

UNIVERSITÀ
DI PAVIA

UNIVERSITÀ DEGLI STUDI DI PAVIA

DIPARTIMENTO DI STUDI UMANISTICI

CORSO DI LAUREA MAGISTRALE IN LINGUISTICA TEORICA, APPLICATA E DELLE LINGUE MODERNE

THE ROLE OF GERMANIC LANGUAGE CONTACT ON VERB-PARTICLE CONSTRUCTIONS: A CONTRASTIVE ANALYSIS OF TRENTINO AND LADIN

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Anno Accademico 2024/2025

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Introduction

This study lies at the intersection between contact linguistics and the typology of motion events, with a specific focus on verb-particle constructions (VPCs). While typically associated with Germanic languages, such as the English 'go out' or 'bring up', VPCs also occur in Trentino dialects (e.g., *vegnir su* lit. 'come up') and Ladin varieties (e.g., *jir via* 'go away'). The Trentino-South Tyrol area, characterised by long-term coexistence between Romance and Germanic languages (e.g. Bavarian dialects, Cimbrian and Mòcheno), is a privileged observatory for the analysis of typological convergence.

This research aims to investigate the nature and the underlying cause of VPCs' pervasiveness (Cordin, 2011b) in this liminal territory. Traditionally, Romance languages are classified as verb-framed (V-F), as they tend to encode PATH in the verbal base (e.g., Italian *uscire* lit. 'exit'). Conversely, Germanic languages are prototypically satellite-framed (S-F), since PATH information is encoded in verb-external satellites (e.g., 'go out') (Talmy, 1985). However, the systematic presence of VPCs in the Northern Italian dialects challenges such a rigid dichotomy, raising a debate concerning their origin. While the calque hypothesis claims that VPCs result from the borrowing of German structures, the genealogical continuity hypothesis supports the autonomous evolution of the Romance system towards more analytic constructions. This study aims to show that Germanic contact does not introduce VPCs *ex novo* but acts as a catalyst in stabilising analytical tendencies already present in the Romance languages. Such a process is defined as "contact enhancement" (Friedman & Joseph, 2025).

To test this hypothesis, a multimethod approach combining quantitative and qualitative analysis was adopted. The empirical basis is constituted by the *Kontatti* corpus (Ghilardi, 2019), which includes samples of semi-spontaneous speech elicited through the Map Task. This technique is believed to be particularly effective because it encourages the production of spatial and directional elements, consequently enabling the observation of VPCs in authentic discourse.

The scope of this research is restricted to specific diatopic varieties, namely, Trentino dialects from Val di Fiemme, Val Lagarina, Val di Non, and Folgaria, and Ladin from Gardena, Fassa, and Badia. In order to validate the differences between sub-corpora,

the analysis employs some specific statistical indices to quantify VPC richness (*MATTR*), polysemy (Shannon's entropy), and functional rigidity (Cramér's *V*).

More specifically, the research is based on three hypotheses: (H1) As a result of the analytical shift from Latin to Romance, Alpine Romance varieties are predisposed to develop VPCs (Haiman & Benincà, 1992; Iacobini & Masini, 2006b; Stolova, 2015). (H2) Although contact with German does not introduce VPCs in the analysed varieties, it increases their frequency, semantic stability, and productivity, affecting the "Thinking for Speaking" patterns of bilingual speakers (Heine & Kuteva, 2005; Slobin, 1996b, 1996a). (H3) Ladin and Trentino show divergent patterns along the contact continuum: while Trentino tends to overtly mark actionality and argument structure (Cordin, 2011b), Ladin may exhibit a different tendency due to its Rhaeto-Romance roots and its potentially different encoding of motion events (Casalicchio et al., 2020; Haiman & Benincà, 1992).

The thesis is structured into four main chapters. Chapter I establishes the theoretical foundations by introducing the principles of contact linguistics and defining bilingualism as the cognitive space in which linguistic structures are negotiated (Friedman & Joseph, 2025; Heine & Kuteva, 2010; Matras, 2009; Thomason & Kaufman, 1988). Chapter II reviews the state of the art, exploring the typology of motion events (Beavers et al., 2010; W. Croft, 1991; W. A. Croft et al., 2010; Slobin, 1996a, 1996b; Talmy, 2000a) and analyses the VPC system in Italian and dialects, tracing its diachronic evolution from Latin (Iacobini, 2008, 2009b; Iacobini & Masini, 2006a; Masini, 2006; Stolova, 2015). In Chapter III, the methodology and empirical analysis are presented, detailing the database structure, the criteria for semantic and actional annotation, and the quantitative results derived from the *Kontatti* corpus. Finally, Chapter IV discusses the findings in relation to the initial hypotheses, examines the concept of "typological repair" and the role of the bilingual's cognitive space as a linguistic interface, concluding with an assessment of the study's limitations and future research prospects.

1. Chapter I: Setting the ground

1.1. Language Contact as a Driver of Change

The study of language change in areas characterised by language contact is one of the most dynamic fields of investigation for historical, typological and areal linguistics, as shown by the lively ongoing debate about its role in language change (Radatz, 2024).

This field of research can be approached from two perspectives: synchronic and diachronic. The former is interested in the study of social and individual aspects of language contact, such as bilingualism, language acquisition, and language processing, whereas the latter focuses on structural and historical contact-induced language change.

As far as the diachronic perspective is concerned, historical studies of the Nineteenth century tended to attribute several linguistic phenomena to language contact[1]. Such an interpretation is due to a mechanistic conception of causality, which was inspired by the natural sciences. At that time, language contact studies culminated with the diachronic view of languages as nearly biological entities that were born, aged, and died, mutually influencing each other, and establishing strict cause-and-effect relationships (Radatz, 2024). On the contrary, experts nowadays lean towards a more nuanced interpretation of such relationships. For instance, although classic terminology on language contact still distinguishes between *substratum* phenomena (the influence of a native language on a dominant one), *superstratum* language (the influence of a dominated language on the local language), and *adstratum* (reciprocal influence between coexisting languages), modern scholarship emphasises the relevance of speaker contact rather than language contact itself (Friedman & Joseph, 2025). In this light, the bilingual mind is the space where contact between different languages takes place, as speakers can use a complex repertoire of linguistic structures, depending on communicative functions rather than on a strict partition of forms categorised by language (Matras, 2009).

[1] Some paradigmatic examples are the Celtic lenition and fronting, the Etruscan spirantisation, the Romanian vowel centralisation, nasal assimilation in Southern Italy provoked by Oscan contact, the Andalusian *seseo* induced by the Arabic, the Germanic syntactic influence on French and the Slavonic influence on Romanian, as it is remarked by Radatz (2024). Subsequent scholarship, notably by Posner (1996) and Smith (2020), reinterpreted these phenomena as stemming from internal development rather than contact.

To take account of those processes, recent taxonomies have been presented. Van Coetsem (1988, 2000) proposed the notion of agentivity to include the role of the individual in contact-induced change. This concept operates through two forms: i) *recipient language agentivity,* which is characterised by the conscious integration of L2 elements in the speaker's native use; and ii) *source language agentivity (imposition),* which occurs when speakers transfer structures from their native language into an imperfectly learned L2. This mechanism often includes phonological and syntactic transfer. These labels correspond to traditional terms of *borrowing* (i) and *substratum influence* (ii); instead, Thomason & Kaufman (1988) refer to the latter as *interference through shift.*

A further concept necessary to the understanding of speaker contact is language accommodation, a phenomenon that happens when "a speaker of one language alters his/her speech patterns and structures in the direction of what another speaker is doing, or in the direction of what s/he believes the other speaker should be doing" (Friedman & Joseph, 2025, p. 110)

According to the Communication Accommodation Theory developed by Sachdev & Giles (2004), accommodation is not mechanical, but rather a dynamic strategy in which the speaker draws from their complex linguistic repertoire to negotiate their identity in concrete communicative contexts. At the same time, Trudgill (1986) described accommodation as a driving force in contact processes, especially at the dialectal level. When speakers of different varieties interact, accommodating tendencies may lead to the formation of "interdialectal forms" (Trudgill, 1986, p. 62) , or to levelling processes that reduce the differences between the involved systems.

Such approaches are centred on the speaker and view contact-induced language change as the product of numerous accommodations that accumulate over time. When these individual innovations diffuse throughout a linguistic community, they may cause structural shifts of varying depths. The predictability of such changes has been the subject of extensive theoretical debate within the field. In order to clarify the nature of such shifts, it is essential to investigate their linguistic and sociolinguistic limitations.

In their seminal work, Thomason & Kaufman (1988) tried to systematise the predictability of contact-induced linguistic change by proposing a hierarchy of

transferable elements and assessing the degree of sociocultural pressure exerted on the speech communities. According to the authors, there would be few constraints on the kind of elements that a language can borrow from another, but borrowings would be more likely to include content words, and least likely to include morphophonemic rules, word structure rules and major changes in morphosyntax (Thomason & Kaufman, 1988, p. 74-76). On the contrary, Winford (2003) remains sceptical about the possibility of transferring syntactic features via a borrowing mechanism, arguing that most structural borrowings were mediated by lexical ones in the first place.

Recent research, however, has shown that contact is not only restricted to borrowings or superficial calques, but can also influence grammatical and semantic structures deeply, promoting grammatical replication and, ultimately, contact-induced grammaticalization processes (Heine & Kuteva, 2010). As the authors observed, contact can act either as a propelling or as an accelerating force in grammatical change. In the former case, contact is a necessary condition for change to happen, triggering grammaticalization paths that would hardly take place otherwise. In the latter case, however, contact just accelerates those processes that are already possible (and likely latent) in the replica language. For instance, the grammaticalization of interrogatives in subordination markers in Basque, Tariana, and Pipil is interpreted as showing contact as a propelling force, since such developments appear hard to explain without the influence of European languages such as Spanish, Gascon, French, and Portuguese (Heine & Kuteva, 2010, p. 95-96). On the contrary, the diffusion of analytic comparative forms in certain Germanic languages with intense exposure to French, notably Luxembourgish (e.g. *mehr schön,* lit. 'more beautiful' as in French *plus beau* instead of German *schöner*) or Southern English, constitutes a case of contact as an accelerating force. In such cases, contact acts primarily by amplifying the usage frequency of pre-existing options (Heine & Kuteva, 2010, p. 96-97).

Areas of intense and stable plurilingualism, such as the Alpine regions, tend to display more complex and layered effects of contact (Bidese et al., 2016). More generally, contact itself can function as a sociolinguistic factor that accelerates language change (Trudgill, 2020).

To better analyse such complexity, it is useful to summarise language contact as operating on (at least) three distinct dimensions, which are related to the above-mentioned processes:

i. Transfer of structural patterns, which can concern the replication of syntactic or morphosyntactic schemata, mainly due to prolonged convergence between linguistic systems[2] (Thomason & Kaufman, 1988; Winford, 2010). A fitting example is Sursilvan[3], which, despite being a Romansh dialect, shows a strict verb-second syntactic order, as in German. Given that this trait is shared by nearby German dialects and given the uniqueness of this phenomenon among Romance languages, Sursilvan V2 is considered "one of the clearest cases of contact-induced syntactic changes within Romance" (Radatz, 2024).

ii. Semantic borrowing, which concerns the reorganisation of polysemy networks and of the conceptual categories of a language under the influence of the system of the contact language, often redefining the semantic content of the pre-existing forms[4] (Haugen, 1950; Winford, 2010). This phenomenon is often manifested through the resemantisation of traditional terms. In Ladin, for instance, Dell'Aquila (2010) notices that words like *suricia* ('mouse') and *leam* ('link') have been semantically extended to cover meanings stemming from new technological semantic domains (Fiorentini, 2020, p.461).

iii. pragmatic-discursive realignment, which interests textual functions, and contextual preferences for functional options. Regarding the realignment of textual functions, some examples include reformulation and correction attempts, like the use of the Italian marker *cioè* ('that is') by speakers of Fassa Ladin in place of the native alternative *voi dir* (lit. 'I want to say') (Fiorentini, 2016), or the use of *ma* in Italian Walser communities to mark contrast, replacing (sometimes entirely) the original element *aber* to perform the same textual function (Dal Negro, 2005). Pragmatic-discursive realignments are also visible when one

[2] This mechanism coincides with that of *grammatical replication* as described by Heine & Kuteva (2010).

[3] According to Kaiser (2002, p. 330), Sursilvan V2 "clearly distinguishes Romansh from all other modern Romance languages. The comparison with Old and Middle French has also shown that fundamental differences exist here", strengthening the role of contact in this phenomenon.

[4] Such reorganisation often represents a crucial phase in the contact-induced grammaticalization paths (Heine & Kuteva, 2005).

functional option is preferred over the others, such as the case of discourse markers in Ladin. Here, the Ladin present indicative form *dijon* (lit. 'we say') is used to cover the Italian discursive marker *diciamo*, which phonetically corresponds to both the indicative ('we say') and the imperative ('let's say'). Although the corresponding imperative form is available in Ladin (*dijane*), the speakers prefer the option that replicates the Italian usage pattern (Fiorentini, 2020b).

These dimensions are not isolated; on the contrary, their intertwinement results in complex contact scenarios, in which one language is exposed to prolonged and systematic pressure from the other, mediated only by the speaker's competence and choice.

Several studies have analysed the importance of structural convergence between Germanic and Romance languages in a European (van der Auwera & Van Olmen, 2017) and Alpine settings (Haiman & Benincà, 1992). In the Trentino-Tyrolean context, the works by Fiorentini (2017, 2020), Bidese et al. (2016), and Dal Negro (2005) underlined the selective and layered nature of contact-induced interference. It would not, in fact, involve massive transfers; on the contrary, it would regard subtle and coherent adjustments of syntactic, semantic, and often discursive patterns. From this perspective, contact can be construed as a catalyst (Heine & Kuteva, 2010), namely, a facilitating factor that renders already existing tendencies more systematic and salient.

One of the fields most sensitive to these dynamics is that of verb-particle constructions, in which syntactic structure, compositional meaning, and typological preferences interact. The Trentino Alps, located along the Germanic-Romance border, constitute a particularly suitable case for the exploration of how language contact may induce semantic and, possibly, typological realignments in pre-existing Romance constructions.

1.1.1 Grammaticalisation and Lexicalisation

The study of contact between structurally different languages suggests that elements from one system can evolve or penetrate another, often losing their original semantic autonomy to acquire a different grammatical function. This process is referred to as grammaticalization, a phenomenon most notably systematised by Lehmann (1995),

whose framework employs six parameters that enable the measure of the grammaticalization degree of a construction. This framework comprises two dimensions: the paradigmatic and the syntagmatic. The former includes the phonological and semantic substance of the linguistic sign (integrity), the degree of cohesion within a paradigm (paradigmaticity), and the degree of freedom with which signs are chosen (paradigmatic variability). The latter is concerned with: the size of the construction (structural scope), bondedness and the possibility to move an element within its context (syntagmatic variability).

Grammaticalisation is typically triggered by semantic bleaching, a process by which an item is deprived of its lexical features, while retaining the grammatical ones. A classic example is that of the evolution of the Swahili root *-taka* ('want'), which has grammaticalised into the future prefix *-ta-*. It is particularly relevant for the present research to note that, according to Lehmann (1995), grammaticalisation can also involve entire constructions, not just isolated items, leading to syntactic configurations in which originally independent elements stabilise into fixed patterns to encode aspectual or actional traits.

According to Brinton & Traugott, (2005, p. 96), lexicalisation can be broadly described as:

> "the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern. Over time there may be further loss of internal constituency and the item may become more lexical".

While grammaticalisation typically involves functional and procedural elements, lexicalisation generates fully contentful forms, whose morphosyntactic and semantic properties can no longer be derived from the original meaning of their parts. This process frequently involves the institutionalisation of an occasional form (*nonce formation*), which is accepted by a community. From the structural perspective, lexicalisation frequently involves univerbation (that is, the fusion of a phrase to a lexeme) and semantic derivation or idiomaticisation. Both processes lead to the retrieval of the entire

construction as a single unit rather than a sequence of independent constituents. Lastly, whereas grammaticalisation is intrinsically linked to host-class expansion, lexicalisation acts in the opposite direction, reducing the pattern productivity and the inventory of the classes with which the lexicalised element can combine.

1.2. VPCs between Syntax, Lexicon, and Semantics

Verb-particle constructions (henceforth VPCs), generally known as phrasal verbs, are hybrid constructions situated at the intersection of syntax, lexicon and semantics. They are formed by a base verb and a particle, and they show a cline of semantic integration that goes from more concrete spatial meanings to more metaphorical and idiomatic readings (Dehé et al., 2002; Jarosz, 2019; McIntyre, 2007).

The notion of *particle* does not here fully correspond to that of *preposition* nor to that of *verbal affix*. Following the classic definition of (Dehé et al., 2002), a particle is:

> "an accented element which is formally (and, often, semantically) related to a preposition, which does not assign case to a complement and which displays various syntactic and semantic symptoms of what may informally be called a close relationship with a verb, but without displaying the phonological unity with it typical of affixes" (Dehé et al., 2002, p.3).

Germanic languages represent the prototypical high-productivity system of VPCs, in which the particle systematically contributes to the articulation of the verbal complex (Dehé et al., 2002; Los et al., 2012). While some Romance languages tend to show a reduced productivity of such constructions, the emergence of VPCs can be framed within a broader shift from Latin synthesis to analytical forms in Romance. Several other analytical forms derived from Latin have been interpreted as products of grammaticalisation. Some examples include:

(i) The substitution of the Latin synthetic future (e.g. *pluet* 'it rains') with the *auxiliary + infinitive* periphrasis, such as the Sardinian *at a próere* (lit. 'it has to rain') (Ledgeway, 2010, p.384);

(ii) The diffusion of auxiliary periphrases to express core grammatical categories such as TENSE, as seen in the Occitan perfective past *ai dormit* (from Lat. *dormivi*; lit. 'I have slept'); ASPECT exemplified by the Sardinian continuous form *so kredende* (from Lat. *credo*; lit. 'I am believing'); and MODALITY, particularly the epistemic use in Catalan *la pipa deu valer molt* (lit. 'the pipe must be worth much') (Ledgeway, 2012, p.3);

(iii) The loss of the *accusative with infinitive* construction (e.g. *credo eum flere*) in favour of subordinate clauses introduced by finite complementisers (e.g. in Cosentino *criju ca chiangia* 'I believe that he is crying') (Ledgeway, 2010, p.384);

(iv) The substitution of the Latin suffixal comparative (*-ior* '-er') with the analytical forms *plus* and *magis* ('more') followed by the ungraded adverb or adjective, as in French *plus beau* ('more beautiful') or in Portuguese *mais alto* ('more tall') (Zamboni, 2000, p. 121, as quoted in Ledgeway, 2010, p. 384).

Before considering the specific features of VPCs in Romance languages and in contact contexts, it is necessary to outline the main syntactic, semantic and lexical properties that characterise them as a constructional class, as described in typological and theoretical scholarship.

From a structural point of view, VPCs are regarded as ambiguous, as they can be collocated in a continuum that ranges from clearly syntactic configurations to complex lexical units. In the generative literature, one branch of studies regards particles as functional projections or independent lexemes, which are often assimilated to reduced prepositional phrases or resultative heads (i.e., *small clauses*[5]). According to this view, verb and particle retain a certain degree of syntactic autonomy, which, in Germanic languages, is proved by phenomena such as separability, particle mobility and the possibility to insert material between the two elements (Dehé et al., 2002). Another branch

[5] The term *small clause* refers to a reduced predicative structure, without tense inflexion, consisting of a subject and a non-verbal predicate (AP, NP, or PP), which form a syntactic unit selected by a matrix verb (Haegeman, 1994). In the context of resultative constructions and verb-particle constructions, the small clause is often assumed to be the domain in which the particle functions as the predicate of the direct object, as in *he looked the information up*, which would correspond to the structure V [$_{SC}$ NP Prt] (Hoekstra, 1988).

of generative studies considers VPCs as complex predicates that exclude the direct object. This approach can be divided into two variants, namely the morphological one and the syntactic one. The former variant sees the verb and the particle as lexically or morphologically combined into a complex head [$_V$ V Part]; according to the latter view, in contrast, the verb and particle represent two different heads integrated in a layered VP. Authors, however, insist that this taxonomy is not exhaustive and that there are hybrid analyses that combine the two (Dehé et al., 2002).

Besides generative approaches, constructionist and usage-based theories emphasised VPCs' role as emergent semantic and formal units, whose interpretation is not fully compositional but depends on recurrent schemata and constructional generalisations (Booij, 2010). In formal terms, a construction is defined as a conventionalised pairing of form and meaning. According to the criteria established by Goldberg (1995, p.4), a structure *C* is considered a construction if, and only if:

> *"C* is a for-meaning pair <F_i, S_i> such that some aspect of F_i or some aspect of S_i is not strictly predictable from *C*'s component parts or from other previously established constructions".

In such a framework, VPCs are considered constructions in all respects, as their meaning often exceeds the sum of their parts. For instance, some VPCs remain fully transparent and compositionally readable (1), while others tend to crystallise as complex lexical units (2), with selective restrictions on the base verb or the particle (Dehé et al., 2002; McIntyre, 2007).

(1) Compositionally transparent VPCs:
Throw a ball down, pull a thread out, walk through, nail a sign on (Dehé et al., 2002, p.14).

(2) Compositionally opaque/idiomatic VPCs:
Hold up ('rob a bank'), *throw up* ('vomit'), *blow up* ('explode'), *bring up* ('educate a child'), *chew out* ('scold'), *catch on* ('become popular', or 'understand') (Dehé et al., 2002, p.73).

From a semantic point of view, one of the most relevant aspects concerning VPCs is the particle's contribution to the verb's event structure. Comparative studies show that

particles can modify the verb's *Aktionsart*, leading to encoding of resultative meanings (e.g. *scrub down the table*), temporal boundaries (e.g. *drink up the water*) or state changes (e.g. *the sky cleared right up*) (Jackendoff, 2002; McIntyre, 2004, 2002). These elements often function as markers of telicity, transforming generic activities into completed events. This phenomenon is particularly evident in VPCs expressing movement: while the verb typically encodes the MANNER of the action, the particle tends to encode PATH-related meanings (3). This spatial-to-temporal shift is central to the cognitive framework proposed by Brinton (1988), according to which the telic *Aktionsart* encoded in some particles stems from a conceptual analogy between movement through space and development through time (4). Conversely, the continuative or iterative aspect is rooted in the spatial meanings that indicate stable locations.

(3) Locative verb-particle constructions encoding MANNER and PATH (Jackendoff, 2002, p.74-75)
   a. *Beth* ***carried*** *the food* ***up*** *the stairs*
   b. ***Up marched*** *the sergeant*
   c. ***Back hopped*** *the frog*

(4) Aspectual verb-particle constructions (Dehé et al., 2002, p.14)
   a. ***Chew up*** *the meat*
   b. ***Read*** *the book* ***through***
   c. ***Think*** *the problem* ***through***

Lastly, from a lexical perspective, VPCs raise some relevant issues about lexical boundaries and lexicalisation processes. Many studies emphasise how the frequency of use and collocational fixation can promote the reanalysis of VPCs as complex lexical units, often associated with idiomatic and partially opaque meanings (Los et al., 2012) However, this process is more nuanced, as detailed semantic analysis often reveals that many apparently idiomatic VPCs are in fact compositional, relying on construction-specific, yet regular, meanings of the particle. Consequently, a layered system where fully productive VPCs coexist with both regularly compositional (5) and genuinely lexicalised constructions can be observed (2).

(5) Verbs of surface treatment involving the particle *down* (McIntyre, 2002, p.97)
   brush down, clean down, dust down, scrub down, soap down, wash down, wipe down.

Considering the above, VPCs are a privileged domain for observing the interaction of syntactic structure, lexical organisation and semantic complexity. Their inherently layered nature makes their positioning inside purely syntactical or purely lexical models problematic (Dehé et al., 2002; McIntyre, 2002, 2007). Such structural and functional ambiguity favoured theoretical approaches that treat VPCs as hybrid constructions. Among these, Booij conceptualises VPCs as *constructional idioms,* that is, entities originated in the lexicon yet endowed with a phrasal structure. This dual nature effectively accounts for their semantic cohesion, while simultaneously allowing for their syntactic separability[6].

This layering is particularly relevant in contexts of diatopic variation and language contact, where different structural models can interact and reinforce each other through processes of "contact enhancement"(Friedman & Joseph, 2025). Since language contact occurs primarily within the bilingual mind, through the interaction of bilingual speakers, VPCs' syntactic separability and semantic cohesion would offer bilingual speakers the flexibility necessary to manage and integrate repertoire (Matras, 2009). This hybridity facilitates the mapping of the structural model of the dominant language onto the matter of the receiving language.

Therefore, VPCs are particularly suitable for the study of contact-induced language change. Since their semantic configuration is based on the distribution of the event components between the verb and the particle, they are susceptible to typological realignments, especially in linguistic systems that lie between different structural models. Typology literature showed how the distinction between verb-framed and satellite-framed languages, however not categorical (see Chapter 2.1), can identify liminal zones in which PATH, RESULT, and telicity-encoding strategies can be rearranged under the influence of external and internal factors (Slobin, 1996a; Talmy, 2000b). It is precisely in those instability zones that VPCs allow for the observation of how spatial semantic categories can be extended to encompass actional, aspectual and metaphorical domains, and how

[6] In continental Germanic languages (such as German and Dutch), the separation of the verb and the particle is obligatory in main clauses. This is driven by the Verb-Second (V2) phenomenon, which anchors the finite verb in second position, while leaving the particle in clause-final position, creating what is known as a sentence brace (*Satzkalmmer*). Conversely, in subordinate clauses, the verb and the particle tend to remain adjacent. In English, however, separability manifests through particle movement, which is mandatory when the direct object is a non-contrastively accented personal pronoun (e.g. *he **called** her **up***) (Dehé et al., 2002, p.2).

semantically autonomous particles can be progressively reanalysed as grammatical elements marking the event structure (McIntyre, 2004). This process does not take place homogeneously, but rather produces layered systems, in which fully compositional structures coexist with partially or highly lexicalised configurations.

Building on this, the next section will focus on the eastern Alpine context, with particular attention to the Romance varieties of Trentino. The following analysis will therefore examine how the documented Romance-Germanic convergence in this region shapes the development and distribution of VPCs.

1.3. The Trentino Context and the Romance-Germanic Continuum

The Trentino–South Tyrol region, located in Italy's north-eastern Alps, provides a key context for the study of convergence between Romance and Germanic languages. This is due to its long history of language contact and the complexity of its local linguistic repertoire. This area indeed lies on a typological and structural boundary along which various national languages and dialects have coexisted for centuries (Loporcaro, 2009), generating interference and reanalysis phenomena concerning both the lexicon, syntax and the semantic organisation of constructions (Casalicchio, 2020; Haiman & Benincà, 1992).

From a historical perspective, this region's linguistic inventory illustrated in Figure 1: comprises local Romance varieties (such as the Trentino dialects), Dolomitic Ladin in the eastern territories, a couple of Germanic minorities (Cimbrian and Mòcheno), regional German (especially in the Province of Bozen), and standard Italian. As Casalicchio (2024) argues, the Romance component reveals the intrinsically composite and dynamic nature of this area. In his study on dialectometry, the author highlights how the present scenario was shaped by the convergence and competition among three distinct Latin-derived varieties: Lombard (or Gallo-Italic), Venetan, and "Archaic Trentino". This threefold distinction is reflected in their geographical distribution: Lombard prevails in the Western area, Venetan in the eastern and southern regions, while Archaic Trentino is predominant in the northern valleys. Given this composite linguistic configuration, the Adige Valleys represent crucial zones of transition and hybridisation. Here, different competing linguistic influences converge and interact, radiating outward across the

province with variable intensity. This scenario makes Trentino one of the most linguistically layered regions of Northern Italy (Casalicchio, 2024). Casalicchio's perspective offers a fundamental contribution to the understanding of the Germanic-Romance continuum and the even more layered multilingual repertoire of the region.

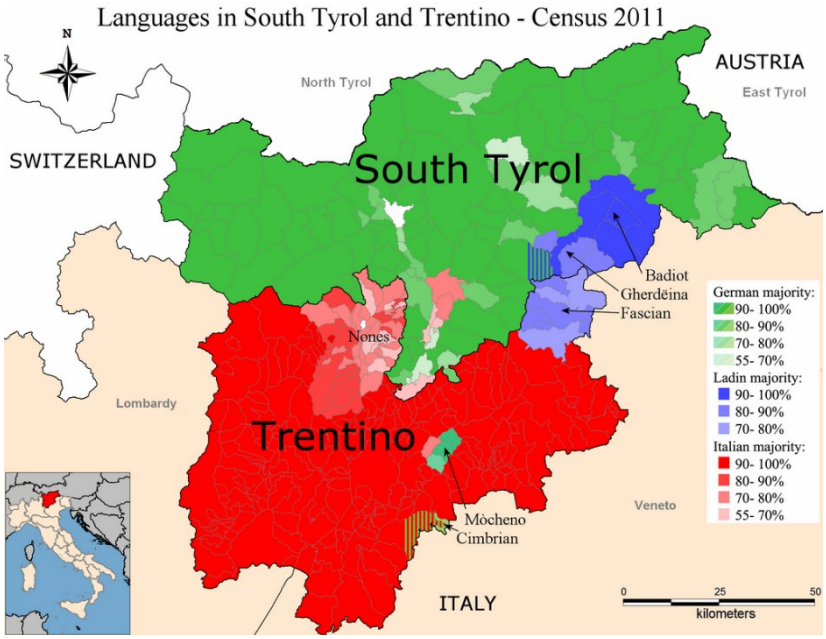


Figure 1: Language distribution in South Tyrol and Trentino.
Adapted from:Language distribution in South Tyrol and Trentino.png, by Wikimedia Commons, 2012, CC BY-SA 3.0.

Such multi-layered scenario results from ancient stratification, a process documented at least from the Middle Ages onwards, which promoted a long-term and sustained contact dynamics (Haiman & Benincà, 1992; Posner, 1996).

The scholarship dedicated to this area agrees that language contact in Trentino extends beyond direct calques or superficial borrowings, constituting a deeper and selective structural convergence instead. In a comparative analysis of several Ladin and Trentino varieties, Casalicchio (2020) shows how different phonological, morphological and syntactic traits reflect the Germanic influence, while remaining structurally grounded within their Romance framework. Specifically, areas more exposed to contact with Germanic varieties exhibit a greater stability in the V2 order[7], the use of bipartite negation, the adoption of gerund with perception verbs, and the use of an impersonal

[7] Despite V2 being a characteristic of Germanic languages, its diffusion in Ladin can be considered a relic of a less strict Romance V2 order that survived owing to the Germanic influence (Benincà, 1985).

pronoun similar to the German *man*. Morphologically, northern varieties often feature human-denoting plurals in *-ons*/*-anes* and dative clitics. These varieties are further distinguished by specific phonological shifts, such as unstressed vowel reduction, initial v-dropping, intervocalic rhotacism and final consonant deletion. If considered together, these features suggest that the closer the contact, the more pronounced the structural alignment with Germanic patterns.

Regarding the Ladin territory, (Fiorentini, 2020b, 2017) documents how contact phenomena often take the form of pattern replication and internal reanalysis, particularly in the domain of discourse markers. In this domain, existing Romance structures are reassigned new functions under the pressure of bilingual usage. Fiorentini, however, does not frame Germanic influence as a direct trigger of structural reorganisation, but rather highlights how endogenous mechanisms of reanalysis operate within the Romance system in situations of intense multilingualism. However, such interference operates unevenly, both geographically and structurally, as certain grammatical domains are more susceptible to be influenced by other languages in contact situations[8]. In this framework, structures at the syntax-lexicon interface, i.e. VPCs, represent a particularly salient case for analysis, since the interplay between those factors can yield unexpected outcomes.

The interest in the Trentino context for studying VPCs lies in its very positioning in a Romance-Germanic continuum. On the one hand, local Romance varieties share a verb-framed structure in which the PATH tends to be encoded in the verb base or by lexically autonomous prepositions (Ledgeway, 2012; Slobin, 1996b; Talmy, 2000b). On the other hand, the high manner-salience and event-encoding patterns characteristic of Germanic satellite-framed languages can exert a strong conceptual pull on the speakers, creating conditions for shifts in how motion events are structured and expressed (Slobin, 1996b, 2004).

In this scenario, the development of VPCs in the Trentino varieties can be interpreted as the result of an interaction between internal tendencies and external typological pressures. Classical studies on the Alpine area show that Ladin exhibits a greater systematisation of such constructions in comparison to Italo-Romance languages,

[8] As mentioned previously in section 1.1, this mechanism is thoroughly described by the borrowing scale presented in Thomason & Kaufman (1988).

suggesting that the Alpine Romance grammar may have developed a greater flexibility in the integration of VPCs (Haiman & Benincà, 1992). More recent analyses on Trentino and Ladin varieties show that, although verb-locative constructions may resemble Germanic patterns, their development is largely autonomous, as locative elements acquire language-internal semantic extensions (aspectual, actional or metaphorical) that go beyond simple replication of German models (Bidese et al., 2016; Cordin, 2011a).

Data from the corpus *Kontatti*[9] used for this work confirm the composite nature of this system. In fact, the semantic complexity observed in the VPCs extracted from Italian, Ladin, Cimbrian, and Tyrolean varieties, which feature spatial, actional, metaphorical, pleonastic, and idiomatic meanings, suggests involvement of internal grammaticalisation processes. Although the patterns that emerged from the analysis may not fully coincide with those typical of contact languages (Heine & Kuteva, 2010), they still show a certain degree of adaptation that is coherent with the underlying typological structure.

All in all, the Trentino-South Tyrol region is regarded as a privileged observatory for examining how language contact influences the semantic-typological organisation of VPCs, while accounting for the genealogical peculiarities of the varieties involved. Analysis of VPCs in such a context enables the distinction among Romance continuity, areal convergence, and local innovations, thereby providing an empirically grounded perspective on the mechanisms through which contact acts as a catalyst for language change.

[9] The corpus *Kontatti* is a dataset owned by the partners & collaborators of the research project "Germanico-Romanzo: discorsi e strutture in contatto nell'area dolomitica" (09.2016-08.2019), coordinated by Silvia Dal Negro (Free University of Bozen/Bolzano). For further informations, see Dal Negro, Silvia / Ghilardi, Marta (2018), *Il corpus Kontatti: metodologia e descrizione*. Internal project document (URL: kontatti.projects.unibz.it/Kontatti-description).

2. Chapter II: Theoretical Framework and State of the Art

2.1. The Typology of Motion Events

An important area of typological and cognitive linguistic research is the study of how the world's languages encode motion events. This field provides valuable insight into the intricate relationship between the universal constraints of human perception and the variety of linguistic structures. Describing a motion event, fundamentally a shared physical experience, which involves a series of lexical and grammatical choices that vary systematically from one language to another. These choices often concern which semantic components of the given event are expressed obligatorily and how they are conflated within the available grammatical units[10], and primarily the verb. Such semantic components are typically MOTION, FIGURE, PATH, GROUND, MANNER, and CAUSE, as described by Talmy (2000, p.21).

Completing this framework, Soteria Svorou (1994) highlights the crucial role of spatial grams, that is, elements belonging to closed grammatical classes (such as affixes and adpositions) that evolve to structure the conceptual experience of the space through relational content. According to Svorou, motion is encoded relativistically, defining the trajectory of an entity, the Trajector (TR), with reference to an object, the Landmark (LM). In this process, language not only reflects absolute spatial coordinates, but also organises the space into regions (such as the FRONT REGION or the BACK REGION), based on human perceptual asymmetries and on the functional properties of the objects involved.

The structural variety observed cross-linguistically can therefore be attributed to grammaticalisation processes, through which concrete lexical elements (nouns or verbs) are gradually transformed into relational grams along a continuum of morphosyntactic integration (embraced < agglutinated < fused) (Svorou, 1994, p.35). Many of these forms retain properties inherited from their lexical "ancestors", for instance, grams derived from motion verbs tend to intrinsically maintain directional notions. Verbs such as 'go', 'bring', or 'come', that typically evolve into allative grams, preserving the concept of movement

[10] Grammatical units are called "surface expression" by Talmy (2000) and represent the main grammatical categories such as verb, apposition and subordinate clause.

towards a goal, such as in Krio, where the allative gram *go* derives from the homophonous verb *go* 'go' (Svorou, 1994, p.111).

The resulting mapping between semantic components and surface expressions is not largely one-to-one but varies depending on the language. The working hypothesis that guides investigation in this field is that such a variation tends not to be accidental; on the contrary, it shows recurrent patterns that reflect different conceptualisation strategies (Talmy, 2000). Identifying such patterns (or *language types*) may not only help draw maps of language variation globally, but it can also contribute to formulating hypotheses about the correlation between different grammatical structures, lexical organisation and even cognitive and narrative processes. Academic discussion in this field has largely focused on the identification of the most significant parameters for such a classification, on the number and on the potentially gradient nature of typological categories (Beavers et al., 2010; Slobin, 2004). Furthermore, significant attention has been paid to the profound consequences that these structural divides have on language use in context, particularly through the lens of Thinking for Speaking (Slobin, 1996a, 1996b).

This chapter aims to retrace this debate, starting from a seminal and highly influential model, that is, the dichotomy between verb-framed and satellite-framed languages proposed by Leonard Talmy (§ 2.1.1). Subsequently, a related reformulation from a more cognitive and discourse-oriented perspective was proposed, notably by Dan Slobin's (1996) work about thinking for speaking (§ 2.1.2), and subsequent critics and refinements have contributed to a more nuanced and multi-parametrical view of this phenomenon (§2.1.3).

2.1.1. Talmy's Model: Verb-Framed vs. Satellite-Framed Languages

One of the most relevant works in the field of motion event typology is Talmy's (2000) framework for categorising motion events. This analysis is framed within Cognitive Semantics, which, unlike purely formal approaches, focuses on the deep-rooted relationship between linguistic and conceptual structure. Within this framework, language is conceptualised not merely as a communicative tool, but also as a system for structuring human experience (Talmy, 2000b). In this perspective, grammar is understood as a

complex system of conceptual structures which lay organisational foundations, to which the lexicon adds meaningful content.

One of the key concepts of this framework is the notion of lexicalisation, that is, the process by which complex concepts and semantic information are typically conflated inside lexical units (e.g. verbs). At this level of analysis, a particularly central role is played by the notions of *surface* and *meaning*, which account for cross-linguistic variation in the association between lexical forms and semantic values, insofar as a single surface form (such as a verbal lexeme) may be mapped onto a diversified set of meanings, each shaped by the structural and interpretive conventions of the language in question.

Talmy's analysis, albeit acknowledging the wide variability of the world's languages, aims at identifying universal principles and recurrent typological patterns that drive this form-meaning mapping. These patterns appear in fact not to be arbitrary, but to emerge from systematic diachronic changes that reflect what may be referred to as "universal cognitive underpinnings" (Talmy, 2000, p.22), that is, basic ways in which the human mind perceives and detangles reality. According to Talmy, one of the fundamental cognitive structures is the Motion event[11], which consists of four core components: the FIGURE (the moving or located object), the GROUND (the reference object), MOTION (the presence of movement of stasis) and the PATH (the course followed by the FIGURE). Some verbs can simultaneously express a Co-event, normally explicating the CAUSE or the MANNER of MOTION. To attain greater descriptive granularity, especially in the context of VPCs, the PATH is further divided into three sub-components, namely VECTOR (the arrival or traversal, e.g. to, from), CONFORMATION (the geometric relationship with the GROUND, such as a container or a surface), and DEICTIC (the direction with reference to the speaker, e.g. hither/thither). Furthermore, the trajectory can also be subdivided into specific segments[12]: the SOURCE (the origin), the GOAL (the destination), and the MEDIAN (the intermediate segment) (Talmy, 2000b).

[11] Here the original writing with the capital M is preserved. Further categories belonging to Talmy' framework are reported in small caps.

[12] While Talmy identifies these segments as "Fillmorean" in nature, his framework diverges significantly from Fillmore's inventory of universal semantic roles. Talmy's classification is specifically concerned with the conflation of these components within the linguistic expression of Motion events.

The author also advances the notion of "characteristic" pattern, to clarify that typological categories are based on "frequent", "colloquial", and "pervasive" tendencies in real language usage that emerge through time (Talmy, 2000, p. 27). The principle of semantic equivalence, meanwhile, guarantees that despite the different ways semantic strategies package information, languages can express the same conceptual event through alternative grammatical means.

The most influential typological division that emerged from this theoretical framework is the dichotomy between "satellite-framed" (S-F) and "verb-framed" (V-F) languages. This distinction is based on the tendency to package the information about the PATH in the central element of the motion event, or in the so-called frame.

In satellite-framed languages (like English, German and Slavic languages[13]), PATH is typically coded within a satellite. This constituent is defined as a grammatical element, such as a verb particle (e.g., English *out*), a prefix (e.g., German *aus*-), or an affix, that depends on the verbal root (Talmy, 2000b). Consequently, in these languages, the "verb + satellite" construction serves as the primary vehicle for expressing motion events, allowing the verbal root to lexicalise the MANNER of the action.

In example (1a-b) and (2a-b), the satellites *in* and *hinein* encode PATH, while the verb roots lexicalise MANNER.

On the contrary, in verb-framed languages (like Italian, Spanish, and French[14]), PATH is typically lexicalised into the verbal root itself. In this case, information regarding the MANNER, if expressed, must be added peripherally, for instance, through a gerundive of a prepositional phrase. In examples (3a-b) and (4a-b), accordingly, PATH information is encoded in the verb root, while the MANNER expression is left to the satellite in gerundive form.

The theoretical foundation that allows for the comparison of diverse linguistic strategies is the "Principle of Conceptual Alternativity". According to (Talmy, 2000b), the

[13] Additional languages that belong to the S-F group are most Indo-European ones with the exception of Romance languages, Finno-Ugric languages, Chinese, Ojibwa, and Warlpiri (Talmy, 1991, p. 486).

[14] More precisely, the verb-framed group includes Romance, Semitic, Japanese, Tamil, Polynesian languages, most Bantu languages, most Mayan, Nez Perce and Caddo languages according to Talmy (1991, p.486).

human mind has the innate ability to construe and interpret the same "ideational complex" (that is, a situation in the real world) in a variety of ways. This principle ensures that the same conceptual event can be expressed through different semantic strategies for conflating the information into surface forms. From this perspective, languages belonging to different typologies can achieve a virtual semantic equivalence, despite relying on a distinct distribution of the semantic components (such as PATH and MANNER) between the verbal root and its satellites.

(1) English (Satellite-framed)[15]

a. *He* *ran* *in*
he run.PST in

b. *The* *bottle* *floated* *out*
the bottle float.PST out

(2) German (Satellite-framed)

a. *Er* *lief* *hinein*
he run.PST in.towards.the.inside
'He ran in'

b. *Die* *Flasche* *trieb* *heraus*
the bottle float.PST out.from.the.inside
'The bottle floated out'

(3) Spanish (Verb-framed)

a. *Entrò* *corriendo*
Enter.PST.3SG run.GER
'He entered running'

b. *La* *botella* *saliò* *flotando*
the bottle exit.PST.3SG float.GER
'The bottle exited floating'

(4) Italian (Verb-framed)

a. *Entrò* *correndo*
Enter.PST.3SG run.GER
'He entered running'

b. *La bottiglia* *uscì* *galleggiando*
the bottle exit.PST.3SG float.GER
'The bottle exited floating'

[15] Glosses follow the *Leipzig Glossing Rules* (Comrie et al., 2015).

This difference is far from being a mere typological curiosity; rather, it has pervasive effects on linguistic expression, influencing lexical richness, narrative organisation, and the semantic evolution of complex structures. As this study aims to demonstrate, these cascading consequences are particularly evident in the development of verb-particle constructions within Romance languages.

2.1.2. Developments and Critiques: Slobin and Thinking for Speaking

The strict dichotomy proposed by Talmy, however foundational, was subject to criticism, so that further developments have refined its implications, shifting the focus from the language system itself to its use in the dynamic context of oral production. The most significant contribution in this regard is that of the psycholinguist Dan I. Slobin and his Thinking for Speaking theory. Slobin accepts the Sapir-Whorfian thesis of language's influence on speaking[16], but he defines it more precisely and in an empirically verifiable way. According to him, it is not, in fact, a matter of total linguistic determinism governing every aspect of cognition, but rather a "habit of mind" that is activated specifically during the act of verbalising an experience. He proposes that "the expression of experience in linguistic terms constitutes *thinking for speaking*", defining it as "a special form of thought that is mobilised for communication". In this process, "one fits one's thoughts into available linguistic frames", actively selecting those characteristics of events and objects that are "readily encodable in the language" (Slobin, 1996, p.76). In other words, while we formulate an utterance, we select and model our thoughts according to the specific grammatical and lexical resources that our language provides.

In another famous work, Slobin (1996b) builds on Talmy's typology and observes that speakers of satellite-framed languages and those of verb-framed languages develop different attentive patterns when describing the same motion event. On the one hand, the former group (S-F), having learnt to rely on satellites to express information regarding the PATH, is trained to focus on the PATH itself and mention it in every motion description **Errore. L'origine riferimento non è stata trovata.**. On the other hand, the latter group

[16] D. Slobin (1996, p.70) clarifies that "the world does not present 'events' to be encoded in language. Rather, experiences are filtered through language into subjective events," emphasising that this filtering is employed for communication.

(V-F) is forced to encode PATH in the main verb **Errore. L'origine riferimento non è stata trovata.**, revealing a tendency to focus on the general event or on the resulting state, often leaving out details about the MANNER that are considered superfluous in that context[17]. It follows that "in learning a particular language, one develops habitual patterns of organising all of these factors in guiding attention to dimensions of experience for narrative expression" (Slobin, 2004, p.220).

(5) *The bird flew down from out of the hole in the tree*

(6) *El* *pájaro* *salió* *del* *agujero* *del* *árbol*
the bird exit.PST.3SG of.det.M hole of.det.M tree
volando *hacia* *abajo*
fly.GER towards down
'The bird exited of the hole of the tree flying towards below'

This theory simultaneously represents a development and an implicit criticism of Talmy's model. The development consists of focusing on the psychological and processual mechanisms that explain how linguistic structures affect real-time conceptualisation. However, criticism lies in the suggestion that the proposed dichotomy may suffer from several limitations. According to D. Slobin (2004, p.24), many issues complicate this neat two-way classification, starting with the structural indeterminacy found in serial-verb languages (such as Mandarin Chinese) and bipartite systems (such as Hokan and Penutian), where the MANNER and PATH are expressed by morphemes of equal status (DeLancey, 1989, 2000) Similarly, languages like Jaminjung (Schultze-Berndt, 2000) rely on general verbs combined with preverbs encoding both PATH and MANNER, which hinder the identification of a single head element. Furthermore, in some V-languages, the boundary between satellites and adverbials can be blurred, as the PATH can be expressed by directional adverbs (e.g., Mayan directionals or the Italian system). Further ambiguity arises in languages like Korean, where, despite being classified as V-framed, both MANNER and PATH verbs appear in subordinate forms (Choi & Bowerman, 1991). Finally, in certain S-languages such as Dutch, the semantic contribution of satellites is construction-dependent (e.g., *de jongen loopt het bos in* 'the boy walks into

[17] Examples **Errore. L'origine riferimento non è stata trovata.** and **Errore. L'origine riferimento non è stata trovata.** are taken from D. Slobin (1996, p.83).

the woods' vs. *de jongen loopt in het bos* 'the boy walks in the woods'), challenging the assumption that satellites consistently encode PATH.

The author therefore proposes a revised typology, in which a third type is added, namely, "equipollently framed languages". These include all the cases that were excluded by the previous strictly two-fold categorisation because they express PATH and MANNER through equivalent grammatical forms as MANNER VERB + PATH VERB (i.e. serial-verb languages as Niger-Congo, Hmong-Mien, Sino-Tibetan, Tai-Kadai, Mon-Khmer, Austronesian); or [MANNER + PATH]$_{VERB}$ (i.e. bipartite verb languages like (Algonquian, Athabaskan, Hokan, Klamath-Takelman); and MANNER VERB + PATH PREVERB + VERB (i.e. Jaminjungan languages). Finally, rather than imposing rigid typological categories on languages, a more insightful approach may consist of examining all factors that interact to shape rhetorical patterns. Within this framework, the way a language encodes PATH represents only one contributing element, as evidenced by comparisons of frog-story narrations across diverse linguistic systems Slobin (2004). Moreover, Slobin's Thinking for Speaking approach paves the way for including in the picture language contact and bilingualism scenarios, situations that were not accounted for by Talmy's purely typological model. A bilingual speaker can, in fact, develop two different Thinking for Speaking systems, selectively activating different patterns according to the language they are using (Slobin, 1996a).

This last remark is most relevant for studying the influence of contact on the semantics of phrasal verbs in regions like Trentino and South Tyrol. Trentino dialects (originally V-F) have, in fact, been in contact with German (a prototypical S-F language) and therefore constitute the perfect testbed to verify the implications of Thinking for Speaking. The hypothesis is that contact not only superficially influenced those dialects through loans and calques but also deeply affected the speakers' cognitive patterns linked to the expression of movement.

2.1.3. Nuances and Alternative Perspectives: Beavers and Croft

While Talmy's framework and its psycholinguistic application proposed by Slobin have prevailed in the research landscape for decades, their occasionally rigid

generalisations have prompted refinements and alternative proposals. Among the most influential contributions are those of John Beavers and William Croft, who, albeit from different perspectives, have moved beyond Talmy's typology to provide a more granular account of motion events.

John Beavers, together with Beth Levin and Shiao Wei Tham (2010), has questioned the dichotomy itself, arguing that the distinction between satellite-framed and verb-framed languages is not categorical, but instead consists of a typological continuum based on productivity and availability of certain lexicalisation patterns. Beavers and colleagues' approach focuses on the granularity with which a language can express the PATH. Their starting point is the null hypothesis: the resources to express MANNER and PATH are not dedicated to movement, but they are "drawn from a larger set of grammatical devices and processes […] none of which is dedicated to motion event encoding" (Beavers et al., 2010, p. 334).They also propose that cross-linguistic variation emerges from a series of properties independent from motion, which rule morphological, lexical and syntactical resources of every language, "thus predicting a much larger number of language types than Talmy's typology" (Beavers et al., 2010, p. 332). In other words, the main difference would not lie in *what* can be expressed, but in *how* and *how easily* and *frequently* complex and highly detailed trajectories are conveyed. This perspective is essential for analysing linguistic contact scenarios, because it allows for the conceptualisation of influence not as a change in linguistic type from V-F to S-F, but rather as a shift along a continuum, that is, in the present scenario, an increase in the productivity of satellite constructions and of granularity in the description of PATH under the Germanic influence.

W. A. Croft et al. (2010) propose two fundamental revisions of Talmy's typological classification, especially in the case of complex motion event constructions. In their former revision, they argue that "Talmy's typological classification of complex event constructions must be elaborated to include additional types" (W. A. Croft et al., 2010). Authors observe that Talmy's initial distinction should be expanded to include symmetrical strategies as coordination (CD), serial constructions and compounding, as well as double framing ones (DF) (Croft et al., 2010, p.208). This elaboration allows for "a richer classification than Talmy's original […] for grammatical constructions that express events" (Croft et al., 2010, p.201).

The latter and most significant revision originates from the remark that "Talmy's typological classification applies to individual complex event types within a language, not to languages as a whole" (Croft et al., 2010, p.202). Through the analysis of Dutch, Icelandic, Bulgarian, and Japanese, the authors prove that a single language uses different construal types to express various types of complex motion events. In this context, construal refers to the specific way in which a speaker mentally structures and linguistically represents a scene among several alternative possibilities (W. A. Croft et al., 2010). Consequently, the authors argue that "the basic unit of comparison and contrast across languages is not the language as a whole, but each construction that is used to express an equivalent state of affairs" (Croft et al., 2010, p.202). This approach aligns with standard typological practice, which focuses on constructional variation rather than holistic language classification.

Moreover, the authors identify implicational scales that govern complex event encoding, and they suggest that "the intralinguistic and crosslinguistic variation is constrained" (Croft et al., 2010, p.202). The authors suggest that these typological categories are not static, but represent different stages along two parallel grammaticalisation paths. Both paths begin with the coordination of independent elements and gradually lead to univerbation. Specifically, a construction can evolve either towards a satellite-framing (where one element becomes a particle) or towards verb-framing (where the information is integrated into the verbal root).

Finally, the authors highlight an important affinity between typological theory and Construction Grammar. Specifically, the latter stresses how linguistic constructions (understood as form-meaning pairings) constitute the basic unit of grammatical analysis (Fillmore et al., 1988). Consequently, W. A. Croft et al. (2010) note that typology necessarily compares constructions, as it involves the study of how languages express equivalent functions, thus revealing a core principle that aligns the two fields.

2.1.4. Italian and Italian Dialects in the Typological Landscape

Within Talmy's typological framework (2000a), Romance languages, and therefore Standard Italian, are typically classified as V-F, as mentioned in (§2.1.1). In this

language type, PATH is coded in the main verb (e.g. *uscire* 'exit'*, entrare* 'enter'*, salire* 'ascend'), while MANNER is expressed by an adverbial phrase in a gerundive form (e.g. *è entrato correndo* 'he ran in').

However, the Italian situation, and especially that of its regional varieties, is much more complex and nuanced, challenging the rigid dichotomy between V-F and S-F languages. A key element in this complexity is the presence of phrasal verbs, that is, constructions made of a verb and an adverb in particle form (e.g. *andare via*,'go out'*, buttare giù* 'throw down'*, mettere su* 'put up')[18]. These constructions, as remarked by Slobin (1996; 2004), are a main characteristic of S-F languages like English and German, where the satellite encodes PATH information.

Diachronic analysis reveals that verb-particle constructions possess a lengthy history in Romance languages, with origins that can be traced back to Latin (Lorusso et al., 2022). Their frequency in contemporary Italian and their extraordinary productivity in many dialects (Cini, 2008; Cordin, 2011b, 2024) suggest they belong to a split or conflated type[19] in which V-F and S-F strategies coexist (W. A. Croft et al., 2010).

It is precisely at a dialectal level that these satellite tendencies emerge most strongly. Recent studies on varieties in contact with Germanic languages, such as Mòcheno in Cognola (2024); and Cimbrian in Bidese et al. (2016) and dialects in the Trentino region in general (Cordin, 2024), highlight a systematic and calculated use of verb-particle constructions[20]. This phenomenon raises the crucial issue of linguistic contact, specifically whether their high frequency and semantic specificity should be interpreted as traits inherited from Vulgar Latin and subsequently resurfaced, or as structural calques modelled on German, a strongly satellite-framed language. The debate is still open, and research shows how contact may have influenced such constructions.

[18] Their structure can be generalised as follows [[…]$_V$ […]$_P$]$_{VS}$.

[19] In their contribution, the authors wish to apply the categories of "split" and "conflated" not to whole languages as Talmy (2000b, p.66-67) did, but to a specific construction.

[20] Other studies focus on geographically distant varieties, like Genoese in Forner (2024), Sicilian in Amenta (2017), Friulan in Vicario (1997).

2.2. Verb-Particle Constructions in Italian

Italian sentence architecture, despite its tendency to be categorised as verb-framed in Talmy's typological classification, presents an astonishingly pervasive phenomenon that seems to contradict such categorisation, that is, phrasal verbs[21]. Phrasal verbs consist of a verbal base and a modifying particle (most notably an adverb), which constitute a single functional and lexical unit (e.g. *go away, shut up, slow down*). For this reason, they represent a prototypical satellite-framing construction inside a verb-framed language, as they tend to code the PATH on the satellite (Iacobini, 2009a). Their pervasiveness in modern usage and even more in dialects (Cini, 2008; Cordin, 2024; Iacobini, 2009b) raises crucial questions about the dynamics of this system between genealogical inheritance and contact.

For the sake of clarity and consistency, in this study, the Italian *verbi sintagmatici* are referred to as verb–particle constructions (VPCs). This label is commonly used in typological and construction-based approaches to multiword predicates and avoids the misleading connotations of the English term *phrasal verb*, which typically implies a degree of lexicalisation or idiomaticity not always present in the Italian data.

This section aims to investigate the nature of these constructions, starting from their ambiguous morphosyntactic status, through their semantic classification, and to a diachronic overview that attempts to explain both their persistence and their productivity.

2.2.1. Definition and Morphosyntactic Status: Between Multi-word Expressions and Constructions

Defining the grammatical status of Italian verb-particle constructions is a complex task that spans the liminal region between syntax and lexicon. Following Iacobini & Masini (2006a) and Masini (2005), VPCs can be considered a subcategory of multi-word expressions, since, as Masini (2005) notices, Italian phrasal verbs exhibit such syntactic-semantic cohesion that they behave as lexical units, even though they are formally composed of independent elements. This feature is well evidenced by several tests that

[21] One of the most common ways to refer to this phenomenon in Italian is "verbi sintagmatici" whose literal translation is "syntagmatic verbs".

assess the ambiguous status of the Italian VPCs. As the syntactic tests show, VPCs can only host light non-argumental constituents between the verb (V) and the particle (P), as displayed in **Errore. L'origine riferimento non è stata trovata.**; they cannot undergo extraposition processes like left dislocation **Errore. L'origine riferimento non è stata trovata.** and topicalisation **Errore. L'origine riferimento non è stata trovata.**; they cannot be freely coordinated as they do not behave like separate constituents (unlike prepositional phrases and adverbial phrases), as shown in **Errore. L'origine riferimento non è stata trovata.**[22].

(7)

a.	*Luca*	***ha***	***messo***	***giù***	*il*	*telefono*
	Luca	have.3SG	put.PART.PAST	down	the	phone

'Luca put down the phone'

b. **Luca **ha messo** il telefono **giù***

c. *Luca **ha messo** subito **giù** il telefono*

d. **Luca **ha messo** con rabbia **giù** il telefono*

(8)

a.	*Il*	*cattivo*	***è***	***stato***	***fatto***	***fuori***
	The	bad guy	be.3SG	be.PART.PAST	do.PAART.PAST	out

The bad guy has been killed / taken out

b. **É **fuori** che il cattivo è stato fatto*

c. ****Fuori** è stato fatto il cattivo*

(9)

a.	**Sara*	*ha*	*portato*	***fuori***	*la*	*bici*	*e*	*poi*
	Sara	have.3SG	take.PSRT.PAST	out	the	bike	and	then
	su	*la*	*spesa*					
	up	the	shopping					

'Sara took out the bicycle and then up the shopping'

[22] Example **Errore. L'origine riferimento non è stata trovata.** is taken from Masini (2005, p.122).

To determine whether nominal infinitives represent the exclusive strategy for nominalising Italian VPC, (Simone, 1997) proposes an additional test, as illustrated in the examples (10) and (11)[23]:

(10)

a. *Che* *Luigi* ***sia*** ***venuto*** *a* *casa* *mia*
COMP Luigi be.SBJV.3sg come.PART.PAST to house my
mi *ha* *fatto* *piacere*
to.me have.3SG do.PART.PAST pleasure
'That Luigi came to my house pleased me'

b. *La* ***venuta*** *di* *Luigi* *a* *casa* *mia* *mi*
ART.F.S come-NMLZ of Luigi to house my to.me
ha *fatto* *piacere*
AUX make.PTCP please-INF
'Luigi's coming to my house pleased me'

(11)

a. *Che* *tu* *sia* *venuto* *su* *è* *stato* *utile*
COMP you be.SBJV.3sg come.PART.PAST up be.3sg be.PART.PAST useful.
'That you came up was useful'

b. *La tua venuta su è stata utile

c. Il tuo venire su è stato utile

Moreover, Iacobini (2009) identifies the frequent clause-final position of VPCs and their status as a unitary prosodic constituent as additional evidence of the strong bond between these two elements. These observations align with the findings previously established by Simone (1997), from whom the following examples are drawn:

(12)

a. Abbiamo messo su il caffè
1PL.AUX.PRS put. PTC P up DEF.M.SG coffee
'We have put on the coffee'

b. *abbiamo messo sul caffè

[23] These examples are taken from the original work by Simone (1997), to which **Errore. L'origine riferimento non è stata trovata.** was added, to show the only available possibility to nominalise Italian phrasal verbs **Errore. L'origine riferimento non è stata trovata.**. Additionally, **Errore. L'origine riferimento non è stata trovata.** demonstrates the impossibility of nominalising verb-particle constructions by means of deverbal nouns.

1PL.AUX.PRS put. PTCP on-DEF.M.SG coffee

(13)

a. [Sàltano] [sui bambìni]
   jump. PRS.3 PL on- DEF.M.PL children
   'They jump on the children'

b. [Saltano sù], [i bambini]
   jump. PRS.3 PL up- DEF.M.PL children
   'the children jump up'

More specifically, **Errore. L'origine riferimento non è stata trovata.** shows that the typical sandhi between preposition and definite article is prevented in the case of VPCs, as they build a separate phrase, while it is normally allowed in the case of preposition + article juxtaposition (i.e. *siamo andati* ***sulla*** *montagna,* lit. 'we went up the mountain'). This behaviour can be taken as proof that the particle belonging to the VS constitutes the phrase's rightmost boundary (Simone, 1997, p.59). Example **Errore. L'origine riferimento non è stata trovata.** shows a direct consequence of this: usually, adverbs that form a phrase with their subsequent noun are not stressed, while particles in VPCs are, thus confirming their autonomous status.

However, as it is remarked by (Iacobini & Masini, 2006a, p.166), Italian VPCs also display some properties that distinguish them from other multi-word expressions and that draw them closer to constructions in the sense of Construction Grammar (Goldberg, 1995). Their most relevant characteristic in this regard is their schematic productivity.

VPCs, in fact, do not simply consist of a fixed list of lexical items, but they are a set of abstract construal schemata that appear to be partially productive. Masini (2005, p.167) effectively describes them as "verb-particle patterns in which the P position is lexically specified, and the V position is an open slot to be filled with a limited set of verbs that fulfil certain conditions" and that are associated with a specific meaning. For instance, in (14) the verbal slot must be occupied by an agentive verb of removing, so that the construction can consistently mean *to successfully remove something by V-ing* (Masini, 2005, p.167).

(14) a. [V [via]$_P$]$_{VPC}$

b.	*raschiare via*	lit. scrape away	'scrape away/off'
c.	*lavare via*	lit. wash away	'remove by washing'
d.	*grattare via*	lit. scrape away	'scrape away/off'

This nature of the abstract scheme explains the possibility of forming occasional, idiosyncratic verb-particle constructions such as *archiviare via* (lit. 'archive away') or *digerire giù* (lit. 'digest down'), which are immediately understood by speakers of Italian as the result of an underlying productive scheme (Iacobini & Masini, 2006b).

To sum up, Italian VPCs are complex lexical units that lie in the intersection between syntax and lexicon. They can be used as fixed multi-word expressions but are also generated productively through abstract construal patterns. Their syntactic rigidity, as demonstrated by the previous tests, is a defining property of the very verb-particle construction. As Iacobini (2009, p. 114) concludes:

> 'Italian phrasal verbs are constructions with a strong morphosyntactic and semantic cohesion […] which, analogously to word formation patterns, select possible verbal bases according to a limited set of productive configurations that result from generalisations over sets of frequently used verb + particle combinations".

2.2.2. Semantic Classification: The Transparency-Opacity Continuum

The expressive function of VPCs lies in their semantic flexibility, which can be easily described as a continuum that goes from full compositional transparency to idiomatic opacity. This model, which contrasts a rigid categorial view, allows grasping the nuances and the dynamic nature of such constructions.

The full transparency pole comprises all VPCs whose meaning is entirely inferable from the sum of their individual components[24]. These constructions typically express concrete spatial relations and can be subcategorised according to the particle's

[24] Masini (2005, p.167) calls "completely free combinations" those that correspond to the most productive patterns (that is, the most compositionally transparent ones) and "completely fixed combinations" the most idiomatic ones.

semantic function. According to Hammouri's (2013) taxonomy (15), VPCs can have different functions, which include (a) the indication of the movement direction; (b) the enforcement of the verb's meaning and (c) the indication of separation or distancing.

(15)

a.	*Andare lontano,*	*Correre via,*	*Andare vicino;*
b.	*Uscire fuori,*	*Salire su,*	*Entrare dentro;*
c.	*Strappare via,*	*Spazzare via,*	*Tagliare via.*

Moving towards the opposite pole of the continuum, different groups of verbs can be found. For instance, one finds those verbs that underwent processes of metaphorical and metonymic extension. In these cases, the original spatial meaning is either projected onto more abstract domains (metaphor) or shifted through conceptual contiguity (metonymy). In these constructions, the bond with the spatial meaning is still somehow recognisable (despite not being immediate), but the global meaning is no longer purely compositional. Iacobini (2009a, 104-105) observes how a verb like *buttare giù* (lit. 'throw down') can be used in a spatial sense ('knock down'), but also with a set of different meanings metaphorically derived from the original one: *ingoiare* (downwards bodily movement), *scrivere frettolosamente* (downwards hand movement), *deprimere* (downcast emotional state). Similarly, Hammouri (2013; p.153) takes *andare incontro* (lit. 'go towards') as an example of a shift from a literal to a more metaphorical meaning like 'face'.

A further development lying between the syntax-semantics continuum is the grammaticalisation of the particle into an actionality marker. In this case, the particle loses its spatial semantic value to modify the event type (*Aktionsart*[25]) expressed by the verb. Iacobini & Masini (2005, p.11-12) systematically demonstrate that particles such as *via, su,* and *giù* can confer a telic[26] value to atelic verbs. For instance, the verb *tirare* ('pull') is atelic, but *tirare su* (lit. 'pull up') and *tirare giù* (lit. 'pull down') describe events

[25] *Aktionsart* here refers to the intrinsic characteristics rooted in the verbs' semantics and to the resulting groupings proposed by Vendler (1957), which consist of 'states', 'activities', 'accomplishments', and 'achievements'. In contrast, the term *aspect* is used to refer to "the specific perspective adopted by the speaker or writer", as Bertinetto & Delfitto (2000, p.190) point out. For a thorough distinction between aspect and actionality, see Bertinetto (1997).

[26] "Telic": a property of predicates that denote events with an inherent culmination or bounded endpoint.

characterised by an inherent ending point. The particle *via* is particularly productive with this function, as it tends to add a "consumption" or "complete removal" value to the verb's semantics: for instance, *lavare via* (lit. 'wash away') can be translated as 'remove by washing'(see example (14)), or *mangiare via* (lit. 'eat out'), that corresponds to 'completely consume by eating' (Hammouri, 2013; Masini, 2005). These are common examples of grammaticalisation, in which the particle developed a meaning closer to the grammar and related to actionality.

At the opposite pole of the spectrum are the opaque or idiomatic VPCs, whose meaning appears to be completely arbitrary, as it cannot be inferred from their parts. Their relationship with the original spatial meaning got lost or is extremely weakened. One of the most illustrating example is *fare fuori* (lit. 'make out'), which means 'kill'. These forms represent the maximal degree of lexicalisation and are the closest to 'completely idiomatic forms' (Masini, 2005). Due to their opacity, they resemble proper lexical units, which must be individually mapped to their meanings. Masini also proposes an even more fine-grained classification of VS's metaphorical meanings, distinguishing three subgroups based on their semantic transparency. There are transparent metaphors, in which the relationship between the literal and the metaphorical meaning is clear and easily understood, like *buttare via* (lit. 'throw away') which, depending on the context may also have the figurative meaning of 'waste', which derives from the (spatially denoted) idea of 'throwing away something as if it was garbage'. A second group consists of opaque metaphors, which are characterised by a less direct relationship between the literal and the metaphorical meaning. They are therefore more difficult to interpret, especially without a proper linguistic and even cultural competence. An example can be *portare avanti* (lit. 'bring forward'), in which the link between the idea of 'advancing', or 'forward movement' and the specific meaning of 'managing' and 'administering' (as for a business or a company) is not entirely compositional and requires a more complex interpretative process. The last group includes VPCs that underwent a complete metaphorical shift, and whose meaning is now impossible to detect compositionally, as in the case of the already mentioned *fare fuori,* meaning 'kill'. This threefold distinction can be easily related to the tradition of phraseology studies (Fillmore et al., 1988; Makkai, 1972), which distinguishes *encoding idioms* from *decoding* ones. Transparent metaphors would then correspond to the former, as they are effortlessly produced and understood.

On the contrary, completely idiomatic forms are more similar to the latter, since background knowledge about their meaning is required for the hearer to understand them. Finally, opaque metaphors lie in an intermediate position between these two classes (Masini, 2005).

Notably, the boundaries between these categories are not clear-cut, but somehow fluid. For instance, the same VPC can occur in different contexts, bearing meanings with different degrees of transparency, as it can be noticed for *buttare via* (lit. 'throw away'), which can keep a spatial meaning as in *buttare via la spazzatura* (lit. 'throw away the garbage') or acquire the metaphorical meaning of 'wasting something' as for *buttare via del tempo* (lit. 'throw away time'). This transparency-opacity continuum is not only a synchronic categorisation, but it may also reflect a possible diachronic evolution. Particles that participate in the formation of VPCs typically originate with a concrete, spatial meaning. Over time, however, they may undergo different semantic developments: through processes of grammaticalisation, they can acquire more action-oriented readings, while metaphorical extensions may lead to the emergence of idiomatic or non-transparent meanings (Iacobini, 2009b).

2.2.3. A Diachronic Overview: Latin Origins and Romance Development

VPCs' productivity in modern Italian is not just an episodic phenomenon or a recent development; on the contrary, it represents the culmination of a long evolutionary process (Masini, 2006), whose diachronic study is essential to understanding its systemic status. This process originates in Late and Vulgar Latin and consolidates through a slow reorganisation of the strategies concerning the encoding of spatial information.

Classical Latin has often been described as exhibiting satellite-framed behaviour, especially due to its rich and productive system of spatial prefixes (i.e. *ex-ire, in-ire, trans-ire*)[27]. However, its typological classification remains a subject of debate. Specifically, Iacobini et al. (2017) argue against a rigid satellite-framed categorisation, noting that Latin lacks the high degree of PATH granularity and articulation characteristic of canonical

[27] In particular, the grammaticalization trajectory of preverbs is summarised by Zanchi (2019) as follows: independent preverb > left member of a verbal compound > prefix > (zero).

S-F languages. Instead of describing complex trajectories involving multiple GROUNDS, Classical Latin shows a marked preference for 'simple' PATH encoding, typically focusing on a single, goal-oriented GROUND. Furthermore, what distinguishes Latin from the canonical S-F model is the semantic redundancy between preverbs and prepositions. In the analysed corpus, prefixes tend to coincide with prepositions, merely limiting their contribution to reinforcing the directional meaning of the preposition, rather than adding new segments to the trajectory. This inherent simplicity in PATH encoding is now considered one of the main propelling factors that triggered the diachronic shift towards a V-F system, typical of the Romance languages.

As this prefixal system reached its functional limits, it faced the progressive erosion described by Lorusso et al. (2022). Verbal prefixes lost both semantic and phonetic transparency, fossilising in many lexical forms, which compromised their productivity. Simultaneously, some verb-locative adverb combinations already existed in vulgar Latin, even though they were still free and compositional formations, which means they did not have the status of complex lexical units they have today (Lorusso et al., 2022).

During the transition from Late Latin to the Early Romance era[28], the inherited system of Latin verbal prefixes underwent significant restructuring, with many varieties showing reduced prefixal productivity and the parallel rise of prepositional or adverbial markers in motion-event encoding (Acedo-Matellan & Mateu, 2016; Ledgeway, 2012). This shift was encouraged by deep typological transformations, among which the migration from a basic SOV order (modifier-head) to an SVO one (head-modifier), and the loss of the case system, which promoted a stronger analyticity of the language (Masini, 2005). In this reconfigured system, post-adverbial particles emerged as a flexible device to offset the expressive deficit left by the weakening of locative prefixes (Iacobini, 2009b).

As Iacobini & Masini (2006a) show, Latin verb-particle combinations were marginal and stylistically marked, lacking the productivity that would later characterise

[28] The term 'Late Latin' generally refers to the period between the 3rd and 6th centuries AD, marking the shift from Classical standards towardsthe varieties often grouped under 'Vulgar Latin.' The 'Early Romance' era follows, typically spanning from the 6th century to the first written attestations of Romance languages (ca. 9th century).

their Romance reflexes. Their analysis of the Dantean corpus[29] (end of the XIII-beginning of the XIV century) led to the identification of 121 VPCs (and 216 occurrences), made up of 68 verbal bases and 21 particles. The most common ones, such as *andare suso/su* (lit. 'go over'), *torre via* (lit. 'take away'), and *andar via* (lit. 'go away'), show that the pattern was already well structured and that it was employed to convey both transparent spatial meanings and more abstract and lexicalised values (*disporre giù* 'overlook', *mandare fuori* 'express' or *porre giù* 'cease'). Despite their marginality and stylistic markedness in Latin and early Romance, Università & Tre (2006) argues that VPCs found in early Italian texts suggest that these patterns were nonetheless available in the earliest stages of the language.

It is precisely at the dialectal level, however, that VPCs found an exceptionally fertile ground. Iacobini (2009b) emphasises how dialects (particularly the northern ones) acted as a source of vitality for VPCs, developing a richer and more productive inventory of particles as well as combinations than that of standard Italian.

This diachronic development was not merely a structural transition from morphological prefixation to syntactic particle configurations; rather, it represented a functional reorganisation in which the semantic scope of the satellite expanded. Iacobini & Masini (2005) describe the evolution of the meanings of the VPCs, showing how they evolved from a mere spatial semantic value (i.e. *portare via* lit. 'carry away') to more actional and figurative meanings through metaphorical shifts and metonymical extensions. In particular, particles underwent grammaticalisation, gaining the status of telicity markers. As the authors observe, "[a]mong the underlying semantic features that contribute to determining actional classes, telicity is one of the most sensitive to the context of occurrence" (Iacobini & Masini, 2005, p.169). Within this framework, the postverbal particle may be understood as taking over part of the semantic-constraining function that Latin prefixes used to perform, particularly in helping to delimit the actionality expressed by the verb. This interpretation remains consistent with the general view that telicity does not reside in the prefix or particle alone but emerges from the interaction between the verb and its satellite (Iacobini & Masini, 2005; Shibatani, 2004).

[29] *Enciclopedia dantesca,* 6 voll., Treccani.

The cognitive mechanism that allows this functional reuse is explained by Iacobini and Masini (2005) in terms of metonymic extension, which allows the VPCs (and the particle) to retain both the locative and the actional nuances of their meanings[30]. The change into actional markers would be motivated by an iconic principle, according to which the domain of spatial movement (being characterised by beginning, development and end), and that of events' temporal structure can be linked by a structural analogy.

Such an analogy can be examined through W. Croft's (1991), according to which an event can be conceived as a causal chain structured according to the structure 'cause-become-state'. From this perspective, the particle acts delimiting a specific segment of the chain (the verbal segment), where the direction of the spatial movement is metaphorically projected onto the directionality of the change of state. Particles would thus offer different event views[31]: telic particles would focus on the endpoint of the causal chain (that is, the resulting state), while atelic particles would linger on the intermediate process of force transmission.

In this perspective, Iacobini & Masini (2005) suggest the division into two particle categories, specifically, *tendentially telic particles* and *tendentially atelic particles* (Iacobini & Masini, 2005, p.170), depending on their tendency to describe telic or atelic events and on their original meaning. The combination of these factors is exemplified in below.

(16)	a.	*Andare dentro*	'come in'	+ telic
	b.	*Andare attorno*	'wander'	- telic

As these particles, such as *giù* 'down', *via* 'away', *fuori* 'out', and *su* 'up', began to grammaticalise, they transitioned from expressing a physical boundary or goal to providing a telic value to the associated verb. This shift aligns with the broader grammaticalisation framework, characterised by semantic bleaching and

[30] On the contrary, metaphorical shifts allegedly do not allow for the simultaneous presence of actional and spatial meanings (Iacobini & Masini, 2005).

[31] According to W. Croft (1991), event views are subsets of an idealised cognitive model (ICM) of the event, which is conceived as a single causal chain oriented towards the endpoint. This structure follows the cause-become-state pattern. The three event views described by the author are: the stative view, the inchoative view, and the causative view.

decategorisation, where the lexical element loses its referential autonomy to gain abstract functional roles (Ledgeway, 2010). A fitting example is *buttare giù* (lit. 'throw down'), used in the sense of 'jot down' or 'write rapidly'. In this example, the satellite *giù* has undergone desemantisation, consequently shifting from being a spatial marker to becoming an aspectual one, thus signalling the event's endpoint. As described by Lehmann (1995), this process involves lexical items losing their phonological and semantic 'weight' to become fixed syntactic formatives or 'slot-fillers'.

This grammaticalisation pathway, whereby a concrete lexical element (the locative adverb) gradually acquires an abstract grammatical function (actional marker), represents the ending point of a long-term diachronic development. Over the centuries, Italian reshaped its actionality encoding strategies by shifting from a predominantly morphological system (based on Latin prefixation) to a syntactic or construction-based one, in which aspectual notions are expressed through verb-particle configurations.

2.3. Language Contact in Trentino

The Trentino context, marked by a centuries-long asymmetry between a Romance-speaking majority and a German-speaking minority, constitutes a privileged setting for the investigation of typological convergence. Defined here as the gradual alignment of structural patterns between languages in prolonged contact (Matras, 2009; Thomason & Kaufman, 1988), such convergence often entails the replication or adaptation of grammatical structures and constructional patterns (Heine & Kuteva, 2005), as widely documented in areal linguistics (Aikhenvald, 2011).

In this framework, the analysis of VPCs becomes one of the focal points of contact linguistics, since it compares the typically Romance verb-framing technique with the Germanic satellite-framing tendency. This paragraph traces the evolution of this scientific debate, from the classical calque hypothesis to more recent interpretations, scanning through the most relevant empirical studies that contributed to shaping our understanding of the phenomenon.

2.3.1 The Debate on Origins: The Calque Hypothesis and its Critiques

The first hypothesis proposed to explain the pervasiveness of VPCs in Trentino dialects is that of the calque from German, a language historically present in the adjacent Austrian and Tyrolean territories. From this perspective, VPCs are understood as an adaptation of the separable verb model (Ger. *trennbare Verben* or *Partikelverben*) model, typical of some Germanic languages[32] (Los et al., 2012). Traditionally, such a stance was taken by Löfstedt (1961), and most notably by Rohlfs (1969), both of whom suggested that items such as *via* in some VPCs typical of Northern dialects, as *portar via,* directly mirror German structures. This hypothesis appears to be supported by the evident functional parallelism and geographical proximity; however, it has faced significant criticism from scholars such as Durante (1981) and Vicario (1997).

Recent diachronic and dialectological studies highlight the complexity of this phenomenon. In her fundamental analysis, Masini (2006) provides a systematic framework for the debate, evaluating four distinct hypotheses about the origin of the Italian VPCs, which constitute the reference even for the case of Trentino dialects. Firstly, the author proposes some points against Rohlfs' (1969) hypothesis (which is referred to as *the Germanic hypothesis*). Notably, VPCs are attested even in late Latin texts and in Italian varieties that were not influenced by Germanic languages[33]. Secondly, Masini discusses the *Contact hypothesis* developed by Simone (1997), which suggests that VPCs entered standard Italian through the mediation of Northern Italian dialects. However, Masini's findings in ancient texts reveal a "diachronic continuity" within Tuscan itself, weakening the idea of a relatively "recent" loan (Masini, 2006, p. 26). Thirdly, the structural-typological hypothesis is advanced, which the author regards as the most plausible. According to this view, VPCs would result from an autonomous evolution triggered by the erosion of the Latin prefixal system (see section 2.2.3). Since prefixes lost their semantic transparency and phonetic weight, verb-adverb configurations would have acted as a functional "repair", allowing for the reconstruction of motion event

[32] Separable verbs concern most notably Germanic languages such as German and Dutch (Booij, 2002b), but complex verbal predicates can also be found in other Indo-European and Finno-Ugric languages (Ackerman & Webelhuth, 1998).

[33] Iacobini's (2009) work critically explores the diffusion of VPCs in Italian dialects, especially those spoken in Tuscany, Umbria, Marche, Latium and Sicily.

encoding. As a result, lexical transparency and a satellite-framed logic already latent in the Romance substrate were prioritised.

Lastly, the *diamesic hypothesis* (Jansen, 2004) suggests that the spreading of VPCs is linked to their colloquial nature and their affinity with the spoken register. This is explained by the fact that VPCs are typically composed of highly frequent and semantically general words, making them ideal for the immediacy of oral communication (Simone, 1997). This perspective does not contradict the structural and the dialect contact hypotheses, but rather integrates them, suggesting that a spoken *koiné* of the 20th century facilitated their stabilisation in the standard language (Masini, 2006).

In this framework, while the Germanic hypothesis is largely refuted for standard Italian, the role of contact remains a significant factor at the dialectal level. For the Trentino setting, this suggests that the structural-typological shift acted upon a preexisting Romance substrate already prone to analytic developments. In this context, contact with German likely acted as a powerful catalyst, boosting the frequency, productivity and semantic specificity of VPCs. Finally, the diamesic hypothesis clarifies how these patterns, once strengthened by contact and typological pressure, circulated through the spoken register to become a defining feature of modern dialectal use.

Another critique of the "pure" calque hypothesis comes from Bidese et al. (2016, p. 126), who observe that "usage of such constructions (verb + locative) is already attested in ancient and preclassic Latin, where it co-occurred with prefixation"[34] and language contact with Germanic languages might therefore have reinforced an already present phenomenon, without originating it. Cordin (2024, p.5) explains this point clearly: "the influence of German did not lead to the emergence of syntagmatic verbs in Italian and Romance dialects but rather contributed to an extension in the use of a pre-existing construction"[35]. In other words, linguistic contact selected, reinforced and stabilised a pre-existing configuration, gradually elevating it to the dominant solution within the system.

[34] Original Italian text: "L'uso di questo tipo di costruzioni è attestato già nel latino arcaico e preclassico, dove conviveva con la prefissazione" (Bidese et al., 2016, p.126).

[35] Original Italian version: "[…] che l'influenza del tedesco non abbia determinato la nascita dei verbi sintagmatici nell'italiano e nelle varietà dialettali romanze, ma che piuttosto abbia contribuito a un'estensione nell'uso di una costruzione preesistente" (Cordin, 2024, p. 79).

2.4. Hypotheses

In accordance with the theoretical framework outlined in the previous sections, this study aims to investigate the role of language contact with Germanic varieties in the structural and semantic configuration of VPCs in the Alpine Romance varieties, particularly focusing on the Trentino dialects and, in a comparative perspective, also some Ladin varieties. However, the aim of this work is not to assess the direct influence of Germanic languages on the Romance varieties under consideration, but rather to determine the extent to which contact acts as a catalyst for trends already present in the Romance system, contributing to their reorganisation, stabilisation, and/or functional expansion. In order to evaluate such an influence, it is useful to consider the three assessment hypotheses presented by Friedman & Joseph (2025):

i. Contact as a primary cause of language change hypothesis: this view was historically adopted by Rohlfs (1969) and sees Italian VPCs as a structural calque of the German satellite-framing encoding of motion. However, this hypothesis finds a strong counterargument in the presence of VPCs documented in a Dante Alighieri (1265-1321) corpus (Masini, 2006) and in diachronically and geographically regional varieties distant from the Alpine border, such as Tuscan (Iacobini, 2009b).

ii. Genealogical hypothesis: it suggests that VPCs are inherited from vulgar Latin and its natural analytical evolution. A counterargument can lie in the limited presence of such constructions in modern Romance languages such as French, despite being attested in a more ancient phase of the language (Masini, 2006).

iii. Typological hypothesis: it interprets the emergence of VPCs in Italian as a natural result of a given structural environment. According to Friedman & Joseph (2025, p.136): “The correspondence between two languages is not necessarily a matter of inheritance or contact, even if it is found in two genetically or geographically related languages.”

Given these limitations, the present research leans towards a “contact enhancement” interpretation of the VPC phenomenon in Trentino and Ladin, in which contact is seen as an accelerating factor. This perspective accounts for the latent

tendencies towards a satellite-framed configuration analysed in the following sections, which aim to consider the gradual, selective and layered nature of the observed phenomena at the intersection of contact studies, typology of motion events, and construction-based analysis.

2.4.1. Structural hypothesis

H1: Trentino Romance varieties display a structural predisposition to the development of VPCs, independently of their direct contact with Germanic languages.

This hypothesis is based on the idea that the Romance system, and the Alpine varieties in particular, already have the inherent structural and semantic potential required to develop analytic VPCs. According to this view, the historical framework outlined by Stolova (2015) appears to be particularly relevant. According to the author's reconstruction, the evolution from Latin to Romance involved a marked shift towards analyticity, manifested in the growing frequency of prepositional phrases and in the syntactic reanalysis of the adverbs and prepositions as integral components of verb phrases.

Such a reorganisation is neither linear nor can it be attributed to a single factor, but it reflects a more complex process in which the spatial elements external to the verb progressively become necessary for encoding the PATH and the direction of motion (Stolova, 2015, p.85-87). In Latin, indeed, verbs of motion already combined with preverbs, prepositions, and adverbs in highly layered configurations, anticipating the Romance tendency towards more analytical and structurally integrated verb-satellite constructions. For instance, in motion predicates exhibited multilayered verb-satellite configurations in which preverbs, prepositions, and directional adverbs co-occurred within the same construction. As Stolova (2015, p.85-86) shows, the PATH could be included in the verbal stem (e.g. *fugere* 'flee away'), in bare-case constructions (*ire Romam* 'go to Rome'), or through preverbs and prepositional phrases. Highly stratified patterns are also attested, such as:

a.

In	villam	intro	involant	columbae
In	villa.ACC	inside	fly.PRS	doves.NOM

'the doves fly into the villa, inside'

After Varro, *Res Rusticae*, reported in Baldi (2006, p.27).

In a, a preposition (*in*), an accusative NP (*villam*), a directional preverb/adverb (*intro*), and a motion verb (*involant*) combine in a single clause.

In line with these claims, classic studies on Ladin (Haiman & Benincà, 1992) show that different Rhaeto-Romance varieties present more flexibility in the order of postverbal elements with respect to standard Italian. In particular, some Ladin varieties in the Alpine area license V3 and V4 orders, allowing the verb to appear more freely in the sentence with respect to its arguments (Casalicchio, 2020; Casalicchio et al., 2020). This flexible syntactic configuration suggests that the Alpine area constitutes a domain structurally predisposed to host postverbal material (adverbs and other satellite elements included) without violating word order constraints.

Further evidence comes from Bidese et al. (2016) supports this interpretation: the authors show that both Trentino and Ladin varieties display a wider range of acceptable word orders in "V + locative" constructions than standard Italian, including the coexistence of the Romance order (V–loc–XP) and, in Ladin, an additional order (V–XP–loc) superficially similar to German. Crucially, these patterns are not analysed as syntactic borrowings from German, but as outcomes of internal Romance developments that may have been reinforced (but not generated) by contact (Bidese et al., 2016, p.116-118).

Ultimately, this structural flexibility provides the ideal foundation necessary to accommodate the results from the long-term Romance drift towards analyticity (notably in the encoding of PATH), thereby supporting the hypothesis that VPCs are endogenous developments that have found a fertile syntactic environment in the Alpine postverbal domain.

In this perspective, Trentino VPCs are not interpreted as typological anomalies, but as possible outcomes of already attested Romance phenomena such as the reanalysis of spatial elements as event markers (Stolova, 2015), the increasing analyticity in the encoding of PATH and RESULT (Iacobini & Masini, 2006a), and tolerance for verb–adverb configurations in which the adverb is not fully subordinated to the verb (Haiman & Benincà, 1992).

The structural hypothesis, therefore, suggests that the VPCs observed in the corpus will exhibit: formal continuity with other Romance constructions, a non-random particle distribution, and semantics interpretable even without direct reference to Germanic models.

2.4.2. Contact as a catalyst hypothesis

H2: contact with Germanic languages does not introduce VPCs ex novo in the Trentino Romance varieties, but increments their productivity, frequency and semantic stability.

This hypothesis aligns with the research trend that interprets linguistic contact not merely as a driver for borrowing, but as an accelerating factor for ongoing language changes (Heine & Kuteva, 2005). Within this framework, contact enhances the salience of processes already latent in a certain language system (see section 1.1). In a contact area such as the Trentino-Tyrolean one, characterised by historical plurilingualism and intense exposure to Germanic languages, contact could favour the conceptual convergence in the structuring of events, particularly those involving movement.

Such a phenomenon can be described as "mapping of the external onto the internal", according to Friedman & Joseph (2025), since in a cognitive perspective, language contact happens in the bilingual mind in the first place. Therefore, the PATH salience typical of German might lead the bilingual speaker to make some trajectory components explicit, which may remain otherwise implicit. As argued by Stolova (2015), Macro-events decomposition leads to the incorporation of the path into lexically transparent satellites, favouring the convergence with the Germanic model.

In particular, as observed by Talmy (1991, 2000b), satellite-framed languages[36], such as German and English, tend to encode information related to the PATH in non-verbal elements and MANNER in the verbal base. The sustained interaction with such systems can make existing, though marginal, analytic strategies more transparent and functionally salient even within the verb-framed languages[37].

[36] A more detailed exposition of Talmy's (1991, 2000) typological framework, along with a comprehensive inventory of languages belonging to the satellite-framed type, is provided in Chapter 2.1.1.

[37] Verb-framed languages are characterised by the encoding of information regarding the PATH in the verbal base (Talmy, 1991, p. 486)

According to this view, the pressure exerted by Germanic (satellite-framed) systems may influence several aspects of the observed Trentino varieties:

i. Increased frequency and decreased markedness: contact may lead to a higher usage frequency of VPCs, which consequently reduces their perceived markedness;
ii. Semantic specialisation: while the semantic extension of particles to non-spatial domains is attested in several Romance languages (Iacobini & Masini, 2006), contact may reinforce this process, favouring the functional specialisation of particles for directional and resultative components (Beavers et al., 2010; W. A. Croft et al., 2010);
iii. Information distribution: there is a notable tendency to distribute information regarding PATH and MANNER across different elements of the clause, aligning Romance varieties with Germanic motion encoding patterns.

However, such influence should not be interpreted as a mechanical transfer of structures, but as a reinforcement of semantic and syntactic patterns already compatible with the Romance system. As it was underlined by (Matras, 2009), language contact tends to operate at the semantic and conceptual organisation levels, more than as a direct transfer of complex grammatical structures[38].

Consequently, this hypothesis proposes that Trentino VPCs may show a noticeable functional variety; aspectual, actional, and metaphorical meanings may be particularly productive; particles may show signs of incipient grammaticalisation, without reaching the degree of integration observable in Germanic languages.

2.4.3 Comparative hypothesis

H3: Ladin varieties show patterns partially parallel and partially divergent from those of Trentino varieties, thus reflecting a different configuration in the contact continuum.

[38] "Speakers […] exploit the meanings and functions of inherited structures and enhance them to carry out organisation procedures that are replicated from the model language" (Matras, 2009).

The inclusion of some Ladin varieties in this investigation and the adoption of a comparative perspective reflects the need to place Trentino data within the broader framework of Alpine variation, thereby avoiding interpretations that are exclusively grounded in Germanic contact. As it was thoroughly recognised in literature, the Alpine area constitutes a domain characterised by layered linguistic contact, in which genealogical, typological and areal factors interact with one another (Haiman & Benincà, 1992; Loporcaro, 2009).

The comparison between Trentino (Romance) and Ladin (Rhaeto-Romance) varieties allows for the distinction of different phenomena. Firstly, there are purely Romance outcomes that can be traced back to tendencies shared by the Romance family, such as the reanalysis of spatial elements as aspectual or resultative markers, which were already present in the evolution from Latin to Romance. Stolova (2015) shows how locative prepositions and adverbs were progressively integrated into the verbal predicate, gaining event-delimiting functions. This tendency is still clearly visible in today's Italian, where particles such as *via* (away) and *su* (up) can also acquire non-spatial values (i.e. *buttar via* 'eliminate'; *metter su* 'organise'). Secondly, shared phenomena are observed across the eastern Alpine region, regardless of the intensity of direct contact with German, such as the increased flexibility of the postverbal domain that allows for the emergence of VPCs, as shown by Haiman & Benincà (1992). Thirdly, some phenomena can be attributed specifically to contact with Germanic varieties, such as calques[39]. In these instances, Romance pre-existing VPCs undergo semantic specialisation comparable to that of German separable verbs (e.g., Ladin from Val Badia variety *morì fòra* (lit. 'die out') from German *aussterben*. Crucially, the construction itself is not borrowed; rather, the contact model reinforces its metaphorical or resultative value. As Matras (2009) observes, such selective convergence operates primarily at the semantic and lexical level, thereby favouring the entrenchment of compatible patterns without altering the structural principles of the recipient language. Lastly, certain local innovations may arise independently from internal, language-specific developments. An example can be the idiosyncratic selection of particles, according to which a single semantic function can be

[39] Calques are referred to as *pattern replication* "to capture even more closely the fact that we are dealing not with issues of ownership or even direct imitation or duplication, but rather with the activity of employing an item, in context, in order to achieve a communicative goal" by Matras (2009).

expressed by different particles in different, although geographically close, varieties. For instance, in the variety of Trentino spoken in Montagne, the particle *fora* ('out') is used to mark completion or accuracy (e.g., *vardar fora*, lit. 'watch out', meaning 'examine thoroughly'; *studiar fora*, lit. 'study out', meaning 'study intensely'). Conversely, in Veneto and Eastern Trentino, this completive function is fulfilled by either *zo* ('down'), as seen in the Trentino *lavar zo* 'wash down', or by *su* 'up' (e.g. in the Veneto *broar su i piati* lit. 'wash up the dishes')(Cordin, 2011b).

Although being exposed to prolonged and intense Germanic pressure, the Ladin structural configuration and grammatical tradition show some peculiar traits. For instance, descriptive studies on Ladin and Rhaeto-Romance varieties show greater conservatism in some domains, alongside autonomous innovations in others[40] (Haiman & Benincà, 1992). Such a combination makes Ladin a highly informative stone of comparison, useful for evaluating the impact of contact and endogenous processes in the emergence of patterns like VPCs.

Considering the above, the comparative hypothesis proposes that some of the VPCs can be shared by Ladin and Trentino varieties, as they are compatible with more widespread Romance and areal tendencies. Furthermore, other constructions may show different functional outcomes, reflecting a different balance between internal structure and contact pressure. Finally, a variable degree of semantic integration of particles could be observed, which suggests non-uniform reanalysis or grammaticalisation paths. In this perspective, comparison with Ladin is not seen as a means of direct causal attribution, but as a device aimed at delimiting the scope of possible interpretations. This comparison allows for calibrating the data derived from the Trentino varieties, therefore contributing to a finer comprehension of the mechanisms that regulate the emergence and the stability of VPCs in the Alpine Romance varieties.

[40] Ladin varieties show considerable conservatism in phonology (e.g. the palatalisation of velars before /a/ or in the preservation of consonant + l combinations such as in *clave* > *clé* or *tlé*), alongside autonomous innovations in morphology and syntax, such as the different evolution of pronoun systems and verbal construction in the valleys of Gardena, Badia and Fassa (Haiman & Benincà, 1992).

2.5. Research Questions

The hypotheses outlined above lead to the following research questions: What semantic types of VPCs emerge in the different Trentino (and Ladin) varieties? How are these types distributed with respect to the verbal bases and particles involved? Are there systematic preferences or selective restrictions? To what extent do the patterns observed converge with those of neighbouring Germanic languages, and to what extent do they diverge? What evidence of grammaticalisation do particles show in the Trentino varieties? Does areal heterogeneity reflect differences in the history of contact or internal dynamics within the Romance systems considered?

Altogether, these questions aim to clarify the role of VPCs as a domain sensitive to contact, but also as a privileged space for observing the interaction between typology, semantics and diatopic variation.

3. Chapter III: Methodology and Empirical Analysis

3.1. Research Design

3.1.1. The Kontatti Corpus: Description and Data Selection

The *Kontatti* corpus (Ghilardi, 2019), developed by the Free University of Bozen in the context of the *Kontatto* (Dal Negro & Ciccolone, 2018) and the subsequent *Kontatti* projects, constitutes the documentary basis for this study. This corpus offers a rare sample of semi-spontaneous speech from an area characterised by intense contact between Germanic and Romance varieties, such as the Trentino-South Tyrolean region.

Corpus description

Notably, the *Kontatti* corpus comprises 6 hours 48 minutes of semi-spontaneous conversation collected from 50 speakers (between 16 and 97 years old). While the *Kontatto* project focused exclusively on the Bassa Atesina[41], this later expansion *Kontatti* was enlarged to include regional Italian from the province of Trento, Trentino, Cimbrian and three varieties of Ladin, namely the Gardena, the Fassa and the Badia varieties. For the study of VPCs, however, the scope was limited to the Ladin and Trentino dialects, specifically the Trentino dialects from Fiemme, Val Lagarina, Val di Non, and Folgaria.

The corpus consists of Map Task recordings, which ensures comparability between the Ladin, Italian and Trentino varieties. This elicitation technique involves pairs of participants engaged in a problem-solving task: an "instruction giver" uses a map **Errore. L'origine riferimento non è stata trovata.**) with a specific path to guide the "instruction follower" from point A to point B. Crucially, the follower's map (**Errore. L'origine riferimento non è stata trovata.**) differs slightly from the giver's, to trigger clarification requests and meaning negotiation. Such a design aims to mitigate the observer's paradox and the monitoring of speech production, thereby fostering spontaneity.

[41] Located in South Tyrol, the Bassa Atesina (in German *Bozner/Südtiroler Unterland*) encompasses the area stretching from Bolzano in the North to Salorno in the South.

Moreover, the sample of the informants that participated in the Map Task is particularly suited to the present research, as VPCs tend to be more present in diaphasically and diatopically marked varieties (Cordin, 2011b; Iacobini & Masini, 2009), such as those included in the corpus. This task requires the use of numerous spatial references and directional cues to navigate the map's landmarks, facilitating the elicitation of VPCs, which predominantly consist of motion verbs and locative particles such as *nar zo* (Trentino dialect), 'go down'; *ves su* (Ladin from Gardena) 'go up'. Lastly, spontaneous speech recorded during the completion of consent forms and the sociolinguistic questionnaire was also included, providing the opportunity to analyse completely unelicited speech.



Figure 2: Instruction giver's map



Figure 3: Instruction follower's map

Annotation and data selection

All the data coming from the recordings was originally annotated with the software ELAN[42]. The original tiers were organised at the utterance level, and they included an orthographic tier, subject expression tagging, language annotation, and a syntactic notation of V2 constructions limited to the Ladin varieties (Ghilardi, 2019).

However, as the *Kontatti* corpus lacked POS tagging annotation, the selection of VPCs was conducted manually. Data extracted from the ELAN transcriptions were organised in a Microsoft Excel database, where detailed information for every occurrence was recorded. This included the verbal base and the particle (annotated both individually and as a single unit), the linguistic context, the specific language or variety, and the source

[42] https://tla.mpi.nl/tools/tla–tools/elan/

file. To enable cross-linguistic comparisons, particles were first lemmatised to unify different surface forms across varieties (e.g. *sù/sò/sue,* which are all variants of *su* 'up'). They were then classified according to a general macro-lemma (e.g. UP, DOWN, OUT, AWAY), to facilitate a coherent comparative analysis. The same logic was applied to VPCs, leading to the formation of comparable macro-types like *andare giù* ('go down'), which includes forms such as *nar zo* (Fiemme), *vas giò* (Non), *va ju* (Fassa), and *ves ju* (Gardena)[43].

Eventually, each VPC was provided with both an analytical translation (e.g. *venire su* 'come up') and a synthetic (*salire* 'ascend') in standard Italian, fostering a deeper comprehension of the semantic and actional value of each construction. A comprehensive overview of the classification criteria and the rationale behind the twofold annotation strategy is provided in the following sections.

From a methodological perspective, the data were analysed through both quantitative and qualitative approaches. The quantitative analysis aimed to measure the frequency and the diffusion of VPCs across all the varieties. For this purpose, tokens (every individual occurrence registered in the corpus) were taken into consideration. Conversely, for the qualitative analysis, which focused on the meaning and the aspectual value of the VPCs, attention shifted towards types (the distinct structural models, regardless of their frequency of occurrence).

The integration of these two levels of analysis enables the distinction between the system (the theoretical combinatory potential) and the usage norm (the degree to which such combinations are rooted in language use). For instance, some particles show a combinatory preference with specific verbal bases, whereas other combinations are not theoretically ruled out. A case in point is the behaviour of the particles *via* ('away') and *avanti* ('forward'), which can, theoretically, serve both as telic and atelic markers. In practice, however, their usage reveals a strong tendency towards just one of these functions. Without a dual annotation, the discrepancy between the potential of the linguistic system and the actual linguistic behaviour of the speakers would remain

[43] Throughout this study, the varieties identified in parentheses correspond to the specific toponyms of the areas where the data was collected.

unobserved. For reference, the full annotated corpus is provided in Appendix A – Trentino sub-corpus) and Appendix B – Ladin sub-corpus).

3.1.2. The Analytical Grid: Criteria for Semantic and Actional Classification

The analysis of VPCs extracted from the *Kontatti* corpus was conducted via a multidimensional analytical grid integrating semantic, actional (*Aktionsart*), and morphosyntactic criteria. The inclusion of both *Aktionsart* and semantic features stems from the layered nature of VPCs, which operate across different linguistic levels. Specifically, a semantic classification is essential to delineate the particle's primary function in relation to the verbal base, as it facilitates the distinction between literal (mainly spatial), pleonastic, metaphoric, and idiomatic meanings of the constructions (Iacobini, 2009, 2015; Iacobini & Masini, 2005, 2006). Conversely, the mapping of the particle's impact on the event's temporal structure relies on the analysis of *Aktionsart*. Without such parameters, the telicisation undergone by some otherwise atelic VPCs, such as *lavare* ('wash'), through the addition of telic particles such as *via* ('away'), would remain unnoticed (Iacobini & Masini, 2005).

The compositional nature of VPCs, therefore, necessitates the inclusion of both *Aktionsart* and semantic features. In this framework, actionality is not merely a lexical trait of the verb, but a dynamic property emerging from the interaction of the verbal head and the particle (Booij, 2002a, 2002b; Iacobini & Masini, 2005). In this perspective, Brinton's (1988) theory explains the particle's contribution through the process of metonymic extension. Notably, it would originate from a structural and cognitive analogy between the PATH and the *Aktionsart,* where particles expressing a trajectory towards a spatial limit (like *via* 'away'*, su* 'up'*,* and *fuori* 'out') project their intrinsic spatial finiteness on the temporal axis (Brinton, 1988, p.191-199). Such a projectional mechanism is further employed by W. Croft (1991), who proposes that "there is an experiential relation between motion and causation that strongly suggests the path-based metaphors in which direction of motion is extended to direction of causation".

Semantic classification

The notational scheme adopted for the semantic classification of VPCs in the corpus comprises the four main categories: locative-directional, pleonastic, metaphorical,

and idiomatic-lexicalised [44]. This analytical grid was essential for mapping the degree of transparency or semantic bleaching exhibited by the VPC instances in the Trentino (and Ladin) varieties.

Specifically, the locative-directional category encompasses cases where the particle has the primary function of PATH marker, acting as a satellite that specifies the directional component not otherwise expressed by the verbal base alone. Conversely, instances in which the particle does not introduce new spatial information about the PATH but rather clarifies a semantic trait inherent in the main verb's semantics (e.g. *scendere giù* (lit. 'descend down') are included in the pleonastic-reinforcing category. Following Masini (2005), metaphorical VPCs are further divided into two subcategories, namely transparent and opaque, depending on the degree of semantic erosion. Lastly, the idiomatic-lexicalised label is reserved for those VPCs whose meanings are no longer accessible through metaphoric associations, having become fully integrated into the lexicon (e.g. *fare su* lit. 'make up', meaning 'make a mistake').

Actional classification

Regarding the actional classification of VPCs in the dataset, the grid adopted in this study was based on that proposed by Bertinetto (1986). This model adapts Vendler's (1957) classification, resulting from the combination of the [± stative], [± durative], and [± telic] semantic dimensions. For clarity, a schematic comparison of the classes by both authors is provided in Table I.

Bertinetto	Vendler	Durative	Telic	Stative
STATIVES (STATIVI)	STATES	+	-	+
CONTINUATIVES (CONTINUATIVI)	ACTIVITIES	+	-	-
RESULTATIVES (RISULTATIVI)	ACCOMPLISHMENTS	+	+	-
TRANSFORMATIVES (TRASFORMATIVI)	ACHIEVEMENTS	-	+	-
PUNCTUALS	(ATELIC ACHIEVEMENTS)	-	-	-

[44] The semantic classification of VPCs adopted in this study follows the framework proposed by Zanchi & Marchesi (2025) in their talk *"Assessing Greek preverbs' productivity in diachrony: a case study on hupo-"*, presented at the 27th International Conference on Historical Linguistics (Santiago de Chile, August 18–22, 2025).

(PUNTUALI)[45]

Table I: Event classification according to Bertinetto (1986) and Vendler (1957)

The distinction between TRANSFORMATIVES (ACHIEVEMENTS) and PUNCTUALS was considered pertinent in this context, as it facilitates the isolation of those instances in which the particle marks the instant attainment of a boundary or destination. This property is considered essential for the analysis of VPCs, which predominantly involve motion verbs.

The relevance of this distinction is further reinforced by the fact that, according to Iacobini (2009b) andIacobini & Masini (2006), actionality should not be interpreted as a purely lexical property of the verb; on the contrary, it should be understood as a compositional property of the construction that emerges from the intersection of the verbal base and other elements belonging to the phrase (notably particles and other satellites). This approach overcomes the traditional view of *Aktionsart* as strictly linked to the lexicon, highlighting how the internal temporal structure of the event results from the systematic combination of different factors operating at a clausal level (Iacobini & Masini, 2005). Furthermore, this choice is enforced by the fact that in the framework of Construction Grammar, lexicon and grammar are seen as elements integrated along a continuum and not as separate entities.

On a notational level, the adoption of this framework entailed the attribution of actional labels (RESULTATIVE, TRANSFORMATIVE, STATIVE, CONTINUATIVE and PUNCTUAL) to the whole [V + P] construction, rather than to the verbal base only. This allowed for the mapping of how the interaction between the two elements modifies the *Aktionsart* through metonymic telicisation, a process previously highlighted by Iacobini & Masini (2006). For instance, particles such as *via* ('away') and *su* ('up') are expected to alter the verb's aspectual nature, shifting atelic verbal bases (like CONTINUATIVES) towards events that incorporate an intrinsic endpoint, namely RESULTATIVES and TRANSFORMATIVES.

Annotation of VPCs and of the corresponding analytical forms

[45] This class is introduced by Dini & Bertinetto (1995), therefore, it is not included in Vendler's (1957) classification. For comparative purposes, it corresponds here to the label of atelic achievements.

In line with constructionist frameworks, the morphosyntactic annotation of the VPCs in the corpus treats the verb and the particle both as individual components ([V]+[P]) and as a single, integrated unit (as [V+P]). This dual approach is essential for capturing the different degrees of productivity that often characterise such constructions (Masini, 2005). Moreover, since several VPCs in the dataset convey idiomatic or metaphorical meanings, they often defy compositional analysis. Therefore, adopting a constructionist perspective enables the analysis of such instances as *constructional idioms*, that is, "semi-specified syntactic structures with a (partially) non-compositional meaning that are stored in the lexicon and display a limited productivity" (Iacobini & Masini, 2005, p.159).

The annotation includes a synthetic semantically equivalent form for every VPC in the dataset, for example, *entrare* (lit. 'enter') corresponds to the analytic form *andar dentro* (lit. 'go inside'). As outlined previously (2.2.3), Italian VPCs emerged as a periphrastic strategy for compensating the progressive decline and opacisation of Latin prefixes, which gradually lost their productivity in the domain of space (Cordin, 2011; Iacobini & Masini, 2005; Masini, 2005). The annotation of synthetic forms enables investigation of how the Trentino and Ladin verbal systems encode information about PATH and/or *Aktionsart* in the structuring of motion events. Such information can be used to verify the tendency of these languages to use an analytical strategy to mark the endpoint or result of the action more transparently than in standard Italian (Cordin, 2011a, 2011b).

Moreover, on the actional level, a comparison with the synthetic equivalent of the VPC helps verify the metonymic telicisation process operated by the particle, confirming that the VPC gains the same *Aktionsart* of its synthetic counterpart.

Satellite notation and spelling out

The choice of cataloguing the verbs, particles, and other satellites both as units and as separate entities stems from the need to account for the complex structure of Trentino VPCs. This level of granularity makes it possible to examine the spelling out of arguments and telicity markers characteristic of the Trentino varieties, along with their outcomes, such as doubling and accumulation phenomena. Furthermore, a distinct annotation of verbs and satellites is the prerequisite for conducting statistical analysis on VPC productivity, for instance, by measuring the number of verbal bases combined with

the particle *via* (‘away’) with respect to *su* (‘up’). Consequently, annotating the different satellites separately is essential for analysing redundancy, distinguishing between compositional and pleonastic VPCs.

The *spelling-out* phenomenon (e.g. the Trentino *vèi dentro!* Lit. ‘come in!’ in place of the standard Italian *entra!* lit. ‘enter!’) is described by Cordin (2011a) as the morphosyntactic requirement of North-Eastern Italian dialectal varieties of obligatorily marking functional verbal categories through an explicit element (namely a particle), even when the nominal argument is not expressed (Cordin, 2011a). As the author notices, this strategy is adopted to mark an argument position in case of motion verbs, or the ‘dynamic nature of a telic verb’ (Cordin, 2011a, pp. 205-206). The particle acts, therefore, as a grammaticalised signal that makes functional traits transparent (e.g. RESULT, ASPECT or PATH), which the prefixation system is no longer able to express effectively.

3.1.3 Metrics and Methods of Quantitative Analysis

Data analysis of the VPCs within the Trentino and Ladin varieties of the *Kontatti* corpus is structured around a series of quantitative metrics. These are designed to assess the general status of such constructions and to validate the research hypotheses. As a preliminary step, the corpus was categorised into VPC types and VPC tokens; subsequently, quantitative analysis was performed exclusively on VPC tokens, while VPC types provided the basis for qualitative observations.

The analysis is structured into three stages. The former evaluates VPC density and richness by cross-referencing normalised frequencies with Guiraud’s and *MATTR* indices while providing a multifaceted view of how these constructions are distributed. The second phase shifts the focus towards the functional stability of the particles. Here, a clear distinction between highly specialised particles and those characterised by polyfunctionality is delineated. Lastly, the study moves towards statistical validation by utilising permutation tests and calculating Cramér’s V to verify the significance and the strength of the association between forms and actional or semantic classifications.

Normalized frequencies

The initial phase involved calculating normalised frequencies, a metric essential for comparing samples of varying sizes. For every particle registered in the "macro_lem[46]" field, its raw frequency was divided by the total number of tokens in the reference sub-corpus and multiplied by 1000. This approach enables an accurate assessment of VPC usage density across languages and varieties, avoiding distortions caused by uneven sub-corpus dimensions.

In addition to frequency, measures of lexical richness evaluate the structural variety of the data. For this purpose, Guiraud's Index (*R*) and the Moving Average Type-Token ratio (*MATTR*) were preferred over the traditional Type-Token Ratio (*TTR*).

Guiraud's Index, defined as $R = \frac{V}{\sqrt{N}}$, mitigates the sensitivity to corpus size by normalising the number of types against the square root of the tokens (*N*).

However, *MATTR* was also calculated using a sliding window of 20 tokens (L=20) to guarantee the result's complete independence from corpus length. This moving-average approach provides a more stable estimate of VPC richness by averaging TTR values across the entire sub-corpus, thereby filtering out bias introduced by varying total token counts. To maintain statistical reliability, *MATTR* was exclusively applied to sub-corpora exceeding 20 tokens. Micro-corpora (e.g. Ita, Bad, Non) were excluded from this specific metric, as they do not provide a sufficient window for meaningful density analysis.

Semantic and actional distribution

The analysis then addressed the semantic and actional distribution. The distribution of particles across semantic and actional categories was mapped using contingency tables. Normalising each row of these tables enables a visualisation of usage proportions, highlighting whether a specific macro-lemma exhibits a functional specialisation within a particular semantic domain.

Polysemy and Functional Stability: Shannon's Entropy

To quantify the particles' polysemy and their functional stability, Shannon Entropy (*H*) was calculated. This metric measures the diversity degree in the distribution of

[46] This field hosts the results of a second phase of lemmatisation, after which every particle in the corpus is reconducted to a general lemma, transcending the interlinguistic differences. Graphically, the "macro_lem" is reported in small capitals.

satellites' meanings. A high entropy signals a diversified semantic use, while values approaching zero indicate a highly specialised or even grammaticalised function.

Statistical Significance: Monte Carlo Permutation Tests

To exclude the possibility that chance could influence the link between particles and the actional function, and to ensure that such links are systematic, inferential analysis on contingency tables was conducted. Moreover, given the sparsity of the data, characterised by low absolute frequencies and several null cells, the traditional Chi-squared test was considered inappropriate, as its asymptotic values do not hold for small sample sizes. Consequently, a permutation test based on the Monte Carlo method (5.000 iterations) was implemented. This procedure generates a probability distribution by randomly shuffling the data to calculate an exact p-value, ensuring statistical reliability even in the case of asymmetrical distributions.

Strength of Association: Cramér's V

In addition to significance, the strength of association between macro-lemmas and both actional and semantic categories was measured through Cramér's V (*V*). This metric, ranging from 0 (no association) to 1 (perfect association), allows for the quantification of functional rigidity within two language systems. A comparison between *V* values for Ladin and Trentino reveals which sub-corpus exhibits a more consistent selection of satellites and *Aktionsart* configurations.

3.2. Data Analysis

This section presents the results of the quantitative analysis of VPCs within the *Kontatti* corpus, focusing on the comparison between Trentino and Ladin varieties. The study aims to describe the frequencies of such constructions, leading to the statistical validation of the observed data[47].

[47] In this work, frequency rates are interpreted as an indicator of VPCs' productivity across the different sub-corpora.

3.2.1. Quantitative Analysis: Frequency, Entrenchment, and Productivity

VPC distribution: an overview

The quantitative analysis of VPCs extracted from the reference corpus requires a systematic description of data distribution, aimed at delineating the degree of entrenchment of the combinations within the analysed languages. The extraction and normalisation processes provide an overview of both the volume of the occurrences (tokens) and the variety of unique combinations (types). The results are summarised in the following sections.

Overall, the research highlights a different usage density between the two language groups. The Ladin sub-corpus yielded 176 tokens, which can be attributed to 59 types, while the Trentino sub-corpus contained 115 tokens spread across 49 types. However, the data reported in the tables below reveal a non-homogeneous distribution among the distinct local varieties. Normalised frequencies of VPCs reported in reveal a striking predominance within the Gardena sub-corpus; indeed, the frequency of these constructions is more than double that observed in Folgaria, despite the comparable dimensions of the two sub-corpora.

	Variety	VPC_ Count	Total_ Tokens	Normalized_Frequency_ per_1000
Trentino	Non	9	2032	4.429
	Fie	23	5999	3.834
	Fol	60	10269	**5.843**
	Lag	22	5373	4,095
	Ita	1	2861	0.350
Ladin	Gar	132	10198	**12.944**
	Fas	42	5749	7.306
	Bad	2	644	3.106

Table 2: Normalised frequencies across sub-corpora

The overall lexical richness measure (Guiraud's Index) indicates that the richest varieties are Folgaria (Fol; R = 6.19) and Gardena (Gar; R = 5.19), both of which display a robust, diversified VPC system. Despite exhibiting the highest number of VPC occurrences, these varieties also feature a wide range of types, suggesting a dynamic linguistic phenomenon that is not restricted to a few crystallised forms. Conversely, the

lowest levels of lexical richness are found in Trentino Italian (Ita; 1.00) and Badia Ladin (Bad; 1.41), which exhibit the fewest VPCs. However, the limited size of the sub-corpora likely influences this result, as both the total occurrences and the lexical variety are constrained. Nonetheless, it is noteworthy that sub-corpora of comparable dimensions, specifically Trentino Italian (2861) and Trentino from Val di Non (2032), present a striking disparity in VPC frequency. This results in a Guiraud's Index for Val di Non that is three times higher than that of regional Italian, signalling that VPC inventory might be significantly richer in the dialectal variety than in regional Italian[48].

A comparison of Guiraud's Indexes for Ladin and Trentino () reveals a similarity (4.44 and 4.56, respectively). This fact suggests that, regardless of the total number of occurrences, both language groups exhibit a nearly identical potential for generating lexically diverse VPC types. A more accurate analysis reveals that the Gardena variety shows the highest Guiraud's index in the Ladin sub-corpus. However, a closer look at the MATTR calls this data into question, as Gardena's perceived predominance is attenuated, suggesting that Guiraud's Index is still influenced by corpus size.

The Moving Average Type-Token Ratio (*MATTR*) was applied to sub-corpora with a sufficient sample size ($N > 20$) in order to further validate these results and account for lexical density at a local level. Among all varieties, Folgaria exhibits the widest variety and the highest density score in the dataset (0.795), according to the *MATTR* results ($L = 20$). Interestingly, Gardena's (Gar) lower *MATTR* (0.653) in comparison to Fassa (0.722) suggests a higher degree of local repetition, despite Gardena's high global productivity, indicated by Guiraud's Index ($R = 5.92$). In the Gardena sub-corpus, the occurrence of the most frequent VPC forms likely offsets the wide inventory. Conversely, Fiemme (Fie) exhibits the lowest *MATTR* (0.413), indicating that its VPC system is not only globally less rich but also highly repetitive. Finally, at a macro-regional level, despite their similar Guiraud's Indexes, the Ladin group displays a higher lexical density (*MATTR* = 0.688) than the Trentino sub-corpus (*MATTR* = 0.614), suggesting that Ladin varieties employ a more varied selection of VPC types within shorter portions of speech.

[48] This interpretation, however, should be treated cautiously. Factors such as the limited size of the sub-corpus, the specific constraints of the Map task and other external variables may have influenced the outcome. An isolated result is, after all, not sufficient to support any overarching linguistic generalization.

Sub-corpus	Types	Tokens	TTR	Guiraud_Index	MATTR
Fie	18	23	0,783	3,753	0.413
Lag	18	22	0,818	3,838	0.633
Non	9	9	1	3,000	/
Ita	1	1	1	1,000	/
Fol	48	60	0,8	**6,197**	**0.795**
Trentino	49	115	0,426	4,569	0.614
Gar	68	132	0,515	**5,919**	0.653
Fas	31	42	0,738	4,783	**0.722**
Bad	2	2	1	1,414	/
Ladin	59	176	0,335	4,447	0.688

Table 3: Lexical diversity and distributional statistics across sub-corpora

Regarding the distribution of the most frequent VPCs (Table 4), a marked diversity within the analysed sub-corpora is noticed, both in terms of absolute frequency and richness of combinations. The Gardena variety, presenting not only higher normalised frequencies (with peaks at 1.71 for *andare via* 'go away'), but also the widest range of verb-particle combinations, can be recognised as the most vital system. Conversely, varieties like Fiemme and Folgaria exhibit a higher concentration of fewer core VPCs, which are mainly linked to vertical movements (*andare su/giù* 'go up/down') and have a lower normalised frequency.

Overall, *andare giù* ('go down') emerges as the most entrenched macro-type in Trentino, with a normalised frequency of 0.29 in the Fiemme and 0.25 in Folgaria. Similarly, *andare su* ('go up') exhibits comparable values across both varieties. Other prominent combinations, especially in the Ladin varieties, include *passare via* ('pass away') and *andare giù* ('go down'), both of which show a high degree of entrenchment in the Fassa and Gardena sub-corpora.

A common trait in both the main sub-corpora (Trentino and Ladin) is the dominance of generic motion verbs (e.g. *andare* 'go'), which increases the productivity of the whole system. However, a major difference emerges from the comparison of Trentino and Ladin data.

Normalised frequencies suggest that, while the Trentino system is primarily oriented towards vertical spatial relations (*andare giù* 'go down', *andare su* 'go up'), the Ladin system seems to be more specialised in describing separation and crossing. This preference is signalled by the prevalence of the particle *via* ('away'), included in the two most prominent VPCs in the entire corpus, namely 'go away' and 'pass away'.

This descriptive overview provides the necessary foundation for the subsequent functional analysis of VPC semantics and actionality.

Sub-Corpus	**Macro-Type**	**Norm. Freq. (1000)**	**Peak Frequencies**[49]
Ladino	*andare via*	1,71	**Gar**
	passare via	1,07	**Gar**
	andare giù	1	**Gar** / Fas
	andare avanti	0,35	**Gar**
	andare fuori	0,35	**Gar** / Bad
Trentino	*andare giù*	0,29	**Fie** / Fol
	andare su	0,25	**Fie** / Fol / Non
	mettere su	0,25	**Fol**
	andare avanti	0,16	**Fie** / Lag
	arrivare giù	0,16	**Lag**

Table 4: Distribution and peak normalized frequencies of the most frequent VPC macro-types.

Satellite Accumulation: distribution and functions

The analysis of the corpus highlights a distinctive structural feature: particle accumulation, defined as the co-occurrence of two or more satellites associated with a single verbal base (e.g. *andare su dritto,* lit. 'go up straight'). The data suggests that this

[49] The normalised frequencies (per 1000 tokens) reported here refer to the peak values recorded within the dominant variety for each macro-type. This choice serves to highlighting the greatest vitality reached by every VPC across distinct sub-corpora, preventing aggregated means from obscuring the specific peculiarities of each language variety.

is not a uniform trend in the sub-corpora, rather it exhibits a significant functional specialisation.

From a quantitative perspective, accumulation emerges as an almost distinctive trait of the Ladin group, where it reaches 77,78% of all such instances, against the sporadic occurrences found in the Trentino sub-corpus. Within Ladin domain, the Gardena variety leads the distribution (40,74%), closely followed by Fassa (37,04%). Conversely, in the Trentino sub-corpus, this phenomenon remains marginal, being restricted to the varieties of Val di Non and Val Lagarina, each exhibiting 11,11% of accumulation. These findings suggest that accumulative structures are more deeply rooted in the Ladin sub-corpus than in its Trentino counterpart.

Sub-corpus	Absolute Frequency	Percentage
Gar	11	40,741%
Fas	10	37,037%
Non	3	11,111%
Lag	3	11,111%

Table 5: Satellite accumulation across sub-corpora

3.2.2. Distribution of Semantic Categories and *Aktionsart*

This section outlines the semantic and actional profiles of the VPCs identified within the main corpus as well as in the individual sub-corpora, providing a descriptive foundation for the interpretation of the data.

Semantic analysis

Semantic analysis of VPCs aims to determine the distribution of various meanings, categorised as locative-directional, metaphorical, actional, pleonastic, or idiomatic. As reported in , normalised data indicate that the locative-directional category is predominant across all sub-corpora[50] (Ladin 73.7%; Trentino 75.7%).

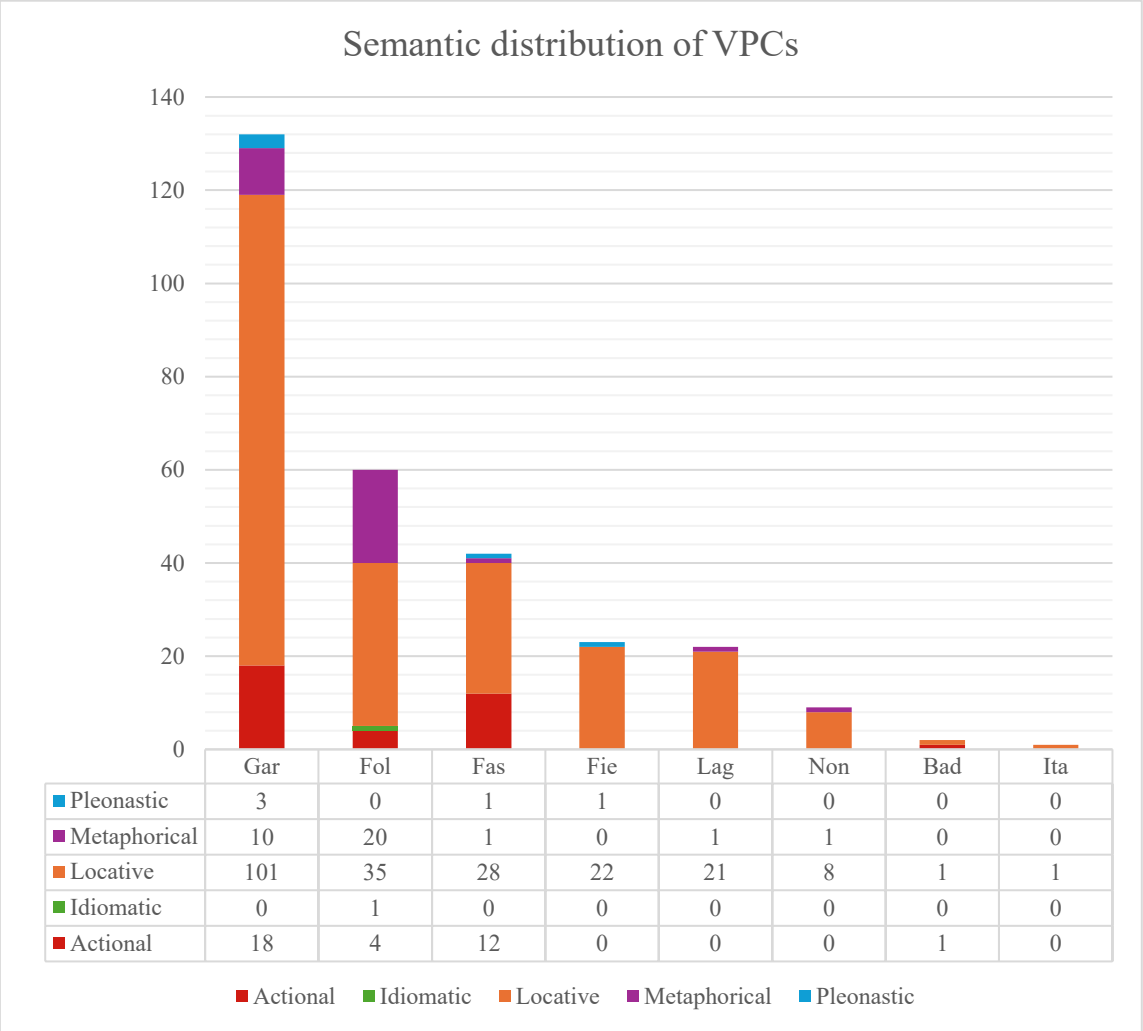
[50] As it will be discussed in

However, substantial differences emerged regarding the other categories. Metaphorical uses in the Trentino varieties (19.13%) are nearly three times more frequent than in the Ladin ones (6.29%). This trend is particularly evident in the Folgaria sub-corpus, where metaphorical uses account for one-third of the total (33.33%). Additionally, only one VPC was categorised as idiomatic, appearing in the Folgaria variety. Conversely, a higher proportion of actional meanings is observed in the Ladin varieties (17.7%), compared to only 3,48% in the Trentino group. The Gardena variety, in particular, shows a marked preference for actional meanings (13.7%).

Language	**ACTIONAL**	**IDIOMATIC**	**LOCATIVE-DIRECTIONAL**	**METAPHORICAL**	**PLEONASTIC**
Ladino	**17.71%**	0.00%	**73.71%**	6.29%	2.29%
Trentino	3.48%	0.87%	**75.65%**	**19.13%**	0.87%

Table 6: Semantic distribution of VPCs across sub-corpora

Chapter IV: Discussion and Conclusions, this neat prevalence is likely attributable to the nature of the Map Task itself, which necessitates the use of spatial and directional references to navigate the landmarks on the map. Therefore, these values are marked with * in the table.



	Gar	Fol	Fas	Fie	Lag	Non	Bad	Ita
Pleonastic	3	0	1	1	0	0	0	0
Metaphorical	10	20	1	0	1	1	0	0
Locative	101	35	28	22	21	8	1	1
Idiomatic	0	1	0	0	0	0	0	0
Actional	18	4	12	0	0	0	1	0

Figure 2: Semantic distribution of VPCs across corpora and absolute frequencies

Regarding the semantic classification of particles summarised in Figure 3 and Figure 4, further analysis shows a strong association between the particle DOWN and the locative-directional meaning within the Ladin sub-corpus (97%). In contrast, the counterpart particle UP exhibits a more fragmented distribution, characterised by a significant proportion of actional (25%) and metaphorical uses (14.2%). This trend is even more pronounced in the Trentino varieties, where UP displays a metaphorical incidence of 34.2%.

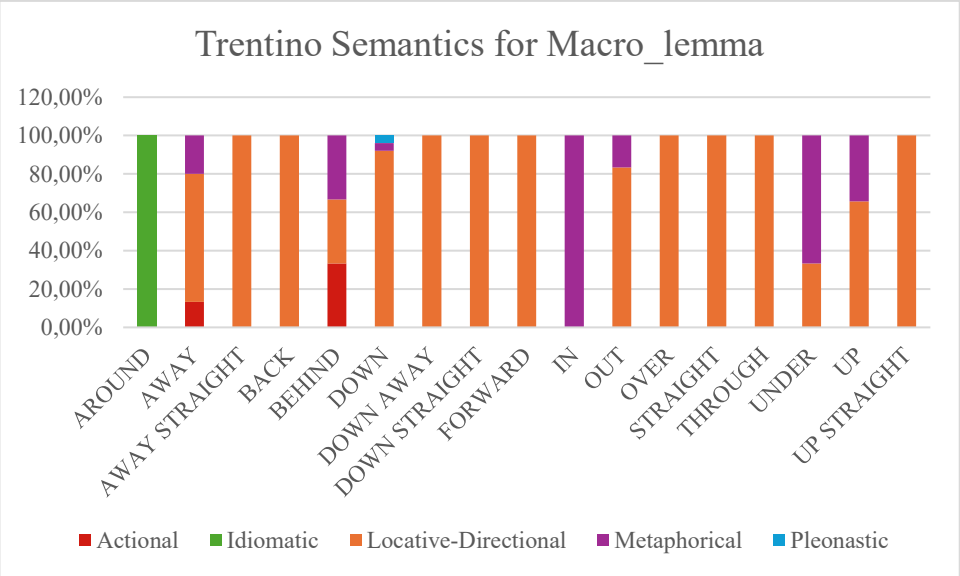


Figure 3: Semantic classification of particles in the Trentino sub-corpus

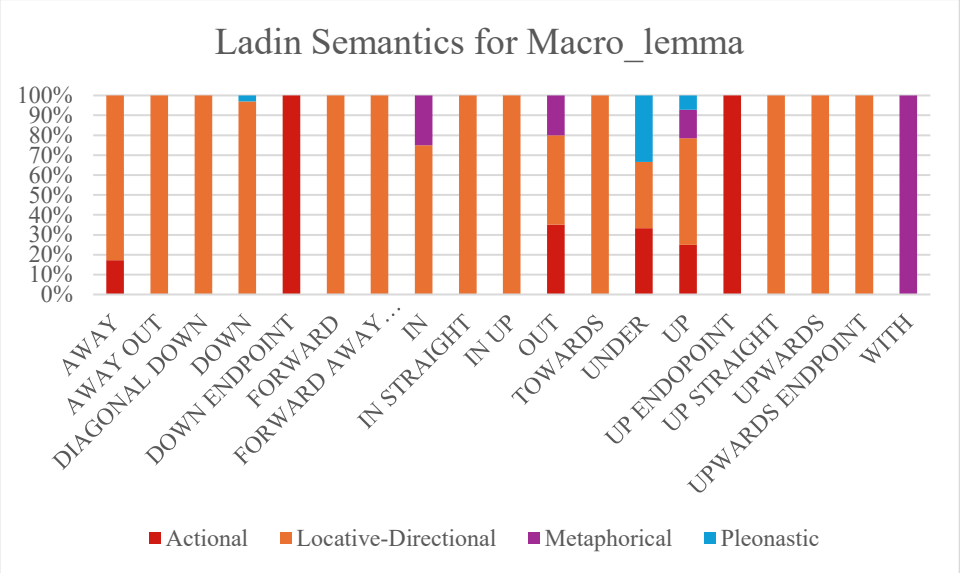


Figure 4: Semantic classification of particles in the Ladin sub-corpus

Semantic characteristics of accumulated particles

From a semantic perspective (), the primary function of stacked particles is the locative-directional, accounting for 62.96% of the total occurrences (17 cases). In these instances, accumulation here serves to specify the motion direction more precisely or to define the endpoint of the movement (e.g. *andare giù in fondo*, lit. 'go down to the bottom'). A significant portion of stacked particles falls under the actional category, thus

contributing to the *Aktionsart* of the event, rather than adding a spatial coordinate. Finally, pleonastic accumulation appears to be a marginal phenomenon, occurring in only a single case (3.70%).

Semantic_Classification	Absolute Frequency	Percentage
Locative-Directional	17	62,96%
Actional	9	33,33%
Pleonastic	1	3,70%

Table 7: Semantic classification of accumulated particles

Focus on particles and Aktionsart

The following section explores the functional distribution of VPCs by categorising each occurrence according to its aspectual contribution to the predicate. By mapping the particles onto specific actional classes, it is possible to observe how these satellites influence the aspectual contour of the events, highlighting whether certain particles serve as consistent markers of telicity.

From an actional perspective (summarised in), the RESULTATIVES category dominates both varieties, accounting for 84% of the VPCs in Ladin and 70.4% in Trentino. This data confirms the role of satellites as telicity markers, as established in the scholarship (e.g. Cordin, 2011a; Iacobini & Masini, 2006a). The second most frequent category in the Trentino varieties is that of TRANSFORMATIVES (13.0%), whereas the Ladin varieties exhibit a higher incidence of CONTINUATIVES (8.0%), which represents the third most populated category in the Trentino corpus (11.3%). This higher incidence suggests that CONTINUATIVES in the Ladin sub-corpus may represent a more relevant category, possibly resulting from a mapping of the conceptual domain of space onto that of time. This mapping hypothesis is strengthened by the empirical data regarding the particle FORWARD, which is associated with CONTINUATIVES (atelic) in 100% of the occurrences, as it is displayed in Figure 5.

Sub-corpus	CONT	PUNC	RES	STAT	TRANS	Tot N
Fol	4 (6,7%)	0 (0,0%)	43 (71,7%)	5 (8,3%)	8 (13,3%)	60
Fie	4 (17,4%)	0 (0,0%)	17 (73,9%)	1 (4,3%)	1 (4,3%)	23
Lag	5 (22,7%)	0 (0,0%)	12 (54,5%)	0 (0,0%)	5 (22,7%)	22
Non	0 (0,0%)	0 (0,0%)	8 (88,9%)	0 (0,0%)	1 (11,1%)	9
Ita	0 (0,0%)	0 (0,0%)	1 (100,0%)	0 (0,0%)	0 (0,0%)	1
Trentino	13 (11,3%)	0 (0,0%)	**81 (70,4%)**	6 (5,2%)	**15 (13,0%)**	115
Gar	12 (9,1%)	2 (1,5%)	109 (82,6%)	4 (3,0%)	5 (3,8%)	132
Fas	2 (4,8%)	0 (0,0%)	37 (88,1%)	3 (7,1%)	0 (0,0%)	42
Bad	0 (0,0%)	0 (0,0%)	2 (100,0%)	0 (0,0%)	0 (0,0%)	2
Ladin	**14 (8,0%)**	2 (1,1%)	**148 (84,1%)**	7 (4,0%)	5 (2,8%)	176

Table 8: Actional classification of VPCs across sub-corpora

More granular analysis reveals that the "macro lemma"[51] AWAY in Ladin is strongly associated with the resultative actional class (89.6%), further confirming its role as a telicity marker (Cordin, 2011a; Iacobini & Masini, 2006a). Similarly, the macro lemma DOWN in Trentino varieties exhibits a clear association with both the RESULTATIVES (84%) and TRANSFORMATIVES (16%) classes, contrasting with its exclusive resultative use in Ladin.

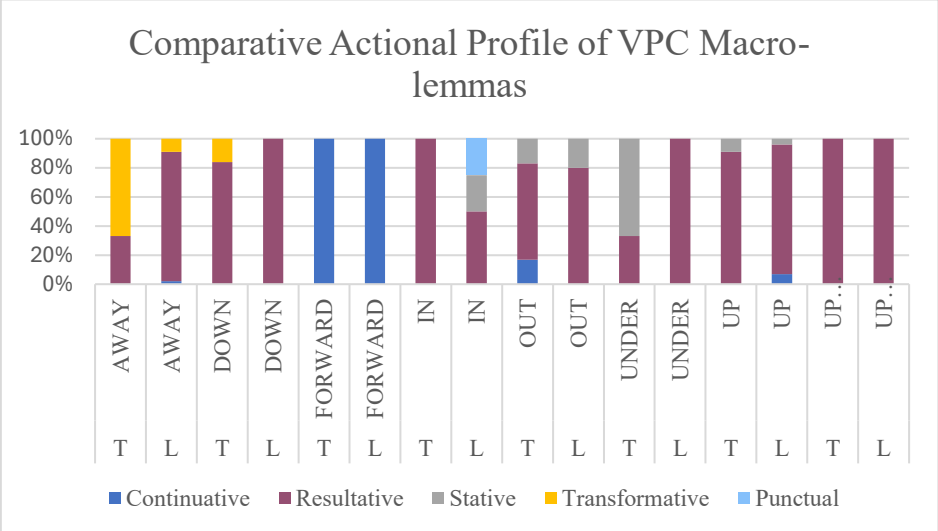


Figure 5: Comparative actional profile of the particles present in both sub-corpora

[51] As detailed in section 3.1.2, "macro-lemma" refers to an aggregate grouping of particles, labelled in English, that comprises all occurrences of lemmas sharing the same function despite their different graphic forms. This categorisation facilitates more effective comparative analysis of the data.

Aktionsart of stacked particles

The accumulation of stacked particles appears to be directly linked to the encoding of telicity, as 96.30% of the occurrences are classified as resultative. Only a single occurrence (3.70%) is associated with the class of continuatives. This data suggests that satellite accumulation might serve as a strategy for marking the endpoint (*telos*) of the action, thereby shaping the global *Aktionsart* of the event.

Actional_Classification	Absolute_Frequency	Percentages
Risultativo	26	96,30%
Continuativo	1	3,70%

Table 9: Actional classification of stacked particles

Polysemy and semantic diversity

The comparative analysis of entropy values reveals that the particle AWAY in Ladin presents an entropy of 0.66, suggesting a more stable and uniform function compared to the same particle in Trentino (1.24), as reported in Table 10. This supports the view that separation constitutes a highly structured and less ambiguous semantic domain. In Ladin, UP emerges as the most polysemic particle (1.65), followed by OUT (1.51). Conversely, the same particles in Trentino exhibit significantly lower values (0.92 and 0.65, respectively). This disparity reflects the functional versatility of UP in encoding both physical and metaphorical meanings (the latter primarily linked to the expression of improvement and fulfilment).

In contrast, DOWN in Ladin shows a minimal entropy level (0.19), suggesting near-total grammaticalisation towards a directional or resultative function (e.g. *andare giù,* lit. 'go down'; *spegnere giù*, lit. 'turn off down', meaning 'turn off completely'). Finally, OUT displays high entropy levels (exceeding 1.5 in Ladin), signalling an area characterised by semantic instabilities, where the particle oscillates between physical spatial references (*andare fuori/sotto* 'go out/down') and actional meanings (*vedere fuori,* lit. 'see out' meaning 'resemble').

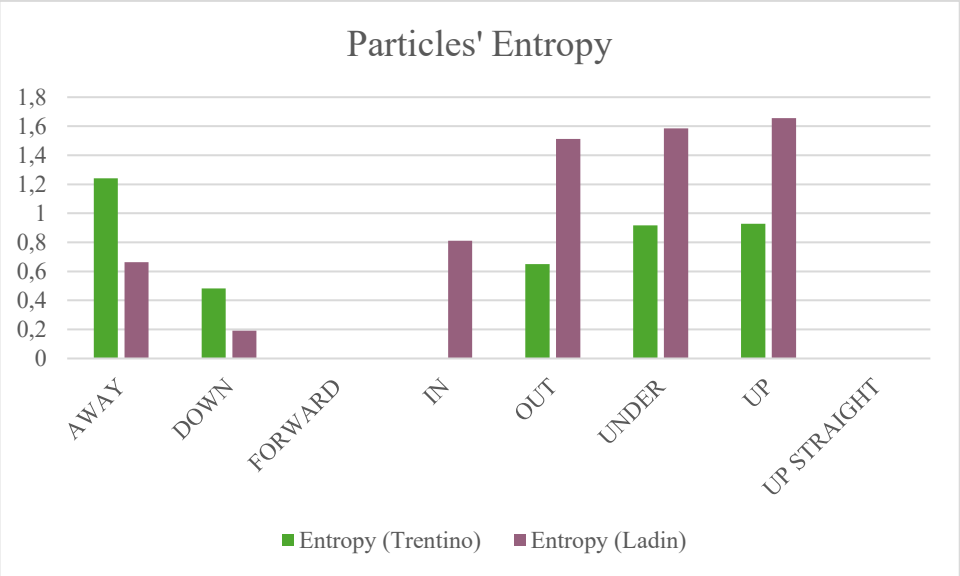


Table 10: Entropy values of the particles present in both sub-corpora

Statistical significance analysis

The results confirm that the actional divergence between VPCs in the Ladin and the Trentino sub-corpora is not random (). Rather, it reflects systemic differences between the most representative macro-lemmas. Specifically, AWAY exhibits the highest significance ($p < 0.001$), confirming the robust tendency towards the resultative class. In the Ladin varieties, this particle is exclusively associated with resultative values (90%), whereas in the Trentino sub-corpus, it primarily assumes a transformative function (67%). The test also yielded a significant value ($p= 0.029$) for the macro lemma DOWN, validating the distinction between the Trentino system, where a transformative component persists (16%), and the Ladin, which is entirely oriented towards resultativity.

Conversely, particles like UP ($p= 0.21$) or OUT ($p=0.28$) did not reach the threshold for statistical significance ($p= 0.05$). This suggests that the observed variations for these particles may stem from limited sample sizes, rather than fundamental systemic differences between the two groups. In summary, the permutation-based validation allowed for the identification of cases where particles are systematically linked to specific actional traits, distinguishing them from random oscillations typical of micro-corpora.

Macro-lemma	Ladin Tot	Trentino Tot	p-value	(Perm) Significance
AWAY	58	15	0.0000	YES
DOWN	34	25	0.0290	YES
FORWARD	6	9	10.000	no
IN	8	1	10.000	no
OUT	20	6	0.2790	no
UNDER	3	3	0.3928	no
UP	28	35	0.2118	no
UP STRAIGHT	1	2	10.000	no

Table 11: Statistical significance of distributional differences between Ladin and Trentino VPC macro-lemmas

Strength association analysis: Cramer's V

While the previous analysis outlines the validity of the associations between particles and actional functions, the following section aims to quantify the strength of such a bond. To serve this purpose, Cramér's V was calculated. Given the high number of null cells in the contingency tables, the significance of these associations was determined, again, using Monte Carlo permutation tests (5,000 iterations) rather than asymptotic p-values. A more targeted analysis of the core particles in both corpora (e.g. UP, DOWN, AWAY) confirms the divergence between the two systems. Although both groups share a similar semantic mapping ($V = 0.34$), Trentino shows a stronger functional specialisation towards actional categories ($V = 0.47$) compared to Ladin ($V = 0.22$). This result suggests that some particles in the Trentino varieties underwent a more advanced grammaticalisation process towards actional functions, whereas particles in Ladin varieties display greater flexibility, although they still show statistical significance ($p < 0.05$). Lastly, these findings support the idea that both languages employ particles to mark the event structure, with Trentino exhibiting a higher degree of functional rigidity and systematicity.

Sub-corpus	Relationship	Chi-squared	Cramér's V	Interpretation	MC p-value
Ladino	Actional_Classification	12.323	0.2266	Weak	0.0308
Ladino	Semantic_Classification	28.294	0.3434	Moderate	0.0000
Trentino	Actional_Classification	33.370	0.4717	Moderately strong	0.0000
Trentino	Semantic_Classification	17.796	0.3444	Moderate	0.0018

Table 12: Strength association analysis across sub-corpus

3.2.3. Qualitative Analysis: Representative Examples for Each Category

Locative and directional nuances

The qualitative analysis reveals that Trentino and Ladin do not employ VPCs simply as stylistic variants¸ rather, they serve as primary tools for spatial encoding, making explicit those motion traits that synthetic forms would otherwise condense into a single lexeme. The following section examines representative examples selected from the sub-corpora to further clarify this phenomenon.

Unlike Romance languages, which, as outlined in section 2.1.1, are typically V-F according to Talmy's typological framework, Trentino and Ladin display an S-F configuration. Specifically, these languages encode motion-related information within a satellite element (most notably a particle). Under this strategy, a generic verb of motion like 'go' can combine with a satellite incorporating specific PATH components such as the directional VECTOR, the GOAL, or the SOURCE of motion. In these cases, both the base verb and the particles maintain their original (spatial) meaning; consequently, the meaning of the VPC is compositional, as shown in the following examples.

In example (17), the particle *zo* ('down') specifies the downward vector of the motion, acting as an analytical counterpart of the synthetic verb 'descend', while in example (18) the particle *ite* ('in') marks the transition into a specific landmark (*la cësa*, 'the house'), thereby expressing the GOAL (or endpoint) of the motion event. Lastly, in example (19), the particle *via* ('away') underlines the detachment from the SOURCE (origin) of motion. Collectively, these instances demonstrate how satellite elements are employed to elaborate the PATH trajectory within the Map Task.

(17) ID 353: Folgaria (K_Fol01B)

lù	*lè*	***nà***	***zò***
3SG.M	3SG.M.SCL+be.PRES.3SG	go.PTCP	down

'he went down'.

(18) ID 79: Gardena (K_Gar01B)

ves	***ite***	*tla*	*cësa*
go.PRES.2SG	in.PTCL	in.the.ART.F.SG	house

'you enter the house'

(19) ID 97: Fiemme (K_Fi04A)

poi	*cognes*	***nar***	***via***
then	must.PRES.2SG	go.INF	away

'you had to go away'

A distinctive feature of Trentino is the obligatory phonetic realisation of the verbal argument, even in the absence of an explicit nominal phrase. While standard Italian allows for the omission of certain verbal arguments (e.g. *entra*!, lit. 'enter!'), in Trentino, this possibility is ruled out. This holds even for "non-prefixed verbs whose meaning is characterised by an inherent feature of natural directionality" (Cordin, 2011a, p. 205). An illustrative case from the Fiemme sub-corpus is *scendi giù* (descend.IMP.2SG down), where the particle reinforces the downward directional vector. A similar pattern emerges in the Ladin sub-corpus Example (20), where the metaphorical direction of biological growth is specified by the particle *su* ('up'), redoubling the feature of verticality inherent in the base verb (*chrësc,* 'grown').

Another instance is reported in example (21), where the particle *ju* ('down') reinforces the direction of the "switching" which is already inherent in the base verb, although not explicitly[52]. For instance, in the context of ID 92, the speaker tells the interviewer to terminate the recording. The imminent conclusion of the session is

[52] Although the particle *ju* ("down") appears pleonastic from a purely spatial perspective, it may serve an aspectual function within the VPC's *Aktionsart*. Specifically, it can act as a telic marker, signalling the transition from an ongoing process to an achievement. In this sense, the particle reinforces the terminative nature of the action (e.g., "switching off" the recorder), transforming a potentially durative verb into a telic one.

signalled by the discourse marker *bon* (‘good’), which immediately precedes the VPC. In this example, the verb’s semantics may still evoke a downward motion associated with pressing the physical button. Consequently, the particle reinforces this latent trait while contributing to the actional profile of the VPC[53]. Moreover, since the particle does not introduce new spatial information in these cases, they are classified as pleonastic VPCs.

(20) ID 89: Gardena (Gar01A)

coche	*ëi*	***chrësc***	***su***	*zweispråchig*
how	3PL	grow.PRES.3PL	up	bilingual

‘how they grow up bilingual’

(21) ID 92: Gardena (Gar01A)

bon	*po'*	***destudon***	***ju****!*
well	then	extinguish.PRES.1PL	down

‘well then, let’s switch (it) off!’

Finally, example (20) yields significant insights from a comparative perspective. The VPC *chrësc su* appears to be a structural equivalent of the Standard German prefix verb *aufwachsen* (lit. ‘grow up’). This parallelism suggests a potential calque[54].

A peculiar tendency towards particle accumulation and trajectory saturation has been noticed in Trentino and Ladin, resulting in complex verbal structures that achieve a high degree of spatial granularity. This phenomenon consists of the clustering of several satellites (typically locative particles and light adverbs) around the verbal base to fully express the semantic components of the motion event. This accumulation is used in the corpus to encode multiple features such as PATH, MANNER, and SOURCE simultaneously.

This strategy mirrors the behaviour of German separable verbs (*trennbare Verben*), which often integrate dense semantic content through multiple affixes, as seen in *hinausgehen* (lit. ‘go out from inside’). In example (22), three distinct spatial satellites are combined within the VPC: DIRECTION (*inant*), VECTOR (*via*), and MANNER (*ndrët*), exhaustively saturating the PATH. Furthermore, the SOURCE of motion is explicitly encoded within the VPC too (*da ilò*), providing additional contextual detail. Example (23) displays a two-particle cluster indicating both verticality (*su*) and the trajectory

[53] This fact will be discussed more thoroughly in the following sections.
[54] Calques will be more thoroughly discussed below in this section.

orientation (*ndrët*). Finally, example (24) illustrates the accumulation of *via* (‘away’) and *for* (‘out’), which highlights the passing of a physical landmark (the bridge). This pattern specifically resembles that of the German *hinausgehen,* where the particles specify both the VECTOR (*aus* lit. ‘out’) and the deictic direction (*hin,* lit. ‘away from the deictic centre’).

(22) ID 758: Gardena (K_Gar_01B)

pona	***ves***	***inant***	***da***	***iló***	***via***	***ndrët***
then	go.PRES.2SG	forward	from	there	away	straight

‘Then you go forward straight from there.’

(23) ID 11: Gardena (K_Gar03B)

y	*po*	***da***	***iló***	***ves***	***su***	***ndrët****!*
and	then	from	there	go.PRES.2SG	up	straight

‘And then you go straight up from there!’

(24) ID 47: Gardena (K_Gar_01B)

ves	***via***	***for***	*dal*	*pont*
‘go.PRES.2SG	away	out	from.the.ART.M.SG	bridge’

‘You go across and away from the bridge.’

Evidence of accumulation is also present in the Trentino corpus, where it serves to mark specific functional traits of motion. In the examples reported below, particular emphasis is placed on MANNER, which is explicitly encoded alongside other particles that describe DIRECTION (e.g., *giò* 'down', *su* 'up'), and VECTOR (*via* 'away').

(25) ID 232: Val di Non (K_Non_01A)

dopo	***vas***	***gió***	***drìta***	*fino*	*àla*
after	go.PRES.2SG	down	straight	until	to.the.ART.F.SG

farmacia
pharmacy
‘Afterwards, you go straight down as far as the pharmacy.’

(26) ID 236: Val di Non (K_Non_01A)

bòm	***vàs***	***via***	***drìta***	*fina*	*via Roma*
well	go.PRES.2SG	away	straight	until	via Roma

‘Well, you go straight ahead as far as via Roma.’

(27) ID 228: Val Lagarina (K_Lag_01)

Arìvi	*in*	*via*	*Roma*	*e*	***vai***	***su***
arrive.PRES.2SG	in	via	Roma	and	go.PRES.2SG	up
dritto						
straight						

'You get to via Roma and then you go straight up.'

Finally, this corpus shows that the tendency towards particle accumulation is closely related to the need to overtly realise certain functional categories. In several instances, locative particles serve as argument markers that must be expressed to signal goal-attainment or the completion of a trajectory. This structural requirement often triggers the doubling phenomenon described above. By systematically employing stacked particles, speakers can modulate degrees of precision, thereby achieving the full saturation of complex trajectories.

Particles as Aktionsart operators

As previously discussed in section 3.2.3, while telicity in standard Italian is within the verbal base or inferred from the context, North-Eastern dialects frequently use particles to express the endpoint of an event. This phenomenon was described as a metonymic shift from spatial description to temporal delimitation (Brinton, 1988). According to this view, particles would therefore grammaticalise into actional or aspectual markers.

Such shifts are frequently driven by specific particles that are considered "tendentially telic" (e.g. those corresponding to the macro-lemmas UP, DOWN, OUT, AWAY, IN) (Iacobini & Masini, 2006a). These satellites frequently transform a durative and atelic activity, categorised as CONTINUATIVE according to Bertinetto (1986), into a resultative accomplishment.

Data from the *Kontatti* corpus illustrate this dual function. For instance, in example (28), the particle *su* ('up') indicates a reduced event duration that culminates in the completion, however hastened, of the action. Furthermore, this example reflects a characteristic lack of precision often associated with the use of the particle *su* (Cordin, 2011b). In examples (29) and (30), the particle *su* marks the ending of the actions of drawing (*dessenië)* and changing (*mudar*). In example (29), however, the VPC might

recall the structure of the German *aufzeichnen* (lit. 'draw up/record'), potentially constituting a calque.

(28) ID 224: Val Lagarina ()

té	*gài*	***fàto***	***su***	*en*	*gran*	*caos*
2SG	have.PRES.2SG	done	up	a	big	mess

'you have made a huge mess'

(29) ID 1: Gardena (K_Gar03B)

po	*mues*	***dessenië***	***su***	*l*	*A*
then	must.PRES.2SG	draw.INF	up	the	A

'then you have to draw the A'

(30) ID 447: Fassa (K_Fa01)

chiò	*i*	*seghita*	*a*	***mudar***	***su***
here	3PL	continue.PRES.3PL	to	change.INF	up

'here they keep changing up'

Interestingly, the particle FORWARD is exclusively linked to a continuative *Aktionsart* in both sub-corpora (see), suggesting a direct mapping of the movement through space onto the iteration of the event through time, consistent with the conceptual framework proposed by W. Croft (1991).

Other instances of VPC in the corpus are characterised by the presence of the particle *via* ('away'), which is considered one of the most consistently telic particles, reaching 100% of telicity in Iacobini & Masini's (2005) study. Beyond its spatial functions, shown in example (19), this particle can describe total removal or detachment, as illustrated in examples (31) and (32). In these cases, *via* combines with verbs of removal (*butàr, trar,* lit. 'throw'), emphasising their inherent semantic traits and marking the attainment of the action's goal. Example (33), from Gardenese Ladin, shows a context in which the particle *via* marks the endpoint of the action of writing (*scrì*). In this instance, the structural similarity with the German verb *aufschreiben* (lit. 'write on') is noteworthy, despite the spatial meaning of the particle being different.

(31) ID 320: Folgaria (K_Fol01A)

àncoi	*dirìa*	*ma*	*sét*	*màta*
today	say.COND.1SG	but	be.PRES.2SG.INT	crazy.F.SG
tràla			***via***	
throw.IMP.2SG=3SG.F.OBJ			away	

'today I would say: are you crazy? Throw it away!'

(32) ID 318: Folgaria (K_Fol01A)

nó	*pàm*	*non*	***butévem***	***via***	*per*	*le*
NEG	bread	NEG	throw.IMPF.1PL	away	through	the
strade						
roads						

'we didn't use to throw bread away in the streets'

(33) ID 263: Gardena (K_Gar01B)

tudësch	*no*	*n*	*pos'*	***scrì***	***via***
German	NEG	NEG	can.PRES.1SG	write.INF	away

'I cannot write German.'

The particle *via* ('away') can also function as an aspectual marker, signalling the inception of an event (ingressive) or its ongoing development (progressive). Both functions occur in the analysed corpus: example (34) illustrates the beginning of motion. Example (35) expresses a progressive connotation through a distinctive combination of auxiliary (*eser* lit. 'be') and the particle (*drio* lit. 'behind'). In this latter case, the particle loses its spatial meaning entirely to become a pure aspectual operator marking the continuity of the action 'prepare' (*préparar*). This construction effectively compensates for the lack of the standard Italian periphrasis *stare* ('stay') + gerund, serving as the primary way in Trentino dialects to indicate progressive aspect (Cordin, 2011b). Notably, Cordin (2011b, p.79) identifies this as an "extreme case" of particle grammaticalisation, where *drio* acts as a purely aspectual marker, resulting in the grammaticalisation of the whole construction, which serves as an aspectual auxiliary. Moreover, *eser drio* does not have a corresponding construction with the particle BEHIND in Standard German (Cordin, 2011b, p. 84). However, prepositional constructions with progressive value are present in some dialects. For instance, constructions such as *sein* + *am/beim* + *nominal infinitive* (lit. 'be + in/at + the + infinitive') can be found in the Rhineland or in Züritüütsch (Swiss German)(Ebert, 2000).

(34) ID 24: Gardena (K_Gar03B)

spieghé	*ulache*	*n*	***pea***	***via***
explain.INF	where	IMPERS	set.off.PRES.3SG	away

'to explain where one sets off.'

(35) ID 310: Folgaria (K_Fol01A)

adès	***són***	***drìo***	*a*	*preparàr*	*el*	*pasapòrt*
now	be.PRES.1SG	after	to	prepare.INF	the	passport

'now I am preparing the passport'

Metaphorical extensions and idiomatic uses

In this section, the analysis of VPCs shifts towards the opaque pole of the semantic continuum along which these constructions are categorised.

The transition from the concrete to the abstract typically involves mapping spatial schemata onto mental domains. A paradigmatic example regards the conceptualisation of the mind (or reason) as a "canonical place", a space that the subject can both enter and exit (Casadei, 1996; Cordin, 2011b). This metaphorical domain is rooted in embodied experience, where physical and abstract entities are perceived as dwelling within their natural boundaries, such as the reason, the mind, or life itself. From this perspective, separation from the 'natural place' signifies the loss of a faculty (e.g. losing one's reason), while the proximity or re-entry indicates its restoration (e.g. recovering one's wits).

This process finds its validation in the *ontological metaphors* described by Lakoff & Johnson (1980), specifically involving the metaphor THE MIND IS A CONTAINER. Since we perceive ourselves as physical entities endowed with interiority and exteriority, we tend to project this configuration onto non-physical entities (e.g. the mind), treating them as discrete units just as our bodies are (Lakoff & Johnson, 1980, p. 25). According to the authors, conceptualising mental states or emotions in terms of containers (e.g. 'be in love') is a necessary strategy to impose a coherent structure on events that are not clearly delineated in themselves. In this context, the semantic opacity of some VPCs reflects an *imaginative rationality* that allows us to understand abstract domains through the spatial mapping of structures rooted in our physical perception.

Associations generated through this spatial mapping can be identified in the Ladin *toma ite* (lit. 'fall into') in example (36), which is used to convey the act of recalling or 'bringing something to the mind'. Here, the idea is conceptualised as an object entering a physical space (memory) at a specific moment. This conceptual scheme closely mirrors the German, *einfallen* ('occur to / recall', lit. 'fall in'), whereas a similar mapping, although with a different spatial reference, is present in the Italian *sovvenire* (lit. 'come under') meaning 'come to mind'.

In the Ladin sub-corpus, the act of placing an object inside a container is further abstracted to indicate the inclusion of an item in a list or a conceptual category, as reported in example (37). This logic also extends to the inclusion and exclusion of individuals from groups perceived as homogeneous. In example (38), the particle *fora* ('out') emphasises subjects' emigration, marking the exclusion from their original community. Consequently, emigration is not merely described as physical displacement; it is lexicalised as a state of being 'outside' a social group. A similar logic is shown in example (39), where the particle (*ora*, 'out') underlines the process of selection. Here, choice is conceptualised as a 'mental act of extraction', where choosing involves identifying an item as distinct from a homogenous set and symbolically 'extracting' it.

(36) ID 35: Gardena (K_Gar02A)

scri	*mé*	*ciche*	*te*	***toma***
write.IMP.2SG	only	what	2SG.OBJ	fall.PRES.3.SG
in				
ite				

'just write whatever comes to your mind!'

(37) ID 231: Val di Non (K_Non01B)

se	*l'*	*avete*	*come*	*lingua*
if	3SG.F.OBJ	have.PRES.2PL	as	language
mettetela		***dentro***		
put.IMP.2PL=3SG.F.OBJ		inside		

'if you have it as your language, put it in.'

(38) ID 316: Folgaria (K_Fol01A)

ghè	***sta***	***fóra***	*lóre*	*dóe*
there	stay.PRES.3SG	out	them	two

'the two of them are staying out'

(39) ID 25: Gardena (K_Gar03B)

chël	*pudëis*	*vo*	***crì***	***ora***
that	can.PRES.2PL	you.2PL	choose.INF	out

'that, you can choose (for yourselves).'

Other metaphorical VPCs are often situated within the domain of perception. For instance, the Ladin *cëla ora* (lit. 'look out') is employed to denote 'resembling' or 'appearing', closely mirroring the model of the German equivalent *aussehen* (lit. 'look out'). In this case, the directionality of the particle (*ora* / *aus*) is metaphorically projected from the subject towards the observer, lexicalising the way an entity 'presents itself' to the external world.

(40) ID 81: Gardena (K_Gar01B)

nia	*nca*	*tan*	*saurì*	*coche*	*l*	***cëla***
not	even	so	easy	as	3SG.M.SCL	look.PRES.3SG
ora						
out						

'not even as easy as it looks.'

3.2.4. Micro-Mapping of Motion Events

Before proceeding with the discussion of the results in the language contact framework, it is necessary to analyse how motion events from the corpus are structurally decomposed. Applying Talmy's (2000) framework to the instances of satellite accumulation in the corpus, a fundamental difference in the granularity of PATH encoding between Ladin and Trentino emerges.

Motion events in the Ladin sub-corpus

The Ladin sub-corpus (which accounts for 77.78% of the total accumulations) uses the satellites not as single modifiers, but rather as a sequence of geometric traits that

define motion with high precision. Several schemata of motion event encoding have been identified.

A. PATH Geometry and MANNER (Gardena)

Following Talmy's framework, Gardena Ladin encodes MANNER externally, through another accumulated satellite (*ndrët* 'straight' and *sotrt* 'diagonally'). This allows for the description of movement through the sum of spatial elements, specifically: [MOTION] + [PATH] + [MANNER]. This structure mirrors that of the German *geradeaus hinaufgehen*, as shown in example (43).

(41) ID 11: Gardena (K_Gar03B)

ves	*su*	*ndrët*
go.PRES.2SG	up	straight
MOTION	PATH VECTOR (TOWARDS)	MANNER

'you go straight up'

(42) ID: 289 Gardena (K_Gar)

vedi	*stort*	*ju*
go.PRES.2SG	crooked	down
MOTION	MANNER	PATH VECTOR

'you go down diagonally'

(43) German

geradeaus	*hinauf-*	*gehen*
straight.ahead	up-	go.INF
MANNER	PATH VECTOR	MOTION + MANNER

'to go straight up'

B. Complex PATH and SOURCE Encoding (Fassa)

In this case, Ladin features two different PATH functions, which Romance languages normally collapse into a single verb + satellite. The speaker here segments the event: firstly, they encode the exit (*fora* 'out') and then the final position (*sot* 'under'), indicating the predominant salience of trajectory encoding.

(44) ID 424: Fassa (K_Fas)

vas	*fora*	*sot*
go.PRES.2SG	out	below
MOTION	SOURCE	LOCATIVE
	BOUNDARY	RELATIONAL

'you go out (down) below'

C. Endpoint and Actional Saturation (Fassa)

In this case, the accumulation appears to be scalar rather than spatial. The satellite *fin* ('until') prepares the ground for the action's endpoint (*junsom* 'down till the end'), fully saturating the potential for movement. Here, the saturation is also actional, as spatial and temporal dimensions of the action converge within the satellite.

(45) ID 403: Fassa (K_Fas)

vas	*fin*	*junsom*
go.PRES.2SG	until	at.the.very.bottom
MOTION	EXTENT	GOAL

'you go all the way to the end'

Motion events in the Trentino sub-corpus

The Trentino sub-corpus accounts for only 11.11% of the instances of accumulation, which fall under two distinct categories. While superficially similar to the Ladin encoding of motion events, these satellite stackings serve different functions.

A. PATH Reinforcement (Val di Non)

Despite its similarity to the motion encoding in example (41), the particle accumulation in the Trentino sub-corpus exhibits a higher degree of functional rigidity (Cramér's V = 0.47), which suggests that accumulation is, in these cases, the product of a fixed formula for reinforcing PATH information, rather than a productive strategy for encoding movement. This interpretation is strengthened by the fact that accumulations in the Trentino sub-corpus almost exclusively involve the particle STRAIGHT as a second particle[55].

(46) ID 232: Val di Non (K_Non)

vas	*gió*	*drita*
go.PRES.2SG	down	straight
MOTION	VECTOR (TOWARDS)	MANNER

'go straight down.'

(47) ID 228: Val Lagarina (K_Lag)

vai	*su*	*dritto*
go.PRES.2SG	up	straight
MOTION	VECTOR (TOWARDS)	MANNER

'you go straight up'

B. Metaphorical-Aspectual Accumulation (Val Lagarina)

In this latter example, the second particle does not add geometric precision to the encoding of the motion event but rather marks telicity. The particle *via* ('away') signals detachment and delimits the action of 'going down', thereby confirming the tendency of Trentino to explicitly encode the event's telicity.

[55] The only occurrence that involves another particle (*via*) is reported in example (48).

(48) ID 222: Val Lagarina (K_Lag)

vai	*en zó*	*via*
go.PRES.2SG	in down	away
MOTION	VECTOR (TOWARDS)	[+ TELIC]

'you head on down'

This detailed analysis of motion encoding reveals that satellite accumulation in Ladin (particularly in the Gardena sub-corpus) exhibits high granularity. Speakers decompose PATH components into distinct satellites. In contrast, the Trentino speakers tend to employ satellite accumulation primarily to mark telicity, thereby modifying the verb's *Aktionsart*, rather than the encoding of motion.

Semantic Feature	**Ladin (Accumulation)**	**Trentino (Accumulation)**
Motion Verb	Generic base (*andare/venire*).	Generic base, but lower accumulation frequency.
PATH (Core Schema)	Decomposed (VECTOR + Geometric + Locative).	Reinforced (VECTOR + MANNER/Aspect).
Co-event (MANNER)	Externalised for S-F precision.	Often absent or limited to fixed forms (*drìta*).
Goal Encoding	Highly analytical (*fin junsom*).	Simpler, usually a single particle.
Aktionsart	High resultativity.	Functional rigidity, marked actional orientation.

Table 13: Synthesis of Structural Differences according to Talmy's framework

4. Chapter IV: Discussion and Conclusions

4.1. Discussion of Results

4.1.1. The Latin Legacy and Typological Repairing

The hypothesis of a direct calque from German (Rohlfs, 1969) must be weighed against the "endogenous nature" of these constructions (Iacobini & Masini, 2009). As Simone (2008) suggests, VPCs represent a form of "typological repair" of the semantic structural opacity inherited from Latin prefixation. Historically, Latin presented a satellite-framed configuration based on verbal prefixation, where the verbal prefix carried the information about the PATH (e.g., *ex-ire* 'go out', *ad-venire* 'come to'). However, during the transition towards Romance languages, these prefixes underwent processes of semantic bleaching and phonetic fusion with the verbal root, resulting in a loss of their transparency (e.g., Italian *assistere* < Latin *ad-sistere*). Whereas French responded to this shift through increased verbal synthesis (e.g. *sortir* lit. 'extract' in place of the Italian *tirare fuori* lit. 'pull out'), Italian and Northern dialects appear to have undergone a "reconstruction cycle of damaged motion verbs" (Simone, 2008, p. 14). From this perspective, Trentino and Ladin are taking advantage of a latent analytic strategy to compensate for this inherited opacity, effectively reverting to a satellite-framed model.

4.1.2. Beyond Talmy's Dichotomy

The typological profile of the varieties analysed in this study necessitates a revision that moves beyond the strict two-fold classification proposed by Talmy (1985, 2000b). According to this model, Romance languages are traditionally categorised as verb-framed (V-F), as they tend to encode the PATH in the main verb (e.g., *entrare* 'enter', *uscire* 'exit'), relegating manner to optional adjuncts such as gerunds or adverbial phrases (e.g., Italian *uscire correndo* 'exit running' or *entrare a balzi* 'enter jumping'). However, data from the *Kontatti* corpus exhibits a completely different system, as the presence of VPCs suggests a satellite-framed encoding of motion events.

The tendency to a "typological repair" is clearly visible in the analysed data. The normalised frequency of VPCs in the Ladin sub-corpus from Gardena (Gar) reaches 12.49 occurrences per 1000 words, a significantly higher figure than the 0.35 observed in regional Italian or the 5.84 in the Folgaria set, which represents the highest value in the Trentino sub-corpus. These findings confirm the centrality of this system within the speakers' linguistic repertoires.

In terms of encoding, these languages present both Romance inheritance and constructional innovations. The use of generic motion verbs (e.g., *andare* 'go', *venire* 'come'), around which the construction is built, is a manifestation of the Romance legacy. Conversely, innovation is driven by semantically transparent particles (e.g., *via* 'away', *su* 'up', *giù* 'down'), which specify the trajectory with a degree of precision comparable to that found in the Germanic languages. Typical instances include the Ladin *ves via* ('go beyond') or *dessenie su* ('trace', lit. 'draw up').

4.1.3. Cross-Comparison: Trentino and Ladin

Qualitative analysis of the data shows some systematic differences between Trentino and Ladin. While Ladin tends to use the VPC system to thoroughly describe the spatial dimensions of motion and to fully saturate semantic space, Trentino displays some instances of lexicalisation and grammaticalisation, aimed at the encoding of figurative meanings and *Aktionsart.*

Trentino: Aktionsart and Argument Marking

In Trentino, however, particles' function shifts towards the marking of *Aktionsart* and argument structure (Cordin, 2011b). As Cordin (2011b) notices, particles in these varieties not only indicate the direction of movement (concurring with PATH encoding) but also act as argument or telicity markers. A phenomenon worth noticing is the spelling out of verbal arguments in Trentino dialects, which obligatorily requires the explicit realisation of the locative (through a particle), even when the nominal phrase remains unexpressed (e.g. *vèi dentro* 'come in', in place of *entra* 'enter').

The data indicate that functional specialisation is more pronounced in the Trentino sub-corpus (Cramér's V = 0.47), than in Ladin (V = 0.22). This suggests that these

particles have become part of a more rigid morphosyntactic system that aims at ensuring the transparency of the verb's argumental and aspectual requirements.

Ladino: Trajectory Saturation and Cognitive Influence

Ladin sub-corpora (mainly Gardena and Fassa) tend towards the full saturation of the spatial trajectory through satellite accumulation. This trait, which is a defining feature of the Ladin sub-corpus (77.78% of all accumulation instances), involves the co-occurrence of multiple particles clustering around a single verbal base. Examples include the Gardena Ladin *ves su ndrët* ('go up straight', ID 11), or the Fassa Ladin *vas fora sot* ('go out below', ID 424).

Such density of information parallels that of German separable verbs (e.g. *gradeaus hinaufgehen* lit. 'go up straight') and suggests a reconstruction of the cognitive space. Following the view of Weinreich (1968), the actual language contact would happen in the mind of the bilingual speaker, where, in this case, the Germanic system might act as a catalyst for developing a new narrative style, or Thinking for Speaking[56], according to Slobin (1996a), which requires a more granular description of the PATH. Normalised frequencies of VPCs in the Gardena sub-corpus signal the extreme vitality of the satellite stacking, where the motion-event decomposition into minimal semantic traits has become close to obligatory.

4.1.4. The Germanic Footprint

The geographical distribution of the data provides key insights into Germanic influence. For instance, the Gardena variety accounts for 40.74% of all recorded occurrences of particle accumulation, emerging as the primary driver of this phenomenon. In this variety, the presence of German in the speakers' linguistic repertoire may have attuned their Thinking for Speaking towards a higher degree of geometric precision, mirroring that of German particle verbs; for instance, the Ladin *ves su ndrët* ('go straight up') closely reflects the semantic structure of *gehe geradeaus hinauf.*

The Fassa sub-corpus exhibits an intermediate pattern of accumulation (37.04%) despite not being a Germanophone territory. This data suggests that trajectory saturation

[56] *Thinking for speaking* is defined by D. I. Slobin (1996, p. 76) as a "special form of thought that is mobilised for communication".

is not a mere calque, but rather a narrative strategy rooted in the Ladin cognitive structure, which survives even in the absence of systematic contact with German. If Fassa (an Italian-contact area) mirrors Gardena (a German-contact area), we are witnessing a process of contact enhancement (Friedman & Joseph, 2025), where the Germanic influence has permanently stabilised a latent Romance strategy into a defining feature of the Ladin language.

This interpretation is further corroborated by the participants' metadata, which confirms that speakers from Fassa are predominantly Ladin-Italian bilinguals (as shown in Table 14). Specifically, two out of six informants reported having acquired Italian as their L1 and Ladin as their L2, yet demonstrating comparable proficiency in both (Fa03, Fa04). Ladin was the dominant language for the remaining four participants, followed by Italian. Notably, only two participants reported knowledge of German (Fa02 and Fa03), ranking it as their third language alongside English or Spanish. In contrast, the Gardena group exhibits a different sociolinguistic profile, consisting primarily of Ladin-German bilinguals (Gar03, Gar04, Gar05, Gar 06); only one informant was a Ladin-Italian bilingual (Gar01), and another a German-Ladin bilingual (Gar02). Italian was only ranked as the third language by the other five participants. Although the total incidence of particle accumulation remains comparable across sub-corpora (10 instances in Fassa and 11 in Gardena), Fa05, a Ladin-Italian bilingual, produced the most VPCs. Furthermore, the participant from Fassa who produced the second-highest number of instances was an Italian-Ladin bilingual, who nevertheless reported Ladin as their predominant language of thought. Ultimately, the only German-Ladin informant of the Gardena sub-corpus (Gar02) produced the highest number of accumulated VPCs.

Despite the relatively small sample size, these findings suggest that the tendency towards particle accumulation might indeed be an inherent typological trait of Ladin, given its consistent frequency across both varieties. However, the fact that the highest concentrations of accumulation were produced by speakers with varying degrees of German proficiency suggests that cross-linguistic influence may play a significant cognitive role in the configuration of complex motion events.

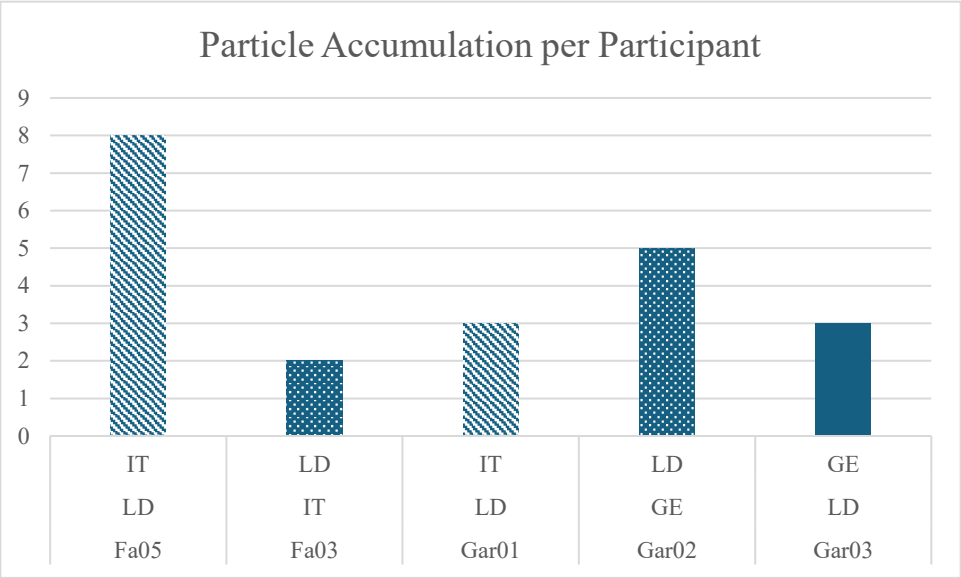


Table 14: Particle accumulation per participant

4.1.5. Limitations of the Study and Avenues for Future Research

Despite the results that emerged from the corpus offering a detailed perspective on the structural convergence between Romance and Germanic languages, the present research presents some limitations that pave the way for future studies.

Firstly, it is mandatory to underline the scarcity of data collected for some languages in the *Kontatti* corpus. Although the qualitative analysis highlighted the vitality of VPCs in some sub-corpora, such as the Gardena and Folgaria, subsets like Badia, Trentino dialect from Val di Non, and regional Italian only included an extremely low number of occurrences. This numerical disparity prevented the application of certain lexical density indices (such as *MATTR*) to all subgroups. As a consequence, the possibility of drawing statistically robust conclusions about the productivity of the system in all the geographical areas considered was limited.

Secondly, the elicitation modality of the Map Task influenced the nature of the data. Despite this technique being effective in favouring the elicitation of spatial and directional references in a spoken and semi-spontaneous context, it tends to overrepresent motion verbs and the locative-directional function of the particles. Consequently, the

inventory of VPCs detected might not reflect the actual repertoire of the speakers. Specifically, since metaphorical and idiomatic extensions could emerge more prominently in a communicative context less bound to the description of spatial relations, a comparison with data stemming from other sources can allow for a more comprehensive interpretation of such instances.

Lastly, a further methodological challenge lay in the lack of POS tagging in the original corpus. This lack of morphosyntactic annotation required a manual selection of the VPCs, a process that, despite guaranteeing high control, limited the scope of the analysis to additional languages included in the *Kontatti* project. The future integration of an automatic POS tagger for under-resourced languages such as Ladin and Trentino dialects would allow for a deeper and more granular analysis of the particles with respect to the distinct verbal bases.

4.2. Conclusions

Quantitative analysis of the *Kontatti* corpus provides an empirical basis to observe that language contact does not act as a simple transfer of lexical elements but rather influences the production of VPCs through the stabilisation of specific semantic and grammatical functions.

Statistical evidence confirms that particles systematically act as telicity markers, fulfilling the function of explicating the endpoint of the action. This role is supported by the marked prevalence of the resultative actional category, which constitutes 84.1% of the VPCs in the Ladin sub-corpus and 79.4% of the Trentino sub-corpus. Such a functional convergence suggests that contact reinforces the cognitive salience of expressing the temporal or spatial limit of the event, especially through particles such as AWAY and DOWN, which show a positive correlation with the class of resultatives ($p < 0.05$).

A further statistical analysis conducted via Cramér's V reveals a difference in systematicity between the two languages: Trentino shows greater functional rigidity ($V = 0.47$) relative to Ladin ($V = 0.22$). Such greater rigidity reflects a tendency towards more advanced grammaticalisation, where the particle has become a quasi-obligatory element

for realising arguments or the dynamic nature of telic verbs (spelling-out). In contrast, the greater Ladin flexibility indicates a more fluid narrative strategy, which aims at the geometric saturation of the semantic space through the accumulation of satellites.

The results of this research suggest that the influence of contact acts as a catalyst, orienting the structural options already latent in the Romance system towards models shared with Germanic languages. In this light, the systematic production of VPCs can be interpreted as a form of "typological repair" addressing the semantic opacity inherited from synthetic Latinate prefixes.

Contact with the German model for PATH encoding (which is strongly satellite-framed) offered bilingual speakers a cognitive framework to resolve such limitations in the encoding of PATH through analytic strategies. Rather than a strict typological division, the results outline a continuum of salience, in which language contact enhances semantic stability and augments the frequency of pre-existing descriptive models.

The divide between these varieties is not geographical but represents a zone in which the cognitive patterns of Thinking for Speaking are reshaped. The Germanic pressure does not introduce VPCs as an external element but rather makes the components of the trajectory (such as the PATH) salient, and therefore more likely to be explicitly realised in the speaker's verbal production.

Lastly, the speakers' cognitive space represents the true interface between the Germanic influence and inherent typological configurations: here, contact with Germanic motion encoding has arguably reshaped Thinking for Speaking patterns, fostering increased spatial granularity in the encoding of PATH. Verb-particle constructions are thus the result of a cognitive reframing of motion events that leads either to the grammaticalisation of actional features (as seen in the Trentino dialects) or to semantic decomposition for the encoding of motion events (as observed in Ladin).

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Appendix A – Trentino sub-corpus

ID	Variety	Source_File	Position	Base_Verb	Part_Form	Part_Lemma	VPC	Semantic_Class	Actional_Class	Macro_Type	Synthetic_Form	Accumulation	Macro_lemma
93	Fie	Fiemme_K_Fi04A_con_annotazioni.txt	1247	vas	sù	SU	vas sù	Locative-Directional	Resultative	andare su	salire	NO	UP
95	Fie	Fiemme_K_Fi04A_con_annotazioni.txt	1507	nar	zo	ZO	nar zo	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
97	Fie	Fiemme_K_Fi04A_con_annotazioni.txt	1751	nar	via	VIA	nar via	Locative-Directional	Transformative	andare via	partire	NO	AWAY
98	Fie	Fiemme_K_Fi04A_con_annotazioni.txt	1814	nar	sù	SU	nar sù	Locative-Directional	Resultative	andare su	salire	NO	UP
101	Fie	Fiemme_K_Fi04A_con_annotazioni.txt	3219	tenete	su	SU	tenete su	Locative-Directional	Stative	tenere su	sostenere	NO	UP
204	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	833	va	atravèrso	ATTRAVÈRSO	va atravèrso	Locative-Directional	Resultative	andare attraverso	attraversare	NO	THROUGH
206	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2039	arìvo	zó	ZO	arìvo zó	Locative-Directional	Transformative	arrivare giù	giungere	NO	DOWN
207	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2052	arìvo	zó	ZO	arìvo zó	Locative-Directional	Transformative	arrivare giù	giungere	NO	DOWN
208	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2071	arìvo	zó	ZO	arìvo zó	Locative-Directional	Transformative	arrivare giù	giungere	NO	DOWN

209	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2569	prosèguo	via	VIA	prosèguo via	Locative-Directional	Transformative	proseguire via	proseguire	NO	AWAY
210	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2597	giro	su	SU	giro su	Locative-Directional	Resultative	girare su	svoltare	NO	UP
211	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	2918	vén	zó	ZO	vén zó	Locative-Directional	Resultative	venire giù	scendere	NO	DOWN
213	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	3369	vegnùa	zó	ZO	vegnùa zó	Locative-Directional	Resultative	venire giù	scendere	NO	DOWN
217	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	3613	vai	drìta	DRITTO	vai drìta	Locative-Directional	Resultative	andare dritto	andare dritto	NO	STRAIGHT
218	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4160	vai	avanti	AVANTI	vai avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
219	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4820	végni	avanti	AVANTI	végni avanti	Locative-Directional	Continuative	venire avanti	avanzare	NO	FORWARD
220	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4864	arìvi	zò	ZO	arìvi zò	Locative-Directional	Transformative	arrivare giù	giungere	NO	DOWN
221	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4941	giri	via	VIA	giri via	Locative-Directional	Resultative	girare via	svoltare	NO	AWAY
222	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4971	vai	en zó via	ZO VIA	vai én zó via	Locative-Directional	Resultative	andare in giù via	scendere	SI	DOWN AWAY

223	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	6957	vò	avanti	AVANTI	vò avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
224	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	8526	fàto	su	SU	fàto su	Metaphorical	Resultative	fare su	combinare	NO	UP
225	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	9164	vado	avanti	AVANTI	vado avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
226	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	9493	vado	avanti	AVANTI	vado avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
227	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	10338	vado	su	SU	vado su	Locative-Directional	Resultative	andare su	salire	NO	UP
228	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	10584	vai	su dritto	SU DRITTO	vai su dritto	Locative-Directional	Resultative	andare su dritto	salire dritto	SI	UP STRAIGHT
229	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	10620	vai	su dritto	SU DRITTO	vai su dritto	Locative-Directional	Resultative	andare su dritto	salire dritto	SI	UP STRAIGHT
230	Lag	Val Lagarina_K_Lag01_con_annotazioni.txt	4610	vai	dritto	DRITTO	vai dritto	Locative-Directional	Resultative	andare dritto	andare dritto	NO	STRAIGHT
231	Non	Val di Non_K_Non01B_con_annotazioni.txt	2131	mettetela	dentro	DENTRO	mettetela dentro	Metaphorical	Resultative	mettere dentro	includere	NO	IN
232	Non	Val di Non_K_Non01A_con_annotazioni.txt	629	vas gió drita	GIÙ DRITTO	vas gió drita	Locative-Directional	Resultative	andare giù dritto	scendere	SI	DOWN STRAIGHT

236	Non	Val di Non_K_Non01A_con_annotazioni.txt	916	vàs	vai drìta	VIA DRITTO	vàs via drìta	Locative-Directional	Resultative	andare via dritto	proseguire dritto	SI	AWAY STRAIGHT
237	Non	Val di Non_K_Non01A_con_annotazioni.txt	980	vàs	su	SU	vàs su	Locative-Directional	Resultative	andare su	salire	NO	UP
242	Non	Val di Non_K_Non01A_con_annotazioni.txt	2958	vai	só	SU	vai só	Locative-Directional	Resultative	andare su	salire	NO	UP
246	Non	Val di Non_K_Non01A_con_annotazioni.txt	3092	rua	en gió drita	GIÙ DRITTO	rua en gió drita	Locative-Directional	Resultative	arrivare in giù dritto	giungere	SI	DOWN STRAIGHT
247	Non	Val di Non_K_Non01A_con_annotazioni.txt	3316	vàs	gió	GIÙ	vàs gió	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
248	Non	Val di Non_K_Non01A_con_annotazioni.txt	3357	vàs	via	VIA	vàs via	Locative-Directional	Transformative	andare via	allontanarsi	NO	AWAY
253	Non	Val di Non_K_Non01A_con_annotazioni.txt	4646	scrivé	dietro	DIETRO	scrivé dietro	Locative-Directional	Resultative	scrivere dietro	scrivere dietro	NO	BEHIND
254	Ita	Italiano trentino_1.03-gaia laura-questionario_con_annotazioni.txt	1982	scriverci	sopra	SOPRA	scriverci sopra	Locative-Directional	Resultative	scrivere sopra	annotare	NO	OVER
297	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	520	tòlti	drìo	DIETRO	tòlti drìo	Metaphorical	Resultative	prendere dietro	prendere con sè	NO	BEHIND

298	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	1630	métegh e	su	SU	métegh e su	Metaphorical	Resultative	mettere su	compilare	NO	UP
299	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	1971	vento	su	SU	vento su	Locative-Directional	Resultative	venire su	salire	NO	UP
300	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2055	méto	su	SU	méto su	Metaphorical	Resultative	mettere su	compilare	NO	UP
301	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2102	méto	sue	SU	méto sue	Metaphorical	Resultative	mettere su	compilare	NO	UP
302	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2125	méto	su	SU	méto su	Metaphorical	Resultative	mettere su	compilare	NO	UP
303	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2436	métegh e	su	SU	métegh e su	Metaphorical	Resultative	mettere su	compilare	NO	UP
304	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2463	métegh e	su	SU	métegh e su	Metaphorical	Resultative	mettere su	compilare	NO	UP
305	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	2498	era	sóto	SÓTO	era sóto	Metaphorical	Stative	essere sotto	sottostare	NO	UNDER
306	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	3642	més	fóra	FÓRA	més fóra	Metaphorical	Resultative	mettere fuori	esporre	NO	OUT
307	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	3804	tacà	su	SU	tacà su	Locative-Directional	Resultative	attaccare su	affiggere	NO	UP
308	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	4943	vào	su	SU	vào su	Locative-Directional	Resultative	andare su	salire	NO	UP

309	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	5368	fa	su	SU	fa su	Metaphorical	Resultative	fare su	rifare	NO	UP
310	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	5478	són	drìo	DIETRO	són drìo	Actional	Continuative	essere dietro	stare (+ ger.)	NO	BEHIND
311	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	5540	són	drìo	DIETRO	són drìo	Actional	Continuative	essere dietro	stare (+ ger.)	NO	BEHIND
312	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	5926	rivài	via	VIA	rivài via	Locative-Directional	Transformative	arrivare via	arrivare	NO	AWAY
313	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	5942	rivài	via	VIA	rivài via	Locative-Directional	Transformative	arrivare via	arrivare	NO	AWAY
314	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	7310	conta va	su	SU	cont ava su	Metaphorical	Resultative	raccontare su	narrare	NO	UP
315	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	9628	méte	zó	ZO	méte zó	Locative-Directional	Resultative	mettere giù	immettere	NO	DOWN
316	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	11849	sta	fóra	FÓRA	sta fóra	Locative-Directional	Stative	restare fuori	escludere	NO	OUT
317	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	12806	xséva	zó	ZO	xséva zó	Locative-Directional	Resultative	versare giù	versare	NO	DOWN
318	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	14088	tràla	via	VIA	tràla via	Metaphorical	Transformative	buttare via	scartare	NO	AWAY
319	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	14558	vegnù	su	SU	vegnù su	Locative-Directional	Resultative	venire su	salire	NO	UP

320	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	15584	butévem	via	VIA	butévem via	Metaphorical	Resultative	buttare via	scartare	NO	AWAY
321	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	15652	butà	via	VIA	butà via	Metaphorical	Resultative	buttare via	scartare	NO	AWAY
322	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	15915	tö	sü	SU	tö sü	Locative-Directional	Resultative	prendere su	raccogliere	NO	UP
324	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	17049	fat	su	SU	fat su	Metaphorical	Resultative	fare su	fare	NO	UP
325	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	17119	mandàda	su	SU	mandàda su	Locative-Directional	Resultative	mandare su	inviare	NO	UP
326	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	17229	tòlta	drìo	DIETRO	tòlta drìo	Metaphorical	Resultative	prendere dietro	portare con sè	NO	BEHIND
327	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	19292	era	sóto	SÓTO	era sóto	Metaphorical	Stative	essere sotto	sottostare	NO	UNDER
328	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	21236	nàvi	fóra	FÓRA	nàvi fóra	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
329	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	21561	vót	zó	ZO	vót zó	Locative-Directional	Resultative	volere giù	versare	NO	DOWN
330	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	21818	và mai	fóra	FÓRA	và [...] fóra	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
331	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	21840	vègni	zó	ZO	vègni zó	Locative-Directional	Resultative	venire giù	scendere	NO	DOWN

332	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	23732	nàda	via	VIA	nàda via	Locative-Directional	Transformative	andare via	partire	NO	AWAY
333	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	24164	méti	sóto	SÓTO	méti sóto	Locative-Directional	Resultative	mettere sotto	inserire	NO	UNDER
334	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	26425	tégni	su	SU	tégni su	Locative-Directional	Stative	tenere su	indossare	NO	UP
335	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	26571	téngnete	su	SU	téngnete su	Locative-Directional	Stative	tenere su	indossare	NO	UP
336	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	26895	nar	fóra	FÓRA	nar fóra	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
337	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	27859	vai	su	SU	vai su	Locative-Directional	Resultative	andare su	salire	NO	UP
338	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28281	vai	zó	ZO	vai zó	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
339	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28293	vai	zó	ZO	vai zó	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
340	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28357	vai	zó	ZO	vai zó	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
341	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28389	vai	zó	ZO	vai zó	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
342	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28429	vai	su	SU	vai su	Locative-Directional	Resultative	andare su	salire	NO	UP

343	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	28552	vai	su	SU	vai su	Locative-Directional	Resultative	andare su	salire	NO	UP
344	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	30387	nar	via	VIA	nar via	Locative-Directional	Transformative	andare via	partire	NO	AWAY
345	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	30547	vedévet	fóra	FÓRA	vedévet fóra	Locative-Directional	Continuative	vedere fuori	osservare	NO	OUT
346	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	30612	rivài	via	VIA	rivài via	Locative-Directional	Transformative	arrivare via	arrivare	NO	AWAY
347	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	30648	féva	via	VIA	féva via	Actional	Resultative	fare via	fare	NO	AWAY
348	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	30668	coltiféva	via	VIA	coltivéva via	Actional	Resultative	coltivare via	produrre	NO	AWAY
349	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	34220	'nà	su	SU	'nà su	Locative-Directional	Resultative	andare su	salire	NO	UP
350	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	34611	scrivi	su	SU	scrivi su	Metaphorical	Resultative	scrivere su	compilare	NO	UP
351	Fol	Folgaria_K_Fol01A_con_annotazioni.txt	35769	va	sóra	SÓRA	va sóra	Locative-Directional	Resultative	andare sopra	salire	NO	OVER
353	Fol	Folgaria_K_Fol01B_con_annotazioni.txt	314	nà	zó	ZO	nà zó	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
354	Fol	Folgaria_K_Fol01B_con_annotazioni.txt	377	nór	zó	ZO	nór zó	Metaphorical	Resultative	andare giù	scendere	NO	DOWN

355	Fol	Folgaria_K_Fol01B_con_annotazioni.txt	1502	conté va	su	SU	conéva su	Metaphorical	Resultative	raccontare su	narrare	NO	UP
356	Fol	Folgaria_K_Fol01B_con_annotazioni.txt	2252	dén	via	VIA	dén via	Locative-Directional	Transformative	andare via	partire	NO	AWAY
360	Fie	Fiemme_K_Fi06B_con_annotazioni.txt	194	vas	zò	ZO	vas zò	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
361	Fie	Fiemme_K_Fi06B_con_annotazioni.txt	279	va	sù	SU	va sù	Locative-Directional	Resultative	andare su	salire	NO	UP
366	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	2991	scendi	giù	GIÙ	scendi giù	Pleonastic	Resultative	scendere giù	scendere	NO	DOWN
367	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	3066	vai	giù	GIÙ	vai giù	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
370	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	4548	passare	sopra	SOPRA	passare sopra	Locative-Directional	Resultative	passare sopra	sorpassare	NO	OVER
372	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	5197	vai	giù	GIÙ	vai giù	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
373	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	5524	vado	giù	GIÙ	vado giù	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
378	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	8043	scrivé	diétro	DIETRO	scrivé diétro	Locative-Directional	Resultative	scrivere dietro	scrivere dietro	NO	BACK

379	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	715	vai	dritto	DRITTO	vai dritto	Locative-Directional	Resultative	andare dritto	andare dritto	NO	STRAIGHT
381	Fie	Fiemme_K_Fi07A_con_annotazioni.txt	7717	andate	avanti	AVANTI	andate avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
383	Fie	Fiemme_K_Fi06A_con_annotazioni.txt	238	vas	ju	GIÙ	vas [...] ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
385	Fie	Fiemme_K_Fi06A_con_annotazioni.txt	486	vas	su	SU	vas su	Locative-Directional	Resultative	andare su	salire	NO	UP
388	Fie	Fiemme_K_Fi04B_con_annotazioni.txt	627	vas	sù	SU	vas sù	Locative-Directional	Resultative	andare su	salire	NO	UP
392	Fie	Fiemme_K_Fi02B_con_annotazioni.txt	426	vas	avanti	AVANTI	vas avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
393	Fie	Fiemme_K_Fi02B_con_annotazioni.txt	550	vas	avanti	AVANTI	vas avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
394	Fie	Fiemme_K_Fi02A_con_annotazioni.txt	298	vas	zo	ZO	vas zo	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
396	Fie	Fiemme_K_Fi02A_con_annotazioni.txt	572	vas	avanti	AVANTI	vas avanti	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
397	Fie	Fiemme_K_Fi02A_con_annotazioni.txt	632	vas	su	SU	vas su	Locative-Directional	Resultative	andare su	salire	NO	UP

Appendix B – Ladin sub-corpus

ID	Variety	Source_File	Position	Base_Verb	Part_Form	Part_Lemma	VPC	Semantic_Class	Actional_Class	Macro_Type	Synthetic_Form	Accumulation	Macro_lemma
1	Gar	Gardena_K_Gar03B_con_annotazioni.txt	348	dessenië	su	su	dessenië su	Actional	Resultative	segnare su	tracciare	NO	UP
2	Gar	Gardena_K_Gar03B_con_annotazioni.txt	662	ves	via	via	ves via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
3	Gar	Gardena_K_Gar03B_con_annotazioni.txt	729	ves	via	via	ves via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
4	Gar	Gardena_K_Gar03B_con_annotazioni.txt	760	ves	via	via	ves via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
5	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1031	ves	ju	ju	ves ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
6	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1180	ves	via	via	ves via	Locative-Directional	Resultative	andare via	svoltare	NO	AWAY
7	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1279	ves	ju	ju	ves ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN

8	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1566	ves	via	via	ves via	Locative-Directional	Resultative	andare via	svoltare	NO	AWAY
9	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1671	ves	via	via	ves via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
10	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1768	ves	via	via	ves via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
11	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1818	ves	su ndrët	su ndrët	ves su ndrët	Locative-Directional	Resultative	andare su dritto	proseguire	SI	UP STRAIGHT
12	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1938	ves	via	via	ves via	Locative-Directional	Resultative	andare via	svoltare	NO	AWAY
13	Gar	Gardena_K_Gar03B_con_annotazioni.txt	2731	vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	oltrepassare	NO	AWAY
14	Gar	Gardena_K_Gar03B_con_annotazioni.txt	3243	vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	oltrepassare	NO	AWAY
15	Gar	Gardena_K_Gar03B_con_annotazioni.txt	6386	ves	via	via	vedi via	Locative-Directional	Resultative	seguire oltre	oltrepassare	NO	AWAY

16	Gar	Gardena_K_Gar03B_con_annotazioni.txt	120	dì	adide	adide	dì adide					NO	
18	Gar	Gardena_K_Gar03B_con_annotazioni.txt	1634	stort	ju	ju	stort ju	Locative-Directional	Resultative	svoltare giù	scendere	NO	DOWN
20	Gar	Gardena_K_Gar03B_con_annotazioni.txt	2575	dessenià	ite	ite	dessenià ite	Locative-Directional	Resultative	disegnare dentro	inserire	NO	IN
21	Gar	Gardena_K_Gar03B_con_annotazioni.txt	2876	vedi	inant	inant	vedi inant	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
22	Gar	Gardena_K_Gar03B_con_annotazioni.txt	3131	vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
24	Gar	Gardena_K_Gar03B_con_annotazioni.txt	4963	pea	via	via	pea via	Actional	Transformative	prendere via	avviarsi	NO	AWAY
25	Gar	Gardena_K_Gar03B_con_annotazioni.txt	5346	crì	ora	fora	crì ora	Metaphorical	Resultative	cercare fuori	scegliere	NO	OUT
27	Gar	Gardena_K_Gar03B_con_annotazioni.txt	5673	jì	inant!	inant	jì inant	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
28	Gar	Gardena_K_Gar02A_con_annotazioni.txt	947	ved	for	fora	ved for	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
29	Gar	Gardena_K_Gar02A_con_annotazioni.txt	1315	scrì	su	su	scrì su	Actional	Resultative	scrivere su	annotare	NO	UP

30	Gar	Gardena_K_Gar02A_con_annotazioni.txt	3917	scrì	via	via	scrì via	Actional	Resultative	scrivere via	scrivere	NO	AWAY
31	Gar	Gardena_K_Gar02A_con_annotazioni.txt	2768	giaurieis	su	su	giaurieis su	Metaphorical	Resultative	aprire su	spalancare	NO	UP
32	Gar	Gardena_K_Gar02A_con_annotazioni.txt	2844	crì	ora	fora	crì ora	Metaphorical	Resultative	cercare fuori	scegliere	NO	OUT
33	Gar	Gardena_K_Gar02A_con_annotazioni.txt	2928	scrì	ora	fora	scrì ora	Actional	Resultative	scrivere fuori	compilare	NO	OUT
35	Gar	Gardena_K_Gar02A_con_annotazioni.txt	4131	toma	ite	ite	toma ite	Metaphorical	Punctual	cadere dentro	ricordarsi	NO	IN
36	Gar	Gardena_K_Gar02A_con_annotazioni.txt	4424	fat	pea	pea	fat pea	Metaphorical	Continuative	fare con	collaborare	NO	WITH
37	Gar	Gardena_K_Gar01B_con_annotazioni.txt	529	rus	via	via	rus via	Locative-Directional	Resultative	arrivare via	raggiungere	NO	AWAY
38	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1052	rui	via	via	rui via	Locative-Directional	Resultative	arrivare via	raggiungere	NO	AWAY
39	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1447	ruves	sun	su	ruves sun	Locative-Directional	Resultative	arrivare su	raggiungere	NO	UP
40	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1474	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
41	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1548	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY

42	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1613	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
43	Gar	Gardena_K_Gar01B_con_annotazioni.txt	2875	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
44	Gar	Gardena_K_Gar01B_con_annotazioni.txt	2892	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
45	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3039	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
46	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3116	ves	ju	ju	ves ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
47	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3185	ves	via for	for	ves via for	Locative-Directional	Resultative	uscire fuori	uscire	SI	AWAY OUT
48	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3260	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
49	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3304	va	suvier	suvier	va suvier	Locative-Directional	Continuative	tornare su	risalire	NO	UPWARDS

50	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3338	ves	su	su	ves su	Locative-Directional	Resultative	andare su	salire	NO	UP
51	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3349	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
52	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3381	ves	su	su	vesmo su	Locative-Directional	Resultative	andare ancora su	proseguire	NO	UP
53	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3406	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
54	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3571	ves	su	su	ves su	Locative-Directional	Resultative	andare su	salire	NO	UP
55	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3582	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
56	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3608	ves	su	su	ves su	Locative-Directional	Resultative	andare su	salire	NO	UP
57	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3653	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY

58	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3679	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
59	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3714	va	ju	ju	va ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
60	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3738	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
61	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3752	passes	via	via	passes via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
62	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3794	va	su	su	va su	Locative-Directional	Resultative	andare su	salire	NO	UP
63	Gar	Gardena_K_Gar01B_con_annotazioni.txt	3815	rus	via	via	rus via	Locative-Directional	Resultative	arrivare via	arrivare	NO	AWAY
64	Gar	Gardena_K_Gar01B_con_annotazioni.txt	4771	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
65	Gar	Gardena_K_Gar01B_con_annotazioni.txt	103	peis	via	via	peis via	Actional	Transformative	prendere via	avviarsi	NO	AWAY
66	Gar	Gardena_K_Gar01B_con_annotazioni.txt	204	pië	via	via	pië via	Actional	Transformative	prendere via	avviarsi	NO	AWAY

67	Gar	Gardena_K_Gar01B_con_annotazioni.txt	252	pië	via	via	pië via	Actional	Transformative	prendere via	avviarsi	NO	AWAY
68	Gar	Gardena_K_Gar01B_con_annotazioni.txt	323	jì	ora	fora	jì ora	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
69	Gar	Gardena_K_Gar01B_con_annotazioni.txt	590	pei	n drë ju	ju	pei n drë ju	Locative-Directional	Resultative	scendere dritto	proseguire	SI	DOWN
70	Gar	Gardena_K_Gar01B_con_annotazioni.txt	608	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
71	Gar	Gardena_K_Gar01B_con_annotazioni.txt	684	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
72	Gar	Gardena_K_Gar01B_con_annotazioni.txt	732	vedi	ju	ju	vedi mo ju	Locative-Directional	Resultative	andare ancora giù	proseguire	NO	DOWN
73	Gar	Gardena_K_Gar01B_con_annotazioni.txt	877	vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	oltrepassare	NO	AWAY
74	Gar	Gardena_K_Gar01B_con_annotazioni.txt	994	vedi-	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
75	Gar	Gardena_K_Gar01B_con_annotazioni.txt	1419	ves	ino suvier	ino suvier	ves ino	Locative-	Continuative	tornare su	risalire	SI	UPWARDS

							suvier	Directional					
77	Gar	Gardena_K_Gar01B_con_annotazioni.txt	2827	pas	via	via	pas via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
78	Gar	Gardena_K_Gar01B_con_annotazioni.txt	4018	ruves	sainsom	sainsom	ruves sainsom	Locative-Directional	Resultative	arrivare in cima	raggiungere	NO	UPWARDS ENDPOINT
79	Gar	Gardena_K_Gar01B_con_annotazioni.txt	4050	ves	ite	ite	ves ite	Locative-Directional	Resultative	andare avanti	entrare	NO	IN
80	Gar	Gardena_K_Gar01B_con_annotazioni.txt	4529	ciaculé	via	via	ciaculé via	Actional	Continuative	chiacchierare via	finire di chiacchierare	NO	AWAY
81	Gar	Gardena_K_Gar01B_con_annotazioni.txt	5031	cëla	ora	fora	cëla ora	Metaphorical	Stative	vedere fuori	sembrare	NO	OUT
86	Gar	Gardena_K_Gar01A_con_annotazioni.txt	2541	jì	ora	fora	jì ora	Locative-Directional	Resultative	uscire	uscire	NO	OUT
87	Gar	Gardena_K_Gar01A_con_annotazioni.txt	2555	ved	ora	fora	ved nia plu ora	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
88	Gar	Gardena_K_Gar01A_con_annotazioni.txt	2580	jì	aus	fora	jì aus	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
89	Gar	Gardena_K_Gar01A_con_annotazioni.txt	3314	chrësc	su	su	chrësc su	Pleonastic	Continuative	crescere su	crescere	NO	UP

90	Gar	Gardena_K_Gar01A_con_annotazioni.txt	3783	tò	su	su	tò su	Metaphorical	Resultative	prendere su	registrare	NO	UP
91	Gar	Gardena_K_Gar01A_con_annotazioni.txt	4068	scrì	ora	fora	scrì ora	Actional	Resultative	scrivere fuori	compilare	NO	OUT
92	Gar	Gardena_K_Gar01A_con_annotazioni.txt	6143	destudon	ju	ju	destudon ju	Pleonastic	Resultative	spegnere giù	spegnere	NO	DOWN
255	Gar	Gardena_K_Gar03A_con_annotazioni.txt	107	scrì	for	fora	scrì for	Actional	Resultative	scrivere fuori	compilare	NO	OUT
256	Gar	Gardena_K_Gar03A_con_annotazioni.txt	539	cersciuda	su	su	cersciuda su	Pleonastic	Continuative	crescere su	crescere	NO	UP
257	Gar	Gardena_K_Gar03A_con_annotazioni.txt	5123	vives	for	fora	vives for	Locative-Directional	Stative	abitare fuori	risiedere	NO	OUT
258	Gar	Gardena_K_Gar03A_con_annotazioni.txt	749	val	inant	inant	val inant	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
260	Gar	Gardena_K_Gar03A_con_annotazioni.txt	2798	scriji	da for	fora	scriji da for	Actional	Resultative	scrivere fuori	compilare	SI	OUT
261	Gar	Gardena_K_Gar03A_con_annotazioni.txt	2841	scrì	su	su	scrì su	Actional	Resultative	scrivere su	annotare	NO	UP
262	Gar	Gardena_K_Gar03A_con_annotazioni.txt	5831	ie	for	fora	ie for	Locative-Directional	Stative	essere fuori	trovarsi	NO	OUT

263	Gar	Gardena_K_Gar03A_con_annotazioni.txt	6417	scrì	via	via	scrì via	Actional	Resultative	scrivere via	scrivere	NO	AWAY
264	Gar	Gardena_K_Gar03A_con_annotazioni.txt	6685	scrì	via	via	scrì via	Actional	Resultative	scrivere via	scrivere	NO	AWAY
265	Gar	Gardena_K_Gar03A_con_annotazioni.txt	7768	tumës'	ite	ite	tumës' ite	Metaphorical	Punctual	cadere dentro	ricordarsi	NO	IN
266	Gar	Gardena_K_Gar02B_con_annotazioni.txt	101	dessenië	su	su	dessenië su	Actional	Resultative	segnare su	tracciare	NO	UP
267	Gar	Gardena_K_Gar02B_con_annotazioni.txt	137	pion	via	via	pion via	Actional	Transformative	prendere via	avviarsi	NO	AWAY
268	Gar	Gardena_K_Gar02B_con_annotazioni.txt	916	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
269	Gar	Gardena_K_Gar02B_con_annotazioni.txt	1261	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
270	Gar	Gardena_K_Gar02B_con_annotazioni.txt	1345	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
271	Gar	Gardena_K_Gar02B_con_annotazioni.txt	1560	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY

272	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2036	veni	ju	ju	veni ju	Locative-Directional	Resultative	venire giù	scendere	SI	DOWN
274	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2512	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
275	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2653	vedi	ju	ju	vedi ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
276	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2665	rui	ju	ju	rui ju	Locative-Directional	Resultative	arrivare giù	raggiungere	NO	DOWN
277	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2790	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
278	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2857	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
279	Gar	Gardena_K_Gar02B_con_annotazioni.txt	3879	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
280	Gar	Gardena_K_Gar02B_con_annotazioni.txt	3972	ves	verso	verso	ves verso	Locative-Directional	Continuative	andare verso	dirigersi	NO	TOWARDS

281	Gar	Gardena_K_Gar02B_con_annotazioni.txt	3993	ves	verso	verso	ves verso	Locative-Directional	Continuative	andare verso	dirigersi	NO	TOWARDS
282	Gar	Gardena_K_Gar02B_con_annotazioni.txt	4426	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
283	Gar	Gardena_K_Gar02B_con_annotazioni.txt	4481	passi	via	via	passi via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
284	Gar	Gardena_K_Gar02B_con_annotazioni.txt	5264	ves	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
285	Gar	Gardena_K_Gar02B_con_annotazioni.txt	5329	rues	su	su	rues su	Locative-Directional	Resultative	arrivare su	raggiungere	NO	UP
286	Gar	Gardena_K_Gar02B_con_annotazioni.txt	876	van	ora	fora	van ora	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
287	Gar	Gardena_K_Gar02B_con_annotazioni.txt	1862	van	ju	ju	van ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
288	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2366	rui	via	via	rui via	Locative-Directional	Resultative	arrivare via	raggiungere	NO	AWAY

289	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2438	vedi	stort ju	stort ju	vedi stort ju	Locative-Directional	Resultative	andare giù storto	svoltare	SI	DIAGONAL DOWN
290	Gar	Gardena_K_Gar02B_con_annotazioni.txt	2969	rui	via	via	rui via	Locative-Directional	Resultative	arrivare via	raggiungere	NO	AWAY
292	Gar	Gardena_K_Gar02B_con_annotazioni.txt	3518	vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
293	Gar	Gardena_K_Gar02B_con_annotazioni.txt	5624	dessenià	ite dret	ite	dessenià ite	Locative-Directional	Resultative	disegnare dentro	inserire	SI	IN
294	Gar	Gardena_K_Gar02B_con_annotazioni.txt	6340	cëla	ora	fora	cëla ora	Metaphorical	Stative	vedere fuori	apparire	NO	OUT
295	Gar	Gardena_K_Gar02B_con_annotazioni.txt	6677	dessenië	ite sun	su	dessenië ite sun	Locative-Directional	Resultative	segnare sopra dentro	inserire	SI	IN UP
296	Gar	Gardena_K_Gar02B_con_annotazioni.txt	7823	dessenià	ite drët	ite drët	dessenià ite drët	Locative-Directional	Resultative	segnare dentro	inserire	SI	IN STRAIGHT
398	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1538	va	ju	ju	va ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN

399	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1563	va	ju	ju	va ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
400	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1747	va	su	su	va su	Locative-Directional	Resultative	andare su	salire	NO	UP
401	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1960	va fin	sù	su	va fin sù	Actional	Resultative	andare fin su	salire	SI	UP
403	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1110	va fin	junsom	junsom	va fin junsom	Actional	Resultative	andare giù in fondo	raggiungere	SI	DOWN ENDPOINT
404	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1364	rué fin	junsom	junsom	rué fin junsom	Actional	Resultative	arrivare giù in fondo	raggiungere	SI	DOWN ENDPOINT
405	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1844	vas fin	junsom	junsom	vas fin junsom	Actional	Resultative	andare giù in fondo	raggiungere	SI	DOWN ENDPOINT
406	Fas	Fassa_K_Fa05B_con_annotazioni.txt	1899	vas fin	sunsom	sunsom	vas fin sunsom	Actional	Resultative	andare fino in cima	raggiungere	SI	UP ENDOPOINT
407	Fas	Fassa_K_Fa05B_con_annotazioni.txt	2057	va fin	junsom	junsom	va fin junsom	Actional	Resultative	andare giù in fondo	raggiungere	SI	DOWN ENDPOINT
408	Fas	Fassa_K_Fa05A_con_annotazioni.txt	176	vegne	ju	ju	vegne ju	Locative-Directional	Resultative	venire giù	scendere	NO	DOWN

409	Fas	Fassa_K_Fa05A_con_annotazioni.txt	211	vès	dret	dret	vès dret	Locative-Directional	Continuative	andare dritto	proseguire	NO	FORWARD
410	Fas	Fassa_K_Fa05A_con_annotazioni.txt	371	ties,	sun	su	ties sun	Locative-Directional	Stative	stare su	trovarsi	NO	UP
412	Fas	Fassa_K_Fa05A_con_annotazioni.txt	2069	vès [...]	dret	dret	vès dret	Locative-Directional	Continuative	andare dritto	proseguire	NO	FORWARD
413	Fas	Fassa_K_Fa05A_con_annotazioni.txt	2240	sotite te-	sot	sot	sotite te-sot	Pleonastic	Resultative	andare sotto	infilarsi	SI	UNDER
415	Fas	Fassa_K_Fa05A_con_annotazioni.txt	2956	jir fin	junsom	junsom	jir fin junsom	Actional	Resultative	andare giù in fondo	raggiungere	SI	DOWNENDPOINT
416	Fas	Fassa_K_Fa05A_con_annotazioni.txt	3007	dir	sun	su	dir sun	Locative-Directional	Resultative	dire su	indicare	NO	UP
422	Fas	Fassa_K_Fa03B_con_annotazioni.txt	779	tire	sù	su	tire sù	Locative-Directional	Resultative	tirare su	sollevare	NO	UP
423	Fas	Fassa_K_Fa03B_con_annotazioni.txt	800	vas	ite	ite	vas ite	Locative-Directional	Resultative	andare dentro	entrare	NO	IN
424	Fas	Fassa_K_Fa03A_con_annotazioni.txt	194	vas	fora sot	sot	vas fora sot	Locative-	Resultative	andare fuori sotto	uscire	SI	UNDER

								Directional					
425	Fas	Fassa_K_Fa03A_con_annotazioni.txt	213	vegne	fora	fora	vegne fora	Actional	Resultative	venire fuori	uscire	NO	OUT
426	Fas	Fassa_K_Fa03A_con_annotazioni.txt	578	vegne	fora sot	sot	vegne fora sot	Actional	Resultative	venire fuori sotto	uscire	SI	UNDER
427	Fas	Fassa_K_Fa03A_con_annotazioni.txt	816	vas	ju	ju	tu vas ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
428	Fas	Fassa_K_Fa03A_con_annotazioni.txt	834	passe	via	via	passe via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
429	Fas	Fassa_K_Fa03A_con_annotazioni.txt	850	vas	ju	ju	tu vas ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
430	Fas	Fassa_K_Fa03A_con_annotazioni.txt	887	passe	via	via	passe via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
431	Fas	Fassa_K_Fa03A_con_annotazioni.txt	1048	vas en	ju	ju	vas en ju	Locative-Directional	Resultative	andare in giù	scendere	NO	DOWN
432	Fas	Fassa_K_Fa03A_con_annotazioni.txt	1237	vas	ju	ju	vas ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN

433	Fas	Fassa_K_Fa03A_con_annotazioni.txt	1290	vas	ju	ju	vas ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
434	Fas	Fassa_K_Fa03A_con_annotazioni.txt	1608	vas	su	su	vas su	Locative-Directional	Resultative	andare su	salire	NO	UP
435	Fas	Fassa_K_Fa03A_con_annotazioni.txt	1645	passe	via	via	passe via	Locative-Directional	Resultative	passare via	oltrepassare	NO	AWAY
436	Fas	Fassa_K_Fa02B_con_annotazioni.txt	244	vas en	ju	ju	vas en ju	Locative-Directional	Resultative	andare in giù	scendere	NO	DOWN
437	Fas	Fassa_K_Fa02B_con_annotazioni.txt	357	gire	ju	ju	gire ju	Locative-Directional	Resultative	girare giù	svoltare	NO	DOWN
440	Fas	Fassa_K_Fa02A_con_annotazioni.txt	142	vegne	fora	fora	vegn e fora	Actional	Resultative	venire fuori	uscire	NO	OUT
442	Fas	Fassa_K_Fa02A_con_annotazioni.txt	1088	rua	ju	ju	rua ju	Locative-Directional	Resultative	arrivare giù	raggiungere	NO	DOWN
443	Fas	Fassa_K_Fa02A_con_annotazioni.txt	1211	vae	ju	ju	vae ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN

445	Fas	Fassa_K_Fa02A_con_annotazioni.txt	1870	vae	ju	ju	vae ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
446	Fas	Fassa_K_Fa01_con_annotazioni.txt	1846	jir	via	via	jir via	Actional	Resultative	andare via	andarsene	NO	AWAY
447	Fas	Fassa_K_Fa01_con_annotazioni.txt	2381	mudar	su	su	mudar su	Actional	Resultative	cambiare su	modificare	NO	UP
448	Fas	Fassa_K_Fa01_con_annotazioni.txt	2930	mete	su	su	mete su	Metaphorical	Resultative	mettere su	annotare	NO	UP
450	Fas	Fassa_K_Fa01_con_annotazioni.txt	3233	jir	su	su	jir su	Locative-Directional	Resultative	andare su	salire	NO	UP
451	Fas	Fassa_K_Fa01_con_annotazioni.txt	250	star	ite	ite	star ite	Locative-Directional	Stative	stare dentro	contenere	NO	IN
452	Fas	Fassa_K_Fa01_con_annotazioni.txt	284	star	ite	ite	star ite	Locative-Directional	Stative	stare dentro	contenere	NO	IN
750	Bad	Badia_K-Ba02A_con_annotazioni.txt	1140	ji	fora	fora	ji fora	Locative-Directional	Resultative	andare fuori	uscire	NO	OUT
751	Bad	Badia_K-Ba02A_con_annotazioni.txt	1817	scrì	fora	fora	scrì fora	Actional	Resultative	scrivere fuori	compilare	NO	OUT

753	Gar	Gardena_K_Gar01B.txt	801	ves	su	su	ves su	Locative-Directional	Resultative	andare su	salire	NO	UP
754	Gar	Gardena_K_Gar01B.txt		scrijëis	su	su	scrijëis su	Actional	Resultative	scrivere su	annotare	NO	UP
755	Gar	Gardena_K_Gar02B.txt		ves	ju	ju	ves ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
756	Gar	Gardena_K_Gar02B.txt		va	ju	ju	va ju	Locative-Directional	Resultative	andare giù	scendere	NO	DOWN
757	Gar	Gardena_K_Gar02B.txt		passes	via	via	ves via	Locative-Directional	Resultative	andare via	proseguire	NO	AWAY
758	Gar	Gardena_K_Gar03B.txt		ves	inant via ndrët	inant via ndrët	ves inant via ndrët	Locative-Directional	Resultative	andare via avanti dritto	proseguire	SI	FORWARD AWAY STRAIGHT
759	Gar	Gardena_K_Gar01B_con_annotazioni.txt		vedi	via	via	vedi via	Locative-Directional	Resultative	andare via	attraversare	NO	AWAY
760	Gar	Gardena_K_Gar01B.txt		raidi	ju	ju	raidi ju	Locative-Directional	Resultative	girare giù	svoltare	NO	DOWN

761	Gar	Gardena_K_Gar01B.txt		raidi	ju	ju	raidi ju	Locative-Directional	Resultative	girare giù	svoltare	NO	UP
762	Gar	Gardena_K_Gar03A.txt		val	inant	inant	val inant	Locative-Directional	Continuative	andare avanti	proseguire	NO	FORWARD
763	Gar	Gardena_K_Gar02B.txt		to	su	su	to su	Metaphorical	Resultative	prendere su	registrare	NO	UP