often phonetically reduced and is not associated with a pitch accent (figure 2). In section (3.5.2), we will come back to these properties and their possible role in terms of markedness to account for the diachronic change.

Now that the current status of these elements is set out, we can move on to describing a model of their diachronic development.

3. Diachronic perspectives

3.1. Corpora and method

To retrace the diachronic paths of *miga* and *mia*, two corpora were built: one in Latin and another in the vernacular varieties (Venetian and Veronese). We decided to include Latin to survey the etymological source of *miga* and its behaviour before the first round of reanalysis (from minimizer to illocutionary negation). We collected data from Brepolis' Library Latin Texts.⁴ We collected 350 tokens containing *mica*, within a period ranging from the II century

³When trying to describe precisely the scope behaviour of illocutionary negation, some possible solutions can be found in Frana and Rawlins (2016).

⁴http://clt.brepolis.net/llta/pages/QuickSearch.aspx, last access 21.11.2022.

BC until the XII century AD (when the earliest attestations of Venetan vulgars are available). The texts have a variety of genres, but mainly comprise religious texts, letters, prose, and poetry. The second corpus contains occurrences in Venetian and Veronese from the earliest attestations (XIII) to XX century, for a total of 1220 tokens. Naturally, the data collected here presents some limitations. First, the earliest attestation of Venetan miga is traced back to the XIII century, although we have a few earlier written texts (e.g. Indovinello Veronese, between the VIII and IX century). While Latin showed *mica* in medieval texts as well, there is a paucity of Romance texts until XIII century, potentially creating the gap in the attestations of miga. Second, there are no known literary sources from Gazzolo, the Veronese village where mia works as standard negation. To circumvent this, we decided to collect written data from the nearest urban centre, Verona. Third, there is an imbalance in the amount of tokens in Venetian and Veronese, since Venetian gained prestige over other varieties in the region (Ferguson, 2013), becoming the standard for literary production. Lastly, the nature of this corpus is more composite as we bound together different sources to ensure the periodic continuity in the analysis. To obtain data from XIII to XIV century, we have searched the corpus TLIO OVI (Opera del Vocabolario Italiano). The main sources for this period are the Vangeli in antico Veneziano (a XIV-century translation of the New Testament into old Venetian), Il libro di messer Tristano, a prose on the story of Tristan and Iseult of the same century, and Tristano Corsiniano, another prose on Tristan of the XIV century. There is less and marginal data from the Veronese area, such as the instances from Giacomino da Verona, a Veronese poet of the XIII century.

Moving on to more recent data, namely ranging from the XV to the XX century, we used the Archivio Digitale Veneto ⁵ and the digitalizations of the prints in Venetan Wikisource. ⁶ We made sure that the written varieties conform to old Venetian and old Veronese, excluding sources from neighbouring varieties (e.g. Paduan in Ruzante). Until the XVIII century, the data contains theatrical pieces, given the prolific production of Goldoni, a Venetan playwright and librettist who lived in the XVIII century. More modern data mainly comes from Veronese and Venetian poets (Berto Barbarani, Antonio Negri, Attilio Turco, Luigi Vianello).

The data from the second corpus was manually annotated for the current analysis. In particular, we annotated whether the predicate accompanying the negator contains a scalar meaning (to test that the scalar implicature is lost and miga behaves as illocutionary negator) and whether it denies activated propositions or not (to test the second round of reanalysis, loss of information-structural requirements in mia). We checked the annotation by calculating an inter-annotator agreement with a trained linguist on a small subset of the corpus (N = 30). We calculated Cohen's unweighted κ , and obtained a κ = .76, z= 7.04, p < 0.001, indicating a substantial reliability index.

We will now discuss our data starting from the use of *mica* in Latin.

3.2. Where it all started: minimizers

In Latin, *mica* had the meaning of 'crumb' or 'pinch'. As such, it did not require any antiveridical licensing, and could appear in both positive (17) and negative polarity contexts (18).

(17) medetur cum *mica* salis trita iisdem omnibus [...] heal.PASS.3SG with crumb.ABL salt.GEN rubbed those.ABL all.ABL 'it can be healed by rubbing a pinch of salt among those [...]' (Plinius maior - Naturalis

⁵http://gag.cab.unipd.it/pavano/public/, last access 25.11.22.

⁶https://vec.wikisource.org/wiki/Pagina_prinsipale, last access 25.11.22.

Historia, XXII, 16)

(18) Nulla-que *mica* salis nec amari fellis in illis gutta nothing-CONJ crumb.NOM salt.GEN nor bitter.GEN gall.GEN in those.ABL drop sit.

be.SUBJ.PRES.3SG

'And there is no pinch of salt nor drop of bitter gall.' (Martial - Epigrams, 7, 25, 1)

However, in negative contexts, *mica* would give rise to a scalar implicature as the one reported in (18). The presence of salt is excluded at its lowest degree and bigger portions of salt are implicationally excluded: there is no salt at all. This conversational implicature was typically exploited to exclude any degree of a predicate to be true, see example (19). This effect can be captured by adopting neo-Gricean reasoning: the denial of a whole scale is pragmatically more informative than the respective weaker statement with the mere negation. More specifically, in downward-entailing contexts like negation, minimizers as *mica* are more informative than the simple denial with the mere negation marker (Israel, 2001; Detges and Waltereit, 2002; Schwenter, 2006; Breitbarth, 2020). Logically, both forms entail the same denial of the proposition but the more marked form (with minimizers) conveys more emphasis than its respective simple form. Since more than necessary is being uttered, we have a violation of the gricean Maxim of Quantity. As a consequence, a marked meaning ensues from a marked form. This pragmatic effect was labelled as 'stronger informativity' by Israel (1998, 2001), but it is often referred to as 'emphatic'.

(19) Totum illud formosa nego, nam nulla venustas, nulla in all that.NEUT beautiful deny.PRES.1SG indeed nothing beauty nothing in tam magno corpore *mica* salis such big.ABL body.ABL crumb.NOM salt.GEN
'I deny that she is completely beautiful, indeed she has no grace, no pinch of salt (wit) in such a beautiful body' (Catullus - Carmen 68)

The properties of minimizers have received extensive attention in the previous literature. In particular, on deriving the scalar effect of minimizers, they are said to evoke a quantity scale, where they would stand at the minimal endpoint (Horn, 1989). In a downward-entailing context such as negation, the scale is reversed and the lowest point implicates all other elements in the scale (Fauconnier, 1975). Similar models are found in Lahiri (1998), Lee and Horn (1994), Eckardt and Csipak (2013).

One of the most valid pragmatic account on minimizers is proposed in Krifka (1995). In this framework, polarity items can be used to express a certain illocutionary force, given their informativity and the activation of alternatives, which makes them akin to focus. When it comes to minimizers, he treats this special class of negative polarity item the special class as 'strong', since they are metrically strong and express an emphatic assertion under negation. The last ingredient that we need to set the cycle in motion is the versatility of *mica* in metaphorical contexts. As reported by Nyman (1987), *mica* was used to denote a small quantity of different elements, not exclusively bread or salt, e.g. *mica auri* ('crumb of gold'), *mica turis* ('crumb of incense'), *mica plumbi* ('crumb of lead'), *mica marmoris* ('crumb of marble'). As theoretized by Deo (2015), metaphorical extensions are expectable in linguistic change, particularly in the lexical meaning of a word. Possibly, these lexical extensions create bridging contexts for the

reanalysis process to work.

To sum up, before the rise of Italo-Romance vulgars (like Venetian and Italian), Latin *mica* was used to denote the smallest quantity of a material, not being necessarily constrained to collocate with 'bread' or 'salt'. By virtue of its meaning, *mica* was not a NPI, but when denied, it would implicate that all other degrees of a pragmatic scale are denied as well. Already from this stage, it could be used for the negation of a given proposition, but in an informatively stronger way.

3.3. The rise of illocutionary negation

In this section we are going to sketch a formal explanation for the change from minimizer to illocutionary negation by resorting to existent linguistic theories and new historical data. With regards to the adopted theoretical assumptions, we argue that the loss of the scalar implicature from Latin *mica* is driven by the Avoid Pragmatic Overload principle or APO (Eckardt, 2009). Eckardt proposes this principle in order to account for the diachronic change of those grammaticalized items which were previously able to evoke scalar implicatures. To illustrate her principle, she sets up a communication model with room for 'pragmatic accidents': if a certain lexical item gives rise to presuppositions or implicatures which are not easily engendered or retrieved by the hearer, then there is a pragmatic accident or pragmatic overload. According to APO, hearers would reanalyse the opaque item in a new way, by assigning new meaning instead of keeping the original one. We report here the case study of *perfino* that she illustrates after Visconti (2005).

(20) Dentro in un bosco, ch'è quivi vicino, t' imbosca es sta perfino al inside in a wood that.is here near yourself hide and stay until at.the mattutino.

morning

'In a wood, which is near here, hide yourself in the wood and stay until morning.' (La Spagna - 1380; after Visconti 2005: 243)

The old Italian *perfino* had the original meaning of 'up to' or 'until the end'. Because of its meaning, it would evoke a pragmatic scale where the noun following *perfino* stays at the very end of the scale (e.g. <..., in the evening, in the night, at dawn, ..., in the morning >). However, when the same item was used in contexts with logically implausible scales, it generated a pragmatic overload, which was sorted out by a reanalysis as 'even'. Instead of recovering the old meaning with the scalar implicature, a new meaning was assigned, avoiding pragmatic overload (21).

(21) In acqua, in neve, in grandine o pruina: a tutto il ciel s'inclina, perfino in water in show in hail or frost to everything the sky REFL.bends, even a quel che la natura sprezza. to that that the nature despises

'In water, snow, hail or frost: To everything bends the sky, even to that which nature despises.' (1389-1420 S. Serdini, Rime, after Visconti, 2009: 244)

Eckardt proposed that in cases like (21), where a pragmatic scale <??, ..., which nature despises> is difficult to recreate, hearers parse the item with a new meaning, by deploying an even-like implicature. The new meaning assigned by the hearers is created in a way that it is semantically compatible with all other linguistic occurrences of the item. This explanation

resembles similar economic principles of language change, see for example, the syntactic principle Feature Economy (Van Gelderen, 2009). We can now apply the APO principle to our case study.

In the passage from late Latin to old Venetian, the literal meaning of *mica*, breadcrumb, is lost. For Venetian, there is only one occurrence of *miga* to indicate 'breadcrumb' (the new word for it is now *fregola*). Instead, the new *miga* is found to express a denial in the form of a illocutionary negator denying an activated proposition. As a proof for this, we may look at propositions with a non-gradable predicate, where a scalar implicature triggered by *miga* is difficult to engender. In example (22), *miga* cannot act as a minimizer indicating the least degree of the predicate, since it is logically implausible to 'be Helias' in different degrees.

"Es tu Helya?" Elio li respondi: "no", et disse: "Io no son miga esso". Are you Helias? He him replied no and said.3SG I NEG am miga him: "Are you Helias?" He replied: "No", and said "I am not him at all." (Vangelo Veneto, Marco, 7, 157.10, XIV century, retrieved from TLIO)

There are cases where *miga* appears with gradable predicates, apparently indicating a scalar component, as in (23). In this context, the interlocutor is being scolded for not believing S.John (not even a bit), contrarily to what was expected for him. Despite these ambiguous contexts, the data points to a reanalysis as a special illocutionary negation marker, which denies activated propositions (as in example (22))

(23) Sen Çoane vene a vui en via de çustizia, et vui no ei Saint John came.3SG to you.PL on way of justice, and you.PL him NEG credesse né *miga*. believed.2PL nor *mica*'St. John came to you on behalf of Justice, but you didn't believe him (not even a bit).' (Vangelo Veneto, Matteo, 88.16, XIV century, retrieved from TLIO)

As we can see already from the earliest documented stage of Venetian, *miga* can appear with both gradable and non-gradable predicates, showing an ongoing reanalysis process where it lost its former scalar component.

The loss of the minimizer meaning and scalar implicature was also proposed by Thaler (2018) for Old Italian *mica*. Further confirmation that Italian *mica* lost its original meaning by that century can be found in a grammar published in 1525 by Pietro Bembo, who prescribed the language spoken in the XIV century as reference for Italian.

"Leggesi Niente, che Neente anticamente si disse, e Né mica o pure Non mica, e Nulla quello stesso; come che Non mica si sia eziandio separatamente detta, Elli non hanno mica buona speranza." (Pietro Bembo, Prose nelle quali si ragiona della volgar lingua, 1525 retrieved from TLIO)
(It was read 'Nothing' like 'No thing' was said in antiquity, and 'nor mica' or 'non

(It was read 'Nothing', like 'No thing' was said in antiquity, and 'nor mica' or 'non mica', and 'nothing' equally, also, Non *mica* was uttered separatedly, they have no good hope.)

In this section, he compares the structure *non* ... *mica* and *nulla* (nothing) as similar in meaning, to reinforce negation. Interestingly, a much later grammar describes *mica* as something very similar to what we mean now by illocutionary negation. The author compares *mica* to

other intensifiers of negative polarity, which encode speakers' attitude towards the truth of a proposition (like truly, certainly, etc.). To our knowledge, similar historical grammars of Venetian dealing with *miga*, are not available and we must base our analyses exclusively on literary works.

"I veri avverbj e modi avverbiali di affermazione assoluta sono adunque assolutamente, certamente, certo, per certo di certo, francamente, sicuramente, di sicuro, Veramente [...] Per la negazione assoluta servono gli avverbj medesimi ove il verbo sia accompagnato dal non. Ella però ne ha inoltre alcuni suoi propri e particolari e sono mica, punto, per nulla, pur niente [...]" (Francesco Soave, Gramatica Ragionata, 1822, retrieved from LIZ)

(The true adverbs and adverbial modes of absolute declaration are absolutely, certainly, frankly, truly $[\ldots]$. For absolute negation we need the same adverbs with the verb accompanied by non. However, it [negation] has its own adverbs: mica, punto, per nulla, pur niente $[\ldots]$)

By applying APO to our empirical data, we can derive that the scalar implicature of the minimizer was metaphorically extended to less transparent contexts in Latin, even to those cases where the scalar effect of 'breadcrumb' was semantically implausible. As a consequence, there is a pragmatic accident, where the scalar implicature is not easy to infer and not retrieved by the hearer anymore. Instead of conserving the scalar implicature, new meaning has been assigned to the item. Now, if miga is devoid of the scalar implicature that Latin mica could trigger, then its meaning should be merely $\neg p$, which is not the case for both Italian and Venetian. Instead, we have an instance of illocutionary negation contrasting an activated alternative p and focusing on the denied proposition. In other words, the APO principle alone is able to predict the loss of scalar implicature of minimizers, but it is not yet able to explain why miga got reanalyzed as illocutionary negation instead of a standard negation marker.

In order to answer this, we need to resort to another principle: the Division of Labour principle (Horn, 1984).

(24) The Division of Labour principle

The use of a marked expression when a corresponding unmarked form is available tends to be interpreted as conveying a marked message.

Note that this principle was previously used in other diachronic explanations, as in Deo (2015). The principle equates linguistic markedness with complexity of meaning. We find the same correlation between linguistic markedness and meaning in other formulations, see, e.g. Kiparsky's Elsewhere Condition (Kiparsky, 1973) or the Subset principle (Wexler and Manzini, 1987). At the stage of reanalysis, hearers are exposed to both the preverbal negator no(n) alone and an optional $mica \mid miga$. By applying the Division of Labour principle, the more complex form non...mica (no...miga for Venetian) must necessarily possess a more marked and complex meaning. The minimizer could not be reanalysed as equal as the existing simple negation no(n). In order for the bipartite construction to be considered necessary, it must encode other meaning than standard negation: mica must have had a motivation to appear. A similar reasoning line comes from Hansen (2018): the more marked forms in Old French, with the bipartite negation,

have more marked pragmatic functions (restrictions coming from information structure). Italian *mica* and Venetan *miga / mia* follow the lead, by confining the marked expression to a more elaborate denial function. Hence, *miga* was not reanalysed as simple negation because of its formal markedness. We will come back to this issue in the next sections.

3.4. The role of the hearer in reanalysis

We argued that when hearers find it difficult to reconstruct a scalar implicature, they will avoid pragmatic complexity and reanalyse the emerging negator (the APO principle).

The application of APO as an explanandum to diachronic change is in line with those theories where the role of the hearer is that of driving re-analysis. Here, hearers are in the remit of the reconstruction of the meaning-form relations and are thus the leaders of semantic change. Similar approaches were already proposed independently in theories on sound change (Ohala, 2012) and in generative syntax (cf. the abduction principle, Andersen, 1973 where the hearer plays an active part in the reconstruction of linguistic forms and rules). In models of change in meaning, the hearer's role has gained progressive attention. While the Traugottian Theory of Semantic Change emphasizes the role of the speaker in inferring a certain meaning (invited inference, IIN), until the inference becomes a Generalized Invited Inference (GIIN), Traugott (2018) reconsiders the hearer's role in semantic change and argues that hearers can infer more than what it is said.

Detges and Waltereit (2002) suggest that reanalysis might be driven by hearers who assign a new meaning to an already existing form. Waltereit and Schwenter (2010) highlight the importance of hearers' inferences in different types of contexts. They base their theory on the case-study of the particle *too*, a trigger for additive presupposition. *Too* requires an antecedent to which it could apply, this antecedent is hard to retrieve if it is not explicitly activated: the presupposition cannot be accommodated. Hearers would assign a new pragmatic and evaluative meaning in these implausible contexts. It is in this framework that we implement the Avoid Pragmatic Overload principle: hearers avoid opaque pragmatic enrichment and reanalyse differently an incoherent expression. An interesting extension of this phenomenon can be observed in Grossman and Polis (2014), who consider *speaker-oriented* and *subject-oriented* inferences (à la Bybee et al., 1994). While subject-oriented inferences reflect more the denotational nature of meaning, the speaker-oriented ones encode the speaker's epistemic attitude to the proposition. When hearers opt for a subject-oriented reconstruction of meaning, the reanalysed item covers a special pragmatic function and its selectional restrictions (such as the predicates it collocates with) will also change accordingly.

While the notion of hearer in a theory of language change is certainly useful, we are now faced with a practical problem. Can we determine the direction of the semantic change? If reanalysis is completely within the remit of the hearer, it may seem that the new meaning may derail in any direction. Of course, this is not the case: in the formation of the new meaning, contextual factors, markedness, and different principles constrain the direction of reanalysis. While we do commit to a framework where hearers actively reconstruct meaning, we also admit that such a creative process is delimited by linguistic and contextual cues, and generalisations that we find in grammaticalization.

3.5. The formation of new meaning

3.5.1. Contextual cues

While we have provided a formulation for keeping a special pragmatic meaning and not jumping directly to standard negation, the constraint problem is not fixed yet: we need to determine the possible reason why *mica* was reanalysed exactly as illocutionary negation. To shed more light on this, we first need to check the contexts where it appeared. The motivation for this operational choice comes from what has been suggested by Detges and Waltereit (2002) with the 'principle of reference'.

The principle of reference also relies on the hearer's role. In particular, hearers derive the meaning of an expression by looking at the current conversational context. Hence, if we want to reconstruct the transition of miga from minimizer to illocutionary negation, we have to consider the contexts where the minimizer would appear. Recall that the denial of the entire pragmatic scale, induced by the Latin minimizer as mica, is more informative. This special illocutionary strength is there to meet, by virtue of the division of labour principle, special pragmatic needs. As such, *mica* must have been originally used in those contexts where an informatively stronger negation of a proposition was necessary, for instance, the rejection of activated propositions which were expected to be true (as visible in example (18)). We argue that when trying to reconstruct the meaning of the opaque minimizer, hearers would consider these special contexts, i.e. when a marked expression is used to deny activated propositions that risk entering the common ground. As a result, the reanalysed miga specifically denotes sensitivity to information structure (as codified by $p \in C$ in our definition): this specific notion is attested by looking at the earliest Italian occurrences. Visconti (2009) showed that Old Italian mica appeared in four types of context: the denial of preceding text, the reiteration of an idea by denying its opposite, the denial of a presupposition and, finally, the denial of an implicature.

She illustrates the idea that these contexts share the function of the denial of a proposition that is already given in the discourse (cf. Chafe, 1976, Prince, 1981). In particular, she adopts the label 'Discourse-old' proposed by Birner and Ward (2006) to describe the evoked or inferable information which can be denied by *mica*. Note that the idea that the renewal of negation starts in old-information contexts was already proposed by Schwenter (2005). The same contexts can be found for Old Venetian *miga*: example (25) illustrates a case where a previously mentioned proposition is denied; equally, *miga* could be used to restate a belief by denying the opposite (26). In (27) *miga* is used to cancel an implicature and in (28) a presupposition both activated previously in the text.

(25) B: Me parea insuniare che a gieri morta. B: me.DAT seem.IMPF.3SG dream.INF that PCL were.2SG dead

'B: I dreamt that you were dead.'

DM: A no son zà *miga* morta.

DM: PCL NEG am already mica dead

'DM:I am not already dead at all.' (Ruzante, La Betia, Act IV, 687-688, XVII century, retrieved from TLIO)

(26) Io son inoçente (ço è a dir io no son *miga* colpevole) de lo sangue de questo I am innocent (that is to say I NEG am *mica* guilty) of the blood of this çusto homo.

right man

- 'I am innocent (that is, I am not guilty at all) for the blood of this right man.' (Volgar-izzamento Veneziano dei vangeli, Matteo, 27:24, XIV century, retrieved from TLIO).
- (27) En paradiso fo possati, ma elly no stette *miga* troppo [...] in paradise were.3PL passed.PL, but he NEG stayed *mica* too.much 'They went to paradise, but he did not stay there for long time [...]' (Franceschino Grioni, La Legenda de Santo Stady, 3986, 1321, retrieved from Archivio Digitale Veneto)
- Dama, uno solo cavalier ha fato tuti nui cussì como vui vedé [...] Et lady one single knight has made all us so like you.2PL saw.2SG [...] and ha vui disemo ben qu'-elo non era *miga* cavalier, ma diavolo. to you.2PL say.1PL well that-he NEG was *mica* knight, but devil 'My lady, only one knight has destroyed us like you see [...] and we can tell you for sure that he is not a knight at all, he is a devil.' (Libro de Miser Tristan, 407, XIV century, retrieved from TLIO)

These contexts show examples where a proposition p is activated and may enter the common ground accepted by the participants, a marked form of denial can be used to meet the speaker's need to exclude p. Once it lost its scalar meaning in 'overloading' contexts, miga was reanalysed as a marked negation of activated information mainly based on the informationally strong contexts that were available in Latin and the vulgar texts.

3.5.2. Prosodic cues

There is another noteworthy point on the markedness of the former minimizer. We have based our notion of markedness on syntactic rules such as the bipartite construction, but Magistro and Crocco (2022a); Magistro et al. (2022a) showed that focus prosody may play a role in the reanalysis process. They analysed the case of Gazzolese, the more advanced variety, where *mia* can be used both as standard negation (30) and as the special illocutionary negation (29). In the latter case, exemplified by (29) in figure (1), *mia* displays the presence of a focal pitch accent. Such accent has a similar shape as the realization of a contrastive focus in the variety (Magistro and Crocco, 2022b). Otherwise, when *mia* is used as standard negation without the function of illocutionary negation, as in example (30) and figure (2), it does not retain prosodic prominence and it is not pitch-accented anymore. Venetian *miga*, working only as illocutionary negation, will typically display a pitch-accent.⁷

(29) A:Zà che ti cusi la manega, tacame el boton. (Gazzolese) A:already that you.SBJ.CL.2SG sew.2SG the sleeve, fix-me the button 'Since you are already sewing the sleeve, sew the button.' B:No cuzo mia la manega.

NEG sew.1SG miga the sleeve 'I am not sewing the sleeve at all.'

⁷We redirect readers to Magistro and Crocco (2022a); Magistro et al. (2022a) for a more exhaustive report of the cited experiments.

(30) A:Sa sucede se no ti porto el maglion de lana? A:What happens if NEG you.2SG bring the sweater of wool 'What happens if I don't bring the woolen sweater?' B:No cuzo mia la manega. NEG sew.1SG miga the sleeve 'I am not sewing the sleeve.'

Figure 1: Pitch contour on a sentence containing Veronese *mia* denying an activated proposition.

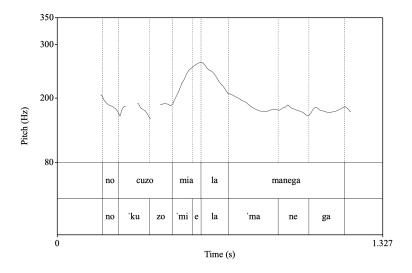
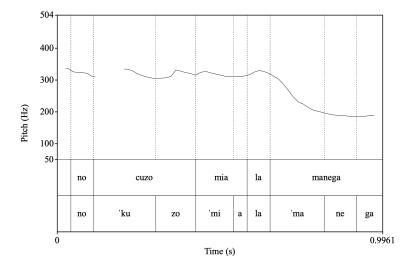


Figure 2: Pitch contour on a sentence containing Gazzolese mia as standard negation.



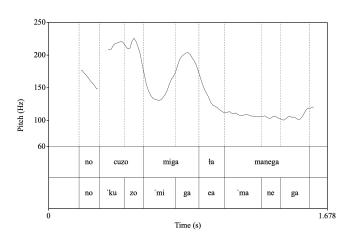


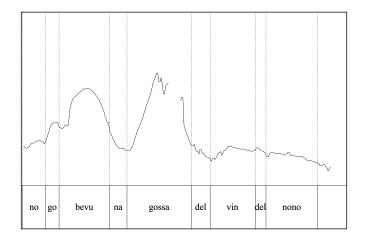
Figure 3: Pitch contour on a sentence containing Venetian *miga*.

The fact that *miga* and *mia* (used as illocutionary negation) exhibit focal prosodic prominence provide support to the idea of a contrast where we find contrast between polar alternatives (cf. polarity focus). When minimizers like *gossa* ('drop') (31) or *fregola* ('crumb') (32) are used in negative contexts as a more informative way to deny an activated proposition, a similar pitch accent is observed on them (figure 4), even when the minimizer is used in opaque contexts, where a pragmatic scale is difficult to retrieve (figure 5).⁸

(31) A:Ti ga bevu tuto 'l vin del nono. (Gazzolese) you.SBJ.CL.2SG have.2SG finished all the wine of grandpa 'You drank up all of grandpa's wine.'
B:No go bevu na gossa del vin del nono.
NEG have.2SG drunk a drop of-the wine of-the grandpa 'I haven't drunk a drop of grandpa's wine.'

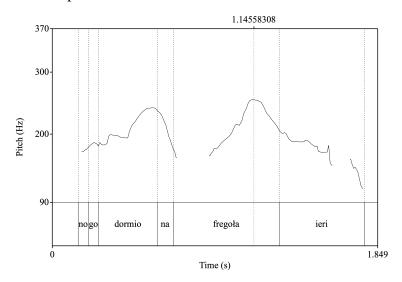
⁸This confirms the idea that NPIs like minimizers are focused (Krifka, 1995).

Figure 4: Pitch contour on a sentence containing the minimizer *gossa* (drop) collocating with the verb to drink.



(32) A:Ieri ti ga dormio tuto 'l tempo! (Gazzolese) yesterday you.SBJ.CL.2SG have slept all the time 'You slept all day long, yesterday!'
B:No go dormio na fregola, ieri.
NEG have.2SG slept a breadcrumb yesterday 'I didn't sleep a crumb, yesterday.'

Figure 5: Pitch contour on a sentence containing the minimizer *fregola* (breadcrumb) collocating with the verb to sleep.



The data suggests that there is a continuity of prosodic properties, despite semantic reanalysis. If the same type of focal prominence is found between the two stages, it is possible that prosody might act as a cue in the re-composition of meaning, pointing to a focal contrastive meaning (see also Christophe and Dupoux, 1996 and Gervain et al., 2020 on the role of prosody in lexical

acquisition, and Donati and Nespor, 2003 for the specific case of prosodic focus and syntactic rules). In short, we argue that another contextual cue exploited by the hearer is prosody. Minimizers already exhibit prosodic prominence which suggests a special pragmatic and marked interpretation despite opacity (pragmatic overload), leading to the formation of illocutionary negation, contrasting an activated p.

3.5.3. Intersubjectification

Other tendencies described in theories of grammaticalization might also come in handy by complementing this model. By virtue of its meaning, *miga* has a dynamic and typically dialogical component, expressing the speaker's attitude towards the truth of a proposition and possessing illocutionary force. This component is in line with the theory of (inter-)subjectification (Traugott, 1995). Visconti (2009) and Thaler (2016) described the diachronic passage of Italian *mica* in terms of (inter-)subjectification, i.e. the encoding of the 'speaker's awareness of the interlocutor's attitudes and beliefs' (Visconti 2009:937, cf. Traugott, 1995).

When miga is associated with a new meaning, it does not simply acquire the denotation of \neg , but it also expresses the speaker's subjective attitude towards an active proposition p (Thaler, 2016). From this angle, when the minimizer becomes an illocutionary negation, it marks a specific speech-act (Narrog, 2012 prefers the term 'speech act orientation' over (inter-) subjectification). Notwithstanding, hearers do not only infer that the speaker is expressing a certain attitude towards an activated p, but intersubjectification also plays a part in the change. With intersubjectification, we mean the involvement of the hearer into the management of the epistemic stance: the hearer is recipient of the expressed attitude and must downgrade p because it is false. In other words, with the progressive interplay of subjectification and intersubjectification, the hearer will infer that the he is becoming involved in downgrading p since the speaker is taking hold of the organisation of the discourse. This effect was progressively encoded and conventionalised in the successive interactions, leading to a gradual reanalysis. We believe that it is this general drift in grammaticalization that also cues to a reanalysis as illocutionary negation. With these notions, we can constrain the direction of reanalysis by resorting to crosslinguistic tendencies observed in reanalysis.

To sum up, we believe that the change in meaning can be accounted for by considering a tension among factors. The metaphorical extension of the minimizer to implausible contexts yields a pragmatic overload, which will be avoided and will cause reanalysis by the hearers. When trying to reconstruct meaning, we propose a series of potential factors. First, hearers may look at contextual cues. The most evident cues are the linguistic ones: this type of denial involves a complex rule with *no* and *miga*; secondly, minimizers under negation exhibit a focal prosodic prominence. These two components point to linguistic markedness, which has to be explained in markedness of meaning in the mind of the hearers.

When looking for a marked meaning different from standard negation, the contexts of the minimizer may suggest that the choice of a more complex form is useful to encode an informative denial. In particular, the association with activated proposition becomes conventionalized to justify the employment of a marked expression. Secondly, the illocutionary dimension in miga can be derived by the general tendency of (inter-)subjectification, encoding the speaker's commitment to $\neg p$ and the involvement of the hearer to downgrade p. Lastly, the prosodic cues may formally signal the contrast and emphasis on a corrective $\neg p$.

While it may seem that we have unnecessarily convoluted the explanation, we believe that these factors are partly overlapping but concur in explaining different aspects of illocutionary negation, its informational restrictions, focal properties, and the need to posit an intermediate stage before *miga* is reanalysed as standard negation.

3.6. The fall of illocutionary negation

For Italian, a progressive loss of the requirement of activated p denied by mica has been attested from the XVI century, ranging from 31% to 2,3% (Visconti, 2009). Here, mica started to cooccur with inferable propositions (i.e. not explicitly activated), accommodating the proposition as activated if necessary (as described for the current status of Italian and Venetian).

This directionality of the change also fits with the cline described by Blaxter and Willis (2018) and Larrivée (2020) for emergent negators going through Jespersen's cycle (33).

(33) Explicitly mentioned > Inferable > Common knowledge > New Information

Similarly, data from Venetian texts attest an analogous pattern, especially in the XVII century (total: 1160 occurrences).

	XIV	XV	XVI	XVII
miga as	34%	30%	25%	10%
denial of				
explicit				
information				
miga as	66%	70%	65%	90%
denial of				
inferable				
information				

Table 1: Different activation of the denied proposition through centuries in the corpus

We report here two examples of Venetian *miga* with an inferable proposition. In particular, in (34), no one in the context mentioned or expected that the knight was wounded. In this case, the narrator is denying implicit information, made available by implicature (if a knight's armour is pierced, then the knight is wounded). In (35), we have a similar denial: no explicit previous belief is mentioned, but an inferable expectation is denied.

- (34) Et si li desmagià la coraça, ma in la carne no li tochà *miga* and so him.DAT broke.3SG the armour, but in the flesh NEG him touched.2SG *mica* 'And he pierced his armour, but he did not touch his flesh at all ' (Libro de Miser Tristan, chapter 422, 386.1, XIV century, retrieved from TLIO)
- (35) Ello li disse qu'-ello li aveva çiovado molto bene, ma ello no he him.DAT said.3SG that-he him.REFL had profited much good, but he NEG li contà *miga* como. him.DAT told *mica* how

'He told him that he benefited a lot, but did not tell him in which way.' (Libro de Miser Tristan chapter 511, 32, XIV century, retrieved from TLIO)

These cases, as opposed to the corrective function of explicitly activated information (25), become more frequent in Venetian and Italian, until they represent the most used context. Of course, in these cases, the propositions are not brand-new, they are inferable. Note that the corrective function of explicit information is still available in both varieties. Modern Veronese texts, on the other hand, present few instances of *miga* used as a denial of new proposition, (36) - (37), the further step in the cline. ⁹ In example (36), the denied proposition is presented out-of-the blue and cannot be accommodated via any other prejacent proposition. In example (36), the speaker is denying that other people know what he is going though, a proposition that is not activated in the previous context or is inferable. In (37), there is a description of newspaper sellers who say that the newspaper 'El Soprimento' is never wrong: this is not a denial to previous contextual information or implicated propositions.

- (36)E i se basa, se bussa, fa festa and they REFL kiss.3PL, they IMPERS knock.3PL, they IMPERS make.3PL party discore de piantar fameia / E no sa miga che / they IMPERS talk.3PL to plant family / and NEG they know.3PL mica what g'ò drento in testa. have.1SG inside in head 'And they kiss each other, they knock on each other's door, they celebrate, they talk about making a family, and they do not know what I am going through in my mind.' (Berto Barbarani, El Camin novo, 1917)
- (37) E i core che i par anime danade / 'El soprimento!... che no and they run.3PL that they seem.3PL souls damned / 'The soprimento that NEG sbalia *miga*!' is.wrong *mica*' 'And they run as they were damned souls / the Soprimento [name of a newspaper] that is never wrong!' (Attilio Turco, El Soprimento, 1924).

This data suggests that *miga* as denial of explicitly activated information is progressively losing ground, going forward in the aforementioned cline. Recall that we hypothesised that speakers would infer the special illocutionary meaning instead of standard negation based on its contextual appearance: a more complex construction is justified when the denial of old information is necessary. When these contexts become rarer and rarer, the active proposition can be difficult to accommodate. Instead of searching unrecoverable activated propositions, hearers would reanalyse the item as a marker of simple negation.

Here again, we can apply the Avoid Pragmatic Overload, the economy mechanism which prevents speakers from retrieving unclear pragmatic enrichment. If the medial stage, the current one in Venetian and Italian, is the result of the deprivation of scalar enrichment by APO, the final stage for Gazzolo is also the result of APO. Instead of retrieving a proposition that is hard to infer, hearers parse *mia* as negation of both old (activated) and new information. In the final stage of Jespersen's cycle, the informational requirement of activated proposition is lost. With the loss of this informational requirement, *mia* acts as a simple negation, it does not presuppose that *p* is activated.

⁹Note that while these sentences are from Veronese, and not specifically Gazzolese: the phonetic form of the negator is *miga*.

The effect of APO provokes some consequences on the balance between economic tendencies and markedness. First, if Gazzolese *mia* can be used as standard negation, there is no use in keeping a linguistically marked expression distinguished from the standard negator *no*. As a direct consequence, the preverbal negator *no* can be dropped and the only marker of negation is *mia*. Secondly, *mia* is currently undergoing phonetic reduction in comparison to Venetian *miga* (Magistro et al., 2022b). As we showed earlier, focal prominence is not associated with *mia* in standard negation. It is yet unclear whether the loss of prominence on *mia* cues reanalysis or vice versa. However, we are able to see that with the loss of pragmatic effect, linguistic markedness is also reduced.

The hypothesis that APO led to the final step of reanalysis (*mia* as a standard negator, not presupposing that the proposition is contextually active) is not devoid of problems. For example, this model does not say anything about *why* the change occurred in Gazzolo, and not, say, in Venetian. Finding a definitive solution is outside the scope of the paper, but it would be interesting to model the role of near varieties in the semantic reanalysis. For instance, a Lombard variety spoken not far from Gazzolo, Bresciano, is known for employing *miga* as standard negation. Cerruti (2018) shows that in a corpus of spoken Bresciano from the previous century, 60% of the occurrences of *miga* are used as Gazzolese *mia*.

We do not want to attribute Gazzolese singularity exclusively to external factors like language contact: shifting the problem elsewhere would not solve it. At the same time, language contact as a catalyst of change cannot be excluded altogether (Breitbarth et al., 2019 for a discussion).

4. Conclusions

In this paper we tried to sketch a theoretical model which could describe the trajectory of Jespersen's cycle in two varieties spoken in Veneto, Venetian and Gazzolese. We reviewed some semantic tests for distinguishing the two stages of the cycle for the two Venetan varieties, where Venetian miga is a form of illocutionary negation and Gazzolese mia can behave as standard negator as well. We implement the pre-existent tests on Italian mica with another one deploying scope ambiguity in disjunction and show that they hold for Venetan too.

We have defined illocutionary negation as a special form of denial which denies an activated proposition p, generating a special emphatic meaning (also detectable in the prominent phonetic realization). This specific condition $(p \in C)$ is acquired and then lost during the different steps of the cycle. The tests for illocutionary negation set out the scene for our diachronic exploration. We briefly reviewed the etymological source of the minimizer mica in Latin, together with its pragmatic enrichment. Latin mica, 'breadcrumb', indicated the lowest point on a pragmatic scale. Under negation, Latin mica would trigger a scalar implicature, denying the entire scale and making the claim pragmatically stronger. For this reason, Latin mica was used metaphorically, extending its collocations with different referents for expressive reasons, i.e. to exclude a given predicate even at its lowest degree.

Starting from the earliest available sources, we showed that miga was already extended to non-gradual predicates in Venetian: the Avoid Pragmatic Overload principle deprived it of the scalar implicature. The loss of scalar implicature is attributed to the hearers, who had to figure out the meaning of miga in opaque contexts. Now, miga was reanalysed as illocutionary negation, a special negator presupposing that p was activated in order to contrast it with $\neg p$. We tried to understand why the minimizer evolved into this special negator. We have attributed such a change to different possible causes. First, when it was originally used as minimizer, it detained a certain degree of informativity when the denial of an activated proposition was sought. Sec-

ondly, its original use as a minimizer would make the denial linguistically marked (in terms of prosodic prominence and syntactic complexity). We hypothesize that markedness constitutes a brake to the economical drifts like APO: we believe that it is this linguistic markedness that suggests the hearers' that there is something more than a simple denial. Hearers would then retain the link with information structure and analyse miga as a marker indicating the speaker's belief and attitude towards the activated p, by focusing $\neg p$.

With the progressive loss of these conditions (such as the appearance of the negator with new propositions in the context), APO can be applied again, leading to the loss of the information-structural requirement and the reanalysis of *mia* as a marker of standard negation. As a consequence, *mia* can be used with or without an activated proposition. The trajectory of the change is sketched in figure (6).

Figure 6: Jespersen's cycle in Venetian and Gazzolese

Our contribution aims at linking the vast literature on the topic with the APO principle. We have tried to implement this theory with the data currently available for the varieties spoken in Veneto and Italian, taking both historical grammars and corpora. The idea that the history of illocutionary negation can be explained in neo-gricean terms as a tension between markedness and economy principles seems appealing but other factors call out for additional complexity. First, we would need more experimental evidence for APO, in particular concerning the effective difficulty in parsing and the mechanisms involved in the assignment of new meaning. Second, a deeper analysis of Gazzolo is needed, trying to explain the reason why it is more advanced in the cycle. We plan to cover these points in future research.

Primary sources and corpora

BREPOLIS: http://clt.brepolis.net/llta/pages/QuickSearch.aspx

TLIO OVI: http://tlioweb.ovi.cnr.it/(S(3gc2mybsxpq4laai0zel0chx))/CatForm01.aspx

Archivio Digitale Veneto: http://gag.cab.unipd.it/pavano/public/

Barbarani, Berto. 1917. I due canzonieri. Verona: P. Apollonio.

Catullus, Gaius Valerius. 1982. Carmina, edited by Elmer Truesdell Merrill. Cambridge: Harvard University Press.

Martialis, Marcus Valerius. 1990. Epigrammata, edited by David Shackleton Bailey. Berlin, Boston: Teubner.

Plinius, Gaius Secundus. 1906. Historia Naturalis, edited by Karl Friedrich Theodor Mayhoff. Lipsiae: Teubner.

Stoppelli, Pasquale, Picchi, Eugenio. 2001. Letteratura Italiana Zanichelli, LIZ 4.0. CD-ROM della letteratura italiana. Bologna: Zanichelli.

Turco, Attilio. 1924. El Soprimento. Verona: Tipografia Operaia.

References

Allan, Keith. 2013. What is common ground? In: Alessandro Capone, Franco LoPiparo, Marco Carapezza (Eds.), Perspectives on linguistic pragmatics, Springer, 285–310, doi:10.1007/978-3-319-01014-4_11.

Andersen, Henning. 1973. Abductive and deductive change. Language, 49, 765–793.

Beaver, David, Zeevat, Henk. 2007. Accommodation. In: Gillian Ramchand, Charles Reiss (Eds.), The Oxford Handbook of Linguistic Interfaces, Oxford University Press, Oxford, 503–536, doi:10.1093/oxfordhb/9780199247455.013.0017.

Bianchi, Valentina, Bocci, Giuliano. 2012. Should I stay or should I go? Optional focus movement in Italian. In: Christopher Piñón (Ed.), Empirical issues in syntax and semantics, vol. 9, 1–18.

Birner, Betty J, Ward, Gregory. 2006. Information Structure. In: Bas Aarts, April McMahon, Lars Hinrichs (Eds.), The handbook of English linguistics, Wiley-Blackwell, 291–317, doi: https://doi.org/10.1002/9780470753002.ch13.

Blaxter, Tam, Willis, David. 2018. Pragmatic differentiation of negative markers in the early stages of Jespersen's cycle in North Germanic. Diachronica, 35(4), 451–486, doi:10.1075/dia.16040.bla.

Breitbarth, Anne. 2020. The negative cycle and beyond. In: Déprez, Viviane and Espinal, M. Teresa (Ed.), The Oxford handbook of negation, Oxford University Press, Oxford, 530–545, doi:10.1093/oxfordhb/9780198830528.013.30.

Breitbarth, Anne, Bouzouita, Miriam, Danckaert, Lieven, Farasyn, Melissa. 2019. The determinants of diachronic stability. John Benjamins Publishing Company, doi:10.1075/la.254.

Breitbarth, Anne, De Clercq, Karen, Haegeman, Liliane. 2013. The syntax of polarity emphasis. Lingua, 128, 1–8, doi:10.1016/j.lingua.2013.02.004.

Breitbarth, Anne, Lucas, Christopher, Willis, David. 2020. The History of Negation in the Languages of Europe and the Mediterranean: Volume II: Patterns and Processes. Oxford University Press, Oxford, doi:10.1093/oso/9780199602544.001.0001.

Bybee, Joan, Perkins, Revere Dale, Pagliuca, William. 1994. The evolution of grammar: Tense, aspect, and modality in the languages of the world. University of Chicago Press Chicago.

Cerruti, Massimo. 2018. Code-switching in Italo-Romance: a variationist study of convergence

- in bilingual speech. Lingue e linguaggio, 17(1), 87–106, doi:10.1418/90425.
- Chafe, Wallace. 1976. Giveness, contrasitiveness, definiteness, subjects, topics, and point of view. In: Charles Li (Ed.), Subject and Topic, Elsevier, New York, 25–56.
- Christophe, Anne, Dupoux, Emmanuel. 1996. Bootstrapping lexical acquisition: the role of prosodic structure. The Linguistic Review, 13, 383–412, doi:10.1515/tlir.1996.13.3-4.383.
- Cinque, Guglielmo. 1976. Mica. In: Annali della Facoltà di Lettere e Filosofia dell'Università di Padova, 1, Università degli Studi di Padova, 101–12.
- Cormack, Annabel, Smith, Neil. 2002. Modals and negation in English. In: Sjef Barbiers, Frits Beukema, Wim Van der Wurff (Eds.), Modality and its interaction with the verbal system, Benjamins, Amsterdam, 133–163, doi:10.1075/la.47.08cor.
- Dahl, Östen. 1979. Typology of sentence negation. Linguistics, 17(1-2), doi:10.1515/ling.1979. 17.1-2.79.
- Deo, Ashwini. 2015. Diachronic semantics. Annual Review of Linguistics, 1(1), 179–197, doi: 10.1146/annurev-linguist-030514-125100.
- Detges, Ulrich, Waltereit, Richard. 2002. Grammaticalization vs. reanalysis: A semantic-pragmatic account of functional change in grammar. Zeitschrift für Sprachwissenschaft, 21(2), 151–195, doi:10.1515/zfsw.2002.21.2.151.
- Donati, Caterina, Nespor, Marina. 2003. From focus to syntax. Lingua, 113(11), 1119–1142, doi:10.1016/s0024-3841(03)00015-9.
- Eckardt, Regine. 2009. APO: Avoid pragmatic overload. In: Maj-Britt Mosegaard Hansen, Jacqueline Visconti (Eds.), Current trends in diachronic semantics and pragmatics, Studies in pragmatics, vol. 7, Brill, Leiden, doi:10.1163/9789004253216_003.
- Eckardt, Regine, Csipak, Eva. 2013. Minimizers–Towards pragmatic licensing. In: Eva Csipak, Regine Eckard, Mingya Liu, Mandred Sailer (Eds.), Beyond 'Any' and 'Ever'. New explorations In Negative Polarity Sensitivity, De Gruyter Mouton, Berlin/New York, doi: 10.1515/9783110305234.267.
- Fauconnier, Gilles. 1975. Polarity and the scale principle. In: Robin E. Grossman, L. James San, Timothy J. Vance (Eds.), Proceedings of Chicago Linguistic Society 11, University of Chicago Press, Chicago, 188–199.
- Ferguson, Ronnie. 2013. Venetian Language. In: Eric Dursteler (Ed.), A Companion to Venetian History, 1400-1797, Brill, Leiden, 929–957, doi:10.1163/9789004252523_027.
- Frana, Ilaria, Rawlins, Kyle. 2016. Italian 'mica' in assertions and questions. In: Nadine Bade, Polina Berezovskaya, Anthea Schöller (Eds.), Proceedings of Sinn und Bedeutung, vol. 20, 234–251.
- Gervain, Judit, Christophe, Anne, Mazuka, Reiko. 2020. Prosodic bootstrapping. In: Carlos Gussenhoven, Aoju Chen (Eds.), The Oxford Handbook of Language Prosody, Oxford University Press, Oxford, doi:10.1093/oxfordhb/9780198832232.013.36.
- Grossman, Eitan, Polis, Stéphane. 2014. On the pragmatics of subjectification: The grammaticalization of verbless allative futures (with a case study in Ancient Egyptian). Acta Linguistica Hafniensia, 46(1), 25–63, doi:10.1080/03740463.2014.956007.
- Hansen, Maj-Britt Mosegaard. 2018. The expression of clause negation: from Latin to early French. In: Anne Carlier, Céline Guillot-Barbance (Eds.), Latin tardif, français ancien. Continuïtés et ruptures, De Gruyter: Mouton, Berlin, New York, 269–297, doi: 10.1515/9783110551716-014.
- Höhle, Tilman. 1992. Über Verum-Fokus im Deutschen. In: Joachim Jacobs (Ed.), Information-

- sstruktur und Grammatik, Westdeutscher Verlag, Opladen, doi:10.1007/978-3-663-12176-3_5.
- Horn, Laurence. 1984. Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. In: Deborah Schriffin (Ed.), Meaning, form, and use in context: Linguistic applications, Georgetown University Press, Washington D.C.
- Horn, Laurence. 1989. A Natural History of Negation. University of Chicago Press, Chicago. Israel, Michael. 1998. The rhetoric of grammar: scalar reasoning and polarity sensitivity. PhD Thesis, University of California, San Diego.
- Israel, Michael. 2001. Minimizers, maximizers and the rhetoric of scalar reasoning. Journal of semantics, 18(4), 297–331, doi:10.1093/jos/18.4.297.
- Kiparsky, Paul. 1973. Elsewhere in phonology. A Festschrift for Morris Halle. In: Stephen R. Anderson, Paul Kiparsky (Eds.), A Festschrift for Morris Halle, Holt, Rinehart and Winston, New York, 93–106.
- Krifka, Manfred. 1995. The semantics and pragmatics of polarity items. Linguistic analysis, 25, 51–74.
- Ladd, Robert. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. In: Robert A. Hendrick, Carrie S. Masek, Mary Frances Miller (Eds.), Proceedings of Chicago Linguistic Society, vol. 17, University of Chicago Press, Chicago, 164–171.
- Lahiri, Utpal. 1998. Focus and negative polarity in Hindi. Natural language semantics, 6(1), 57–123, doi:10.3765/salt.v0i0.2696.
- Larrivée, Pierre. 2020. The Role of Pragmatics in Negation Change. In: Viviane Déprez, M. Teresa Espinal (Eds.), The Oxford Handbook of Negation, Oxford University Press, Oxford, doi:10.1093/oxfordhb/9780198830528.013.32.
- Lee, Young-Suk, Horn, Laurence. 1994. Any as indefinite plus even, unpublished manuscript. Lohnstein, Horst. 2016. Verum focus. In: Caroline Féry, Shinichiro Ishihara (Eds.), The Oxford Handbook of Information Structure, Oxford University Press, doi:10.1093/oxfordhb/9780199642670.013.33.
- Magistro, Giuseppe. 2022. Mica preposing as focus fronting. Glossa-A Journal of General Linguistics, 7(1), 39.
- Magistro, Giuseppe, Breitbarth, Anne, Crocco, Claudia. 2022a. How prosody guides reanalysis. Manuscript, paper presented at Diachronic Generative Syntax (DiGS), 2022. University of New York.
- Magistro, Giuseppe, Crocco, Claudia. 2022a. Phonetic erosion and information structure in function words: the case of mia. In: INTERSPEECH 2022, International Speech Communication Association (ISCA), 91–95.
- Magistro, Giuseppe, Crocco, Claudia. 2022b. Rising and rising-falling declaratives in Veneto dialects. In: International Conference on Speech Prosody, 11th, Proceedings, International Speech Communication Association (ISCA), 175–179.
- Magistro, Giuseppe, Crocco, Claudia, Breitbarth, Anne. 2022b. Information structure and Jespersen's cycle: The dialects of Veneto as a window on processes of language. In: Nicholas Catasso, Marco Coniglio, Chiara De Bastiani (Eds.), Language Change at the Interfaces. Intrasentential and Intersentential Phenomena, John Benjamins, doi:https://doi.org/10.1075/la. 275.01mag.
- Narrog, Heiko. 2012. Beyond intersubjectification: Textual uses of modality and mood in subordinate clauses as part of speech-act orientation. English Text Construction, 5(1), 29–52,

- doi:10.1075/bct.65.03nar.
- Nyman, Martti. 1987. Semantic Selection Properties and Etymology: Latin mīca. Glotta, 65(3), 221–239.
- Ohala, John J. 2012. The listener as a source of sound change. In: Maria-Josep Solé, Daniel Recasens (Eds.), The Initiation of Sound Change, John Benjamins Publishing Company, Amsterdam, 21–36, doi:10.1075/cilt.323.05oha.
- Pescarini, Diego. 2009. Presuppositional negation, modality, and the {addressee}. Padua working papers in linguistics, 3.
- Prince, Ellen. 1981. Topicalization, focus-movement, and Yiddish-movement: A pragmatic differentiation. In: Annual meeting of the Berkeley linguistics society, vol. 7, 249–264, doi: 10.3765/bls.v7i0.2092.
- Repp, Sophie. 2006. \neg (A&B). Gapping, negation and speech act operators. Research on Language and Computation, 4(4), 397–423.
- Repp, Sophie. 2013. Common ground management: Modal particles, illocutionary negation and verum. In: Daniel Gutzmann, Hans-Martin Gärtner (Eds.), Beyond expressives: Explorations in use-conditional meaning, Current Research in the Semantics / Pragmatics Interface, vol. 28, Brill, Leiden, 231–274, doi:10.1093/acprof:oso/9780199543601.003.0004.
- Romero, Maribel, Han, Chung-Hye. 2002. Verum Focus in Negative Yes/No Questions and Ladd's $p/\neg p$ Ambiguity. In: Semantics and Linguistic Theory, vol. 12, 204–224.
- Schwenter, Scott. 2005. The pragmatics of negation in Brazilian Portuguese. Lingua, 115(10), 1427–1456, doi:10.1016/j.lingua.2004.06.006.
- Schwenter, Scott. 2006. Fine-tuning Jespersen's cycle. In: Betty Birner, Gregory Ward (Eds.), Drawing the boundaries of meaning: Neo-Gricean studies in pragmatics and semantics in honor of Laurence R. Horn, Benjamins, 327–344.
- Stalnaker, Robert. 1978. Assertion. In: Peter Cole (Ed.), Syntax and semantics, vol. 9, Brill, Leiden, 315–332.
- Thaler, Verena. 2016. Italian mica and its use in discourse: An interactional account. Journal of Pragmatics, 103, 49–69, doi:10.1016/j.pragma.2016.07.011.
- Thaler, Verena. 2018. The diachronic evolution of Italian mica: Discourse strategies and language change. Italian Journal of Linguistics= Rivista di Linguistica, 30(1), 3–40, doi: 10.26346/1120-2726-114.
- Traugott, Elizabeth Closs. 1995. Subjectification in grammaticalization. In: Dieter Stein, Susan Wright (Eds.), Subjectivity and subjectivisation: Linguistic perspectives, Cambridge University Press, Cambridge, 31–54.
- Traugott, Elizabeth Closs. 2018. Rethinking the role of invited inferencing in change from the perspective of interactional texts. Open Linguistics, 4(1), 19–34, doi:10.1515/opli-2018-0002.
- Van Gelderen, Elly. 2009. Feature economy in the linguistic cycle. In: Paola Crisma, Giuseppe Longobardi (Eds.), Historical syntax and linguistic theory, Oxford University Press, Oxford, doi:10.1093/acprof:oso/9780199560547.003.0006.
- Visconti, Jacqueline. 2005. On the origins of scalar particles in Italian. Journal of Historical Pragmatics, 6(2), 237–261, doi:10.1075/jhp.6.2.05vis.
- Visconti, Jacqueline. 2009. From "textual" to "interpersonal": On the diachrony of the Italian particle mica. Journal of Pragmatics, 41(5), 937–950, doi:10.1016/j.pragma.2008.08.012.
- Waltereit, Richard, Schwenter, Scott. 2010. Presupposition accommodation and language

change. In: Kristin Davidse, Lieven Vandelanotte, Hubert Cuyckens (Eds.), Subjectification, Intersubjectification and Grammaticalization, De Gruyter, Berlin, New York, doi: 10.1515/9783110226102.2.75.

Wexler, Kenneth, Manzini, Rita. 1987. Parameters and learnability in binding theory. Linguistic Inquiry, 18(3), 413–444, doi:10.1007/978-94-009-3727-7_3.

Zanuttini, Raffaella. 1997. Negation and clausal structure: A comparative study of Romance languages. Oxford University Press, Oxford.