ONOMÁZEIN
Journal of linguistics, philology and translation

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
FACULTAD DE LETRAS

Polysemy and semantic relations in Aquilan prepositions

Francesco-Alessio Ursini
Central China Normal University
China

Haiping Long
China Three Gorges University
China

ONOMÁZEIN 54 (December 2021): 203-223
DOI: 10.7764/onomazein.54.06
ISSN: 0718-5758

Francesco-Alessio Ursini: School of Chinese Language and Literature, Central China Normal University, China.
Orcid number: 0000-0001-7042-3576. | E-mail: randorama@outlook.com
Haiping Long: School of Literature and Media, China Three Gorges University, China.
| E-mail: lhpszpt@126.com

Received: April 2019
Accepted: November 2019

Abstract

The goal of this paper is to offer an analysis of polysemy and related semantic relations emerging in prepositions belonging to Aquilan, a dialect of Italian. The data are based on fieldwork research, in which different polysemy tests where used in an experimental setting. Two key results emerged from the study. First, Aquilan prepositions display a degree of polysemy inversely proportional to their morphological complexity, with some prepositions being monosemous (e.g. *a, a destra de, 'ngima a*). Second, prepositions' senses can stand in relations of colexification, partial synonymy, or hyponymy. Colexification holds when related senses become part of a preposition's sense range; hyponymy and partial synonymy (overlap) when one preposition denotes all or some of the places denoted by a second preposition. The work thus offers a paradigmatic view of the polysemy of Aquilan prepositions that sheds light on seldom attested polysemy patterns, and contributes novel insights on the ongoing debate on this phenomenon.

Keywords: Italian dialects; polysemy; colexification; monosemy; synonymy; hyponymy; prepositions; Aquilan.

1. Introduction

Romance dialectology and lexical semantics are closely intertwined disciplines. One example is the study of semantic fields, defined as sets of words that can describe a sense domain (Cruse, 2004: ch. 3). Early studies explored how Romance languages and dialects can structure fields for body parts, objects, and kinship concepts (e.g. Malkiel, 1976). However, the semantic field of spatial concepts seems understudied. This appears surprising because *prepositions*, the chief part of speech expressing these senses, are typologically well studied (Hagège, 2010). Therefore, when one looks at Romance languages, a dearth of data emerges regarding their spatial prepositions.

One such empirical void pertains to *polysemy*, the property of vocabulary items to cover distinct but related senses, and a well-documented property of prepositions (Tyler & Evans, 2003). Studies illustrating the polysemy of single prepositions are common (e.g. *da* in Italian: Luraghi, 2009). However, studies that tackle this form of polysemy as a paradigmatic, categorial phenomenon are rare (cf. Vandeloise, 1991 on French). Here we propose to address this problem by focusing on *Aquilan*, a dialect of Italian. We offer a first sketch of the problem at stake via (1)-(3):

(1) *Mario sta seuto a-lla machina.*
Mario is.E sat A-the car
a. 'Mario is sitting in the car'
b. 'Mario is sitting behind the car'
c. 'Mario is sitting in front of the car'
...

(2) *Mario è jjito 'n-abballe a-jju colle.*
Mario is.S gone N-ABB A-the hill
a. 'Mario has gone south of the hill'
b. 'Mario has gone to the base of the hill'

(3) *Mario sta seuto 'nn-anzi a-lla machina.*
Mario is.E sat N-AVA A-the car
'Mario is sitting in front of the car'

We introduce some key notions. Examples follow Leipzig glossing rules (Croft, 2003: xiv-xxv). However, we use small cap glosses (e.g. "A") to represent the sense clusters that each preposition can cover. In (1), the preposition *a* fuses with the definite article *la*, forming the inflected preposition *alla* (Napoli & Nevins, 1987, on Italian). This preposition denotes a spatial relation between a landmark entity (or *ground*, Talmy, 2000: ch. 1), the car in (1) and a located entity (or *figure*), Mario. Prepositions are heads taking a ground NP as their complement to form a PP (Haspelmath, 1997). PPs become complements of verbs in *basic locative constructions* (BLCs),

defined as sentences acting as (full) answers to *where*-questions (Ameka & Levinson, 2007). Let us note that like all Italian "dialects", Aquilan can be conceived as a full-fledged Romance language with a specific geographic distribution. Hence, from here onwards we treat Aquilan as a distinct language, of which we study its prepositions and their semantic properties.

Let us move to the polysemy data. In (1), *a* denotes a 'general' relation: Mario can be inside, or outside, or behind the car, or in any other location defined with respect to ground (here, a car). Each possible translation in English as the metalanguage approximates a possible sense (e.g. (1a-c): Tyler & Evans, 2003). The gloss "E" represents the "temporary" aspectual value associated to *sta'*, one of Aquilan's two copulas (Avolio, 1992, 1993; Ursini, 2013, 2015). The other copula *esse* receives the gloss "S" to represent how its sense denotes a "stable" aspect value, viz. (2). In (2), '*nnabballe*, literally 'in the valley', specifies that Mario has gone to the 'base side' of a hill (cf. (2b)), or in a location to its 'South' side, cf. (2a). In (3), '*nnanzi a* lit. 'ahead of' specifies that Mario is sitting in a 'front' location close to the car. This preposition seems to lack other senses, hence being monosemous; furthermore, this sense seems to be one of the possible senses that *a* can also cover in context.

Overall, this preliminary sketch hints at Aquilan prepositions being polysemous to differing degrees, and being lexically/semantic related because of this polysemy. Specifically, *a*, '*nabballe a*, and '*nnanzi a* differ in the range of related but functionally distinct senses that they cover or colexify (François, 2015). Furthermore, *a* and '*nnanzi a* seem to stand in a hyponym-like relation, with the second preposition covering (colexifying) one of *a*'s possible senses. As matters stand, (1)-(3) hint at Aquilan prepositions' polysemy being an indication of a wider net of semantic and morphological properties that connect the items in this category into a coherent lexical/semantic domain. A full documentation of these patterns, however, is still outstanding.

Our paper has the goal of filling this empirical void. We first review previous research to introduce core notions (section 2). We then present our data collection methodology, based on a minor variant of the "Topological Relations Picture Series" (Bowerman, 1996), and on the joint use of the coordination and definition polysemy tests (Kearns, 2006; section 3). Section 4 offers the data, and offers novel findings on three aspects. The first pertains to lexical/semantic relations between polysemous prepositions; the second, to the existence of a class of monosemous prepositions; the third, to a relation between increasing morphological complexity and decreasing polysemy. We discuss the theoretical implications of these findings (section 5), before concluding.

2. Previous literature and desiderata

Polysemy remains a controversial concept, and several works and research traditions propose different though closely related definitions. However, most works agree that polysemy involves a many-to-one relation between sense/function and form. Thus, a definition that

encapsulates this core notion can be formulated as follows. If a vocabulary item *α* has several senses (e.g. *s*, *s'*) and these senses are related, then *α* is polysemous (Apresjan, 1974; Cruse, 2004: ch. 6). Polysemy is distinguished into three sub-types: logical, regular, and irregular. Logical polysemy involves senses from mutually exclusive types. Thus, two of the senses of *book* can respectively describe a physical object and an information source (Pustejovsky, 1995). Regular polysemy involves senses that can be also expressed via other vocabulary items (Riemer, 2005; Vicente, 2018); a clear example is the pair *a/'nnanzi a* in (1)-(2). Irregular polysemy emerges when an item takes "new" senses via metaphor and metonymy, e.g. temporal senses in prepositions (Haspelmath, 1997).

Colexification can be defined as the inverse notion of polysemy. If related senses *s*, *s'* are expressed via vocabulary item *α*, then they are colexified (François, 2008, 2015). Colexification is also distinguished into accidental and logical (regular) patterns, which respectively act as symmetrical phenomena to irregular and regular polysemy (Georgakopulous & Polis, 2018). Thus, while polysemy offers an inherently semasiological perspective in studying the mapping from form to meaning/sense, colexification focuses on studying both "directions" of this relation. Our aim in studying regular polysemy and colexification patterns in Aquilan prepositions is to uncover how prepositions' multiple senses can be semantically related. A specific concern that we display in our study is to show that if a preposition *p* has senses *s*, *s'*..., then distinct prepositions *p'* independently capture these senses (cf. Apresjan, 1974's definition). Hence, we aim to prove that hyponymy relations are a *consequence* of prepositions' polysemous nature.

Polysemy is also contiguous to *monosemy*, *homonymy*, *vagueness*, and *lexical underspecification* (Kearns, 2006). Monosemy holds when an item has only a single sense, and it is considered a rare phenomenon (Asher, 2011: ch. 2). Homonymy holds when a lexical item has multiple *unrelated* senses; hence, it does not play a role in our discussion. Vagueness holds when a lexical item depends on context for its exact interpretation (e.g. the adjective *expensive*: Kearns, 2006). Lexical/semantic underspecification holds when a lexical item licenses multiple interpretations of sentences/phrases in a context (e.g. *aunt* in *this is my aunt*: Pustejovsky, 1995: ch. 3; Asher, 2011: ch. 3-4). Vagueness and underspecification play a minor role that we discuss as we tackle the data, in section 4. Monosemy, instead, plays a crucial role in our discussion of the data involving complex prepositions (cf. (3)), as we show in more detail in section 4.

Polysemy can be evaluated via the *definition*, *co-predication*, *ellipsis*, and *coordination* tests (Apresjan, 1974; Kearns, 2006; Vicente, 2018). The definition test works as follows. If a vocabulary item *α* requires distinct but overlapping sense definitions to capture its distribution in context, then it is polysemous. Examples (1)-(3) offer an illustration of how the definition test works, and how one sense can be selected in a given context of use. The co-predication test holds when two predicates with different senses can be coordinated and combined with an argument (e.g. *Mario lifts and reads a book*). The ellipsis test holds when an item is elided, carrying the same

sense as its antecedent (e.g. *play* in *Mario plays tennis and so does Luigi*). Co-predication and ellipsis are tests that mostly apply to verbs; hence, they do not play a role in our study.

The coordination test comes into two variants. In the first variant, the tested vocabulary item is a head taking two conjoined arguments (e.g. *Mario plays soccer and the Beatles*). In the second, the vocabulary item heads each conjunct and carries a distinct sense (e.g. *on* in *Mario sits on the table and on the chair*). In both cases, each of a head's arguments selects a distinct sense for the head, and the two senses coexist in the coordinated phrase. Senses must be distinct, if not zeugmatic. If one sense is assigned to both conjuncts, then the sentence should become uninterpretable (Ursini, 2016). The coordination test can thus aptly identify forms of inherent polysemy, since it is to an extent designed with this purpose (Apresjan, 1974; Pustejovsky, 1995; Vicente, 2018). The definition test, instead, is suitable to identify any form of polysemy, if the context of use is clearly accessible. In section 4, we show how these tests can be used in tandem.

Polysemy has been studied in spatial prepositions, although their status as lexical or functional items is controversial (cf. Hagège, 2010; Svenonius, 2010). For instance, geometrical spatial senses (e.g. 'inclusion', 'attachment', cf. English *in* and *on*) have been studied intensively across languages (e.g. Bowerman, 1996; Feist, 2000). The same holds for directed motion senses (e.g. 'going to' a location: Talmy, 2000: ch. 3). For Romance languages, studies have documented the polysemy of single prepositions in French (Aurnague & Stosic, 2002) and Italian (Luraghi, 2009), among others. Studies following a paradigmatic approach, however, are scarce. One exception is Vandeloise (1991), a book-length analysis of French prepositions: cf. also Tyler and Evans (2003) on English. However, these works propose an analysis of prepositions' sense clusters as being to an extent unrelated. They suggest that if two prepositions might both include a sense in their respective clusters, then a researcher may erroneously assign this sense to only one of the prepositions. Although we show how to avoid this problem in section 4, here we conclude that paradigmatic studies on the polysemy of prepositions are still overall rare.

When one looks at colexification and other semantic relations, a similar picture emerges. Colexification is generally studied by verifying that the possible senses for one or more target items share part of their definitions, but most studies concentrate on lexical categories (François, 2008, 2015; Georgakopulous & Polis, 2018). Similarly, the study of semantic relations in prepositions is still in its infancy. Levinson and Meira (2003) have proposed a universal taxonomy of spatial senses, ranging from a "general location" sense to increasingly specific senses. Prepositions with specific senses stand in entailment relation with prepositions having more "general" senses (cf. Aurnague & Vieu, 2015, for a similar point). This relation is usually reflected in the morphological complexity of prepositions, viz. the English pair *on/on top of* (Lehmann, 1985, 2018). However, these studies do not explicitly investigate prepositions' polysemy, thereby begging the question whether morphological complexity and sense specificity are related.

Finally, one previous work on Aquilan prepositions has investigated their morpho-syntactic properties, and briefly mentions the polysemy of its simple prepositions (Ursini & Long, 2018). However, this work does not document the polysemy of this and other preposition types and the other semantic relations (i.e. colexification, hyponymy, and overlap), leaving this task for future research. As matters stand, then, the empirical gaps involving polysemy and the related semantic properties of Aquilan prepositions are still outstanding.

3. Background and methodology

Aquilan is part of the *cicolano-reatino-aquilano* branch of central Italian languages (Giammarco, 1973; Vignuzzi, 1997). It features a semi-standard spelling system used in literary and popular prose (e.g. poetry, theatre: Lopez, 1988). The phoneme /j/ is written via the grapheme "j"; apocope and syntactic doubling are explicitly represented (e.g. *jju quatran-o* 'the child. SG.ML'; '*nnanzi* lit. 'a-head': Marra et al., 2000; Cavalieri, 2001). Aquilan co-exists in a situation of diglossia with Italian, like other Italian languages (Berruto, 2012). While near-monolingual speakers are attested in older generations (i.e. >70;0 years), younger generations (<40;0 years) are generally bilingual. Diatopic variation involves forms of lexical variation (e.g. *piete* vs. South-eastern *pee*), and hinges on contact with Southern Italian varieties (Cavalieri, 2001; Avolio, 2009a, 2009b).

Because of this combination of factors, the researchers opted to adopt the following methodology. Speakers (N=13) were invited to participate in structured interviews (cf. also Ursini & Long, 2018). Participants were near-ideal NORM speakers, i.e. Non-Mobile, Older, Rural, and Male. That is, all participants were male, never spent extended periods of life in other cities, and their ages ranged from 63;0 years to 71;4 years. Their status as rural speakers was less clear-cut. All participants were in their retirement years; one participant had a university degree (N=1), whereas the other participants only completed their secondary education (junior high school: N=4; senior high school: N=8). Some participants (N=3) spent most of their life in the city of L'Aquila, which can be considered an urban and more dynamic environment from a sociolinguistic perspective. The other participants (N=10) spent long stretches of time living in smaller villages near the city, although they mostly worked as professionals in L'Aquila, thus commuting on a daily basis. Furthermore, some participants originated from South-eastern villages (N=3), and thus displayed influences from Southern varieties.

Overall, the participants' profiles strongly suggest that their answers reflect a complex linguistic situation, as befits Italian and its sister languages (Avolio, 2009a, 2009b; Berruto, 2012). Nevertheless, we consider the findings as representative of the dialect's lexical patterns, even though they do not emerge as data representing "pure" monolingual patterns. For instance, most participants offered *'nfonno a* or *'nfonnu a* as a preposition describing a figure 'at the bottom of' a ground. This seems a slight divergence (via metaphony) from reported "standard" forms for certain vocabulary items (e.g. *'nfunnu a*: Cavalieri, 2001). As our focus is on se-

mantic matters, this form of phonological variation does not represent a concern. The central reason underpinning this claim lies in the methodology that we adopted for data collection, which can be described as follows.

Participants were contacted via shared acquaintances with the researchers (e.g. a grandson asking a grandfather to join the study). Participants were asked to join an "interview" (i.e. an elicitation session) in which one researcher would improve his poor skills about the Aquilan language. During the interview, participants acted as "teachers" of dialect to the field researcher, who acted as a "student" wishing to improve his native speaker skills. The goals of these interviews were to reduce or even neutralize the influence of Italian and create a cooperative, relaxed atmosphere (Chelliah & Willem, 2010: ch. 5). The researcher started each interview in Italian, but slowly converged to Aquilan during the interview/lesson, to facilitate the production of sentences. The researcher clarified before starting each interview/lesson that he was going to transcribe the sentences via a laptop. Hence, these transcriptions acted as "lecture notes" designed towards building a better understanding of this language for the researcher.

The need to test semantic properties of spatial prepositions compelled us to adapt part of the "Topological Picture Research Series" task. In this task, participants are asked to observe pictures from a fixed set, then name and describe the spatial relations they represent (Bowerman, 1996). Researchers can then compare responses across participants to establish which preposition in the target language prototypically describes a given spatial relation (e.g. English *in* for an 'inclusion' relation). The aim of the task is thus to generate a minimal corpus of sentences that speakers can use in context to describe spatial relations, and to study how the spatial categories of a language can "carve" this semantic field into possibly overlapping sub-domains.

For our topic-specific purposes, we adapted the task as follows. We used toy props to create scenarios portraying a target spatial relation. For instance, (3) was obtained by using a Lego character named "Mario" and placing it ahead of a toy car. Once the researchers created a scenario involving "Mario" (i.e. the Lego character) being 'in front of' the toy car, they asked the participant to describe this scenario. In this scenario, participants invariably produced sentences including *'nnanzi a* as the preposition describing this spatial relation, and thus confirmed that (3) captures this spatial sense in Aquilan. Participants generally found the examples clear. Furthermore, they would at times spontaneously adjust the props' positions to clarify their answers. Elicited sentences were transcribed during the sessions, with feedback on their pronunciation and transcription from the participants when deemed necessary. The token sentences were then analysed, and categorised, along with their relations, as we discuss next.

4. Results

In this section, we discuss the results, obtained via the use of the definition and coordination tests. Our reasons for combining these tests were as follows. Prepositions involve regular

polysemy when their spatial senses are involved; therefore, the definition and coordination tests are best suited for testing this property. However, both tests have their weaknesses. An unrestrained use of the definition test can lead to over-generation of attested senses (Tyler & Evans, 2003: ch. 2). The coordination test leads to misunderstandings from participants if the target senses are not fully distinct or even zeugmatic (Kearns, 2006; Ursini, 2016). For these reasons, we elected to use both tests whenever the senses of target prepositions made this combination possible, thereby opting for a form of methodological triangulation (D'Amico & Tetnowski, 2008, for discussion). In the case of sentences based on the coordination test, we used scenarios that featured two grounds, and thus required coordinated ground NPs for accurate descriptions (e.g. *ajji letti elle machine* in (8)).

To analyse the relation between morphological complexity and polysemy we divide prepositions into *simple* and *complex* prepositions. Simple prepositions only consist of one morpheme as the head of a PP (e.g. *a*: Hagège, 2010: ch. 2). Complex prepositions consist of one or more simple prepositions combining with a "spatial noun" (e.g. *balle, fonno* in *'nabballe a*, *'nfonno a*). These nouns refer to parts or axes of grounds (e.g. English *front*). Because of their senses, they can become part of a preposition (Jackendoff, 1991; Levinson, 1994; Svenonius, 2010). We spell out the morphological details in each section. Here, instead, we clarify our methodology in testing lexical relations. When eliciting sentences, we used the same scenarios for distinct prepositions. For instance, participants were asked if *sopre a* and *'ngima a* could describe a scenario in which some pigeons' location was vertically aligned and adjacent to a hill's top (i.e. (22), (26) in section 4.2). Both prepositions were judged appropriate, even if *sopre a* was accepted in scenarios in which the pigeons were also not close to the hill's top. More in general, we considered as distinct each proposed sense for a polysemous preposition, when a monosemous preposition was accepted in that context. We unravel these results in the next two sub-sections.

4.1. Simple prepositions

Aquilan has four simple prepositions (cf. (7)). Simple prepositions block *ground NP ellipsis*: the ellipsis of the complement NP (Svenonius, 2010). If ellipsis occurs, a sentence becomes ungrammatical; cf. the "*" symbol in (5). Simple prepositions can alternate between "locative" and "directional" senses, respectively denoting a figure's stable or changing position with respect to the ground. For instance, *pe'* in (6) describes the boys as scattered or 'around' the fields, when it combines with copula *stanno*. When it combines with "directional" verb *vanno*, instead, it describes the boys as going 'across' the fields. *A* in (5) displays a similar alternation (i.e. 'going to' vs. 'being at'). Thus, Aquilan behaves like a "verb-framed" language (Talmy, 2000: ch. 4):

(5) **Mario va/sta a(-jju tavolo).*
Mario goes/is.E A(-the table)
'Mario goes to/is at (the table)'

(6) *Ji quatrani stanno/vanno pe'ji campi.*
The boys are.E/go PE-the fields
'The boys are (located) around/go across the fields'

(7) **Simple Ps**={*a* 'at, in, to', *da* 'at, from, to', *de* 'of, from', *pe'* 'through, around, across'}

Let us now fully tackle the polysemy of simple prepositions. Aquilan lacks cognates of *in* 'inclusion' and *su/giù* 'vertical support/lower position' found in Italian (cf. Luraghi, 2009). Aquilan *a* colexifies these senses, thereby acting as a preposition colexifying a 'general' set of locative and directional senses (cf. also (1)). Here we offer two examples based on the coordination test. Most participants (N=9) would also accept (9) as a possible structure although they preferred (8). This because (9) was perceived as closer to the Italian norm, hence not fully dialectal, a fact consistent with speakers not being fully monolingual:

(8) *Le quatrane stanno assettate a-jji letti e-lle machine.*
The girls are.E sat A-the beds and-the cars
a. 'The girls are sitting on the beds and inside the cars'
b. 'The girls are sitting on the beds and near the cars'
...

(9) *Le quatrane stanno assettate a-jji letti e a-lle machine.*
The girls are.E sat A-the beds and A-the cars
a. 'The girls are sitting on the beds and inside the cars'
b. 'The girls are sitting on the beds and near the cars'
...

In (8), *a* takes two coordinated NPs as its argument: *(a)-jji letti* and *e-lle machine*. Conjunction *e* fuses with the definite article of the second NP conjunct, forming the item *elle*. Participants accepted this sentence as describing a situation in which some girls (i.e. Lego characters) were sitting on toy beds, and other girls were sitting inside or near some cars. If each girl in a group was sitting in a different location, then *a* was judged the most fitting preposition to describe such a situation. Crucially, one can find specific prepositions *'ngima a* 'on top of', *entro a* 'inside' and *vecino a* 'near' to only colexify these senses. Thus, participants confirmed that *a* colexified the senses that these prepositions also colexify. Overall, participants confirmed that *a* can be used to describe figures located in distinct but related locations, hence "including" the senses of other prepositions in its semantic range. By definition, *a* is polysemous (Apresjan, 1974; Vicente, 2018).

Let us move to *da*. Eliciting sentences involving ground NPs proved to be challenging, for participants and researchers alike. We offer examples based on the definition test, in (10)-(12):

(10) *Ji quatrani stanno da-jji nonni.*
The boys are.E DA-the grandparents
a. 'The boys are at their grandparents' place'
b. #'The boys are from their grandparents' place'

(11) *Ji quatrani so' jjiti da-jji nonni.*
The boys are.S gone DA-the grandparents
a. 'The boys have gone to their grandparents' place'
b. #'The boys have come from their grandparents' place'

(12) *Mario se n'è jjito da Roma.*
Mario SELF of-is.S gone DA Rome
a. 'Mario has gone (away) from Rome'
b. #'Mario has gone to Rome'

Da can combine with locative verb *sta* and describe some boys' current location as coinciding with their grandparents' place; hence, its 'source' sense is blocked (cf. (10a-b), with "#" marking a blocked interpretation). When *da* combines with directional *va*, only a 'goal' sense is attained, viz. (11a-b). The presence of toponym *Roma* in (12) signals that *da* has a 'source' sense. Overall, (10)-(12) prove that *da* is also polysemous, like Italian counterpart *da* (Luraghi, 2009).

Consider now *de*, which can only occur as a head when the ground NP is an indexical (i.e. *ecco*) or a toponym (i.e. *L'Aquila*, cf. (13)). In these cases, *de* has a 'source' sense, like *da*. In all other sentences, *de* mostly acts as the head of (some) complex prepositions, as we anticipate via (14):

(13) *Mario è de ecco/L'Aquila*
Mario is.S DE here/L'Aquila
'Mario is from here/L'Aquila'

(14) *Ji quatrani vanno a-ssenistra de-lle machine e a-jju fianco de-jju camion.*
The boys go A-SIN DE-the cars and A-the FIA DE-the truck
'The boys go to the left of the cars and next to the truck'

As (14) shows, *de* can occur in coordinated structures involving two distinct prepositions: *assenistra de* and *ajju fianco de*. Each preposition denotes a different location for the boys. This is possible insofar as one considers *de* polysemous, and each spatial noun (*senistra* and *fianco* in (14)) as selecting a distinct sense within *de*'s range. Therefore, *de* is polysemous, too.

We conclude the section by discussing *pe'* and its polysemy. Consider (15):

(15) *Le machine passeno pe' gli campi e-lle gallerie.*
The cars pass PE the fields and-the tunnels
'The cars drive around the fields and through the tunnels'

This item covers senses involving the complex "routes" that figures can move across with respect to the ground (cf. *through*, *across* in English: Evans & Tyler, 2003: ch. 4). Participants accepted (15) as describing a scenario in which some (toy) children were shown to be walking within a field, and other children were traversing a (toy) tunnel. The first sense describes the children traversing the 'open' fields; the monosemous preposition *lungo a* specifically colexifies this sense. The second sense involves them being 'inside' the tunnel at some point during the event of motion. Monosemous prepositions *mmezzo a* 'in the middle of', and *entro* a 'inside' seem instead to approximate this sense. Participants accepted that *pe'* could describe scenarios in which these more "specific" prepositions could be used. By definition, then, *pe'* is also polysemous. As matters stands, these data also clearly hint at the emergence of lexical relations stemming from the polysemy of different types of prepositions. We now turn at complex prepositions' data.

4.2. Complex prepositions

Aquilan complex prepositions involve the combination of one simple preposition with a spatial noun. Spatial noun and preceding preposition can undergo conflation and univerbation. A second simple preposition acts as the head. Complex prepositions can be divided into a type denoting "projections" of a ground, and a type denoting specific locations or "regions". We dub the first type *projective* prepositions; the second, *region* prepositions (Cresswell, 1978; Hagège, 2010).

Aquilan projective prepositions mostly involve univerbation. A possibly silent simple preposition becomes the prefix of a spatial noun (e.g. *'n-* in *'nfronte a*, "Ø" in *Ø-fore a*); *a* is the main head in most items. Region prepositions involve inflected *a* introducing the spatial noun, and *de* as the main head (e.g. *ajju fronte de*). Ground NP ellipsis can apply to these prepositions, thus leaving the internal preposition as the pronounced part or *remnant* (e.g. *affianco a* in (16)). Complex prepositions also alternate between a directional and a locative sense. One of our central findings is that region prepositions seem always monosemous. Instead, projective prepositions can be partitioned into polysemous and monosemous items. We propose their lists in (17)-(18):

(16) *Mario* *sta/camina* *a-ffianco* *(a-jju* *muro).*
Mario is.E/walks A-FIA A-the wall
'Mario is/walks to next to the wall'

(17) **Polysemous Ps**::={*a-rrete/'n-fronte a* 'behind/in front of', *ad-destra/as-senistra de* 'to the right/left of', *entro a* 'inside', *sopre/sottu a* 'above/below', *pe-ttraverso a* 'through, across', *a-ffianco a* 'next to', '*n-ammonte a* 'on top of/North of', '*n-abballe a* 'at the bottom of/South of', *vecino/lontano a* 'near/far', *'n-torno a* 'around', *a-jju fonno de* 'at the bottom/back', ...}

(18) **Monosemous Ps:**
a. **Projective**:={*fore/entro a* 'outside/inside', *'n-faccia a* 'against', *'n-centro a* 'in the centre of', *'n-nanzi a* 'ahead of', *'n-gima a* 'on top of', *'n-fonno a* 'at the bottom of', *a-nnord de* 'North of', *a-ssud de* 'South of', *lungo a'* along', *mmezzo a* 'in the middle of', ...}
b. **Region**:={*a-jju fronte de* 'at the front of ', *a-lla senistra/destra de* 'at the left/right of', *a-jju centro de* 'at the centre of', *a-lla gima de* 'at the top of', *a-llo stremo de* 'at the edge of', *a-jju fianco de* 'at the flank of', *a-jju sopre/sottu de* 'at the upper/lower place of',...}

Participants considered these lists near-exhaustive; we leave open the possibility that other items have not emerged in the interviews. The list in (18b) includes only region prepositions. These items turned out to be mostly monosemous, since they denote specific locations (regions) defined with respect to a ground. The polysemy of complex prepositions can be illustrated via some key items: the pairs *'nammonte a* and *'nabballe a; sopre a* and *sottu a;* and single item *pettraverso a*. These items show that polysemy in complex prepositions is restricted to four semantic dimensions: reference, distance, convexity, and accessibility. We motivate this claim in the rest of this section.

Consider *'nammonte a* and *'nabballe a,* first. The senses of *'nammonte a* lit. 'summit at' denote a figure located at the top, beginning, or northern axis defined with respect to a ground. Those of *'nabballe* lit. 'valley at' denote a bottom, ending, or southern axis. Thus, the senses of these prepositions denote relations defined with respect to a *relative*, *intrinsic*, or *absolute* reference system. These systems respectively involve the computation of a direction with respect to the speaker, the ground, and landscape referents' perspectives (Levinson, 1996). In this case, the absolute senses are defined with respect to the North and South coordinates, viz. (19)-(20):

(19) *Mario sta 'n-ammonte a-jju colle.*
Mario is.E N-MON A-the hill
a. 'Mario is on top of the hill'
b. #'Mario is North of the hill'

(20) *Mario sta 'n-abballe a-lla conca.*
Mario is.E N-ABB A-the basin
a. 'Mario is at the bottom of the valley'
b. #'Mario is South of the valley'

Participants could accept (19) as describing Mario being on top of a given hill, but not in a northern location defined with respect to the hill. A similar reasoning applies to *'nabballe*, which can cover the respective inverse directions (cf. (20)). Next, we show that a similar pattern also involves the intrinsic and reference frames via *'nfronte a* in (21):

(21) *Ji quatrani vanno 'n-fronte a-jju muru e-lle machine.*
The boys go N-FRO A-the wall and-the cars

a. 'The boys go in front of the wall and the cars'
b. 'The boys go in front of the wall and behind the cars'

Participants could accept (21) as describing the boys being 'in front' of the car and the wall (i.e. (21a)). They could also accept (21) as describing a scenario in which the boys reached the back side of the cars and the front side of the wall, as both being "in front" of the observers (i.e. (21b)). The intrinsic and relative senses of *'nfronte* can be distinguished and coordinated. This type of analysis can be extended to *arrete a* and *addestra/assenistra de*, and possibly *sopre/sottu a*. Hence, these prepositions colexify opposite senses (e.g. *'nfronte a* colexifying the sense of *arrete a* and vice versa). This apparently paradoxical fact nevertheless confirms their polysemy.

Distance is another dimension licensing restricted polysemy. Consider *sopre a* and *sottu a*: both items colexify senses denoting locations along the vertical axes, but do not distinguish the distance at which a figure can be located. Thus, *sopre a* colexifies senses that can be translated as 'over', 'on top of', and 'above' (cf. (22)). Instead, *sottu a* colexifies the opposite sense triplet (cf. (23)):

(22) *Ji picció voleno sopre a-jju colle e-lle nuvole.*
The pigeons fly SOP A-the hill and-the clouds
'The pigeons fly over the hill and above the clouds'

(23) *Ji quatrani s'assettano sottu a-jju ponte e-jju pino.*
The boys SELF-sit SOT A-the bridge and-the pine
'The boys sit under the bridge and below the pine'

In (22), pigeons are described as flying at a higher distance from the hill than from the clouds. In (23), the boys' sitting distance from the pine is understood as greater than that from the bridge. Vagueness plays a role in distinguishing these senses: the size of the ground and the distance determines this value (Carlson & Covey, 2005). Thus, *sopre a* and *sottu a* are polysemous because they can distinguish between two or possibly three "degrees" of distance, proximal and distal, much like indexicals (Diessel, 2005). The same reasoning applies to *vecino a* (i.e. 'next to', 'near') and *lontano da* (i.e. 'away', 'far away'), and to other projective prepositions (e.g. *'nfronte a*). Here we however focus on this pair, because monosemous *'ngima a* and *'nfonno a* offer clear evidence of distance acting as a dimension of polysemy, as we show in a few paragraphs.

The polysemy of *pettraverso a* instead involves two senses that *pe'* can also capture (cf. our discussion of *pe'*). This preposition can describe the figure(s) as temporally being 'through' the ground while moving in a non-specified direction. This condition is not necessary if the ground is not a convex object. In this case, the figure can move 'across' the ground. These two minimally distinct senses can be coordinated, as we show in (24):

(24) *Ji quatrani vanno pettraverso a-jji campi e-lle gallerie*
The boys go PE-TRAV A-the fields and-the tunnels
'The boys go across the fields and through the tunnel'

Participants offered similar responses for *'ntorno a*, confirming that it can cover 'around' and 'across' senses. For these prepositions, the specific geometrical properties of the grounds (i.e. their 'shape') can determine which precise sense is accessed. Although compact, our discussion suffices to show that these prepositions are polysemous with respect to a 'convexity' semantic dimension.

Before we move to monosemous prepositions, we discuss a lone polysemous region preposition: *ajju fonno de*. This preposition can be used to describe figures being at the back or bottom side of a ground. As (25) shows, *ajju fonno de* can be used to describe some socks being at the bottom of a drawer (cf. *'nfonno a*) but also being in the space behind this piece of furniture (cf. *arrete a*):

(25) *Ji carzitti stanno a-jju fonno de-jju tiratoro.*
The socks are.E A-the FON DE-the drawer
a. 'The socks are at the bottom of the drawer'
b. 'The socks are at the back of the drawer'

Thus, *ajju fonno de* also displays a restricted but important form of polysemy that involves non-accessible regions with respect to the observer (Svorou, 1994: ch. 3, for cross-linguistic data).

We now turn to the set of monosemous complex prepositions, which can be divided into two groups. Monosemous projective prepositions denote relations defined with respect to a specific reference system, distance or location. Monosemous region prepositions usually denote regions defined via possibly unique body/object parts (cf. Levinson, 1994). This property entails that these prepositions cannot have more than one sense in context, as (26a-b) show:

(26) *Ji picció voleno 'n-gima ajju monte e-jju pino.*
The pigeons fly N-TOP A-the monte and-the pine
a. 'The pigeons fly on top of the mount and the pine'
b. #'The pigeons fly on top of the mount and above the pine'

For (26), the only interpretation that participants accepted is that the pigeons fly and reach the top of the mount and the top of the pine; other distances and corresponding senses were rejected (cf. (26a-b)). We conclude that this and the other region prepositions are monosemous, because of their inability to colexify but one sense. They thus identify the "atomic" senses that constitute the spatial domain, and that polysemous prepositions colexify into increasingly rich sense clusters. To these sense clusters and the relations they define, we turn next.

5. Lexical relations: colexification, hyponymy, and overlap relations

We believe that three key results emerge from our inquiry, which clearly point at the existence of lexical relations connecting Aquilan prepositions into a lexical domain.

First, simple prepositions *a* and *de* colexify several senses: they are richly polysemous. *A*'s polysemy is confirmed via its possible uses in context, but also because several complex prepositions, projective-type and region-type alike, colexify the specific senses that *a* can cover. Hence, *a* acts as an hyperonym or "general" preposition for complex prepositions that include this preposition as a head (e.g. *arrete a*, *'nfronte a*, and so on). Thus, (8)-(9) and (16)-(23) also confirm that hyponymy relations emerge between *a*, *de* and the complex prepositions of which they respectively are heads. These relations hold between complex prepositions down to monosemous prepositions, as the pair *sopre a* and *'ngima a* show. Therefore, Aquilan prepositions form a taxonomy of senses of increasing specificity, a fact consistent with Levinson & Meira (2003)'s hierarchy. Their hyponymy relations seem to mirror similar sense relations attested in the modal domain. We can consider this as a fact confirming the empirical validity and theoretical soundness of our approach (cf. Van der Auwera & Plungian, 1998).

Second, projective complex prepositions colexify senses restricted to four semantic dimensions: reference systems, distance, convexity, and (non-)accessibility for the region preposition *ajju fonno de*. Furthermore, they always involve the combination of a simple preposition as a head (e.g. *a*), and a complex item as possibly involving the univerbation of a spatial noun and preposition (e.g. *'nfronte* including *'n-* and *fronte*). Monosemous prepositions otherwise coincide with region prepositions, which involve an inflected preposition (e.g. *ajju* in *ajju centro*), and thus a slightly more complex structure. Hence, these data confirm that increasing morphological complexity corresponds to decreasing polysemy, with hyponym relations emerging because of these systematic sense restrictions.

Third, prepositions also differ in which 'directional' senses they colexify. While *a* and *de* colexify a 'goal' sense (cf. (1)-(3)), *da* also colexifies a 'source' sense (cf. (10)-(12)). *Pe'* colexifies senses that can be classified as 'route' senses (cf. (6)-(7): Jackendoff, 1983, 1990). Therefore, the data also prove that *a*, *de* and *da* stand in a relation of partial synonymy or "overlap" at least with respect to the 'goal' sense (cf. Cruse, 2004: ch. 5; Murphy, 2010: ch. 4). By assuming that this sense is multiply realized as one of the senses forming different sense clusters, we also avoid Tyler and Evans (2003)'s pitfall of "sense exclusivity" (cf. section 2).

It is also important to mention that Aquilan displays apparently rare polysemy patterns. Aquilan *a* acts as a general location preposition, in a manner similar to Tzeltal and its preposition *ta* (Bowerman, 1996; Levinson & Meira, 2003). Its general nature can be also confirmed via the fact that Aquilan lacks prepositions colexifying 'inclusion' and 'support' senses (e.g. English *in*, *on*: Feist, 2000). The neutralization of the distance dimension that *sopre a* and *sottu a* display (i.e. their colexification of 'proximal', 'medial', and 'distal' senses) is not rare across Romance

languages (e.g. Aurnague & Stosic, 2002, on French). However, the existence of absolute terms such as *'nnabballe a, 'nnammonte a* seems to be indeed rare, although other dialects feature it (e.g. Sursvelan, a Romantch dialect from Switzerland: Söhrman, 2015). Aquilan thus offers important paradigmatic evidence not only on the polysemy of prepositions, but also sheds light on rare lexical/semantic phenomena involving this category.

Overall, we believe that our work offers ample evidence on the polysemy and monosemy of Aquilan prepositions, and on the lexical relations emerging as logical consequences of this polysemy. As we have reached our goal of offering a thorough overview of these properties, we can move to the conclusions.

6. Conclusions

The goal of this paper has been to offer an overview of the polysemy and colexification patterns in Aquilan prepositions (e.g. *a, sopre a, 'ngima a*). We have shown that Aquilan displays some rare forms of polysemy (i.e. absence of prepositions colexifying 'inclusion' and 'support' senses, absolute prepositions). We also have shown that the degree of polysemy and colexification that prepositions display is inversely related to their morphological complexity, reaching monosemy in some complex prepositions (e.g. *ajju fianco de*). We then have shown that Aquilan prepositions stand in semantic relations of sense overlap (e.g. *a* and *da* colexifying a 'goal' sense) and hyponymy (e.g. *sopre a* and *'ngima a*). A possibility is that this type of analysis can be applied to other Romance languages, offering a paradigmatic view of the polysemy and colexification of prepositions that also accounts for their other semantic relations. However, we leave for the future an investigation on how to extend these results to these languages.

7. Abbreviations

A=sense cluster for *a*; ABB=sense cluster for *abballe*; DE=sense cluster for *de*; DEF=definite marker; E=copula, extended aspect; S=copula, stable aspect; FIA=sense cluster for *fianco*; FON=sense cluster for *fonno*; FRO =sense cluster for *fronte*; MON=sense cluster for *monte*; N=sense cluster for *'n-*; PE=sense cluster for *pe'*; SELF=reflexive clitic; SOP=sense cluster for *sopre*; SOT=sense cluster for *sottu*; TOP=sense cluster for *'ngima*; TRAV=sense cluster for *traverso*;

8. References

Ameka, Felix K., & Stephen C. Levinson, 2007: "Introduction. The typology and semantics of locative predicates: Posturals, positionals and other beasts", *Linguistics* 45 (6), 847-872.

Apresjan, Juri D., 1974: "Regular polysemy", *Linguistics* 12 (1), 5-32.

Asher, Nicholas, 2011: *Lexical Meaning in Context: A web of words*, Cambridge: Cambridge University Press.

Aurnague, Michel, & Dejan Stosic, 2002: "La préposition 'par' et l'expression du déplacement. Vers une caractérisation sémantique et cognitive de la notion de trajet ", *Cahiers de Lexicologie* 81, 113-139.

Aurnague, Michel, & Laure Vieu, 2015: "Function versus regions in spatial language: a fundamental distinction" in Corine Astesano & Melaníe Jucla (eds.) : *Neuropsycholinguistic perspectives on language cognition. Essays in honour of Jean-Luc Nespoulous*, London: Psychology Press, 31-45.

Avolio, Francesco, 1992: "Il problema dei questionari e la metodologia d'inchiesta nei primi rilevamenti per il vocabolario dei dialetti della Sabina e dell'Aquilano", *VDSA ALIR*, 557-575.

Avolio, Francesco, 1993: *Problemi di interlinguisticità dialettale. Contatti e reazioni linguistiche sul 'confine' mediano–meridionale: modellizazione sabina e 'abruzzesità' vestina con particolare riguardo al sinecismo aquilano*. Unpublished Ph.D. Dissertation, Università di Sassari.

Avolio, Francesco, 2009a: *Lingue e Dialetti D'Italia*, Roma: Carocci Editore.

Avolio, Francesco, 2009b: *Tra Abruzzo e Sabina*, Alessandria: Edizioni dell'Orso.

Berruto, Gaetano, 2012: *Sociolinguistica dell'italiano Contemporaneo,* second edition, Roma: Carocci Editore.

Bowerman, Melissa, 1996: "Learning how to structure space for language: A crosslinguistic perspective" in Paul Bloom, Mary A. Peterson, Lynn Nadel, & Michael F. Garrett (eds.): *Language and Space*, Cambridge: the MIT press, 385-436.

Carlson, Laura A., & Eric Covey, 2005: "How far is near? Inferring distance from spatial descriptions", *Language and Cognitive Processes* 20 (5), 617-631.

Cavalieri, Mario, 2001: *La Pujetta, Grammatica e Vocabolario delle Parole Aquilane*, L'Aquila: Lo Zirè edizioni.

Chelliah, Shiobana L., & James Willem, 2010: *Handbook of descriptive linguistic fieldwork*, Berlin: Springer Science and Business Media.

Cresswell, Maxwell J., 1978: "Prepositions and points of view", *Linguistics and philosophy* 2 (1), 1-41.

Croft, William, 2003: *Typology and universals,* second edition, Cambridge: Cambridge University Press.

Cruse, Alan, 2004: *Meaning in language: An introduction to semantics and pragmatics*, Cambridge: Cambridge University Press.

D'Amico, Jack, & James A. Tetnowski, 2008: "Triangulation" in Chris Forsyth & Herman Copes (eds.): *Enciclopedia of Social Deviance*, Riverside: Sage Publications, 740-743.

Diessel, Holger, 2005: "Distance contrasts in demonstratives" in Martin Haspelmath, Martin Dryer, David Gil, & Bernard Comrie (eds.): *World Atlas of Language Structures*, Oxford: Oxford University Press, 170-173.

Feist, Michelle, 2000: *On "in" and "on": An investigation into the linguistic encoding of spatial scenes*. Unpublished Ph.D. Dissertation, Northwestern University.

François, Alexandre, 2008: "Semantic maps and the typology of colexification: Intertwining polysemous networks across languages" in Martine Vanhove (ed.): *From Polysemy to Semantic change: Towards a Typology of Lexical Semantic Associations*, Amsterdam: John Benjamins, 163-215.

François, Alexandre, 2015: "The ins and outs of 'up' and ''down': Disentangling the nine geocentric space systems of Torres and Banks languages" in Alexandre François, Stephan Lacrampe, Marie Franjieh, & Sandra Schnell (eds.): *The Languages of Vanuatu: Unity and Diversity*, 5. Asia-Pacific Linguistics Open Access, 137-195.

Georgakopoulos, Thanasis, & Stefan Polis, 2018: "The semantic map Model State of the art and future avenues for linguistic research", *Language and Linguistics Compass* 12 (9), 1-33.

Giammarco, Ernesto, 1973: *Abruzzo dialettale*, Pescara: Istituto di Studi Abruzzesi.

Haspelmath, Martin, 1997: *From Space to Time: Temporal Adverbials in the World's Languages*, Newcastle: LINCOM Europa.

Hagège, Claude, 2010: *Adpositions*, Oxford: Oxford University Press.

Jackendoff, Ray, 1983: *Semantics and Cognition*, Cambridge: The MIT Press.

Jackendoff, Ray, 1990: *Semantic structures*, Cambridge: The MIT Press.

Jackendoff, Ray, 1991, "Parts and Boundaries", *Cognition* 4 (1), 9-45.

Kearns, Kate, 2006: "Lexical semantics" in Bas Aarts & Alice McMahon (eds.): *Handbook of English Linguistics*, Malden, MA/Oxford: Blackwell, 557-580.

Lehmann, Christian 1985: *Thoughts on grammaticalization*, Munich: Lincom Europa.

Lehmann, Christian, 2018: *Foundations of Body-Part Grammar*, manuscript, University of Erfort.

Levinson, Stephen C., 1994: "Vision, shape, and linguistic description: Tzeltal body-part terminology and object description", *Linguistics* 32 (4-5), 791-856.

Levinson, Stephen C., 1996: "Frames of reference and Molyneux's question: Crosslinguistic evidence", *Language and Space* 109 (1), 169-210.

Levinson, Stephen C., & Sergio Meira, 2003: "Natural concepts in the Spatial Topological Domain - Prepositional Meanings in Crosslinguistic Perspective: An exercise in semantic typology", *Language* 79 (3), 485-516.

Lopez, Luigi, 1988: *L'Aquila, le Memorie, i Monumenti, il Dialetto*, L'Aquila: G. Tazzi Editore.

Luraghi, Silvia, 2009: "A model for representing polysemy: The Italian preposition da" in Jean François, Édouard Gilbert, Cecile Guimier, & Marc Krause (eds.): *Actes du Colloque "Autour de la preposition"*, Caen: Presses Universitaires de Caen, 76-90.

Marra, Luigi, Edoardo Villante, & Mario Lolli, 2000: *Dizionario Italiano-Aquilano-Italiano*, L'Aquila: Colacchi Edizioni.

Malkiel, Yakov, 1976: "From Romance philology through dialect geography to sociolinguistics", *International Journal of the sociology of language* 9 (1), 59-84.

Murphy, Lynn M., 2010: *Lexical meaning*, Cambridge: Cambridge University Press.

Napoli, Donna Jo, & James Nevis, 1987: "Inflected prepositions in Italian", *Phonology* 4 (1), 195-209.

Pustejovsky, James, 1995: *The Generative Lexicon*, Cambridge, MA: The MIT Press.

Riemer, Nick, 2005: *The Semantics of polysemy: reading meaning in English and Warlpiri*, Berlin: Mouton de Gruyter.

Svenonius, Peter, 2010: "Spatial P in English" in Guglielmo Cinque & Luigi Rizzi (eds.): *The Cartography of syntactic Structures,* vol. 6, Oxford: Oxford University Press, 127-160.

Svorou, Soureta, 1994: *The Grammar of Space*, Amsterdam: John Benjamins.

Söhrman, Ivan, 2015: "Onomasiological differentiation" in Adam Ledgeway & Martin Maiden (eds.): *The Oxford Guide to the Romance Languages*, Oxford: Oxford University Press, 588-595.

Talmy, Leonard, 2000: *Towards a cognitive semantics*, Cambridge: the MIT press.

Tyler, Andrea, & Vyvyan Evans, 2003: *The semantics of English prepositions: Spatial scenes, embodied meaning, and cognition*, Cambridge: Cambridge University Press.

Ursini, Francesco-Alessio, 2013: "*Esse* and *Sta*: Auxiliary selection in the Aquilan dialect", *Dialectologia* 10 (1), 107-134.

Ursini, Francesco-Alessio, 2015: "Ave' & Tene'. A closer look at auxiliary selection in Aquilan", *Dialectologia* 13 (3), 115-143.

Ursini, Francesco-Alessio, 2016: "Compositional Metaphors: the case of 'spatial' Ps", *Semantics-Syntax Interface* 3 (1), 73-107.

Ursini, Francesco-Alessio, & Haiping Long, 2018: "Spatial Categories in Aquilan", *Dialectologia et Geolinguistica* 27, 1-29.

Vandeloise, Claude, 1991: *Spatial Prepositions: A Case Study in French*, Chicago: University of Chicago Press.

Van der Auwera, Johann, & Vladimir Plungian, 1998: "Modality's semantic map", *Linguistic Typology* 2, 79-124.

Vicente, Agustín, 2018: "Polysemy and word meaning: an account of lexical meaning for different kinds of content words", *Philosophical Studies* 175 (4), 947-968.

Vignuzzi, Ugo, 1997: "Lazio, Umbria and the Marche" in M. Maiden & Mair Parry (eds.): *The dialects of Italy*, London: Routledge, 311-321.