

Caused Motion constructions between standard and substandard: *entrare*, *uscire*, *salire* and *scendere* in contemporary Italian

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The paper presents the first quantitative investigation of the causative use of four Italian prototypically path-encoding verbs: *entrare*, *uscire*, *salire*, *scendere* ('to enter', 'to exit', 'to ascend', 'to descend') (Talmy 1985; Ricca 1993). These uses are gradually expanding from generally southern varieties to substandard Italian as well, as part of the general re-emergence of *Umgangssprache* features. We use Construction Grammar as a reference framework and interpret the phenomenon as the gradual standardization (via lexicalization) of a coercion phenomenon. Specifically, we investigate the role of both linguistic (i.e. animacy of the referent of the second argument) and sociolinguistic (i.e. dialectal competence) factors on the standardization of the analysed verbs. The study consists of two acceptability ratings tasks on three datasets, tested on two different groups of subjects. Main findings are consistent with our hypotheses: the four verbs show different degrees of acceptability, and dialectal proficiency is shown to significantly influence Caused Motion Construction use. Animacy is also shown to significantly affect acceptability. Moreover, *salire* and *scendere* uses in Caused Motion Constructions is found to be likely influenced by their standard transitive use.*

KEYWORDS: Construction Grammar, Italian, motion verbs, sociolinguistics.

1. Introduction

Motion verbs – broadly defined as all verbs that encode movement – have been at the centre of the linguistic investigations in the last decades (see Tesnière 1959; Fillmore 1966; Talmy 1985, 2000; Slobin 1991, 1996; Cennamo & Lenci 2019, among others). These verbs are generally defined as encoding motion events that include an entity (the Figure) and its movement along a path (the Path), with respect to another reference entity (the Ground) (Kortmann 2003; Ibarretxe-Antuñano 2009).

* This work is the product of a joint collaboration between the two authors. Specifically, for academic purposes, Lucia Busso and Domenica Romagno contributed equally to the paper, of which they split the authorship: both authors contributed to the selection of the stimuli, data collection and drafting of the present paper. LB is responsible for statistical analyses.

These components can be identified in the sentences such as the following:

- (1) *The bottle moved into the cave.*
[Figure] [Motion] [Path] [Ground]

Motion verbs represent a key question at the interface between lexical semantics and morphosyntax: in fact, they typically have a complex semantic frame, enable different argument structures and, consequently, occur in various types of construction (Levin 1993; Kay 2005; Cennamo 2015). The relationship between the semantic properties and the syntactic behaviour of motion verbs have been addressed by a variety of studies, including different theoretical frameworks and research methods. Important studies on motion verbs come from Generative Grammar (Chomsky 1981, Cardinaletti & Giusti 2003), functional linguistics (Wierzbicka 1972, 1980; Jackendoff 1983; Levin 1993; Van Valin & LaPolla 1997; Rappaport-Hovav 1989; Van Valin 2005), language typology (Talmy 1985, 2000), language acquisition (Naigles & Terrazas 1998; Papafragou 2009), Construction Grammar (Goldberg 1995, 2006; Croft 2012; Torre 2012; Lovestrland 2021), among others.

Generally speaking, motion verbs have been investigated in a variety of European (and non-European) languages, including Italian, in which they have been addressed from different perspectives: L2 acquisition (Bernini *et al.* 2006; Spreafico & Valentini 2010), morphosyntactic analysis (Cardini 2008; Iacobini & Vergaro 2014; Sansò & Giacalone Ramat 2016), patterns of argument structure (Cennamo & Lenci 2019; Cappelli *et al.* 2019), among others. However, the question of how diastatic, diatopic and diaphasic variations may influence the usage and the distribution of motion verbs in different constructions has not yet fully clarified.

In the present paper, we adopt the Cognitive Linguistics framework, which centres on the interrelationship between formal and functional dimensions of language: specifically, between syntax and semantics (Langacker 1987; Barlow & Kemmer 2000; Croft 2012). Hence, in order to clarify the nature and the distribution of a particular construction including motion verbs in contemporary Italian, we take into account the properties of the clause on the whole, thus considering not the verb semantics *per se*, as the sole cause of the syntactic behaviour of motion verbs, but rather the combination of the verb with its arguments and how possible pairings of syntactic form and semantic function may be encoded into different constructions. Consistently with the Construction Grammar approach, we consider constructions as general clause struc-

tures, that can be variously combined with particular groups of verbs, and correspond to basic units in languages (Goldberg 1995, 2006, 2019).

In particular, we present an analysis of both intransitive and transitive uses of four motion Italian verbs, i.e. *entrare*, *uscire*, *salire*, *scendere* ‘to enter, to exit, to go up, to go down’, in which we consider not the semantic features of each verb by itself, but rather the properties of the argument structure construction it appears in. We combine this cognitive and constructionist perspective with a sociolinguistic approach, to explore the influence of different factors (including diatopic and diaphasic or diastratic ones) on the ongoing standardization of dialectal (and regional) caused motion constructions with the four above-mentioned verbs. Since we consider the argument construction as a unit, to further clarify the principles underlying the distribution of motion verbs in the various constructions, we also address the role of a crucial property of the referent of the object noun, that is animacy (Silverstein 1976; Olloqui-Redondo *et al.* 2019), in governing the frequency and the degree of acceptability of a given verb in less canonical constructions.

The paper is structured as follows. In the following section (§2), we summarize the linguistic characteristics of motion verbs in the Italo-Romance area and describe the four verbs object of the present analysis (§2.1). Next, after presenting our main hypotheses and motivations (§3), we describe the data and the methodology of our study (§4), followed by a discussion of the main findings (§5) and concluding remarks (§6).

2. Motion verbs in Italian

Talmy (2000) famously introduced a bipartite typology of languages according to the patterns in which motion events are encoded. This typology distinguishes between Verb-Framed (henceforth: **VF**) and Satellite-Framed (henceforth: **SF**) languages. The main distinction between the two types resides in the way in which direction of motion (i.e. Path) is encoded, be it into the verb root in the VF type (e.g. Italian *entrare* ‘to enter’, *uscire* ‘to exit’), or into a satellite verb particle or affix in the SF type (cf. English *to go in / out*).¹

(2) a. *John limped into the house.*

b. *Je suis entré dans la maison (en boitant).* (Lit. ‘I am entered in the house in limping’) (from Beavers *et al.* 2010: 333)

This typology is far from being unproblematic, as recent studies have revealed that lexicalization strategies may actually differ signifi-

cantly even across languages belonging to the same linguistic type (e.g. Beavers *et al.* 2010; Croft *et al.* 2010). In particular, Italo-Romance varieties (i.e. standard Italian and Romance primary dialects) belong to the VF type; nonetheless they display features typically ascribed only to SF languages, such as a complex system of phrasal verbs (Hijazo-Gascón & Ibarretxe-Antuñano 2013; Iacobini 2012; Iacobini & Masini 2009; Iacobini & Vergaro 2014; Simone 2008). However, even acknowledging the inevitable problems that such a classification poses, Talmy's original categories perfectly match the purposes of the present study. In fact, our interest lies in a group of four prototypically VF path-encoding motion verbs (Italian *entrare, uscire, salire, scendere* 'to enter, to exit, to go up, to go down'). These verbs encode a directional component which specifies the motion event in configurational terms: from an 'outside' to an 'inside' and vice versa, and from the top down and vice versa (Ricca 1993). This configurational template somewhat resembles the contextual one of deictic verbs of motion (cf. Hijazo-Gascón 2017; Ricca 1993). However, these verbs cannot be defined as deictic themselves, since the interpretation of the general event does not rely specifically on extralinguistic contextual components of the speech act participants (Fillmore 1997; Ricca 1993).

For this reason, it appears to be more productive to adopt the definition of Configurational Motion Verbs (henceforth **CMV** – Ricca 1993). CMVs are, prototypically, one-argument verbs in Italian, and hence occur in Intransitive Motion constructions, which consist of a Theme (subject) that moves along a Path to a different point in space (Location), expressed by a Prepositional Phrase (NP-V-PP), as in example (3).²

- (3) a. *Alessio è entrato in casa*
'Alessio entered in (the) house'
b. *Alessio è uscito da casa*
'Alessio went out from the house' (lit.), i.e. 'left the house'
c. *Il gatto è salito sul tavolo*
'The cat climbed on the table'
d. *Il gatto è sceso dal tavolo*
'The cat climbed down from the table'

Nevertheless, in a few dialects – especially southern – and regional Italian varieties, this group of verbs may also occur in caused motion constructions, in which an Agent (subject) directly causes the movement of a Theme (direct object) from a location A to a location B, along a path specified by a locative prepositional phrase (NP-VP-NP-PP). Caused-motion constructions (see example 4) are quite frequent in

standard Italian, although they occur with a limited set of verbs (Torre 2012; Baicchi 2015; Busso *et al.* 2018, 2020).

- (4) *Michela lanciava sassi nell'acqua*
'Michela was throwing stones into the water.'
(from Torre 2012: 8)

Such constructions cannot take CMVs or Manner of Motion verbs, such as *marciare* 'to march', *nuotare* 'to swim', *correre* 'to run' (Alonge 1997; Iacobini & Vergaro 2014). However, we register a recent trend by which the use of CMV to encode caused motion events is manifested in the standard language as colloquialisms. This new usage, its boundaries and its diffusion have never – to our knowledge – been addressed experimentally. See table 1 for examples of caused motion constructions with CMV.

The aim of the present paper is to propose an exploratory preliminary account of the occurrence of CMVs in caused motion constructions (henceforth: **CMVcaus**). The next section will describe more thoroughly the object of investigation.

2.1. The case of Italian CMVs *entrare*, *uscire*, *salire*, *scendere*

The four Italian CMVs can be analysed as belonging to two opposite pairs: *entrare/uscire* and *salire/scendere*. The former pertains to an outward/inward movement, whereas the latter encodes an upward/downward direction. The four verbs also encode metaphorical movement, but for the purposes of this work we will strictly deal only with literal motion events.

Notably, *salire* and *scendere* also have a (grammatical) transitive use, as in example (5) below.

- (5) a. *Anna ha salito le scale di fretta*
'Anna climbed the stairs in a hurry.'
b. *Anna ha sceso le scale di fretta*
'Anna descended the stairs in a hurry.'

Interestingly, several important Italian dictionaries (such as Sabatini-Coletti 2008 and Devoto-Oli 2014) register transitive causative uses for CMVs, beside the prototypical use and senses. The *Grande Dizionario Italiano dell'Uso* ('Great Italian Dictionary of Usage', GRADIT, De Mauro 1999-2007) – the most comprehensive dictionary of current usage of contemporary Italian – reports transitive causative uses as southern and colloquial, typical of the regions of Campania, Puglia and Sicily. Other dictionaries, such as Zingarelli 2016 and the online

Vocabolario Treccani only report the regional southern use in transitive causative constructions of *scendere* and *uscire*.

2.2. *Caused motion constructions and popular Italian*

The fact that dictionaries of standard Italian report the transitive causative use of the four CMVs is particularly important, as they provide a crucial acknowledgement of this secondary usage – albeit registered as diatopically marked. Notably, transitive uses of these verbs date back to medieval and Renaissance texts, and it is also attested in poets and writers of the 19th and 20th century, such as Carducci, Pascoli, Fenoglio, Calvino.

Nevertheless, we claim that the portrait depicted by dictionaries of CMVs use is only partially faithful to the everchanging contemporary sociolinguistic situation of Italian, given that the standard language continuously interacts with substandard and dialectal varieties (Cerruti & Regis 2014).

It has been shown that a crucial characteristic of 20th century Italian lies in the re-emergence of substandard features belonging to the *Umgangssprache*, a concept which we (imperfectly) translate as ‘popular Italian’, and that is closely related to Sabatini’s (1985) ‘Italian in average use’ (Berruto 1990; D’Achille 2002; De Mauro 2011; Iacobini 2009; Maiden 2014). With ‘popular Italian’ we denote a variety of Italian that incorporates regional and dialectal features, occupies a place slightly lower than standard Italian on the diastratic and diaphasic axes, and is predominantly spoken. As several scholars have noted, the assertion of popular Italian marks the diffusion of constructions and features that were excluded from standard language and were continued only in dialects and regional spoken varieties of Italian (D’Achille 2002; Tavoni 2002; Amenta 2008; Iacobini 2009). This phenomenon is typical of the second half of the century, when mass schooling, economic boom and diffusion of mass media resulted – in the course of roughly two decades – in a more widespread use of standard Italian in communicative everyday contexts (Alfonzetti 2002; Sobrero 2003). In fact, in 1950 only 20% of Italians claimed to use Italian in every communicative context, whereas in the 1970s more than 50% of the population was regularly using the standard language (Iacobini 2009).

This popular and widespread use of standard language has predictably changed – and is still changing – the norm, by enriching it with substandard features and dialectal influences at all levels of language (Sabatini 1985; Tavoni 2002; Cerruti & Regis 2005). At present, at least four diglottic levels may be identified in the complex Italian sociolin-

guistic landscape: standard Italian, regional Italian, regional dialect, local dialect (Cardinaletti & Munaro 2009; Loporcaro 2009; Maiden & Perry 1997). Local and regional Italo-Romance dialects are primary dialects (Coseriu 1980), that is they are coeval to the variety from which the standard language descends (Berruto 2005: 81-83). Regional Italians, instead, are diatopic varieties resulting from the geographical differentiation of standard Italian after its social diffusion (Cortelazzo 1990). Varieties of regional Italian differ from each other and from the standard norm at every level of the language system and represent the form of Italian most commonly spoken in contemporary Italy (Cerruti 2011), although competence of these four levels is extremely diversified. Benincà & Poletto (2006) suggest that the interference of dialect, regional Italian and norm is originally propelled by diglot speakers. However, those speakers are also the ones who mostly refrain from using regional forms in standard contexts, as they perceive these structures as dialectally marked. On the other hand, regional Italian speakers with no or limited dialectal competence extend the use of already circulating colloquial forms to more standard contexts.

Building on the studies presented above, we propose that the emergence of caused motion constructions with CMVs in contemporary Italian can be accounted for in a more general picture showing how dialectal and regional influences on (sub)standard Italian have become increasingly stronger, and how the use of code-mixing by speakers contribute to this language change.

2.3. Caused motion constructions between productivity and creativity

The sociolinguistic picture outlined in §2.2 can be integrated by looking at the phenomenon with a constructionist lens. The ongoing standardization of CMV_{caus} can be in fact interpreted as a progressive lexicalization of creative uses of verbs and constructions. The novel combination of lexical items (in this case, verbs) and the general construction they occur in is referred to as ‘coercion’ in the constructionist literature (Lauwers & Willems 2011; Suttle & Goldberg 2011; Goldberg 2019). The notion of coercion refers to a mismatch in semantic specifications between a lexical item (mostly a verb) and the general construction in which it appears. The incongruence is resolved by the mismatching verb being ‘forced’ into a new meaning more in line with the general construction’s semantics.

For instance, the famous example *she sneezed the napkin off the table* (Goldberg 1995) is easily interpreted by English speakers as encoding an event of ‘moving the napkin by the act of sneezing’. The overall meaning

of the clause combines the meaning of the verb with that of an argument structure construction; namely the caused motion construction contributes the notion that someone causes the napkin to move from the table by the act of sneezing of the Agent. Creative uses of language often display a ‘partial productivity’ (Suttle & Goldberg 2011; Goldberg 2019). In fact, in order to enter a language, new coinages should satisfy three main criteria:

- (i) the coinage should be semantically compatible;
- (ii) the coinage should have enough coverage;
- (iii) the coinage should not be statistically preempted by a competing structure.

We will briefly explain each of these criteria (see Goldberg 2019 for an in-depth discussion on the topic). Firstly, novel coinages must be sensical, in that verb and general construction should combine in a new meaning which is effortlessly understood by speakers. This results from a dynamic interrelation of lexical and constructional semantics, which should not be too dissimilar. That is, for a novel coinage to be meaningfully coerced, only a ‘partial semantic incompatibility’ between main verb and general construction is allowed (Yoon 2013, 2016; Perek & Hilpert 2014; Goldberg 2019; Busso *et al.* 2020; Busso 2021). Secondly, a potential new coinage is productive if “the category which would be required to include the previously attested examples and the coinage is well attested within the [...] conceptual space in which the exemplars cluster” (Goldberg 2019: 63). This parameter is called ‘coverage’, a concept borrowed from nonlinguistic literature on induction, and states that any new coinage will be more acceptable if they fall under a cluster of constructions which is already attested and used (Clark & Clark 1979; Osherson *et al.* 1990; Suttle & Goldberg 2011; Perek 2016; Goldberg 2019). Finally, the new coinage’s productivity is inhibited by the existence of readily available alternative formulations that encode the intended meaning and are more accessible to speakers. This concept is called ‘statistical preemption’, and refers to competition among constructions at the paradigmatic level (Boyd & Goldberg 2011; Perek & Goldberg 2017; Ambridge *et al.* 2018; Goldberg 2019). Since speakers recognize that a way of expressing the intended message is already present in the language, novel formulations encoding the same (or a similar) message will be judged as ill-formed because they do not obey the normative convention of the speech community. We can apply these parameters to our constructions. CMVs are compatible with caused motion constructions in that

they inherently encode motion (for an in-depth account of semantic compatibility in Italian caused motion constructions, see Busso *et al.* 2020, *forthcoming*).

These constructions appear in what we can define as a multidimensional linguistic-conceptual space, which is formed at the intersection of dialect/regional Italian, popular Italian and standard language (Figure 1).

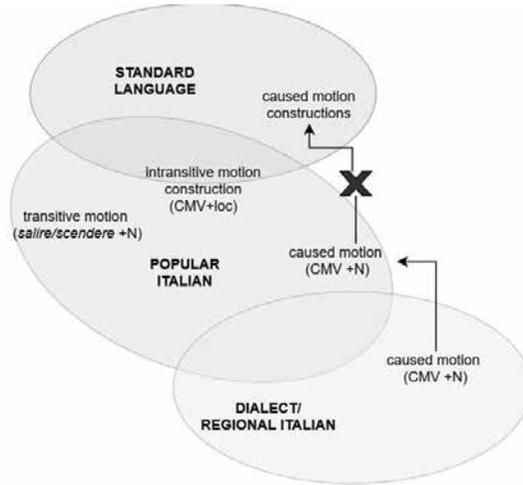


Figure 1. High dimensional conceptual spaces illustrating the coverage for the caused motion CMV construction.

CMV_{caus} is attested in the dialectal and regional Italian spaces, and it shares similarities with other constructions in standard language: caused motion (*fare uscire il cane* ‘to make the dog go out’) and – mostly – the transitive motion construction used for the verbs *salire* and *scendere* (*salire le scale* ‘to climb the stairs’). The coverage of similar formulations is enough for the caused motion use of CMV to be expanded to popular Italian (see Figure 1). In fact, it has been demonstrated that speakers tend to transfer constructions from their first to their second language, depending on proficiency levels (*inter alia* Ellis 2006, 2019; Ellis & Larsen-Freeman 2009). However, the productivity of these constructions is curtailed by a strong sociolinguistic stigma. This stigma is for example apparent in the sarcastic piece by the journalist Massimo Gramellini, written in the immediate afterwards of an article by the *Accademia della Crusca* legitimating the colloquial use of causative CMVs. The piece is voluntarily written in a paroxysmal broken Italian, with the clear intent

to mock the *Crusca*'s acceptance of these constructions, even in sub-standard registers (Gramellini, *Corriere della Sera*, 29/1/2019).

Moreover, the presence of alternative causative construction (*fare* 'to make' + verb) in standard language may statistically preempt the substandard construction's full productivity (Boyd & Goldberg 2016).

3. The study: research hypotheses and motivation

We have claimed in previous paragraphs that the use of CMV_{caus} in standard Italian could be ascribed to the re-emergence of the sub-standard (dialectal and/or regional), a similar argument to the one made by Iacobini (2009) for phrasal verbs. This claim is not entirely new, as ALIQUOT (*L'Atlante della Lingua Italiana QUOTidiana* 'The Atlas of the everyday Italian Language') and the *Accademia della Crusca* have made similar claims on several occasions (Paoli 5/2/2016; Coletti 15/3/2019). In fact, the debate on the dubious acceptability of the transitive causative constructions including the four verbs analysed in the present study has recently reached popular culture and social media memes, fora and viral discussion, online and offline. Specifically, the *Accademia della Crusca* proposes that *salire* and *scendere* may be more acceptable in their transitive causative versions (3c-d) since they already display a transitive – albeit not causative – use in standard Italian (5a-b). In fact, at least in some varieties spoken in the area of Cosenza, in northern Calabria,³ they may also select *avere* 'to have' as the auxiliary in compound tenses (*ho sceso*, 'I have descended'; *ho salito* 'I have climbed'), whereas *entrare* 'to enter' and *uscire* 'to exit' only allow *essere* 'to be' (*sono entrato*, 'I am [i.e. have] entered'; *sono uscito*, 'I am [i.e. have] left' (cf. Bentley 2006).

ALIQUOT conducted a qualitative survey on its online users, asking whether sentences like *scendimi le chiavi* (lit. 'descend me the keys') or *esci il cane* (lit. 'exit the dog') were grammatical. Results of the survey indicate that the use of those forms seems to be typical of the southern part of the country (see Figure 2, from Paoli 5/2/2016).

A great attention has been paid to this phenomenon, from speakers and linguists alike, as the various articles from the *Accademia della Crusca* attest. However, all the available data and discussion remains anecdotal and occasionally qualitative, and no rigorous and quantitative study has been performed yet – to the best of our knowledge.

Caused Motion constructions between standard and substandard

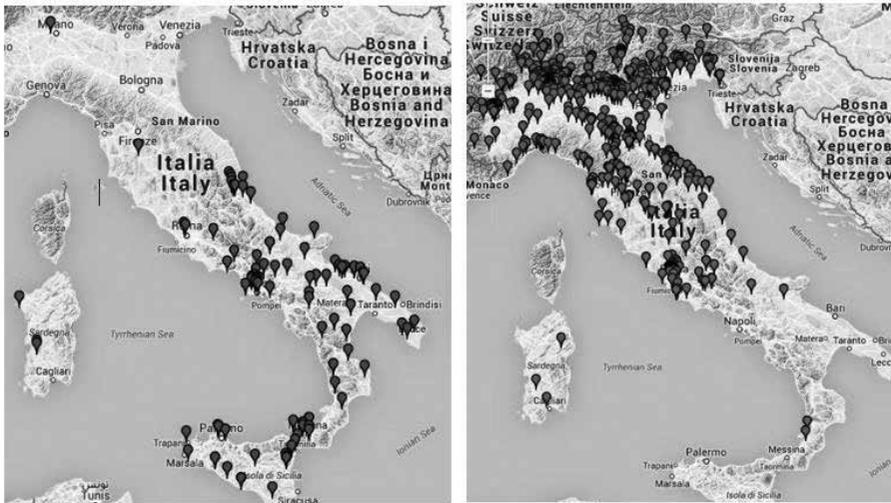


Figure 2. Results of the ALIQUOT survey: in blue (2a) users who use causative CMVs. In red (2b) the users who do not.

Furthermore, the issue has been so far addressed without considering other types of crucial factors that could influence the usage, the distribution, and the degree of acceptability of CMV_{caus} in standard Italian. In particular, the role of the properties of the Theme in the two-argument version of these verbs remains unclear. In this study, we predict that the degree of acceptability of the two-argument structures is influenced by the animacy of the referent of the noun in the direct object position (i.e. the Theme of the construction). It has been shown, in fact, that object animacy may play a crucial role in the alternation between standard and substandard constructions including two-argument predicates (cf., for instance, its role in the alternation between canonical and non-canonical marking of the second argument of the predicate, in the languages of Europe, including Romance varieties: see Romagno 2005, Romagno 2006, Romagno 2007, among others).⁴ Moreover, as already discussed in §1, we adopt a constructionist perspective, in which the predicate and its argument structure are considered as a whole. We hypothesize that the interaction between the main verb and the fillers of the general construction may affect acceptability and, consequently, productivity. Hence, instead of analysing the verb in isolation, we considered the entire construction (i.e. the caused motion construction with CMVs) and analysed the verb together with the crucial properties of its core arguments (with a special attention to the Theme,

for the reasons explained above). In addition, no study – to the best of our knowledge – has ever addressed the phenomenon by integrating a Construction Grammar approach with sociolinguistic methods and perspective.

The present study aims at filling a gap in the literature and at contributing to the ever-growing debate with reliable quantitative data. We devised a pilot study on the ongoing standardization of CMV_{caus} which integrates a constructionist approach to language creativity with a sociolinguistic perspective. The study comprises two Experiments in the forms of acceptability ratings tasks on a Likert scale (1 to 7). Experiment 1 addresses inherent characteristics of CMV_{caus} (such as the animacy of the referent of the noun – the Theme – in the direct object position) and the influence of the dialectal conceptual-linguistic space (in the form of dialectal competence and fluency) on acceptability. Experiment 2, instead, widens the scope, by considering similar constructions that also occur with CMV in the multi-dimensional conceptual space: Intransitive Motion (henceforth: **CMV_{intr}**) and Transitive Motion (henceforth: **CMV_{tran}**) constructions. We provide a synoptic interpretation of the results from the two experiments.

4. Materials and methods

4.1. Datasets

To investigate the different uses of CMVs, three datasets were designed by the two authors jointly. The first dataset includes sentences displaying CMV_{caus} instances (e.g. *Gianni ha entrato la macchina in garage* ‘Gianni entered the car in the garage’); the second one includes CMV_{intr} instances (e.g. *La cliente è entrata nel negozio* ‘the customer entered [in] the store’), and the third one includes the standard CMV_{tran} non-causative use of the verbs *salire* and *scendere* (e.g. *Anna ha salito le scale di fretta* ‘Anna climbed the stairs in a hurry’). We will describe each dataset more in detail.

Dataset 1 includes 80 causative sentences with our four CMVs (20 stimuli per verb). Within each verb category, 10 stimuli were devised with an ANIMATE Theme, and 10 with an INANIMATE Theme. The group of animate direct object stimuli was further balanced for referent type: 5 Themes refer to humans (e.g. *la zia*, ‘the aunt’), and 5 to animals (e.g. *il gatto*, ‘the cat’).

All 80 stimuli share the same morphosyntactic template (simple sentence, 3rd person singular subject, auxiliary plus past participle). To

reduce extraneous variation as much as possible, stimuli within each antonymic pair (*entrare/uscire; salire/scendere*) only differ in their main verb, keeping all other words identical, as it can be seen in Table 1 below. Two distractors (transitive causative constructions with the verbs *correre* ‘to run’ and *camminare* ‘to walk’) were also included to dissimulate the aim of the experiment. The distractors were chosen of dubious acceptability in line with the rest of the stimuli.⁵ In total, 40 filler sentences were devised, with identical structure to the target stimuli. The structure of the dataset is outlined in Table 1 below, with some examples.

DATASET 1		
CMVs	ANIMATE	INANIMATE
ENTRARE	<i>Alessandro ha entrato il cane in casa</i> (‘Alessandro entered the dog home’)	<i>Gianni ha entrato la macchina in garage</i> (‘Gianni entered the car in the garage’)
USCIRE	<i>Alessandro ha uscito il cane da casa</i> (‘Alessandro exited the dog from home’)	<i>Gianni ha uscito la macchina dal garage</i> (‘Gianni exited the car from the garage’)
SALIRE	<i>Gianluca ha salito l’amico sul taxi</i> (‘Gianluca climbed his friend on a taxi’)	<i>Gianluca ha sceso l’amico dal taxi</i> (‘Gianluca descended his friend from the taxi’)
SCENDERE	<i>Giovanni ha sceso la zia dalla mansarda</i> (‘Giovanni descended his aunt from the attic’)	<i>Anna ha sceso le borse della spesa da casa</i> (‘Anna descended the shopping bags from home’)
Distr-CORRERE	<i>Emanuela ha corso il figlio a scuola</i> (‘Emanuela ran her son to school’)	<i>Elena ha corso il fidanzato in stazione</i> (‘Elena ran her boyfriend to the station’)
Distr-CAMMINARE	<i>Emanuela ha camminato il figlio a scuola</i> (‘Emanuela walked her son to school’)	<i>Elena ha camminato il fidanzato in stazione</i> (‘Elena walked her boyfriend to the station’)

Table 1. Outline of Dataset 1.

Dataset 2 includes 40 stimuli of standard CMVintr (10 per verb). For this and the following dataset, all stimuli were collected not from native intuition but from the large corpus of contemporary Italian

ItWac (Baroni *et al.* 2009) and adapted to fit the experimental design. As for the stimuli in Dataset 1, all sentences share the same structure; within each pair (*entrare/uscire* and *scendere/salire*), sentences only differ in the main verb, to avoid all extraneous variation and rule out possible confounds. Given that this dataset is composed of instances of prototypically standard intransitive constructions, the Theme corresponds to the sole argument of the verbs (in the subject position), which also has the semantic role of Agent. Consequently, the degree of animacy of the Theme was not manipulated in this dataset. Notably, the argument corresponding to the subject of the motion verbs of the type investigated here typically has a double semantic role (Actor and Undergoer: cf. Van Valin & La Polla 1997), as it typically refers to an agentive entity that undergoes a change of location. The structure of the dataset is reported in Table 2 below, with some examples.

DATASET 2	
CMVs	STIMULI
ENTRARE	<i>La cliente è entrata nel negozio</i> (‘The customer entered [in] the store’)
USCIRE	<i>La cliente è uscita dal negozio</i> (‘The customer exited [from] the store’)
SALIRE	<i>Anna è salita sul treno</i> (‘Anna climbed on the train’)
SCENDERE	<i>Anna è scesa dal treno</i> (‘Anna descended from the train’)

Table 2. Outline of Dataset 2.

Dataset 3 includes 20 stimuli of CMVtran uses of the verbs *salire* and *scendere* (10 per verb). As for the previous dataset, all sentences were selected from *ItWac* and construed as having the same structure, differing only for the main verb. The 20 sentences were submitted to speakers together with other 20 distractor sentences of the same structure, with the verbs *camminare* ‘to walk’ and *correre* ‘to run’. In this case as well, distractors were chosen with similar acceptability to the focus stimuli. The structure of the dataset is reported in Table 3 below.

DATASET 3	
CMVs	STIMULI
SALIRE	<i>Anna ha salito le scale di fretta</i> (‘Anna climbed the stairs in a hurry’)
SCENDERE	<i>Anna ha sceso le scale di fretta</i> (‘Anna climbed down the stairs in a hurry’)
CAMMINARE	<i>Martina ha camminato il sentiero nel bosco</i> (‘Martina walked the path in the woods’)
CORRERE	<i>Martina ha corso il sentiero nel bosco</i> (‘Martina ran the path in the woods’)

Table 3. Outline of Dataset 3.

4.2. Data collection

The three datasets were used in two different acceptability rating tasks (Experiment 1 and Experiment 2), rated by two different groups of native Italian speakers. While Experiment 1 focuses on CMV_{caus}, Experiment 2 compares results from atypical constructions with results from sets of perfectly grammatical and acceptable stimuli (CMV_{intr} and CMV_{tran}).

4.2.1. Experiment 1

Dataset 1 was submitted to 118 Italian native speakers between 18 and 25 years of age (mean: 21, st. dev.: 1.7). Given the conspicuous number of stimuli, the dataset was divided in two subsets (60 stimuli per subset), and presented in randomized order to two groups of subjects: the first group was presented with all the stimuli for the verbs *entrare* ‘to enter’ and *scendere* ‘to go down’, and the second group with *salire* ‘to go up’ and *uscire* ‘to exit’. This was to avoid any confound due to both the influence of each member of the two antonymic pairs on the processing of the other, that is of *salire* ‘to go up’ on the processing of *scendere* ‘to go down’, and of *entrare* ‘to enter’ on the processing of *uscire* ‘to exit’, and the influence of the directional component of the motion events, that might lead – at least in a prototypical and pragmatically less marked configuration – to an association of *entrare* ‘to enter’ with *salire* ‘to go up’, and of *uscire* ‘to exit’ with *scendere* ‘to go down’. All distractors were presented to both groups.

58 subjects participated in subset 1, and 60 in subset 2. All participants were native speakers of Italian, born and raised in Italy. Both groups are controlled for level of education: all participants were in their first or second year at the University of Pisa or at the University of Bologna. These two universities were chosen as they notoriously attract students

from all over the country, for both their good reputation and their central position. This choice ensured a balanced data collection, with similar numbers of participants from North, Centre and South of Italy. The choice of a young age group is also theoretically motivated, as extensive sociolinguistic literature has shown that younger generations are generally responsible for language change (Eckert 2017). Moreover, by testing first or second year students, we strive to exclude possible interferences with other dialects or regional Italians (e.g. from roommates and friends). It is worth specifying that we decided to exclude the variable of education in this pilot study and consider only young and educated speakers. The idea was to explore the ongoing standardization of the (substandard) constructions under investigation by starting from highly educated people (i.e. highly competent and fluent in standard Italian); if our results hold to be true for highly educated people, a possible follow up will be considering the contrast between different levels of education and, therefore, exploring the use of these constructions by less educated participants.

In both subsets of Experiment 1, stimuli were presented on a Google Form. Before the test, participants were asked for their age, gender (M, F, other) and Italian region of origin, defined as the region where they grew up and attended primary and/or middle school, regardless from where they were born. After the test (in order not to influence their responses), they were presented with a written sociolinguistic questionnaire to self-assess their knowledge of the primary dialect and level of diglossia. Passive competence was evaluated with the question *Quanto capisci il dialetto delle tue zone?* ('How much do you understand of your local dialect?'). Fluency in the primary dialect was assessed with the question *Quanto parli a casa o con gli amici il dialetto delle tue zone?* ('How do you use your local dialect in speaking with family or friends?'). For both questions, 5 options were given: 'native (I understand/speak my dialect perfectly/all the times)', 'proficient (I understand/speak my dialect well/very often)', 'medium user (I understand/speak my dialect with some uncertainties)', 'low-competence user (I understand/use only some words or phrases)', 'no competence (I do not understand/speak my dialect)'.

4.2.2. Experiment 2

In Experiment 2, Datasets 2 and 3 were presented to 60 native speakers of different ages (mean: 30.7, st. dev.: 4.2). Since the aim of this second experiment was to independently test the standard constructions with CMVs (both transitive and intransitive), participants were only presented with the initial sociolinguistic questionnaire (gender, age, origin). For the same reason, we did not restrict our sample to university students, but included a

wider age range, still controlling for level of education (all participants held an Italian university degree or were enrolled in an Italian university).

4.3. Data cleaning

Before conducting the analysis, we performed some preliminary data cleaning on geographical categorization. The regions listed by participants (sixteen out of twenty Italian regions) were grouped into three macro-categories of North, Centre and South. In doing so, we followed geographical and sociolinguistic criteria as follows (Ascoli 1885; Dardano & Trifone 1985).

- North: Piedmont, Lombardy, Veneto, Emilia-Romagna, Liguria;
- Centre: Tuscany, Umbria, Marches, Lazio;
- South: Abruzzo, Basilicata, Campania, Apulia, Calabria, Sicily, Sardinia.

After careful exploration of the dataset of Experiment 1, the data of 6 participants were excluded from subsequent analyses, as the participants clearly answered the online survey with bias or as a joke (e.g. ratings all 1 or all 7, sociolinguistic questionnaire either not filled or filled with fictitious information such as indicating ‘the moon’ as region of provenience). Data from the remaining 112 participants was analysed.

5. Analyses and results

5.1. Experiment 1

Our research hypotheses on CMV_{caus} are the following: (1) speakers of a regional variety that presents such structures will be more ‘tolerant’ in judging the use of them in (standard) Italian, since their high-dimensional conceptual space already includes acceptable CMV_{caus}; (2) the animacy of the referent of the noun in the direct object position (i.e. the Theme argument) may affect acceptability.

Particularly, we answer three main research questions: (1) Does geographical origin affect acceptability of these structures? (2) Do dialectal competence and fluency have any influence on acceptability? (3) Does the animacy of the Theme influence acceptability, and how?

Descriptive statistics (Table 4) and data visualization (Figure 3) suggest that participants from southern regions rated CMV_{caus} construc-

tions as more acceptable than participants from central and northern regions – although with high internal variability. This finding is in line with the results of the above-mentioned survey carried out by ALIQUOT (confront the similarities between maps in Figures 1 and 1b).

AREA	MEAN RATING	MEDIAN RATING	ST. DEVIATION
North	1.57	1	1.1
Centre	1.8	1	1.6
South	3.67	3	2.4

Table 4. Descriptive statistics of general ratings per geographical area.

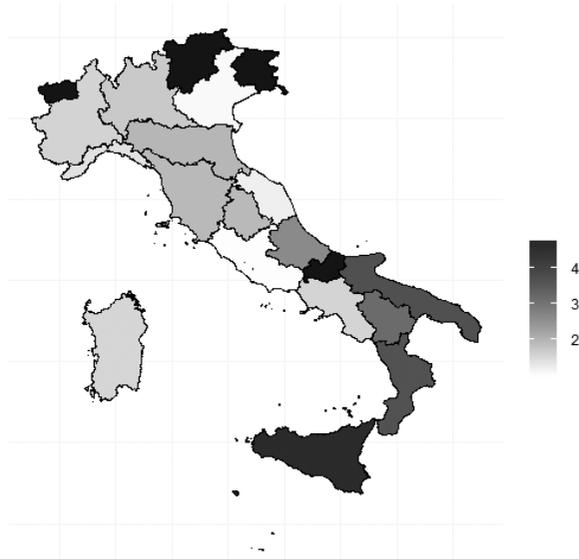


Figure 3. Ratings per Italian regions. Darker blue signals higher acceptability on the Likert scale (1 to 7).

If we investigate the distribution of ratings per single verb, further considerations can be added, as differences among areas – particularly of North and Centre with respect to the South – emerge (see Figure 4).⁶

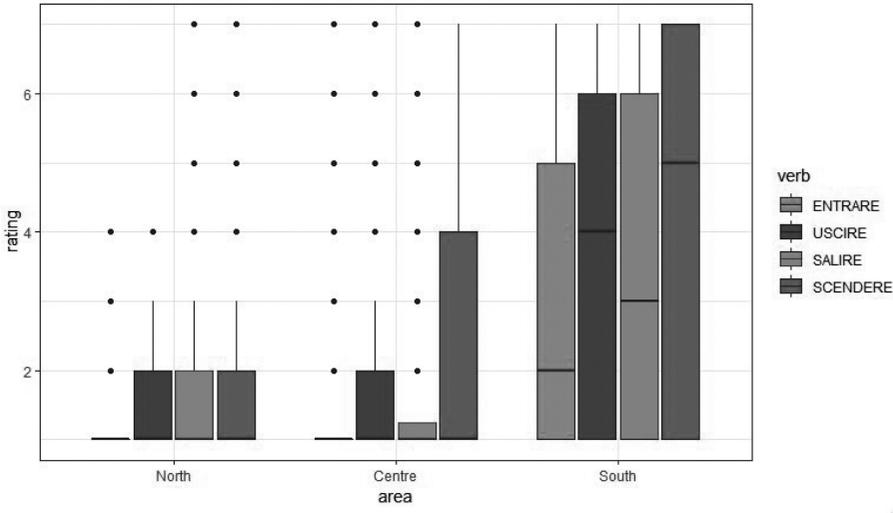


Figure 4. Ratings per each CMV in the three different geographical areas.

Northern speakers tend to generally assign extremely low ratings (although with many outliers). Participants from central Italy display a much more nuanced perception, and southern speakers – as expected – rate the transitive causative uses as highly acceptable. Overall, *scendere* (dark green) appears to be the most acceptable, followed by *uscire* (dark blue).

If we explore the data in light of our second research question, it is visible that speakers from the south globally rated CMVcaus structures higher than speakers from northern and central regions, independently of their dialectal competence and fluency (Figures 5a-b). Moreover, Table 5 helps understand the distribution of speakers across different levels of diglossia. Surprisingly, even with young speakers, the level of competence and fluency of primary dialects seems to be high, especially in the South. Hence, we cannot rule out *ex ante* that the higher acceptability of CMVcaus in the South may also be influenced by a widespread dialect ‘practice’ and by a more widespread interference of the two systems (dialect and regional Italian) with popular and standard Italian. If we look at the effect of object animacy, our second hypothesis is also confirmed by the data and, consequently, the answer to the third research question above is affirmative. As shown in Figure 6, object animacy appears to hinder the acceptability of CMVcaus.

COMPETENCE						
Area	None	Low	Intermediate	Proficient	Native	total
North	3	6	5	15	4	33
Centre	0	4	9	10	12	35
South	0	2	4	22	16	44

FLUENCY						
Area	None	Low	Intermediate	Proficient	Native	total
North	6	13	5	2	7	33
Centre	5	13	4	4	9	35
South	2	9	0	6	27	44

Table 5. Distribution of speakers' competence and fluency per geographical zone.

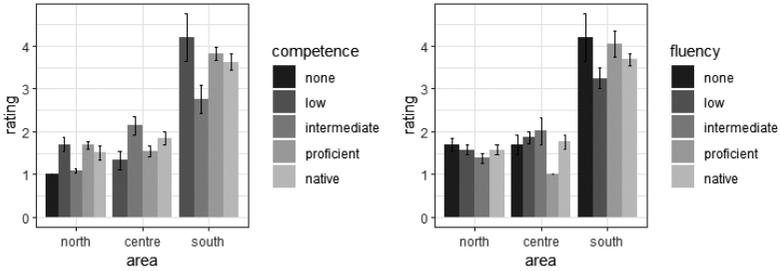


Figure 5. Relationship between acceptability ratings, geographical origin, and dialectal competence (5a) and fluency (5b).

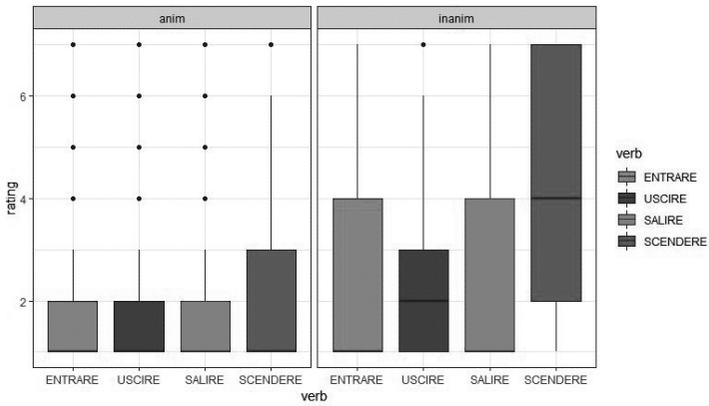


Figure 6. Ratings for both ANIMATE and INANIMATE contexts in all CMVs.

To statistically assess the relevance of the distinct factors, we used linear mixed effect models, a state-of-the-art statistical technique for the analysis of linguistic data (Winter 2020). To avoid effects of multicollinearity, two models were implemented. The structure for both models was selected using Likelihood Ratio Tests as implemented by the R package *afex* (Singmann *et al.* 2018). Subject and experimental items random intercepts are used as random structure. R2 values are computed with the R package *SjPlot*.

The first model investigates the effect of geographical origin and of the interaction between animacy and CMV type. Contrasts of the predictors were sum coded. Fixed effects estimates are reported in Table 6 below.

<i>PREDICTORS</i>	<i>ESTIMATES</i>	<i>CI</i>	<i>P</i>
SOUTH	3.7***	3.40 – 4.03	< 0.001
CENTRE	-1.9***	-2.36 – -1.48	< 0.001
NORTH	-2.1***	-2.59 – -1.70	< 0.001
Inanimate obj.	0.5***	0.37 – 0.57	< 0.001
Uscire	-0.15	-0.40 – 0.11	0.264
Entrare	-0.4**	-0.66 – -0.15	< 0.005
Salire	-0.0	-0.26 – 0.25	0.978
Scendere	0.5***	0.31 – 0.81	< 0.001
Uscire inanimate	-0.2*	-0.43 – -0.04	< 0.05
Entrare inanimate	-0.03	-0.23 – 0.16	0.728
Salire inanimate	-0.15	-0.34 – 0.05	0.142
Scendere inanimate	0.4***	0.22 – 0.61	< 0.001
Uscire animate	0.2*	0.04 – -0.43	< 0.05
Entrare animate	0.03	0.16 – 0.23	0.728
Salire animate	0.15	0.07 – 0.29	0.246
Scendere animate	-0.4***	-0.61 – -0.22	< 0.001
Marginal R ² / Conditional R ²	0.305 / 0.514		

Table 6. Fixed effects of model 1.

The model confirms that southern speakers rate transitive causative CMVs as significantly more acceptable (3.7 Likert points above average). Central and northern speakers instead rate them as significantly less acceptable (respectively 1.9 and 2.1 Likert points below average). Overall, the trend already displayed by the raw data is confirmed, finding *scendere* and *entrare* respectively the most and least acceptable.

Animacy is also singled out as a significant factor, both *per se* and in interaction. In fact, the acceptability of different CMVs is affected by animacy effects: *scendere* is significantly more acceptable than average with inanimate objects, whereas its acceptability is hindered by an animate theme. *Uscire* displays an inverse behaviour.⁷ This finding could partially be explained with the role of pragmatic factors and of frequency effects. In fact, some stimuli contain expressions of a higher type frequency (such as *uscire il cane* ‘to exit the dog’). The expression has emerged as a common collocation since the early 2000s, as the Google ngram visualization in Figure 7 reveals (as of 13 February 2021).

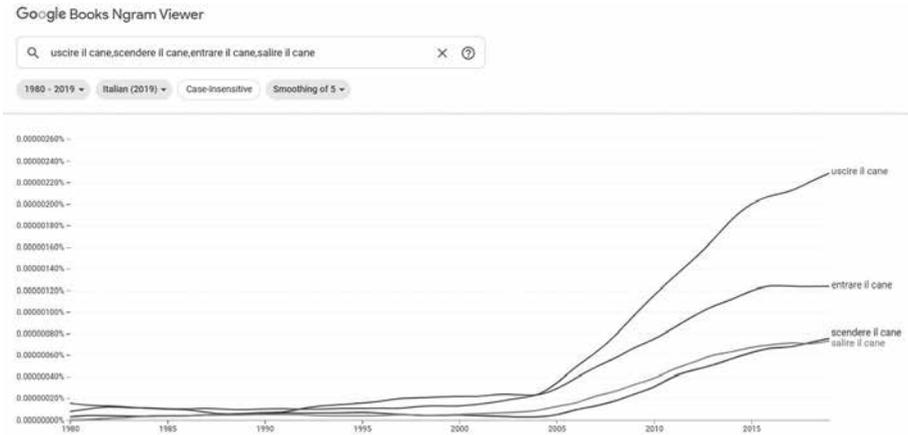


Figure 7. Google Ngram view of the multi-words expressions *uscire/entrare/scendere/salire il cane* (‘exit/enter/descend/climb the dog’).

To check whether this common collocation affected the data, we re-run the analysis after removing the stimulus in question. The results remained unchanged, corroborating our hypotheses. Figure 8 graphically displays the model estimates.

Caused Motion constructions between standard and substandard

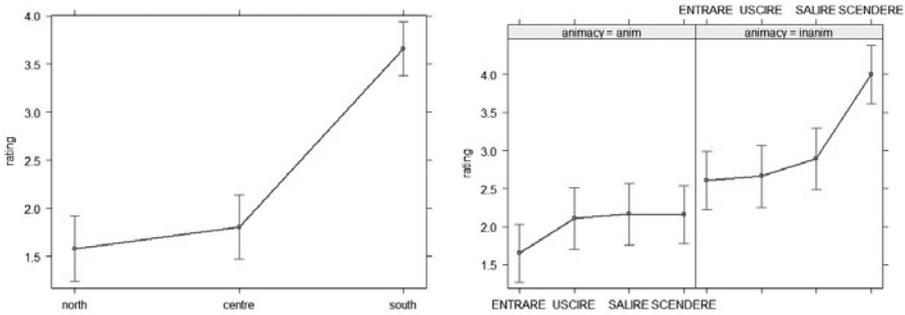


Figure 8. Estimates of model 1 fixed effects.

Having ascertained that both geographical origin and object animacy influence the acceptability of CMVcaus, we turn to investigate the effect of competence and fluency of primary dialects. That is we test whether and how the degree of diglossia influences acceptability: Table 7 confirms that the degree of diglossia (measured by competence and fluency) and the geographical origin are positively correlated. In conclusion, southern speakers tend to show a higher level of diglossia.

PEARSON CORRELATIONS				
		Pearson's r	p	
competence	-	fluency	0.508	< .001
competence	-	area	0.261	< .001
fluency	-	area	0.385	< .001

Table 7. Pearson's correlation among area, competence and fluency.

However, we wanted to test the effect of diglossia independently of the geographical origin, to see whether these two variables have an effect of their own. To do so, we conducted a second linear mixed model analysis, including fluency and competence as predictors. To control for geographical variation, we include the variable of 'region' in the random effect structure. Model selection via LRT finds the predictor of competence not significant ($\text{chisq} = 1.63, p > .5$): hence, we exclude it from further analyses. The remaining predictor of fluency is sum coded, that is mean ratings for a given level of the predicate are compared to the overall mean over all levels (the intercept).

PREDICTORS	ESTIMATES	CI	P VALUE
(Intercept)	2.46	1.80 – 3.12	<0.001
No fluency	0.10	-0.38 – 0.58	0.682
Low fluency	-0.20	-0.50 – 0.11	0.211
Intermediate fluency	-0.22	-0.82 – 0.38	0.465
Proficient fluency	0.54*	-0.03 – 1.11	0.05
Native fluency	-0.22	-0.54 – 0.10	0.184
Marginal R ² / Conditional R ²	0.060 / 0.520		

Table 8. Fixed effects of the second model $ratings \sim fluency + (1|subject) + (1|items) + (1|region)$.

Results show that caused motion constructions are significantly more acceptable for proficient dialect speakers (0.5 points above average). This may indicate that the actual use of a given construction and, consequently, its degree of frequency, plays a role in the phenomenon (Bybee 2006; Diessel & Hilpert 2016). Interestingly, native fluency did not yield a significant effect. Figure 9 reports the estimates of the model.

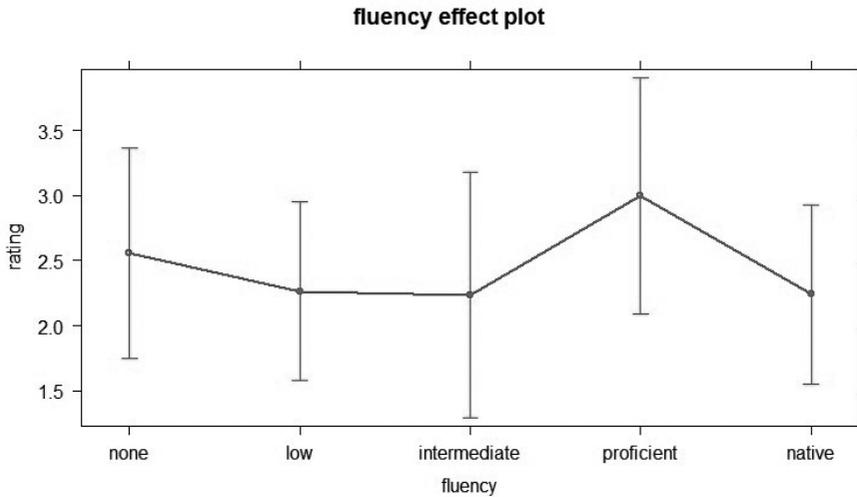


Figure 9. Effect plots of the second model.

These findings allow us to draw a tentative picture of the diffusion of CMV_{caus} from southern dialects to regional and then (sub)standard Italian. Proficient diglot speakers mix dialect and regional Italian. The constant convergence of the two systems leads to an extension of regional uses to more standard contexts. A significant effect of dialect is not in evidence for (self-assessed) native dialectal speakers. This finding aligns with current literature on dialect/Italian interference, which suggests that perfectly diglot speakers refrain from using dialectally marked forms in standard Italian (Amenta 2008; Benincà & Poletto 2006; Iacobini 2009).

To sum up, the gradual diffusion via the lexicalization of CMV_{caus} is ascribable to an intertwining of cognitive and sociolinguistic phenomena. The progressive re-emergence of features of popular Italian combines with linguistic criteria such as compatibility and coverage, and is hindered by the mainly sociolinguistic constraint of statistical preemption.

5.2. Experiment 2

Experiment 1 globally confirms our initial hypotheses on the usage and acceptability of CMV_{caus}: this construction has entered substandard Italian from the code-mixing of proficient speakers of southern dialects. Moreover, animacy of the direct object affects acceptability. These findings – to the best of our knowledge – provide the first quantitative and rigorous analysis of the CMV_{caus} construction, and are highly informative by themselves. However, we have claimed that one of the plausible reasons of expansion of this construction is the sufficient coverage provided by two similar constructions which are found in standard Italian: Intransitive Motion and Transitive Motion constructions. Therefore, in Experiment 2 we investigate these prototypical uses, and compare them to the transitive causative one.

We present a second group of speakers (§2.2.2) with instances of CMV_{intr} and CMV_{tran} (stimuli from Datasets 2 and 3). It should be remembered that these constructions are perfectly acceptable and widely used in standard Italian. Figure 10 shows the distribution of ratings in both intransitive (in red) and transitive (in light blue) standard constructions.⁸ While all intransitive uses of the four verbs were unambiguously rated as perfectly acceptable, some surprising uncertainties remain on the acceptability of CMV_{tran} (*salire* ‘to climb’ and *scendere* ‘to descend’).

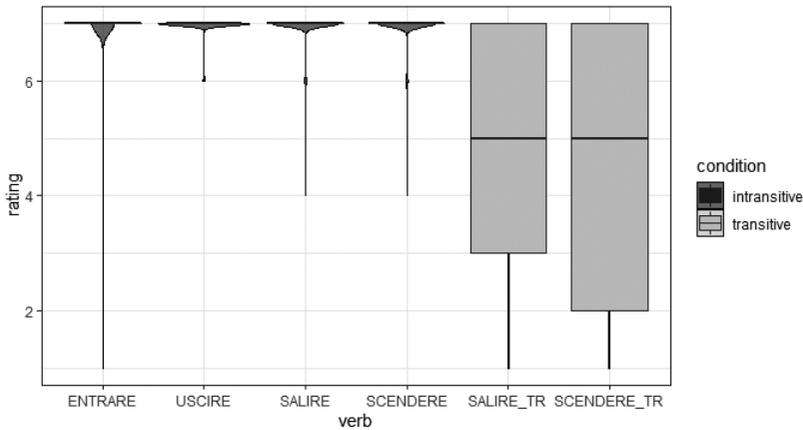


Figure 10. Distribution of ratings in the two grammatical conditions: intransitive and transitive.

We model the data using linear mixed effect modelling, following the procedure illustrated above. Results from the first experiment showed that CMVcaus are more acceptable for speakers of the southern regions. Hence, building on these findings we fit construction type (transitive vs intransitive) and geographical origin as predictors, in interaction term, and random intercepts for subject and experimental items. Since intransitive uses are uniformly rated as perfectly acceptable (mean: 7, st. dev.: 0), this level was used as the intercept. The factor of geographical origin was sum coded. Table 8 reports estimates for fixed effects.

<i>PREDICTORS</i>	<i>ESTIMATES</i>	<i>CI</i>	<i>P</i>
Intransitive	5.8***	5.60 – 5.98	< 0.001
Transitive	-2.3***	-2.61 – -2.00	< 0.001
Intransitive North	0.03	-0.14 – 0.21	0.697
Intransitive Centre	0.02	-0.14 – 0.18	0.811
Intransitive South	-0.05	-0.22 – 0.12	0.531
Transitive North	-0.09	-0.20 – 0.02	0.116
Transitive Centre	-0.1**	-0.24 – -0.03	0.01
Transitive South	0.2***	0.11 – 0.33	< 0.001
Marginal R ² / Conditional R ²	0.414 / 0.585		

Table 8. Fixed effects of the first model rating ~ condition * geographical origin + (1|subjects) + (1|items).

The statistical analysis confirms that transitive – yet standard – uses of CMVs are perceived as less acceptable than standard intransitive uses (2.3 points below intransitive use).⁹ The predictor of geographical origin does not influence intransitive CMVs’ acceptability, whereas transitive constructions are rated as more acceptable in the South (0.2 points below average) and – somehow surprisingly – significantly less in the Centre (0.1 points below average). We cautiously interpret this result as a sign of hypercorrection. The usage of CMVcaus is growing across Italy, starting from proficient diglot speakers of southern dialects, but statistical preemption and sociolinguistic stigma still characterize these structures as highly marked, and frowned upon by linguistic prescriptivism. Additionally, CMVcaus do not belong to the norm of the primary dialect of the Italian central regions. Hence, speakers may be biased against – or uncertain about the status of – non-causative transitive uses (*salire le scale*, ‘to climb the stairs’), even though they are perfectly regular in contemporary standard Italian. Figure 11 plots the effects of the statistical model.

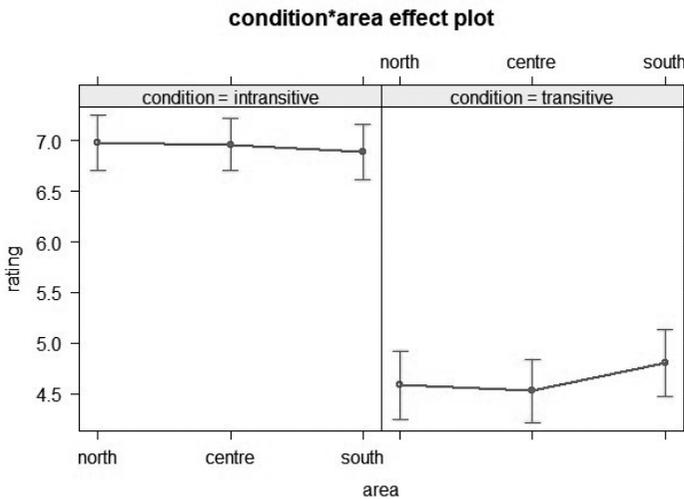


Figure 11. Effect plots of model 1 for intransitive (left) and transitive (right) CMVs.

5.3. A comparison between Experiment 1 and 2

To assess the status of CMVcaus with respect to the other two constructions, we compared results from Experiment 1 and 2. Preliminary visual exploration on the acceptability of the three constructions (Figure 12) reveals the intermediate position of CMVtran, with high internal

variability, as the high standard deviations show. Moreover, the acceptability of three constructions significantly overlaps for *salire* and *scendere*, especially in the southern speakers group.

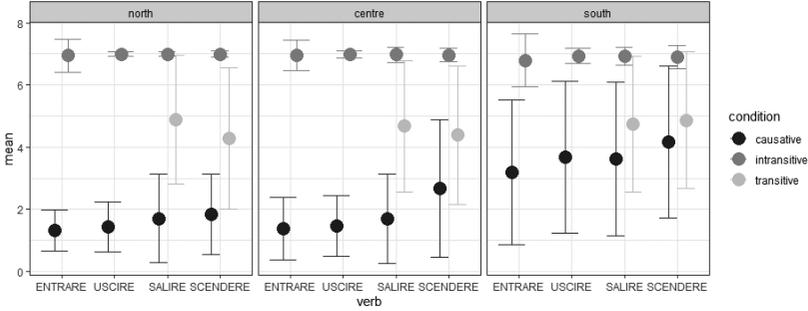


Figure 12. Interval plot showing the difference in ratings.

Ratings of the three constructions per geographical area were contrasted using two-way ANOVA. Significant differences are found for both construction ($F = 188.5, p < .0001$) and geographical area ($F = 6.5, p = .005$). A post-hoc Tukey HSD confirms that the three constructions are significantly different from each other in acceptability ($p < .0001$ per each comparison). Geographically, significant differences are found between South and the other two areas (South-Centre: $p < .05$, South-North: $p < .005$). Central and northern speakers do not show statistically significant differences in behaviour ($p > .5$). Figure 13 plots the effects of the ANOVA.

The unexpected intermediate status of the transitive construction with *salire* and *scendere* may tentatively suggest an interference in the process of standardization, which is at least consistent with the constructionist parameter of coverage (§2.3). The presence of this construction in the conceptual space appears to interfere with the lexicalization of the creative use of CMVcaus. Significantly, this uncertainty is present in all three areas, suggesting that even for speakers without a dialectal equivalent (or with no dialectal competence) the transitive motion construction could function as an anchor for the transitive causative usage.

However, whether this influence is top down (i.e. the standard and grammatical CMVtran construction ‘pulls’ CMVcaus into standardization) or bottom up (in which case the growing substandard use of CMVcaus would create hypercorrective uncertainties on the grammatical status of CMVtran) remains to be investigated.

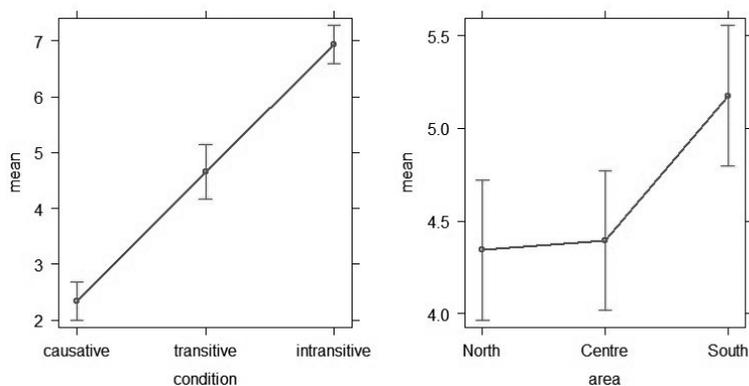


Figure 13. ANOVA effect plot.

6. Discussion

In the present paper, we have addressed – for the first time qualitatively and quantitatively – possible factors influencing the ongoing standardization of caused motion constructions with CMVs in contemporary Italian, by integrating a constructionist perspective with a sociolinguistic approach. In particular, we aimed at providing preliminary reliable evidence on the following hypotheses:

- i) sociolinguistic variables and, specifically, the diatopic dimension influence the distribution and the degree of acceptability of CMVcaus: we expected speakers of southern dialects and/or regional varieties to rate these constructions as more acceptable compared to speakers from the Centre and the North of Italy. We also expected acceptability to be affected by the degree of diglossia (measured by dialectal competence and fluency). In fact, the use of CMVs in different constructions may be related to diastratic or diaphasic variation. Moreover, speakers with higher dialectal fluency or competence will have a more entrenched dialectal conceptual space (Figure 1), which may enable the expansion of the construction.
- ii) Object properties play a role in either facilitating or hindering acceptability of creative uses. In particular, we investigated whether and how the animacy of the entity denoted by the noun in the direct object position (i.e. the Theme argument) affects the acceptability of the caused motion constructions.

Findings were in line with our research hypotheses and can be summarized as follows.

- i) Speakers from the southern regions of Italy considered these structures more acceptable than speakers from central and northern regions. In particular, speakers of varieties in which CMV_{caus} belong to the norm perceived them as more ‘natural’ in standard Italian as well. In addition, while investigating the effects of diglossia, we observed that only dialectal fluency significantly influenced acceptability, whereas the effect of competence is not in evidence in the present study. Proficient but not native diglot speakers globally rated CMV_{caus} constructions as more acceptable. This is in line with current literature on the role of non-perfectly diglot speakers in extending dialectal structures to (sub)standard Italian. It also confirms that speakers with more intertwining multidimensional conceptual spaces tend to contribute to the productivity of creative forms.
 - ii) Object animacy affects the degree of acceptability of caused motion constructions. In particular, CMV_{caus} with inanimate direct objects (e.g. *salire i bagagli sul treno*, lit. ‘to climb the luggage on the train’) are rated as more acceptable overall, with the exception of the verb *uscire* ‘to exit’. This verb was, instead, rated as more acceptable when combined with an animate direct object. For this case, we posit that pragmatic factors and, consequently, the higher frequency of exemplar expressions such as *uscire il cane* ‘to take the dog out’ (lit. ‘to exit the dog’) might play a role.
 - iii) Findings from experiment 2 showed differences in the acceptability of CMV_{tran} (e.g. *salire le scale* ‘to climb the stairs’) depending on diatopic variables: albeit perfectly standard, these constructions are rated as less acceptable by speakers from the Centre of Italy, compared to other areas. We cautiously interpret this result as an epiphenomenon of a tendency to hypercorrection proper of speakers of regions whose dialectal varieties lack CMV_{caus} constructions. Northern speakers could not be affected by hypercorrection, because of the resurface of some southern Italian features in regional Italians. It has been observed, in fact, that this phenomenon depends on the massive internal migration South-North, started in the Fifties and Sixties, which caused interference and attrition between linguistic systems, especially for second and third generation speakers (Pautasso 1969; Boario 2008; Cerruti 2011).
 - iv) Finally, when comparing results of the two experiments, it appears that both *salire* and *scendere* display more similar ratings across conditions, with CMV_{tran} overlapping with both CMV_{intr} and CMV_{caus} constructions. This finding suggests an interference across the three construction in the ongoing process of standardization, and corroborates our hypothesis that the Transitive Motion construction could be providing sufficient coverage to CMV_{caus} to expand into the lower registers of standard language.
- In sum, the present study strives to integrate a Cognitive Construction Grammar perspective with a sociolinguistic investigation of the ongoing

standardization of CMV_{caus} structures. Particularly, we considered the different argument structure realizations of the four verbs as different linguistic units, and investigate them as such. Our initial hypotheses appear to be corroborated by the results of this pilot study. Caused motion constructions including CMVs – albeit still non-standard and highly marked – are undergoing an uneven process of standardization, brought forward by proficient southern diglot speakers. Acceptability is not uniform across the verbs. *Entrare* ‘to enter’ is overall the least acceptable, while *scendere* ‘to go down’ is the most acceptable with inanimate objects, and *uscire* ‘to exit’ with animate objects. Moreover, the acceptability of both *salire* ‘to go up’ and *scendere* ‘to go down’ in caused motion constructions is influenced by their transitive use in the standard language. It is possible that CMV_{tran} constructions provide the coverage needed for CMV_{caus} to expand to colloquial registers of standard Italian. Beside the sociolinguistic stigma, partial productivity could also be explained by statistical preemption.

Further research is needed to fully clarify the phenomenon. Here, we aimed at showing how combining the Cognitive Linguistics and Construction Grammar approach with sociolinguistic perspective and methods may provide a useful tool to investigate phenomena at the interface between semantics and syntax.

Abbreviations

CMV = Configurational Motion Verb

CMV_{caus} = Caused Motion Constructions with CMV as main verb

CMV_{intr} = Intransitive Motion Constructions with CMV as main verb

CMV_{tran} = Transitive Motion Constructions with CMV as main verb

SF = Satellite-Framed

VF = Verb-Framed

Acknowledgements

This study is part of the project ‘NeuroCoG’, funded by *Fondazione Cassa di Risparmio di Lucca* – Program: *Ricerca Scientifica e Tecnologica*, P.I.: Professor Domenica Romagno.

The authors thank the participants in the experiments reported here: without them, the present study would not have been possible. We also thank Dr. Roberta Combei, who kindly circulated the test among her students at *Università degli Studi di Bologna*.

Special thanks go to two anonymous reviewers, whose comments significantly contributed to improving the manuscript.

Notes

¹ This typology has also been extended to comprise a third class of ‘E(quipollently)-framed languages’ (Slobin 2004; Slobin & Hoiting 1994, Zlatev & Yangklang 2004), which is not included in the scope of the present paper.

² All the following examples come from our dataset (§4.1), unless differently specified.

³ Data come from an ongoing investigation conducted by D. Romagno in the area of Cosenza and specifically focusing on the varieties spoken in Rende, Rogliano and Santo Stefano di Rogliano.

⁴ For further data on the crucial role of animacy in grammar, discourse and cognition, see Dahl & Fraurud 1996; Bresnan & Hay 2008; Vihman & Nelson 2019, among many others.

⁵ In Italian *correre* and *camminare* are typically not grammatical in transitive constructions, differently from English.

⁶ Boxplots are statistical graphical representations of groups of numerical data through their quartiles. The ‘box’ depicts the second and third quartiles, divided by the median line (the black line). The lines that extend from the boxes (called whiskers) indicate the variability outside the upper and lower quartiles. The individual black points represent outliers.

⁷ As one anonymous reviewer correctly points out, results may be affected by the particular stimuli that were devised for the present study. However, the use of mixed effect modelling with a random intercept for experimental stimuli should statistically compensate for the inevitable particularity of each study.

⁸ Violin plots are similar to boxplots, but they also display the density distribution of the data.

⁹ An anonymous reviewer observed that, as a speaker of Central Italian, their impression is that transitive uses of *salire* and *scendere* are more acceptable in simple tenses than in compound tenses. We thank the reviewer for this very interesting observation, that we reserve for future research on the topic.

Bibliographical References

- Alonge, Antonietta 1997. Semantica lessicale e proprietà sintattiche dei verbi di movimento italiani: analisi di dati acquisiti da dizionari di macchina e da un corpus testuale computerizzato. *Atti del III convegno della società internazionale di linguistica e filologia italiana*. 31-63.
- Alfonzetti, Giovanna 2002. *La relativa non-standard: italiano popolare o italiano parlato?* Palermo: Centro di Studi Filologici e Linguistici Siciliani.
- Ambridge, Ben; Barak, Libby; Wonnacott, Elizabeth; Bannard, Colin; Sala, Giovanni; Zwaan, Rolf & Ferreira, Fernanda 2018. Effects of both preemption and entrenchment in the retreat from verb overgeneralization errors: Four reanalyses, an extended replication, and a meta-analytic synthesis. *Collabra: Psychology* 4,1. Article 23.
- Amenta, Luisa 2008. Esistono verbi sintagmatici nel dialetto e nell’italiano regionale di Sicilia? In Cini, Monica (ed.), *I verbi sintagmatici in italiano e nelle varietà dialettali. Stato dell’arte e prospettive di ricerca*. Frankfurt am Main: Lang. 159-174.
- Ascoli, Graziadio I. 1885. L’Italia dialettale. *Archivio glottologico italiano* 8. 98-128.

- Baicchi, Annalisa 2015. *Construction Learning as a Complex Adaptive System: Psycholinguistic Evidence from L2 Learners of English*. New York: Springer International Publishing.
- Barlow, Michael & Kemmer, Suzanne 2000. *Usage-Based Models of Language*. Cambridge: Cambridge University Press.
- Baroni, Marco; Bernardini, Silvia; Ferraresi, Adriano & Zanchetta, Eros 2009. The WaCky wide web: a collection of very large linguistically processed web-crawled corpora. *Language Resources and Evaluation* 43,3. 209-226.
- Beavers, John; Levin, Beth & Tham, Shiao Wei 2010. The typology of motion expressions revisited. *Journal of Linguistics* 46,2. 331-377.
- Benincà, Paola & Poletto, Cecilia 2006. Phrasal verbs in Venetian and Regional Italian. In Hinskens, Frans (eds.), *Language variation: European perspectives*. Amsterdam: John Benjamins. 9-22.
- Bernini, Giuliano; Spreafico, Lorenzo & Valentini, Ada 2006. Acquiring motion verbs in a second language: The case of Italian L2. *Linguistica e Filologia* 23. 7-26.
- Berruto, Gaetano 1990. Semplificazione linguistica e varietà sub-standard. In Holtus, Gunther & Radtke, Edgar (eds.), *Sprachlicher Substandard III. Standard, Substandard und Varietätenlinguistik*. Tübingen: Niemeyer. 17-43.
- Berruto, Gaetano 2005. Dialect/standard convergence, mixing, and models of language contact: the case of Italy. In Auer, Peter; Hinskens, Frans & Kerwill, Paul (eds.), *Dialect change. Convergence and divergence in European languages*. Cambridge: Cambridge University Press. 81-97.
- Berruto, Gaetano 2007. Miserie e grandezze dello standard. Considerazioni sulla nozione di standard in linguistica e sociolinguistica. In Molinelli, Piera (ed.), *Standard e non standard tra scelta e norma. Atti del XXX convegno della Società Italiana di Glottologia*. Roma: Il Calamo. 13-41.
- Bertinetto, Pier Marco 1991. Il verbo. In Renzi, Lorenzo & Salvi, Giampaolo (eds.), *Grande Grammatica Italiana di Consultazione*, vol. 2. Bologna: Il Mulino. 13-161.
- Boario, Anna 2008. Community of practice e diffusione di un fenomeno alloctono a Torino trasmesso a parlanti immigrati non nativi. In Berruto, Gaetano; Brincat, Joseph; Caruana, Sandro & Andorno, Cecilia (eds.), *Lingua, cultura e cittadinanza in contesti migratori. Europa e area mediterranea*. Perugia: Guerra. 165-189.
- Boyd, Jeremy K. & Goldberg, Adele E. 2011. Learning what not to say: The role of statistical preemption and categorization in a-adjective production. *Language* 87. 55-83.
- Bresnan, Joan & Hay, Jennifer 2008. Gradient grammar: An effect of animacy on the syntax of give in New Zealand and American English. *Lingua* 118,2. 245-259.
- Busso, Lucia; Pannitto, Ludovica & Lenci, Alessandro 2018. Modelling Italian construction flexibility with distributional semantics: Are constructions enough? In Cabrio, Elena; Mazzei, Alessandro & Tamburini, Fabio (eds.), *Proceedings of the Fifth Italian Conference on Computational Linguistics (CLiC-it 2018)*. 68-74
- Busso, Lucia; Lenci, Alessandro & Perek, Florent 2020. Valency coercion in Italian: An exploratory study. *Constructions and Frames* 12,2. 171-205.

- Busso, Lucia; Perek, Florent & Lenci, Alessandro *forthcoming*. Constructional associations trump lexical associations in processing valency coercion. *Cognitive Linguistics*.
- Busso, Lucia 2021. Constructional creativity in a Romance language. *The Wealth and Breadth of Construction-Based Research. Belgian Journal of Linguistics* 34. 17-29
- Bybee, Joan 2006. From Usage to Grammar: The Mind's Response to Repetition. *Language* 82,4. 711-733.
- Cappelli, Giulia; Bertinetto, Pier Marco & Lenci, Alessandro 2019. On the argumenthood of optional PPs with Italian motion verbs. In Botinis, Antonis (ed.), *ExLing* 25. Athens: ExLing Society. 45-49.
- Cardinaletti, Anna & Giusti, Giuliana 2003. *Motion verbs as functional heads*. Oxford: Oxford University Press.
- Cardinaletti, Anna & Munaro, Nicola (eds.) 2009. *Italiano, italiani regionali e dialetti*. Milano: Franco Angeli.
- Cardini, Filippo-Enrico 2008. Manner of motion saliency: An inquiry into Italian. *Cognitive Linguistics* 19,4. 533-569.
- Cennamo, Michela 2015. Valency patterns in Italian. In Malchukov, Andrej & Comrie, Bernard (eds.), *Introducing the Framework, and Case Studies from Africa and Eurasia*. Berlin / Boston: De Gruyter Mouton. 417-482.
- Cennamo, Michela & Lenci, Alessandro 2019. Gradience in Subcategorization? Locative Phrases with Italian Verbs of Motion. *Studia Linguistica* 73,2. 369-397.
- Cerruti, Massimo 2011. Regional varieties of Italian in the linguistic repertoire. *International Journal of the Sociology of Language* 2011, issue 210. 9-28.
- Cerruti, Massimo & Regis, Riccardo 2005. 'Code switching' e teoria linguistica: la situazione italo-romanza. *Italian Journal of Linguistics* 17,1. 179-208.
- Cerruti, Massimo & Regis, Riccardo 2014. Standardization patterns and dialect/standard convergence: A northwestern Italian perspective. *Language in Society* 43,1. 83-111.
- Chomsky, Noam 1981. *Lectures on Government and Binding: The Pisa Lectures*. Berlin: De Gruyter.
- Clark, Eve V. & Clark, Herbert H. 1979. When Nouns Surface as Verbs. *Language* 55,4. 767-811.
- Coletti, Vittorio. See section *Non-academic publications* below.
- Cortelazzo, Michele & Mioni, Alberto (eds.) 1990. *L'italiano regionale*. Roma: Bulzoni.
- Coseriu, Eugenio 1980. 'Historische Sprache' und 'Dialekt'. In Göschel, Joachim; Pavle, Ivic & Kehr, Kurt (eds.), *Dialekt und Dialektologie*. Wiesbaden: Steiner. 106-122.
- Croft, William 2012. *Verbs: Aspect and Causal Structure*. Oxford: Oxford University Press.
- Croft, William; Barðdal, Jóhanna; Hollmann, Willem; Sotirova, Violeta & Taoka, Chiaki 2010. Revising Talmy's typological classification of complex event constructions. In Boas, Hans C. (ed.), *Constructional Approaches to Language 10*. Amsterdam: John Benjamins. 201-236.
- D'Achille, Paolo 2002. L'italiano regionale. In Cortelazzo, Manlio; Marcato, Carla; De Blasi, Nicola & Clivio, Gianrenzo P. (eds.), *I dialetti italiani. Storia, struttura, uso*. Torino: UTET. 26-42.

- Dahl, Osten & Fraurud, Kari 1996. Animacy in grammar and discourse. *Pragmatics and Beyond* 38. 47-64.
- Dardano, Maurizio & Trifone, Pietro 1985. *La lingua italiana*. Torino: Zanichelli.
- De Mauro, Tullio 2011. *Storia linguistica dell'Italia unita*. Roma: Laterza.
- Devoto-Oli 2014. See section *Dictionaries* below.
- Diessel, Holger & Hilpert, Martin 2016. Frequency Effects in Grammar. *Oxford Research Encyclopedia of Linguistics*. 1-30.
- Eckert, Penelope 2017. Age as a sociolinguistic variable. In Coulmas, Florian (ed.), *Handbook of sociolinguistics*. Oxford: Wiley-Blackwell. 151-167.
- Ellis, Nick C. 2006. Selective attention and transfer phenomena in SLA: Contingency, cue competition, saliency, interference, overshadowing, blocking, and perceptual learning. *Applied Linguistics* 27. 1-31.
- Ellis, Nick C. 2019. Essentials of a theory of language cognition. *The Modern Language Journal* 103. 39-60.
- Ellis, Nick C. & Larsen-Freeman, Diane 2009. Constructing a Second Language: Analyses and Computational Simulations of the Emergence of Linguistic Constructions from Usage. *Language Learning* 59. 90-125.
- Fillmore, Charles J. 1966. Deictic Categories in the Semantics of "Come". *Foundations of Language* 2. 219-27.
- Fillmore, Charles J. 1997. *Lectures on Deixis*. Cambridge: Cambridge University Press.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Goldberg, Adele E. 2006. *Constructions at Work*. Oxford: Oxford University Press.
- Goldberg, Adele E. 2019. *Explain Me This*. Princeton: Princeton University Press.
- Goschler, Juliana & Stefanowitsch, Anatol 2013. *Variation and Change in the Encoding of Motion Events*. Amsterdam: John Benjamins.
- Gramellini, Massimo. See section *Non-academic publications* below.
- GRADIT 2000. See section *Dictionaries* below.
- Hijazo-Gascón, Alberto 2017. Motion event contrasts in Romance languages: Deixis in Spanish as a second language. In Ibarretxe-Antuñano, Iraide (ed.) *Motion and Space across Languages, Human Cognitive Processing* 59. 301-328.
- Hijazo-Gascón, Alberto & Ibarretxe-Antuñano, Iraide 2013. Las Lenguas Románicas y la Tipología de los Eventos de Movimiento. *Romanische Forschungen* 125,4. 467-494.
- Hilpert, Martin 2014. *Construction Grammar and its Application to English*. Edinburgh: Edinburgh University Press.
- Iacobini, Claudio 2009. Phrasal verbs between syntax and lexicon. *Italian Journal of Linguistics* 21. 97-118.
- Iacobini, Claudio & Masini, Francesca 2009. I verbi sintagmatici dell'italiano fra innovazione e persistenza: il ruolo dei dialetti. In Cardinaletti, Anna & Munaro, Nicola (eds.), *Italiano, italiani regionali e dialetti*. Milano: Franco Angeli. 115-136.
- Iacobini, Claudio & Vergaro, Carla 2014. The role of inference in motion event encoding / decoding: A cross-linguistic inquiry into English and Italian. *Lingue e Linguaggio* 1. 211-240.
- Ibarretxe-Antuñano, Iraide 2009. Path saliency in motion events. In Gu, Jiansheng; Lieven, Elena; Budwig, Nancy; Ervin-Tripp, Susan; Nakamura,

- Keiko & Özçalışkan, Şeyda (eds.), *Crosslinguistic Approaches to the Psychology of Language: Research in the Tradition of Dan Isaac Slobin*. New York: Psychology Press. 403-414.
- Jackendoff, Ray 1983. *Semantics and Cognition*. Cambridge, MA: MIT Press.
- Kay, Paul 2005. Argument structure constructions and the argument-adjunct distinction. *Grammatical constructions: Back to the roots* 4. 71-98.
- Kortmann, Bernd (ed.) 2003. *The typology of motion and posture verbs: A variationist account*. New York: Mouton De Gruyter.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar: Theoretical prerequisites*. Stanford: Stanford University Press.
- Lauwers, Peter & Willems, Dominique 2011. Coercion: definition and challenges, current approaches, and new trends. *Linguistics* 49,6. 1219-1235.
- Levin, Beth 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Loporcaro, Michele 2009. *Profilo linguistico dei dialetti italiani*. Roma: Laterza.
- Lovestrand, Joseph 2021. Serial Verb Constructions. *Annual Review of Linguistics* 7,1. 109-130.
- Maiden, Martin 2014. *A Linguistic History of Italian*. London: Routledge.
- Maiden, Martin & Parry, Mair 2006. *The Dialects of Italy*. London: Routledge.
- Nagles, Letitia R. & Terrazas, Paula 1998. Motion-Verb Generalizations in English and Spanish: Influences of Language and Syntax. *Psychological Science* 9,5. 363-369.
- Olloqui-Redondo, Javier; Tenbrink, Thora & Foltz, Anouschka 2019. Effects of animacy and linguistic construction on the interpretation of spatial descriptions in English and Spanish. *Language and Cognition* 11,2. 256-284.
- Osherson, Daniel N.; Smith, Edward E.; Wilkie, Ormond; López, Alejandro *et al.* 1990. Category-based induction. *Psychological Review* 97,2. 185-200.
- Papafragou, Anna; Massey, Christine & Gleitman, Lila 2002. Shake, rattle, 'n roll: the representation of motion in language and cognition. *Cognition* 84,2. 189-219.
- Paoli, Matilde. See section *Non-academic publications* below.
- Pautasso, Mariella 1969. *Dialetto, lingua e integrazione linguistica a Pettinengo*. Torino: Giappichelli.
- Perek, Florent 2016. Using distributional semantics to study syntactic productivity in diachrony: A case study. *Linguistics* 54,1. 149-188.
- Perek, Florent & Hilpert, Martin 2014. Constructional tolerance: Cross-linguistic differences in the acceptability of non-conventional uses of constructions. *Constructions and Frames* 6,2. 266-304.
- Perek, Florent & Goldberg, Adele E. 2017. Linguistic generalization on the basis of function and constraints on the basis of statistical preemption. *Cognition* 168. 276-293.
- Rappaport-Hovav, Malka 1989. Unaccusativity and Verbs of Motion. *Selected papers on theoretical and applied linguistics* 2. 113-140.
- Ricca, Davide 1993. *I verbi deittici di movimento in Europa: una ricerca interlinguistica*. Firenze: La Nuova Italia.
- Romagno, Domenica 2005. La codificazione degli attanti nel Mediterraneo romanzo: accordo del participio e marcatura dell'oggetto. *Archivio Glottologico Italiano* 90. 90-113.

- Romagno, Domenica 2006. Gradiente di transitività e codifica dell'oggetto. Dall'accusativo preposizionale al partitivo. *Archivio Glottologico Italiano* 91,2. 203-222.
- Romagno, Domenica 2007. Canonical and non-canonical marking of core arguments in European languages. A typological approach. In Ramat, Paolo & Roma, Elisa (eds.), *Europe and the Mediterranean as linguistic areas. Convergencies from a historical and typological perspective*. Amsterdam / Philadelphia: John Benjamins. 289-315.
- Sabatini, Francesco 1985. 'L'italiano dell'uso medio': una realtà tra le varietà linguistiche italiane. In Holtus, Gunther & Radtke, Edgar (eds.), *Gesprochenes Italienisch in Geschichte und Gegenwart*. Tübingen: Narr. 154-184.
- Sansò, Andrea & Giacalone Ramat, Anna 2016. Deictic motion verbs as passive auxiliaries: the case of Italian *andare* 'go' and *venire* 'come'. *Transactions of the Philological Society* 114,1. 1-24.
- Silverstein, Michael 1976. Hierarchy of features and ergativity. In Dixon, R.M.W. (ed.), *Grammatical categories in Australian languages*. Canberra: Australian Institute of Aboriginal Studies. 112-171.
- Simone, Raffaele 2008. Verbi sintagmatici come categoria e come costruzione. In Cini, Monica (ed.), *I verbi sintagmatici in italiano e nelle varietà dialettali. Stato dell'arte e prospettive di ricerca*. Frankfurt-am-Main: Peter Lang. 11-30.
- Singmann, Henrik; Bolker, Ben; Westfall, Jake; Aust, Frederik; Ben-Shachar, Mattan S.; Højsgaard, Søren; Fox, John *et al.* 2018. *afex: Analysis of Factorial Experiments*. <CRAN.R-project.org/package=afex>.
- Slobin, Dan 1991. Learning to think for speaking: Native language, cognition, and rhetorical style. *Pragmatics* 1. 7-26.
- Slobin, Dan 1996. Two ways to travel: Verbs of motion in English and Spanish. In Shibatani, Masayoshi & Thompson, Sandra A. (eds.), *Grammatical Constructions. Their form and meaning*. Oxford: Clarendon Press. 195-317.
- Slobin, Dan 2004. The many ways to search for a frog: Linguistic typology and the expression of motion events. In Strömquist, Sven & Verhoeven, Ludo (eds.), *Relating events in narrative: Typological and contextual perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates. 219-257.
- Slobin, Dan & Hoiting, Nini 1994. Reference to movement in spoken and signed languages: Typological considerations. *Annual Meeting of the Berkeley Linguistics Society* 20,1. 487-505.
- Sobrero, Alberto 2003. Nell'era del post-italiano. *Italiano & Oltre* 5. 272-277.
- Spreafico, Lorenzo & Valentini, Ada 2010. Gli eventi di moto: strategie di lessicalizzazione nell'italiano di nativi e di non nativi (immigrati o in mobilità). *Segundas Lenguas e Inmigración en red* 3. 66-87.
- Suttle, Laura & Goldberg, Adele E. 2011. The partial productivity of constructions as induction. *Linguistics* 49,6. 1237-1269.
- Talmy, Leonard 1985. Lexicalization patterns: Semantic structure in lexical forms. In Shopen, Timothy (ed.), *Language typology and syntactic description* 3. Cambridge: Cambridge University Press. 36-149.
- Talmy, Leonard 2000. *Toward a cognitive semantics*. Vol. 2. Cambridge, MA: MIT Press.
- Tavoni, Mirko 2002. Caratteristiche dell'italiano contemporaneo e insegnamento della scrittura. In Bruni, Francesco & Raso, Tommaso (eds.), *Manuale*

Lucia Busso, Domenica Romagno

- dell'italiano professionale. *Teoria e didattica*. Bologna: Zanichelli. 139-152.
- Tesnière, Lucien 1959. *Éléments de syntaxe structurale*. Paris: Klincksieck.
- Torre, Enrico 2012. Symmetry and asymmetry in Italian caused-motion constructions. *Constructions* 1. 1-38.
- Van Valin, Robert 2005. *Exploring the Syntax-Semantics Interface*. Cambridge: Cambridge University Press.
- Van Valin, Robert & LaPolla, Randy J. 1997. *Syntax: Structure, Meaning, and Function*. Cambridge: Cambridge University Press.
- Vihman, Virve-Anneli & Nelson, Diane 2019. Effects of Animacy in Grammar and Cognition: Introduction to Special Issue. *Open Linguistics* 5,1. 260-267.
- Wierzbicka, Anna 1972. *Semantic Primitives*. Frankfurt: Athenäum.
- Winter, Bodo 2020. *Statistics for linguists: an introduction using R*. New York: Routledge.
- Yoon, Soyeon 2013. Correlation between semantic compatibility and frequency: A usage-based approach. *Linguistic Research* 30,2. 243-272.
- Yoon, Soyeon 2016. Gradable nature of semantic compatibility and coercion: A usage-based approach. *Linguistic Research* 33,1. 95-134.
- Zlatev, Jordan & Yangklang, Peerapat. A third way to travel. In Strömquist, Sven & Verhoeven, Ludo (eds.), *Relating events in narrative: Typological and contextual perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates. 191-218.

Dictionaries

- Devoto-Oli 2014 = Devoto, Giacomo & Oli, Gian Carlo 2013. *Il Devoto-Oli: Vocabolario della lingua italiana 2014*, a cura di Luca Serianni e Maurizio Trifone. Firenze: Le Monnier.
- GRADIT 2000 = De Mauro, Tullio (ed.). *Grande dizionario italiano dell'uso*. Torino: UTET.

Non-academic publications

- Coletti, Vittorio 15/3/2019. Da intransitivo a transitivo: trauma della lingua o dei parlanti? *Accademia della Crusca, consulenze linguistiche*. <accademiadellacrusca.it/it/contenuti/titolo/7437> .
- Gramellini, Massimo 29/1/2019. Scendi il cane. *Corriere della Sera*. <www.corriere.it/caffè-gramellini/19_gennaio_29/scendi-cane-esci-accademia-crusca-massimo-gramellini-83605786-233a-11e9-9543-1916afeb08d9.shtml> .
- Paoli, Matilde 5/2/2016. Entrare, uscire, salire e scendere: transitivi a furor di popolo? *Accademia della Crusca, consulenze linguistiche*. <accademiadellacrusca.it/it/consulenza/entrare-uscire-salire-e-scendere-transitivi-a-furor-di-popolo/1047> .