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A PARTICLE-CENTRED APPROACH ON ITALIAN VERB-PARTICLE CONSTRUCTIONS

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A mio nonno Isaia

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List of Conventions

Conventions which were used in this dissertation are listed below.

←→ 'paraphrastic equivalence', *i.e.* synonymic relation between two or more utterances

→ 0 zeroing operation, i.e. reduction to zero of an item

***** unacceptable expression

? doubt on the acceptability of a sentence

+ plus sign in lexicon-grammar tables which indicates a proprety accepted

- minus sign in lexicon-grammar tables which indicates a property not accepted

→ transformation

W a variable indicating all the arguments, included adverbs and empty elements (E)

Adv adverb

E the empty element in a sentence

LG Lexicon-Grammar Theory

Loc all prepositions introducing a locative prepositional phrase

MWE multi-word expression

MWV multi-word verb

NP noun phrase

N_i Lexicon-Grammar notation for the *noun phrase*. The symbol *i* refers to position of arguments (0, 1, 2, 3,..) in the sentence:

- N_0 noun phrase in subject position
- N_1 noun phrase in first argument position
- N_2 noun phrase in second argument position
- N_3 noun phrase in third argument position

The linguistic notation in subscript refers to the *semantic class* involving the noun phrase:

N_{hum} human noun phrase

N_{-hum} non human noun phrase

O operator, i.e. the central syntactic element (verb, noun, adjective or preposition) which selects the number and the type of its arguments. It can select nominal arguments, i.e. '**n**' or sentential arguments, i.e. **'o'.**

n elementary argument (noun like Mary, book ..)

o non elementary argument (sentence)

The types of operator-argument combinations are:

On "operator on an elementary argument"

Onn "operator on two elementary arguments"

Oo "operator on operator (operator on one non-elementary argument)"

Ono "operator on one elementary argument and one operator"

Onno "operator on two elementary arguments and on one operator"

Ooo "operator on two operators (operator on two non elementary arguments)"

Part particle in a verb-particle combination

PP prepositional phrase

Pred **t**he predicative element of a sentence usually indicated between square brackets

Prep preposition

SC small clause

SVC support verb construction

TWV two-word verbs

Vtr transitive verb

Vintr intransitive verb

V verbal entry

V sup support verb

V sup-ext support verb extension (or support verb 'variant')

Examples

The examples used in the dissertation are taken from many sources:

1. Italian Language corpora and texts;
2. lexicographic resources;
3. Google;
4. other authors
5. my intuition as a native speaker

I will indicate the reference between brackets. Where there is no indication about the "source" it means that the examples adopted are my own.

Preface

The following doctoral thesis, titled "*A particle centred approach on Italian Verb Particle Constructions*" (hereinafter VPCs) aims at showing that the particle characterizing Italian Phrasal verbs (such as *su* (up), *giù* (down), *fuori* (out), *dentro* (in/inside) and so on plays a key role in the constructions both syntactically and semantically.

The framework adopted is based on the main syntactic theories developed by Z.Harris (1976). as well as on the Lexicon Grammar Method as pointed out by M. Gross (1981). I will suggest, gradually during the dissertation, that the spatial, aspectual and metaphorical meaning of a large portion of Italian VPCs such as *scappare fuori di casa* (to escape out of the house), *tirare via un chiodo* (to pull out the nail from the wall), *mettere dentro il ladro* (to put the thief inside), *portare avanti un progetto* (to carry out a project), *tagliare fuori qualcuno da un discorso* (to cut sb.out from a discussion) - are embedded only into the particle slot as the head verb can vary into a finite range of possibilities or it not occur at all. The head verb is in other words 'week' while the particle represents the powerful element (or 'operator' in lexicon-grammar terms) so that it can not be considered a small added element (lat. '*particula*'): the particle affects the argument structure of the verb and carries the aspectual or spatial or idiomatic meaning. Moreover its syntactic autonomy is demonstrated by the fact that it can also occur without the head verb, in sentences such as *su le mani* (hand up), *via di qui* (away from here), *fuori i soldi* (money out), *giù il governo* (down with the government), *Lazio avanti* (Lazio ahead) that are defined "verbless particle constructions".

The thesis provides an in depth syntactic and semantic analysis of Italian VPCs, with interesting evidence from dictionaries and corpora, stressing the need to substitute the traditional "Verbocentrism" with an original Particle-Centred Approach. Finally the theoretical and applicative implication of such a change of perspective are pointed out.

D.G.

SECTION I

Theoretical Background and Preliminary remarks

Abstract

This section is devoted to provide some basic and preliminary remarks. In particular, the chapter one attempts to detail the theoretical background adopted in the current dissertation, i.e. the theoretical orientation to the grammar as a mathematical characterization of the information-bearing structure of natural language, based on *The Theory of Grammar* as presented by Z. Harris (1968) and on the *Lexicon-Grammar Approach* as developed by Maurice Gross (1975, 1992). Some attention will be drawn also to the Lexicon-Grammar treatment of multi-word expressions, (hereinafter MWEs). The chapter two provides an overview of the object of study, the so-called *phrasal verbs* or **Verb-Particle Constructions** (hereinafter VPCs): I will sketch out the previous research on this topic and the criteria used in this dissertation to delimit the research field. In particular with the term 'verb-particle constructions' I will refer to a very specific sub-class of MWEs, made up with a motion (or non motion) verb followed only by locative particles such as *via* (away), *su* (up), *giù* (down), *avanti* (forward/on), *indietro* (back), *sopra* (on/ over/ upon), *sotto* (under), *fuori* (out) and *dentro* (in).

1. The Framework: Harris' Theory of Grammar and Lexicon-Grammar Model

"*One has to study all sentence types and all types of verbs. Well, let's see what we find."*

(Gross, 1979)

1.0 Introduction

In *Aspects of the Theory of Syntax* (1965), Chomsky outlines a new model of "Transformational-Generative Grammar" (TGG), called *Extended Standard Theory* where, for the first time, the Lexicon makes its entry into the formal description of languages, next to the reaffirmed primacy of syntax. It would be necessary to provide for each verb a list of sub-categorizations, with respect to the rules of selection and co-occurrence: this program, however, was never realised in an exhaustive way. Since the early seventies, at the LADL[1] of Paris, Maurice Gross in order to verify the applicability of the TGG model, began to describe 3000 French verbs selecting a sentence. Meanwhile BGL (1976a and b) and Guillet, Leclere (1992) examined about 2800 entries in a verbal transitive and intransitive system in French.What did Gross and his colleagues discover? That, by testing the transformational component on large amounts of data, the exceptions exceeded the rules. Furthemore the strong irregularities and idiosyncrasies of the lexicon allowed Gross (1975) to move away from the Chomsky's model, entering into open conflict with it.

Since the publication of his "*Mèthodes en Syntax"* in 1975, Maurice Gross' methodological principles gave input to the Lexicon-Grammar description of many natural languages, like French, Italian, Portuguese, Spanish, English, German, Norwegian, Polish, Czech, Russian, Bulgarian, Greek, Korean, Chinese, Arab (and others), through the development of *lexically exhaustive grammars* i.e. grammars that incorporating the lexical information, provide the domain of application of a mechanism, in particular, syntactic. In other words the lexically exhaustive grammars deal with all the lexicon of a given language and explicate what the Transformational-Generative Grammar called *strict sub-categorization*

[1] Laboratoire d'Automatique et documentaire linguistic, University of Paris 7.

rules (Chomsky, *Aspects of the theory of syntax,* 1965). In fact as Chomsky himself observed (Chomsky, 1965), the transformational rules – which describe systematic relations between syntactic structures - are generalisations, subject to strong lexical constraints. Given a specific word, the question of whether or not a given generalisation applies needs to be answered. Or, in other words, a full description of the syntax of a language implies not only the identification of general syntactic rules but also, and equally importantly, a detailed specification of which word requires, accepts or forbids the application of which syntactic rule. This is what Maurice Gross' work sets out to achieve for the French language.

His approach is systematic, namely for a given phenomenon, one has always attempted to reach a complete coverage of the description in a language. The point of view is strictly formal, minimal, mathematic, and no semantic notion is involved in the metalanguage, according to the classical methodology developed by Z.S. Harris and N. Chomsky. The major contribution to linguistics made by Maurice Gross is of methodological and epistemological nature: he was the first to adapt and apply methods borrowed from experimental science to the syntax of natural languages. He graduated as an engineer and scientist and in experimental science, priority is given to accumulating empirical data in order to design and test models, theories and conjectures. Even when models or hypotheses naturally come to mind, their scientific value depends on their correspondence to reality, so they must be systematically checked on observable facts. This involves experimentation. In syntax, as in other field interest, experimentation requires effort and skill; it must be explicit and take into account large-scale data, namely the vocabulary of the language and the syntactic constructions of the language. This is one of the fundamental principles of Maurice Gross' Lexicon - Grammar method, based on the epistemological synergy between theory and particular fact, that is between universal rules and directly observable examples or counter-examples. From the theoretical point of view, Maurice Gross' model is based on some basic concepts that emerged out of Z. S. Harris's works in syntax.

Zellig Sabattei Harris (1909-1992) was a renowned American linguist, mathematical syntactician, and methodologist of science. Maurice Gross in 1976 claimed that

> "*Zellig Sebbatai Harris, sans aucun doute, avec R. Jakobson, E. Benveniste at N.*

Chomsky, le plus grand linguiste vivant".[2]

Originally a Semiticist, he is best known for his work in structural linguistic (Harris, 1951), and discourse analysis (Harris, 1956) and for the discovery of transformational structure in language (1969, 1970). The main contributions of his career include transfer grammar, string analysis, elementary sentence-differences (and decomposition lattices), Algebraic structures in language (1968), Operator Grammar (Harris (1976, 1982), and a Theory of Linguistic Information (Harris, 1988, 1991). His *Theory of Grammar* is based on the identification procedure of the "rules of co-occurrence" of individual words with other words in the vocabulary of a certain language. Harris went through the whole story of North-American Structuralism, coming out from the so-called "Bloomfieldian era", i.e. the full Distributionalism period, and proposing steps forward in that field, with particular regard to the notion of 'transformation', that he first defined, and to the so-called "operator argument grammar". Despite the renowned importance of Harris in the United States, he was almost unknown in Europe.

In 1973 Maurice Gross invited Harris to run a course on syntax in Paris-Vincennes (for the accademic year 1973-1974). During that period in Paris, Harris sketched out his point of view on transformational syntax and distributional grammar and from the notes that he himself wrote up, and their translation in French, provided by Gross, a book came out – never published in English or Italian - *Notes du cours de syntax,* in 1976. This year represented the date of birth of Harris' first fame in Europe, and, at the same time, the beginning of the spread of Gross' linguistic method. Just one year before, in fact, Gross published his *Méthodes en syntaxe* and he began the lexicon-grammar research. The link between the theories of the two linguists is, under some aspects, so tight that, as Eric Laporte (2004) has mentioned, there is a sort of *"smooth continuum"* from the thoughts and works of Harris to those of Maurice Gross, so that it is sometimes difficult to distinguish between their respective contributions. Nevertheless, since *Lexicon-Grammar* (henceforth LG) and *Harris' s theory of grammar* are the most theoretical and methodological frameworks adopted in this dissertation, I consider it a necessity to provide a relatively detailed outline of their basic principles, by focusing on their respective contributions to the linguistic theory, before presenting the results of my research. The object of study of the current dissertation, is, in fact, the systematical analysis of the

[2] Presentation by Maurice Gross of the book *Notes du cours de syntaxe,* 1976.

interaction between lexicon and syntax of Italian verb-particle constructions by applying to this domain: a) the distributional and transformational principles of the sentence structure analysis and of Harris's Operator-Argument Grammar; b) the theoretical and methodological assumptions of the Lexicon-Grammar as developed by Maurice Gross, that is: b.1) the accumulation of large-scale data within a corpus-driven procedure; b.2) the representation and the coding of such data into a taxonomic form. The following chapters are dedicated to a description of the two approaches.

1.1. Harris's Theory of Grammar

1. 1. 1 On overview.

For Z. Harris (1976), the theory of grammar is a system of operations acting on words, whose results are sentences (or "discourses"), that is sequences of words that belong to a language, as opposed to all those which do not belong to it. A given language is made up of a set of words, therefore sentences, as opposed to its opposite, i.e. a set of non-words and therefore non-sentences. A grammar defines not only the sequences of words that constitute sentences, but also the different ways in which each sequence of words may constitute a sentence. In this sense, the harrisian grammatical theory, which is an extension of the traditional distributional analysis of American Structuralism, identifies the "rules of co-occurrence" of individual words with other words in the vocabulary of a certain language. According to Harris, the grammatical theory performs two basic operations. *The first* is the construction of a *set* of concatenation of sentences that give rise to a full informative language, neither ambiguous nor paraphrastic. *The second one* regards the construction of another *set* of sentences that, undergoing a certain number of formal variations, are paraphrastic reductions of sentences of the first set[3]. The forms of the latter can be reduced, even to zero,[4]; they are in other words deformations and reductions of the forms of the first set which are instead “full” or, as Harris called them, *"morpho-phonemic extended”,* in parallel with the generalization of the linear algebra provided by the

[3] See Harris (1969), *The two systems of Grammar. Report and paraphrase*.

[4] The operation consisting of a reduction to zero of a given item is defined by Harris as “zeroing”. See also Harris (1968).

"operators theory" in mathematics. [5]

The sentences of the first set are fully explicit and their elements are "redundant" with respect to the informational structure of the sentences themselves (Harris 1988). As a consequence, their usage by speakers is not very "probable", even if it is not impossible. The second type of sentences, instead, which have a lower degree of explicitness and which are paraphrastic reductions of sentences of the first set, have a higher probability of realization, i.e. *high likelihood.* They are, in other words, closer to the real production of the speakers. For instance, the sentence 1 below belongs to the first set, that is to the set of "full" and "explicit" sentences of the language, while the sentence 1.b, which has a higher likelihood, belongs to the second set (i.e. the set of "reduced" and more "probable" sentences).

1- *I expect John to be here*

2- *I expect John*

To be here, i.e. the favoured second argument of *expect* is, in other words, reduced to zero. Other cases in which favoured high likelihood motivates particular reductions are seen in the formation of compound nouns, e.g. *milkman ← man who was particularly to do with milk* and the zeroing of *wh-* pronouns as in *the man who is coming tomorrow → the man coming tomorrow*. Then, related to high likelihood are instances of "repetitional reduction". Such reduction occurs in particular positions where a given occurrence of a word is the "same" word or refers to the same things as another word occurrence, e.g. the reduction in *Eva played tennis and Eva played football → Eva played tennis and football*.

Reductions are in other words "changes" in the physical shape or relative position of words made upon their entry into a sentence. All the reductions take place on words which contribute little or no information to the sentence. Moreover, for Harris' Grammar Theory, a necessary condition on reductions is that they preserve the likelihood-inequalities of the sentence to which they are applied. The reductions of the second set of sentences hold constant the informational content of the sentences of the first set, i.e. they are paraphrastic. Another example of paraphrastic operation obtained using morphemes ("free"

[5] For further remarks, see also Stephen Johnson's book about Harris *The Legacy of Zellig Harris* (2002).

and "bound")[6] happens when a word is reduced to a prefix or *viceversa* like in:

fare nuovamente ← → *rifare*
(Do over again ← → redo)

where the adverb *nuovamente* (a free morpheme obtained by the combination of two bound morphemes) is replaced - via paraphrastic equivalence - by the prefix *ri-* (a bound morpheme). According to Harris, reductions constitute a type of "transformation" and transformations are "*correspondence bi-univoque*" between sentences (or discourses) which are in paraphrastic and morpho-phonemic equivalence relation. Transformations are "variations" of related sentences; they are "*opération de changement de forms*" which do not affect the relationship between the operator and its arguments, that is the normal likelihood-ordering for a given argument or operator, that is called its "selection". One could think that differences in forms involving transformations can produce or "derive" a *novel* sentence or discourse, that is, it could seem that there is a sort of *source* sentence (or discourse) and a *target* sentence (or discourse) that is the result of the transformation. But as Harris pointed out – the identification of a "source" of a particular transformation is arbitrary, we can only consider the sentences undergoing a transformation as members of *equivalence classes.*

So, this kind of grammar has aone constant ("operator") and more variables ("arguments"). When an operator operates on its argument word, it determines the conditions of acceptability of the string, as well as one or more reductions required. At the same time, the operator determines how the reductions can be made, even though most of the reductions are optional. Therefore this entry-order system invites a more detailed comparison with the "valence" based grammars, and with the predicates calculus of categorical grammar, which was developed in the philosophical tradition of Husserl and

[6] Every morpheme can be classified as either free or bound. These categories are mutually exclusive, and as such, a given morpheme will belong to exactly one of them:

1. ***Free morphemes*** can function independently as words (e.g. *town*, *dog*) and can appear with other lexemes (e.g. *town hall*, *doghouse*).
2. **Bound morphemes** appear only as parts of words, always in conjunction with a root and sometimes with other bound morphemes. For example, *un-* appears only accompanied by other morphemes to form a word. Most bound morphemes in English are affixes, particularly prefixes and suffixes. Bound morphemes that are not affixes are called **cranberry morphemes**, their nomenclature derived from the bound, non-affix function of *cran-* in the word *cranberry*.

Lésniewki. With regards to the "valency theory" sketched out by Tesnière (1976), we can observe that, by metaphor, as an atom attracts around him a fixed number of electrons, an operator determines the number and the type of its arguments (one, two, three or four). In this sense a "discourse" (or a "text") is an ordered sequence of operators (each with its arguments), concatenated with each other.

Instead, with regards to the Traditional Grammar for which the value of a word is determined by its membership class, since it is essentially a "categorial grammar", Harrisian grammar differs by suggesting that each word can modify its function when the sentence context in which it occurs changes. This means, consequently, that words have not got an instrinsic or absolute or unique "value", as their value is conveyed by the co-occurrent elements. This kind of grammar, in fact, argues that words have "selection and co-occurrence rules" which depend on the sentence context and on the interpretation process. According to Harris, the function of "operator" is entirely independent from its belonging to a given class of words. They can, in fact, have such a role, the same way as nouns, verbs and adjectives, adverbs, prepositions, prefixes and suffixes. For this reason, if adjectives are inherently predicative, as is well recognized in the so-called "copular sentences" like *Max is happy*, the fact that an item could be noun or verb does not ensure that it is an argument or an operator. We need to analyze its co-occurrence, i.e. the sentence context. More specifically, the membership of the grammatical class of "verbs" is not associated with the category of "operator". Such a consideration is of absolute importance to the issues that I will address in the current dissertation.[7]

1.1.2 Concatenation discourse

According to Harris (1976) a *discourse* is an expression of a language that can be "pronounced" or "written". It is also termed by him "*connected speech*" (Harris, 1952), that is, a cohesive sequence of sentences. From the structural point of view a discourse is characterized by a sequence of words which "need" the presence of other words. This "relation of necessity" between words can be analysed in terms of a relationship between the discourses of the language. Given the following sequence of discourses:

[7] For a more detailed outline of this principle with respect to some frequent constructions of Italian language, i.e. the support verb constructions, see D'Agostino-Guglielmo (2010).

X A **B** Y

we can note that discourse B "needs" A in the sense that B is introduced by A.[8] With regards to the notion of "relation of necessity" we can observe that, given the sentences:

Le livre de cusine est tombé (Harris, 1976)

Le livre est tombé

**Le de cusine est tombé*

the presence of *de cusine* needs *the le livr*e. In other words *de cuisine* is introduced by *livre*. When B requires (or "needs") A, we call B an "operator" on A, and A an argument of B. For instance, in the following discourse:

Que Berlusconi démissionne est un fait

the sequence *Que...est un fait* is an operator which is applied on the argument *démissionne.* The argument *démissionne* in turn is an operator because it "requires" *Berlusconi,* with which it constitutes a discourse. *Berlusconi* is the argument of the operator *démissionne.* So if the sequence:

Berlusconi démissionne (discourse 1)

is a discourse, the sequence *:*

Que...est un fait

is the operator applied on it, in order to obtain a novel discourse:

---

[8] Note that for Harris' distributional analysis B can occur also into contexts different from X A Y like:

X' A'___ Y'

where X' A' and Y' are equivalent to X, A and Y:

X A B Y ← → X' A' **B** Y'

At the same time, in the context X A __ Y, an element which is the distributional equivalent of B can occur, like B':

X A **B** Y ← → X A **B'** Y

Que Berlusconi démissionne est un fait (discourse 2)

in which the former (the discourse 1) is included.

[Que (Berlusconi démissionne) DISCOURSE 1 *est un fait]*DISCOURSE 2

The operator *Que...est un fait,* by introducing the discourse *Berlusconi démessionne, "*operates on" it. The interpretation is that the operator is a sort of "*constructeur d'assertions*", that is, approximately a predicate with respect to its arguments. For Harris, the words can be of two types, *operator* or *non-operator (arguments)* and operators are considered "*elementary*" when they operate on an "*elementary argument*" - that is, arguments which are nouns *(N).* We can now observe that the discourse 1:

Berlusconi démessionne

is an *elementary operator,* represented with the notation *On* (meaning "operator on N") where *Berlusconi* is the elementary argument (N) selected by the operator (O) *démessionne:*

Berlusconi démessionne = ***On***

The phenomenon of concatenation emerges when an argument functions also as operator, producing a novel discourse. The sentence:

Que Berlusconi démissionne est un fait

is just such a clear example of *concatenation discourse:* the operator *Que…est un fait* is defined as a "*non elementary operator*" because it requires as argument *Berlusconi démessionne*, which is, in turn, as we have seen above, not an elementary argument but a novel operator containing the *On* structure. Therefore the discourse 2 *Que Berlusconi démissionne est un fait* is represented – within the Harrissian notational system - with "Oo" (meaning "operator on operator") where *O* is the "non elementary operator", *Que...est un fait* and "*o*" is the "non elementary argument" *Berlusconi démissionne.*

Disourse 1 =Berlusconi démessionne = ***On***

Discourse 2 = Que Berlusconi démissionne est un fait = ***Oo*** (with o → On)

Therefore the discourses of a language are made up of a *concatenation of discourses* (discourse 1 + discourse 2 +...discourse *n*), i.e. ordered sequences of operators, one

included into the other, (or one applied on the others), as in the case, metaphorically, of the chinese boxes.

1.1. 3. Distributional analysis

Distributional analysis is a descriptive linguistic method typical of the North-American Structuralism and formulated for the first time by Bloomfied (1933). Harris in his *Methods in Structural Linguistics* (1951) led this method to its extreme development: the investigation of "discovery procedures" for phonemes and morphemes based on the distributional properties of these units. Harris in fact outlines the methods of the structural analysis in the notion of linguistics as "science" and on the basis of this assumption he wanted to make the procedure used during the analysis explict. The **distribution** is considered by Harris (1952) as the "logic" which allows for the relations between elements of the language, and these relations are not arbitrary but regular in some way, so that they can be formalized by the analyst. The regularities of a language can be described in terms of distributional relations between the various elements, where the term "distribution" refers to the sum of all the possible sentence contexts of a given element. This method, by analysing the relative occurrence of morphemes as discrete elements and by not accounting for the meaning carried by each morpheme, is strictly "formal" and for this reason is characterised by high generality and "reproducibility".[9] He outlines his method of analysis as follow:

> "*An application of the distributional methods of linguistics to one discourse at a time. It can be applied directly to text, without using any linguistic knowledge about the text except the morpheme boundaries. This is possible because distributional analysis is an elementary method, and involves merely the statement of the relative occurrence of elements, in this case morphemes*." (Harris, 1970, p.316)

Therefore:

> "*Our interest in those elements that do occur cannot be merely in the tautologic statement That they occur, but in the empirical statement of How they occur: which*

[9] Harris' intention of displaying those properties of the linguistic phenomena which are invariant across diverse representations anticipates in some ways the later work on linguistic universals.

ones occur next to each other, or in the same environment as each other, and so on – that is, in the relative occurrence of these elements with respect to each other". (ibid. p. 318).

Two elements or strings of morphemic elements are "equivalent", regardless of the physical form of the sequence, and so they can be grouped together in the same class, when the contexts in which they occur are identical or equivalent. For instance given the sentences:

(1)

mio nipote Tullio ***gioca a calcio***
(my nephew Tullio plays football)

mio nipote Tullio ***mangia un gelato***
(my nephew Tullio eats an ice cream)

mio nipote Tullio ***è contento***
(my nephew Tullio is happy)

the sequences *gioca a calcio*, *mangia un gelato*, and *è contento* can be situated in the same class since they share the same context on the left, i.e. *mio nipote Tullio.* The three sequences are in other words "distributional equivalents"[10] The basic procedure of this distributional method is the "substitution". Given the sequence:

(2)

YAZ

where A occurs in the contexts Y and Z, replacing A with X, B and C we produces the novel sequences:

(3)

Y X Z

[10] When two sequences or units can occur in the same context, they are said to have "equivalent distribution". Contrarily, when two sequences or units have no contexts in common, so that they cannot be substituted in the same position, they are said to have "complementary distribution". For more detail on the application of Harris' *distributional analysis* to Italian language structure, see D'Agostino (1992) and D'Agostino & Guglielmo (2010). For a simplified Harris' outline see also Vietri (2004).

Y B Z

Y C Z

which are all equivalent from the distributional point of view, as they share the same context of A in (2), that is the sequence Y on the left and Z on the right.

In line with Harris, it is therefore possible to reduce the number of morpheme classes: when some morphemic sequences have the same distribution - and this can be tested by substituting them in the same position - they can be grouped together into the same morphemic class associated with a given syntactic function. For instance, given the following sentences:

(4)

Tullio legge un libro ***nuovo***
(Tullio reads a new book)

Tullio mangia un biscotto ***di cani***
(Tullio eats a dog biscuit)

Tullio ascolta un CD ***che Daniela gli ha regalato***
(Tullio listens to a CD that Daniela gave him)

the sequences *nuovo* (adjective), *di cani* (prepositional phrase), *che Daniela gli ha comprato* (relative clause) share the same contexts on their left .i.e the sequence noun, verb, noun (N V N). Then with the following "substitution" procedure:

(5)

Tullio legge un libro (nuovo + di cani + che Daniela gli ha regalato)

Tullio mangia un biscotto (nuovo + di cani + che Daniela gli ha regalato)

Tullio ascolta un CD (nuovo +di cani +che Daniela gli ha regalato)

we can test that the three sequences, *adjective*, *prepositional phrase* and *relative clause* can occur in the same position with respect to the three contexts *Tullio legge un libro*, *Tullio mangia un biscotto*, *Tullio ascolta un CD*. As a consequence, by considering them in a relation of "distributional equivalence" they can be grouped into the unique

"syntactic class" of "post-modifier". In this sense from a structural point of view, a novel definition of "grammatical classes" can be outlined on the basis of the "positional" value carried by the elements co-occurring in the sentence, as in Harris' distributional analysis, rather then on notional considerations.

1.1.4 The likelihood of occurring

Let's look again at the examples in (4), by focusing now only on the sequence noun- verb - determinant -noun

(6)

Tullio legge un libro
(Tullio reads a book)

Tullio mangia un biscotto
(Tullio eats a biscuit)

Tullio ascolta un CD
(Tullio listens to a CD)

These have the form:

N V un N

We observe that the elements in the sentences in (6) are distributionally equivalent as each member of the class V can co-occur with each member of the class N and *vice-versa*. But not all the possible combinations resulting from this co-occurrance have the same degree of likelihood. For instance the possible combinations:

(7)

Tullio legge un biscotto
(Tullio reads a biscuit)

Tullio mangia un CD
(Tullio eats a CD)

Tullio ascolta un libro

(Tullio listens to a book)

have a lower likelihood of occurrence compared with the combinations in (6). This likelihood-inequality depends on the distributional constraints that each word operates on each other in the language. *Mangiare* selects words referring to *food* with a higher likelihood, so that the sentence *Tullio mangia un CD* could be perceived as "strange" by a native speaker, even though it could be perceived as "normal" in a fantasty context where the selectional rules are violated, or, merely considering that the CD is made of chocolate. With regards to this likelihood, Harris says:

> *"Each word has a particular and a roughly stable likelihood of occurring as argument or operator with a given other word, though there are many cases of uncertainty, disagreement among speakers, and change over time..."*

In other words, acceptability for Harris is not a binary but a "gradual" mechanism, a sort of *continuum* which goes from the pole of the highest likelihood of occurring to that of the lowest likelihood of occurring. In order to outline the "distribution" or "selection" of a given lexical item, Harris says

> *"We refer here with the term 'likelihood' of a word under an operator (or an argument), to an estimation of the probability or frequency of that word with respect to a fixed number of occurrences of that operator (or argument) [...] The set of words with a frequency higher than the average is called selection."* (Harris, 1988).

In other words, the distribution or selection of a verb like "sleep" will include animated noun phrases like *the child, Max*:

(The child + Max) is sleeping

Although it has a lower degree of likelihood, the verb sleep can co-occur with inanimate nouns like *the plant*, *the tree* like:

(The trees + the plants) are sleeping during the winter

Exceptionally, the verb sleep has a very low likelihood of occurring with words like *vacuum*.

The vacuums are sleeping through the centuries

However, it is impossible *a priori* for "sleep" to co-occur with a completive sentence introduced by "*the fact that...*"

* *The fact that you will arrive is sleeping*

This illustrates the difference described by Harris between the notion of "acceptability" – which is distribution based – and "ungrammaticality".

1.1. 5 Information and meaning

A key feature of natural language is the different likelihood which each word in a given entry class has in respect to its prior or next entering word. More precisely, we are speaking of various inequalities of likelihood, as estimated by speakers of the language. These inequalities of likelihood of arguments for each operator and vice versa serve to distinguish every operator word and its meaning. Whereas likelihood itself is imprecise and liable to fluctuate rapidly, the inequalities in their gross grades (exceptionally high likelihood, high likelihood, normal likelihood, low likelihood, etc.) are rather stable (Ryckman, Gottfried, 1981).

In this sense, the distributional analysis is of primary importance, since it allows for the assignment of meaning to the sentences. The meaning of a lexical element for Harris can not be defined *a priori*; it can be only found by analysing the sentence contexts of that element, that is, the membership classes with which it can co-occur within a normal likelihood. According to Harris:

> "*Outside of the context, a given lexical entry has such a general meaning as to amount to the absence of meaning"* (Harris, 1988)

For Harris, there is an overlapping between the notion of information and meaning. They are context dependent in the sense that a lexical entry can be understood only if it is inserted inside a sentence. The different meanings of a word can be split by analysing all the distributional and syntactic contexts in which it can occur.

For instance the verb "believe" in the following examples:

Max belives

Max belives that Eva will come

Max belives in me

acquires different meanings only by inserting it into different sentence structures, represented by:

N V

N V CHE F

N V in N

By adding the distributional restrictions required by the operator with respect to its arguments to this procedure, we can make the different meanings or 'senses' explicit. For example, looking at the Italian verb "*abbattere*" (to tear down/destory), we must first position it within different sentence structures:

Il macellaio ha abbattuto la vacca	[uccidere]
(The butcher killed the cow)	[to kill]
Gli operari hanno abbattuto la parete	[demolire]
(The workers tore down the wall)	[to demolish]
Il fatto che Max mi abbia lasciata mi ha abbattuto	[demoralizzare]
(The fact that Max left me demoralised me)	[to demoralise]

We can then formalize the different distributional structures required by each "use":

abbattere (1) = N_{human} V N

abbattere (2) = N_{human} V $N_{concrete}$

abbattere (3) Che F V N_{human}

The meaning of a lexical item is therefore, according to Harris, the result of the co-occurrence and it is shaped in a purely relational way, emerging from the structure. Harris' distributional method of assigning the meaning to an item appears in this case merely structuralist as the "value" of each single lexical item is not defined by itself, *a priori,* in an absolute way, but it is the result of the 'relationship' that it retains with the other co-

occurrent elements of the 'system', as in the Hjelmslev' Structural Theory (Hjelmslev, 1948). Furthermore, this Harrisian procedure concerning the splitting of a single morphophonemic form into more meanings or "senses" was next applied systematically by Maurice Gross (1979) who called it "splitting of entries". This notion is of primary importance for the method provided in this work, as it leads us to perform a clear distinction between "lexeme" and "lexical entry" and to prefer the latter for the subject of my corpus-based investigations.

In conclusion

The Harrisian classification of operators represents the essential starting point for lexicon-grammar analysis, since it is based on the recognition of the key role played by the elementary sentences in the linguistic system. The study of operators may beperformed only by taking into account the special relationships that link them to their arguments and independently whether these are simple nouns (i.e elementary arguments) or sentential arguments (i.e. non-elementary arguments or discourses).

1.2. The Lexicon-Grammar Model

1.2.1. An outline

Lexicon-Grammar is one of the most consistent methods for exhaustive natural language formalisation, automatic textual analysis and parsing. Its main goal is to describe all mechanisms of word combinations closely related to concrete lexical units and sentence creation, and to give an exhaustive description of lexical and syntactic structures of natural language. LG was set up by the French linguist Maurice Gross during the '60s, and subsequently developed for and applied to Italian by Annibale Elia, Emilio D'Agostino and Maurizio Martinelli. Its theoretical approach is prevalently based on Zellig Harris' Operator-Argument Grammar, which assumes that each human language is a self-organizing system, and that the syntactic and semantic properties of a given word may be calculated on the basis of the relationships this word has with all other co-occurring words inside given sentence contexts. For LG, the simple sentence is the minimal linguistic meaning context which can be analyzed and on the basis of which concrete studies on natural language may be achieved (Gross 1968).

A simple sentence is a context formed by a unique predicative element that is the "operator" in Harrisian term (which can be a verb, but also a noun or an adjective) and all the "essential arguments" selected by this element in order to obtain an acceptable and grammatical sentence.[11] The study of simple sentences is achieved by analyzing the rules of co-occurrence and selection restriction, i.e. distributional and transformational rules based on predicate syntactic-semantic properties. Today LG methodology is used all over the world by RELEX, a network formed by several groups of researchers working in different universities, laboratories and international structures. The Department of Communication Sciences of Salerno University is part of RELEX and has had a long scientific collaboration with LADL (Laboratoire d'Automatique Documentaire et Linguistique) of Paris 7 University, directed for over twenty years by Maurice Gross.[12] I present in the next chapter its main theoretical features, mostly inferred from large-scale empirical studies aimed at obtaining a large coverage of French (M. Gross 1975, 1992, 1996; J-P Boons, A. Guillet, C. Leclère 1976a, 1976b; Giry-Scheider J. 1978, G. Gross 1989; A. Guillet, C. Leclère 1992). French is the earliest application, but other studies in various languages have also been performed, for example for Italian language (A. Elia 1984, A. Elia, E. D'Agostino, M. Martinelli 1981, Elia-D'Agostino 1983, D'Agostino 1992, Cicalese 1995, Vietri 1996, Vietri-Elia-D'Agostino 2004, Vietri 2004, Elia 2005, D'Agostino-Guglielmo at alii 2007, Guglielmo-Constant 2010, Guglielmo 2010, Messina 2012, D'Agostino-Guglielmo 2012, Elia 2013), for Portuguese (Ranchhod 1990; E. Maceiodo 1984, J. Malaca-Casteleiro, 1981), and for Spanish (B. Lomiroy 1983, L. Massot-Pellat 19899, C. Subirats 1987), which already allows for comparisons of Romance languages both at lexical and syntactic levels.

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11 For distinguishing *essential* from *not essential* complements see next chapter.

12 This strict scientific collaboration aimed at refining Lingware in order to adapt it to Natural Language Processing (hereinafter NLP) software. In the last twenty years, LG has also achieved important results in the domain of automatic textual analysis and parsing, creating software and Lingware fully oriented towards NLP, such as INTEX (http://intex.univ-fcomte.fr/), UNITEX (http://www-igm.univ-mlv.fr/~unitex/), and, more recently Nooj (http://www.nooj4nlp.net/pages/nooj.html). For more information about LG, refer also to http://it.wikipedia.org/wiki/Lessico-grammatica and http://fr.wikipedia.org/wiki/Lexique-grammaire. . For other books and publications about multilingual Lexicon-Grammar, see the link "Bibliographie" on http://infolingu.univ-mlv.fr/.

1.2.2. The Argumental structure of elementary sentences

The major principle of the lexicon-grammar model concerns the notion of "unit of meaning" of a given word which is not located at word level but at elementary (or "simple") sentence level.

The entries of the lexicon are, in other words, for Maurice Gross (1975), not the "words" but the simple sentences. This principle seems to be in contradiction with the notion of lexicon, but only apparently. In fact, in a dictionary we cannot give the sense of a word without using a sentence, or compare the different uses of the same word without placing it into a sentence. "In fact the presentation of the words in the dictionary - by lexemes - is justified only for the convenience concerning the information retrieval process. It is in other words a restriction on the presentation, as is the alphabetical order". (Gross, 1981, p.48).

The elementary sentence (or "minimal" sentence) - identified by Harris as the concatenation of elements built around an operator and its arguments, is, in other words, made up with a verb (with its selected subject) and its selected arguments, called "essential arguments", as opposed to its non-selected arguments (also called "circumstantial").

Gross (1986) stated:

> *The essential feature of a lexicon-grammar is that the elementary unit of computation and storage is the simple sentence: subject-verb-complement(s). This type of representation is obviously needed for verbs: limiting a verb to its shape has no meaning other than typographic, since a verb cannot be separated from its subject and essential complement(s). We have shown (M. Gross, 1975) that given a verb, or equivalently a simple sentence, the set of syntactic properties that describes its variations is unique: in general, no other verb has an identical syntactic paradigm. As a consequence, the properties of each verbal construction must be represented in a lexicon-grammar. The lexicon has no significance taken as an isolated component and the grammar component, viewed as independent of the lexicon, will have to be limited to certain complex sentences (Gross, 1986).*

Separating *essential* from *circumstantial* complements is a classical question discussed by many linguistics. Boons (1983), one of the main Lexicon-Grammar scholars, splits for example the complements into two kinds: "nuclear" and "non nuclear" where the former,

completing the information carried by the verb, are the "argument" directly selected by the verb. Meanwhile, the latter are just "added" complements, since they can be deleted from the sentence in which they appear as the information they carry, concerning usually Place, Manner and the Time, is not essential for the basic meaning of the sentence. Another couple of terms used to define this dichotomy are "*argument"* vs. "*adjunct"* (Manning 2003:290). Arguments are taken to be syntactically specified and required by the head and its subcategorization frame, whereas adjuncts (of time, place, etc.) can freely modify a head. The distinction is based on a twofold syntactic-semantic claim (Dowty 2003):

- syntactic level: an adjunct is an "optional element", while a complement is an obligatory element;

-semantic level: an adjunct "modifies" the meaning of its head, while a complement "completes" the meaning of its head.

There are very clear arguments and some very clear adjuncts, but there is also a lot of stuff in the middle, which is often classified either as arguments or adjuncts and leads to the postulation of various in-between categories such as argument-adjuncts (Grimshaws 1990) and pseudo-complements (Vespoor 1997). As Calabrese (2011) suggested, there are in fact some "fuzzy categories" which generate "grammatical indeterminacy" as pointed out first by Bolinger (1971:26) and formalized in Aarts' (2007) "syntactic gradience" theory. Maurice Gross (1992) also outlined that the traditional analysis is well-intentioned but often lacks precision. Among many questions is the fact that one encounters numerous ambiguities that prevent one from distinguishing the various types. For example, circumstantial complements are often sub-classified into Time, Place, and Manner complements, and these semantic attributes are presented as characteristics of circumstantial complements, but various essential complements and some subjects appear to also have these attributes. For example, in the sentences provided by Gross (1992):

La pioggia è durata sei ore (The rain lasted for six hours)

Jo vive in Iran (Jo lives in Iran)

Jo si comporta in maniera strana (Jo behaves in a strange way)

the complements of Time, Place and Manner are essential, whereas in the following sentences they are circumstantial:

Jo ha dormito per sei ore (Jo slept for six hours)

Jo ha mangiato del buon caviale in Iran (Jo ate good caviar in Iran)

Jo ha mangiato in modo strano (Jo ate in a strange way)

This happens because *dormire* does not select a Time complement and *mangiare* requires only the object in the sentence structure, but not the Place and the Manner complements.

Furthemore, Gross (1996) claimed that:

> *Upon examination of more than 10,000 verbs, delineating a border between essential and circumstantial complements has proved to be a varied enterprise, more dependent on individual verbs than initially thought: tests for characterizing essential complements are highy lexical and tend to apply more to individual verbs or small groups then to broad semantic classes* (Gross, 1996: 245).

Although lexicon-grammar admits the difficulty concerning the identification of the border between these two kinds of verb-complements, it has always considered such operations of a fundamental importance, as it identifies the "minimal" syntactical environment for each verb, based on its subject and its essential arguments.[13] In fact, in order to distinguish between essential and circumstantial arguments, LG provided an applicative method based on the formal criteria first pointed out by Harris (1976), i.e the deletion and the reduction test. In particular if the deletion and the reduction test – together with native speaker competence - produce an unacceptable sentence, it means that the specific complement is of "essential" type. For example given the sentence:

Max abita a Roma (Max resides in Rome)

if we want to determine if the Place complement "*a Roma"* is essential or circumstantial (as many Place complements are) we first need to apply "the deletion test":

Max abita a Roma

[a Roma → O] = : * *Max abita*

This produces an unacceptable sentence: the novel sentences resulting from these transformations (the notation "X → 0" represents the zeroing of an item X) appears in fact clearly "incomplete" from the point of view of the argument-requirement. Our native speaker

[13] The formalized elementary sentence structure is called a *definitional structure.*

competence suggests in fact that the activity of *residing* requires some *places* for the subject to reside in.

In a second step, to be more sure of the result arising from the deletion test, we need to integrate the test with the other formulated by Harris, called "reduction of a sentence". This test deals with the insertion of the Place complement into a sentence with the support verb "*avvenire*", "*avere luogo*" (to happen, to take place). So, now, let's add the words "*e ciò avviene a Roma*" (and this happens in Rome) to the subject-verb sequence *Max abita*:

* *Max abita e ciò avviene a Roma* (Max resides and this take place in Rome)

The unacceptability of such a novel complex sentence shows that the Place complement is not a reduction of a sentence, that is, it is not an operator-argument structure, but a completely characterizing and essential argument, required by the verb *abitare* (to reside).[14]
As consequence, this Place complement needs to be taken into account as a part of the elementary sentence. It is in an "essential argument" inserted into the following definitional structure, i.e the "minimal" syntactic environment of *abitare*:

N_0 V Loc N_1

Here, **N_0** is *Max*, **V** is *abitare*, and **Loc N_1** is the Place (or "locative") complement *a Roma*.
Today, all the simple sentences – according to Gross (1992) - share the general structure:

N_0 V W

Here **N_0** is the subject, **V** the verb, and **W** is a variable ranging over all complements including an empty one ("E"), in which case the notation is the following:

W =: E

The part **N_0 V** of the structure **N_0 V W** is then of great generality, while this is not the case for the rest of the structure, i.e W. This has raised a lot of questions, stemming from Gross' observation that practically

[14] The application of these formal Harrisian tests to Italian verb-particle sentence structures will be discussed in the next section of the current dissertation.

"No two verbs of the lexicon (12,000 for French verbs) have the same W complements". (Gross 1992).

In order to clarify the nature of W, as we have seen before, grammarians traditionally have have classified the complements into two main types: object or **essential complements** that are characteristic of each verb and **circumstantial complements** (considered reductions of sentences), which can be applied to large sets of verbs and can often be omitted. Both types of complements can take the shape of noun phrases, prepositional or direct, which are notated*: Prep Nj* where the subscript *j* indicates their left or right order of occurrence in the sentence. If the preposition is 'zeroed', it is annotated with *(Prep =: E).* For Italian, we have:

Prep = E + di + a + da + in + con + su ...
(Prep = E + of + to + from + in + with + on ....)

But complements can also be "sentential", in this case we write:

Prep N j = (E + *il fatto*) *che* F
Prep N j = (E + the fact) that F

to outline their content and to indicate that they nonetheless have some of the property of the ordinary noun phrase. Sentential complements may belong to the type "object" or circumstantial, in which case they are called subordinate clauses.
The empirical results derived from lexical-grammatical classifications have helped us - says Gross (1992) - to make the variable W more and more precise:
First the number of essential complements is limited to 2, that is, one only observes the structures:

a. W =: E
b. W =: Prep N 1 (where Prep can also be "E")
c. W =: Prep N 1 Prep N 2 (where Prep can also be "E")

Here are some examples of the elementary sentences of Italian for each of the possible contents of the variable W:

a. with W =: E

N0 V
Il gatto miagola
(The cat meows)

b. with W =: Prep N1 (Prep =: E)

N0 V N1
Il bambino mangia il gelato
(The child eats the ice cream)

b.1 with W = Prep N1 (with Prep =: a)

N0 V a N1
Eva obbedisce a sua madre
(Eva obeys her mother)

b.2. with W =: PrepN1 (with Prep =: di)

N0 V di N1
Max parla di Ugo
(Max speaks of Ugo)

b.3 with W: = PrepN1 (with Prep =: da)

N0 V da N1
John viene da una famiglia nobile
(John comes from a noble family)

b.5 with W =: Prep N1 (Prep =: con)

N0 V con N1
Simona litiga con Sonia

(Simona argues with Sonia)

c. with W =: Prep N1 Prep N2 (with Prep1 =: E, = Prep2=: da)

N0 V N1 da N2
Bob ereditò la casa dalla madre
(Bob inherited the house from his mother)

d. with W =: Prep N1 N2 (with N2= Che F)
Max ha scommesso con Jo che Ugo sarebbe venuto
(Max bet with Jo that Ugo would come)

The global view we just outlined provides a description of the complexity of each verb, since the number of arguments is a measure of this complexity. However, various linguistic phenomena lead us to correct this view. A first correction regards the study of the content of the arguments of the verbs, which will be taken into account in the next chapters. With regards to Italian, on the basis of these criteria, 66 different classes were built, referring to 5000 verbal uses (Elia 2013) on the basis of a "maximal expansion principle", i.e. the maximal expansion of the sentence.

1.2.3. Lexical Ambiguity analysis

Based on the content of the sequence W (the number and type of essential arguments) "homograph" verbs are divided into distinct lexical units called "verbal entries" or "verbal uses." The different senses of a single verb are, in other words, represented in distinct lexical entries on the basis of their co-occurrence sentence context. A set of 6000 verbs was retained and studied for French. First, semantic distinction led to the identification of 12000 verbal unit instead of 6000.
For example, the French verb *voler* (to want) must be subdivided into two units: *voler* (= to fly) and *voler* (= to steal) with two distinct syntactic descriptions:

1. N0 voler =: *L'oiseau vole* (The bird is flying)
2. N0 voler N1 à N2 =: *Bob a volé un livre à Jo* (Bob stole a book from Jo)

In other terms, we have W=: E for *voler* with the meaning of "to fly", and W =: N1 à N2 for *voler* with the meaning of "to steal". This procedure of splitting a verb into different lexical uses is called "splitting of entries" and is based on Harris' distributional analysis, as outlined in the chapters 1.1-1.2 of the current section.

Instead, given the Italian verb *mirare*, we see it has different interpretations depending on whether it enters into a transitive construction (*mirare* = to look at) or into an intransitive one (*mirare* = to pretend, to aim):

3.	N0 mira N1	=: *Max mira le bellezze del paesaggio* (Max looks at the beauty of the landscape)
4.	N0 mira Prep N1	=: *Max mira al successo* (Max aims for success)

For the verbal use 3. we have W: = Prep N1 (with Prep = :E), that is, the following type of sentence structure:

3.1.N0 V N1 (*mirare* = to look at)

Meanwhile, for the verbal use 4. we have W =: Prep N1 (with Prep =: "a"), that is, a sentence structure such as:

3.2. N0. V at N1 (*mirare* = to aim)

Based on Zellig Harris' conception of syntax, Maurice Gross considered the elementary sentence the minimum unit for the study of meaning and syntax. As a matter of fact, meanings of sentences are much easier to distinguish than the meaning of (isolated) words. A good example is the English verb "to miss" and the sentence structures associated with each meaning or "lexical use" of it:

5.N0 V V- ing	=:	*Max evitò di cadere* (Max missed falling)
6.N0 V N1	=:	*Max mancò l'obiettivo* (Max missed the target)
7.N0 V N1	=:	*A Max mancò Eva* (Max missed Eva)

It is easy to see how “to miss” is a lexically ambiguous verb, as it occurs in different elementary sentences with distinct and unrelated meanings. The respective lexical entries of “to miss” are in other words considered “separate”. In fact, the relationships between homographic entries are usually not adressed in lexicon grammar studies, as suggested by Laporte (2004). If we look at the sequence W, we have in all of the three sentences W=: Prep 1 (with E = Prep), and therefore a syntactic structure apparently similar to the type ***N0 V N1***. The differences between the three uses lie in the type of the selected complement N1, because in 5. it is “sentential” so we have W =: Prep N1 (with N1 =: Che F), while in both 6 in 7 “miss” selects an elementary argument, that is a noun phrase (respectively “the target” and “Eve”).

One of the problems that Lexicon-Grammar meets in the automatic analysis of texts (NLP, Natural Language Processing) is represented by this need to resolve **the lexical ambiguity.** The identification of the “elementary sentence” (or minimum discourse) is the first solution to distinguishing homographic entries such as *voler* for French and *mirare* for Italian. Instead, in the case of “to miss”, the only identification of the sentence structure has allowed us to split the completive use (5) by non-completive uses (6-7), which do not slect a sentence as argument. However, this was not enought to disambiguate between the meanings, which are both of the transitive type and have the same N0 V N1 sentence structure.

At this point, **distributional analysis** (as developed by Harris, 1976) comes into play i.e the identification of the selections of co-occurrences encoded into the different lexical entries. In the case of the use 6 and 7 of “to miss”, the distributional restrictions on the the arguments are the following:

6. N0 miss N1 =: *Max mancò l'obiettivo* (Max missed the target)

N0 = noun phrase, of human type
N1 = noun phrase of non-human type and concrete

The argument in object position, however, is "restricted," it can be situated in a list of finite and empirically numerable members, so that the following sentence is perfectly acceptable:

6.1. Max missed (the target + the aim + the mark...)

while this is not the case for a sentence in which the co-occurrence relation with the verb is a

non-human and concrete noun phrase:

6.2 *? Max missed the house

In this sentence, however, the acceptability judgment is recovered if we assume that “the house” is a target to hit, so that it then is in a **"hyponymy-hyperonymy"** semantic relationship with “the target”.

Instead, the distributional restrictions on the use of “to miss” in 7, are as follows:

7. N0 V N1 Max missed Eva

N0 = human noun phrase, the human
N1 = human, animate and inanimate noun phrase

Here, in distributional equivalence with the human N1 we can find:

7.1 Max missed (the sister+the holiday house+the piano+the dog)

Of course, the ambiguity persists in a sentence like:

8. Max missed the piano

where only the sentence context cannot allow us to determine if, for example, Max is playing with a sling, so that “the piano” needs to be interpreted as a target (use 6), or whether it is the object melancholy feeling by Max (use 7) .

1.2.4 The content of argument: free, fixed, sentential arguments

What we have argued so far has led us to note that the LG analysis of verbal operators (or *ordinary verbs)* starts from the determination of “sentence structure” or definitional structure of these verbs, i.e. from the identification of the number and type of arguments they select (this stage requires the distinction between essential and circumstantial complements, as we

have seen above, for which we refer also to Vietri, 2004). Also at the first stage, important distributional properties should be taken into account, concerning the presence of a "non-elementary argument", called by Gross (1992) "sentential argument", i.e. a complement which is a sentence**.** Let's look at some examples using a verb that selects, a "sentential argument" (also known as "completive")[15] in a distributional equivalence relation with a noun phrase:

9. **N0 V N 1** with N1 =: that F
(Ena)0 desidera (che Max sia vestito)1
(ENA)0 wants (that Max gets dressed) 1

10. **N0 VN 1 di N 2** → with N2 = Che F
(Max)0 convince (Ugo) 1 (del fatto che il lavoro sia insopportabile)2
(Max) 0 convinces (Ugo) 1 (that the work is unbearable) 2

11. **N0 V N1 Prep N 2 N3** → with N3 = Che F
(Vito) 0 scommette (50 euro)1 (con Matteo)2 (che Ugo arriverà)3
(Vito) 0 bets (50 euros)1 (with Matthew) 2 (that Ugo will arrive) 3

We have also seen that when an entry selects only elementary arguments, it can be classified as transitive or intransitive (depending on the presence, respectively, of a nominal or prepositional group to its right). It is on this basis that we have split the transitive use of "*mirare*" (to look at) in *mirare le bellezze del paesaggio* (= *to look at the beauty of the landscape)* from the intransitive one (in *mirare al successo* = to aim for success*)*. A further methodological step has been represented by the specification of the distributional and semantic restrictions operating on the arguments, which led us to distinguish between the uses 6-7 of "miss", i.e "to miss the target" vs. "to miss Eva".

Despite that restriction on arguments can sometimes be strong enough to identify a very restricted class of *N1* (for example, the entry *mangiare* (to eat) selects a concrete object not only labelled as "edible" but also as part of a more limited semantic class, i.e. the "solid edible" class of objects), the complements analyzed so far are nonetheless still **free**

[15] Both for Gross and Harris the splitting between sentential vs. non-sentential verbs (ordinary verbs) - or within Harris – between non-elementary vs. elementary operators is of primary importance compared with the splitting between transitive and intransitive verbs. In other words the last distinction should be operated after the former.

arguments. Now I will provide some examples of sentence structures in which the arguments are "constrained" or **frozen** since they form, together with the verb, a “complex lexical unit” called an **idiom.** The sequence verb + frozen arguments forms a **frozen sentence,** also defined by Gross (1982)as a “compound verb”**:**

- **N_0 V C_1**

12. (*Il bambino)0 taglia (corto)1*
    (The child) 0 cuts (to the chase) 1

- **N_0 V C_1 Prep C_2**

13. *(The girl)0 prese (il toro)1 (per le corna)2*
(The girl) 0 took (the bull) (by the horns) 2

- **N_0 V C_1 Prep C_2**

14. *(Mia sorella)0 mette (i bastoni)1 (fra le ruote)2 (a Bob)3*
(My daughter) 0 puts (spokes) 1 (between the wheels) 2 (of Bob) 3

Here *Ni* indicate the variable noun phrases and *Ci* the frozen argument. For the subjects *i* = 0, while for the complements: i = 1, 2, 3, 4. In other terms we can assign a number in subscript ranging from 0 to 4 to the fixed or frozen arguments (also indicated by Gross with the notation “C” (“constant”). To specify the frozen arguments in the sentences presented above, we write:

C_1 = : to the chase; the bull, the spokes
Prep C_2 = : by the horns, between the wheels

To specify the “arguments” situated into the free positions 0 (subject) and 3 (prepositional phrase) we write in the same way:

N0=: the child; the girl, my daughter
PrepN3=: to Bob

Within a Lexicon-Grammar approach the distinction between free and frozen arguments is based on the possibility to modify the first, by:

- the replacement of them with synonyms, i.e. equivalent distributional elements
- the addition of modifiers (like adjectives) and determinants
- the inversion of singular and plural (and vice versa)

This is notable in the following perfectly "acceptable" sentences, which are "varianta" of the sentences 12-14:

12.1 *(Il bambino + Bob) taglia corto*
(The child + Bob) cuts to the point;

13.1 *(La + quella) ragazza prende il toro per le corna*
(The+ That girl) takes the bull by the horns;

14. *(Mia sorella + le mie sorelle) (mette + mettono) I bastoni fra le ruote a Bob*
15. (My daughter + My daughters) (puts + put) spokes between the wheels of Bob

The same manipulations applied to the fixed arguments of the same sentences 12-14 produce instead the following not "acceptable" sentences:

*12. 2 The bambino taglia (corto + * breve)*
The child cuts (to the chase + * brief)

13.2 *La ragazza prende (il + * un toro) per le corna*
The girl takes (the + * a) bull by the horns;

14. 1 *Mia sorella mette I bastoni (*fra la ruota + le ruote) a Bob*
*My daughter puts spokes between (*the wheel + wheels) of Bob*

The only way these could be considered "acceptable" would be if we were willing to give up with the idiomatic interpretation of the compound verb, to obtain the "concrete" one.
As we have seen, the formal description of frozen sentences does not differ from the formal

description of the free sentences discussed until now.

The table below shows the class of frozen adverbs (or "compound adverbs") that have been defined in French on this basis with an example and the number of items for each class (Gross, 1982), while for a similar classification concerning Italian frozen adverbs like "*chiaro e tondo*" we refer to Elia (1982, 1995), and for Italian frozen sentences like ""*mettere i bastoni fra le ruote*" to Vietri (1984):

Tables	Structures	Exemples	Effectifs
PADV	Adv	*soudain*	320
PC	Prép C	*en bref*	460
PDETC	Prép Dét C	*contre toute attente*	570
PAC	Prép Adj C	*de sa belle mort*	440
PCA	Prép C Adj	*à gorge déployée*	400
PCDC	Prép C de C	*en désespoir de cause*	350
PCDN	Prép C de N	*au moyen de N*	330
PCPN	Prép C prép N	*par rapport à N*	90
PCPC	Prép C Prép C	*des pieds à la tête*	140
PCONJ	Prép C Conj C	*en tout et pour tout*	170
PV	Prép V W	*à dire vrai*	150
PF	P (phrase figée)	*Dieu seul le sait*	230
PECO	(Adj) comme C	*comme ses pieds*	200
PVCO	(V) comme C	*comme un cheveu sur la soupe*	210
PPCO	(V) comme Prép C	*comme dans du beurre*	30
PJC	Conj C	*et tout le tremblement*	100
		TOTAL	> 4 190

Frozen Adverbs (M. Gross 1986)

To sum up: the number and nature of the arguments depends on each verb. On the whole the variety of arguments has turned out to be enormous, but it is possible to create a typology of them, although approximative in some cases. Gross (1992) distinguishes in fact between:

a. "Sentential arguments";
b. "Free concrete arguments";
c. "Frozen arguments"

So given the general argumental structure, as formalized in Gross (1992):

N0 V W

where the variable W can include the following sequence of complements:

W = : (E + PrepN1 (PrepN2 E + (E + PrepN3)))

we have the equation:

Ni=: Qu P + N + C (Gross, 1992)

This shows that in a given syntactic position ***N i,*** one can find a sentential argument **(Qu P),** a concrete free noun phrase **(N)** or a frozen argument **(C).**

This equation gave rise to the construction of disjoint classes or parallel classifications of **verbs selecting a sentence** (non-elementary sentences), **simple verbs** (free sentences) and **compound verbs** (frozen sentences)**.** In the case of the French, by the specification of the sequence W a system was designed which describes about 50 disjoint classes for 12,000 free sentences and about 30 classes for about 30,000 frozen sentences so far (Leclère 1990).

In the case of Italian, a system has been provided, of 1350 completive sentences (Elia, 1984), 2000 free sentences, i.e. which do not select any sentences - of which 1200 are of transitive type (D'Agostino,1992), and 800 of intransitive type (Bocchino 2006) - and about 55,000 frozen sentences (Vietri, 1985) and 3086 frozen adverbs in Elia (1995). By the quantification of data, it clearly emerged that idiomatic or frozen sentences are not the "exceptions" in the language system, as traditionally claimed by Generative Grammar. Frozen or fixed sentences are in fact more numerous compared with free sentences, although the origin of the compound or idiom is often irregular (as shown by the etymological dictionaries which are often rich in anecdotes).

In the next chapter we shall focus in more detail on the so called "compound words", as

defined in origin by Gross (1992) and more recently – within more terminological agreement between different linguistic approaches - termed "Multi-Word Expressions" (MWEs) or multi-word unit (MWUs).

2. Multi-word expressions and Verb-particle constructions: an overview

2.0 Introduction

In the field of the phraseological study there is unfurtunately still no common descriptive approach, in particular concerning those semi-preconstructed phrases, or **multi-word units**, such as collocations, idioms, clichès, formulae, proverbs (cf. Cowie 1981). Going into detail about the different concepts behind these types would go beyond the scope of this dissertation. However, in order to analyse the so-called "verb-particle constructions" (hereinafter VPCs) in Italian language I consider it of primary importance to outline the larger family of multi-word expressions, as VPCs represent merely a very specific sub-class of it. One of the main aims of this dissertation in fact is the investigation of the relation that VPCs retain with the MWE family as a whole, from syntactic, lexicon and semantic points of view. In the next chapter, I will deal with the main hypothesis on MWUs, with particular attention to the results developed by the lexicon-grammar framework, since it represents the basic theoretical and methodological background adopted in the current dissertation. In chapter 2.2 I will provide a brief outline of the state of the art on English and Italian VPCs.

2.1 Multi-word expressions: an overview

Multi-word expressions (MWEs) are sequences of simple words separated by a hyphen or blanks which can be both compositional and idiomatic. The current approaches on lexicon-syntax relationship, i.e. Construction Grammar (cf. Fillmore, Kay and O' Connor 1988, Goldberg 1995) and Lexicon-Grammar (Gross M. 1975, 1981, 1986, Vietri 1996) agree in considering MWEs phrasal structures working as "unique lexical items" or "complex

predicates". Recent lexicon-grammar studies (Guenthner F., Xavier B. 2001) draw attention to the fact that MWEs should be dealt with in a systematic way, classified into a smaller number of types, with distinct properties and coded both in traditional and electronic dictionaries in exactly the same manner as simple words (i.e. sequences of characters between two white spaces like *andare* (to go), *casa* (house), *bello* (beautiful)).

MWEs play an important role in natural language learning as well as in real-word applications: machine translations, information retrieval, parsing, summarisation, etc. In spite of the awareness of the weight which they fill in languages, they are actually a pain in the neck in *Natural Language Processing* (NLP) because of their strong syntactic and semantic constraints (Sag A., Baldwin T., Bond F. Copestake, A., Flickinger, D. et al. 2002). Current techniques for processing MWEs are still less effective than those for simple words. Two of the reasons for this are the variety of linguistic forms classified as MWEs, and the lack of linguistic knowledge with a level of formalization, required for it to be exploitable in computer applications.

MWEs include a large range of different linguistic objects (G. Nunberg et al., 1994; N. Calzolari et al. 2002; A. Capostake et al. 2002; I. Sag et al. 2002), such as:

(i) **lexical compounds** (nouns: *magnetic field*; adjectives: *well-known*; adverbs: *above all*; prepositions and conjunctions: *as far as, in order to*;

(ii) **phrasal verbs** (*carry out*, *give up*);

(iii) **fixed and semi-fixed constructions** (*take the bull by the horns, be one in a hundred)*;

(iv) **support verb constructions** (*give a lecture, make a speech*).

The most important lesson of lexicon-grammar works on MWEs is that there is no alternative to their systematic manual enumeration. Tests with large collections of multi-word expressions at the LADL, CIS, UAB, and DSC have shown that at least one-third of any natural language corpus must be analysed in terms of dictionary entries involving such terms. The precision that we will obtain in the parsing results will also increase tremendously both in terms of proper identification of lexical items and in terms of the semantic characterization of the text tokens.

The number of MWEs in a speaker's lexicon is estimated to be of the same order of magnitude as the number of single words. Specialized domain vocabulary overwhelmingly consists of MWEs, hence, the proportion of MWEs will rise as a system adds vocabulary

for new domains, because each domain adds more MWEs than simple words. The greatest problem for translating MWEs might be the **idiomaticity problem**, as many MWEs have an idiomatic sense, to a higher or a lesser degree. For example, it is hard to predict for a system that an expression like *kick the bucket* has a meaning that is totally unrelated to the meaning of *kick*, *the* and *bucket* while appearing to conform to the grammar of English VPs. Idioms cannot be translated literally, because in many cases the idiom does not exist in an equivalent form in the target language. Attention has to paid to syntactic and/or semantic (non)equivalence. Also, not every MWE of the source language has an MWE in the target language as well. For example, the German MWE *ins Auge fassen* can only be translated by the English one-word term *envisage*. Nunberg et al. (1994) introduced the notion of "semantic compositionality" in relation to idioms, as a means of describing how the overall sense of a given idiom is related to its parts. Idioms such as *spill the beans*, for example, can be analyzed as being made up of *spill* in a "reveal" sense and *the beans* in a "secret(s)" sense, resulting in the overall compositional reading of "reveal the secret(s)". With the oft-cited *kick the bucket*, on the other hand, no such analysis is possible. Based on the observation that this process of semantic deconstruction starts off with the idiom and associates particular components of the overall meaning with its parts, it has been recast as semantic decomposability. We distinguish between decomposable idioms such as *spill the beans* and *let the cat out of the bag*, and non-decomposable idioms such as *kick the bucket*, *trip the light fantastic* and *shoot the breeze*.

From the theoretical point of view in earlier Lexicon Grammar Frameworks, the most essential features of what we call "multiword expressions" were the non-compositionality and the semantic opaqueness. Maurice Gross used the term "compound word" (Gross, M. 1986) to refer to a string composed of several words, where the meaning cannot be computed from its elements and they "form the essential part of the Lexicon-Grammar". They include not only the so-called **compound verbs** ("frozen verbs", or idiomatic sentences) like *take the bull by the horns* but also **compound nouns** like *crude oil*, *stroke of luck* and the so-called **compound adverbs** like *in every sense of the word, at night, in the long run.* In particular, with regards to such structures of the language Gross (1986) claimed:

> *That they force both the linguist and the computer specialist to adopt a much more abstract view of language;*

-semantically, by definition, "compound utterances" cannot be decomposed into simple utterances. In other terms, meaning is not compositional for compounds. Hence in a certain sense, one has to recognize that meaning has not much to do with words;

- syntactically, it has become a rather general habit to attach properties to individual words. In the case of compounds, this mode of representation is no longer possible: Why favour one part of a compound with marks rather than some other part? For example, there is no reason to attach the Passive marking to the verb rather than to either of the complements of the utterance "to put the cart before the horse". Lexicon-grammar representations eliminate such questions by delocalizing the syntactic information and by attaching it to the full sentence. In this sense, compound expressions provide a powerful motivation for representing lexical and syntactic phenomena in the form of a lexicon-grammar". (Gross, 1986, p.5).

De Mauro (2000) describes the compound word as a group of words with a single meaning, which cannot be inferred from the meanings of the individual words that are part of it, both in common use and in specialized language. Recently the significance of compositionality has changed and the term MultiWord Unit has evolved in such a way that it can also be referred to non-idiomatic units.

For exemple, *luna di miele* (honeymoon) and *lente a contatto* (contact lenses) are both MWEs (having structure *N Prep N*) even if the first is idiomatic and the latter is compositional. The reason to treat them as "compound words" in the sense of M. Gross is the fact that they undergo the same syntactic and lexical constraints:

(a) we can not substitute the first nominal elements (N_0) with synonyms:

* *satellite di miele* (* honey satellite)*; * vetro a contatto* (* contact glass)

nor the second nominal elements (N_1):

* *luna di zucchero* (* sugar moon)*; * lente ad aderenza* (* adherence lenses)

(b) we cannot insert a modifier between the preposition (Prep) and the noun (N_1):

* *luna di dolce miele* (*honey sweet moon)*; * lente a grande contatto* (* contact big lenses)

The frozen status of the elements in the compund is considered - in other words - of higher importance compared to the semantic character, compositional vs. non compositional.

Another important issue of the Lexicon-Grammar of MWEs (De Bueriis G., Elia A. 2008) is

that they are considered as part of a *continuum* in which combinations can vary from a high degree of variability of co-occurrence of words (combinations with free distribution, i.e. free construction), to the absence of variability of co-occurrence (i.e. frozen construction). They identify four different types of combinations of phrases or sentences, namely:

1. with a high degree of word co-occurrence variability, i.e. with free internal distribution, compositional and denotative meaning (such as: *il gatto mangia il cibo* (the cat eats the food));
2. with a limited degree of word co-occurrence variability, i.e. combinations with restricted internal distribution (such as *Ugo indossa un abito* (Ugo wears a suit));
3. with no or almost no word co-occurrence variability, i.e. combinations with fixed internal distribution (such as *mangiare la foglia* (lit. *eat-the-leaf, =to understand something)) or semi-fixed (i.e. support verb constructions such as *prendere sonno* (to fall asleep);
4. without any word co-occurrence variability, (i.e. proverbs such as *tutto bene quel che finisce bene* (all's well that ends well));

Relations between these mentioned classes can be interpreted not only as relations between distinct classes, but also as relations between poles of the continuum. Sometimes, however, multiword units are much more difficult to classify and describe when they are situated between the status of compound words or MWEs (the class 3 and 4 above) and that of free nominal groups (the class 1 and 2 mentioned above) .

This is a problem that occurs most frequently with compound words, as pointed out by Elia et al (2011)[16], in the case, for example, of the Italian multiword unit *editto bulgaro*[17] (Bulgarian edict) and *elezione bulgara* (Bulgarian elections).

According to Silberztein (2005), an accurate identification of compound words must be based on the following criteria:

1. **Semantic atomicity**: if the exact meaning of a nominal group cannot be deduced from the meaning of its components, the nominal group must be lemmatized (=> it is

[16] See Elia A., Guglielmo D., at alii (2011).

[17] This compound noun comes from political language and refers to a 2002 speech of the Italian Prime Minister Berlusconi pronounced against some journalists and their banishment from the Italian Broadcasting Service.

therefore treated as a compound noun; this happens with *colletto bianco* [white-collar worker], but also with *teste di cuoio* (members of a special anti-terrorist police team), *casa chiusa* ("brothel") *Guerra Fredda* (the proper noun "Cold War"), in which each element of the compound participates in the construction of a complete and non-literal meaning;

2. D**istributional restriction**: if certain constituents of the nominal group, which by the way, belong to certain natural distributional classes, cannot be freely replaced, then this distributional restriction must be acknowledged by classifying the series of nominal groups in a lexicon, which again, amounts to treating it as a compound noun. For instance, the above-mentioned examples of *colletto bianco* and *colletto celeste* [blue-collar worker] follow this criterion;

3. **Institutionalization of the usage**: certain nominal groups, even those that are semantically and distributionally "free", are used in a quasi-obligatory manner, to the detriment of other potential syntactic constructions that are just as valid, but are never used. The Italian expression *in tempo reale* (a loan translation of the English "in real time") is an example for this criterion, which use in Italian seems to be unmotivated if we take into consideration that the antonym **in tempo irreale* ("*in unreal time") is not used at all. These criteria allow identifying a larger group of compound words than it is normally and traditionally assumed for a language.

2.2 Verb-Particle Constructions: the state of the art

Verb-Particle constructions are a specific type of MWE, which display a syntactically flexible status. With Sag et al (2002) these constructions are defined as consisting of a verb and one or more particles, such as *write up*, *look up* and *brush up on*. They can be either semantically idiosyncratic, such as *brush up on*, or compositional, such as *break up* in *the meteorite broke up in the earth's atmosphere* (Bolinger 1972, Dixon 1982, Dehè et al 2002). In compositional usages, the particle(s) act as a construction and modify the spatial, aspectual properties of the head verb, such as *up* transforming *eat* from an activity into an accomplishment in *eat up*. That is, the particle(s) generally assume semantics idiosyncratic to verb-particle constructions, but are semi-productive (cf. *gobble up* in the case of *up*). Transitive verb-particle constructions take an NP argument either between or following the verb and particle(s) (e.g. *call Kim up* and *fall off a truck*, respectively). Certain transitive verb-particle constructions are compatible with only particle-initial realizations (consider

**fall a truck off*), while others are compatible with both forms (e.g. *call Kim up* vs. *call up Kim*). Even with intransitive verb-particle constructions, adverbs can often be inserted between the verb and particle (e.g. *fight bravely on*). As a result, it is impossible to capture the full range of lexical variants of transitive verb-particle constructions as words with spaces. As with other MWE types, a fully compositional approach is troubled by idiomaticity and overgeneration problems. Even for seemingly synonymous verbs combining compositionally with the same particle, idiosyncrasies are observed (e.g. *call/ring/phone/telephone* vs. *call/ring/phone/*telephone up*: McIntyre 2002) which would be beyond the descriptive powers of a purely compositional account. Monographs on the verb-particle construction have been written by, among others, Bolinger (1971), Declerck (1976a, 1976b), Dehé (2002), Dehé et al. (2002), Den Dikken (1995), Fraser (1976), Gries (2002), Lindner (1982, 1983), Lipka (1972), Pelli (1976), Quayle (1994), Svenonius (1994: Chapter 3) and Zeller (2001). Dehé (2002, Chapter 2), in particular, provides a good introduction to most of the syntactic analyses of the verb-particle construction that have been proposed in the generative literature. For a comprehensive and fairly recent bibliography of studies on the verb-particle construction, see Thim (2012). Another good on-line bibliography is the one maintained by Humboldt University's Department of English and American Studies at the following web address: <www2.hu-berlin.de/angl/ling_projects/part/bibliography.htm> as well as in Villavicencio and Baldwin (2002).

Furthemore, Villavicencio (2003) argued that by verb-particle constructions, one means both idiosyncratic or semi-idiosyncratic combinations, such as *make up*, in (1), where the meaning of the combination cannot be straightforwardly inferred from the meaning of the verb and the particle, and also more regular combinations, such as *tear up*, in (2):

(1) *He knew what he wanted and quickly made up his mind.*

(2) *In a rage she tore up the letter Jack gave her.*

Such constructions are often highly polysemous: for instance, eight senses are listed for *make up* in the Collins Cobuild Dictionary of Phrasal Verbs and among them we have:

(3) to form something:

Half the congress is made up of lawyers.

(4) to invent:

He used to make up tales about dragons and fairies.

(5) to prepare something for someone to use it or have it:

They made a bed up for John in the guest room.

They also show syntactic variation, where each combination can take part in several different subcategorisation frames. For example, *add up* can occur as an intransitive verb-particle combination in (6) or as a transitive one in (7).

(6) *It's a few calories here and another hundred calories there, and it all*

quickly adds up.

(7) *We need to add these marks up.*

Some particles have a fixed position in relation to the verb, such as *come up*, in sentence (8), where the particle is expected immediately after the verb. Thus (9) is ungrammatical.

(8) *She came up with the idea.*

(9) **She came with the idea up.*

Other combinations have a more flexible order in relation to the verb, and can equally well occur immediately after the verb, or after another complement, as *eat up* in sentences (10) and (11) exemplify.

(10) *John ate up his cereal.*

(11) *John ate his cereal up.*

Besides complements, certain adverbs are also accepted between the verb and the particle, such as *right* in (12).

(12) He came *right* back.

In terms of usage, verb-particle constructions tend to be thought of as informal: they are sometimes said to be inappropriate in formal writing, and conversely slang is a rich source of these constructions. Presumably because of this, dialect variation in the use of verb-particle constructions is quite marked: the examples and judgements in this paper are British English,

except where otherwise stated. These constructions have been the subject of a considerable amount of interest, like Jackendoff (2002), Bame (1999), Gries (2002), and Zeller (2001) among others.

From the syntactic point of view two sets of approaches on VPCs can be distinguished – a **complex predicate approach** vs. a **small clause approach**.

let's look at the following examples:

(1) a. *They marched off the hangover.*

b. They marched the hangover off.

(2) a. They let up the pressure.

b. They let the pressure up.

Here, the complex predicate (CP) analysis takes (2a) as the paradigmatic example: the verb and the particle are adjacent, and the meaning is idiosyncratic, clearly stored in the lexicon. Such accounts typically envisage a lexical entry with two parts, inserted together into a syntactic tree, but with the possibility of separation by syntactic processes (to account for (2b)) (see e.g. Chomsky 1955; Johnson 1991; Neeleman 1994; Stiebels and Wunderlich 1994, Zeller 2001). In (2), then, *the pressure* is the direct object of the complex verb *let up*, and by extension, in (1), *the hangover* must be the direct object of the complex verb *march off*. Because such constructions are productive and allow novel combinations, the CP analysis is forced to assume that complex verbs can be constructed, either in the syntax or in the lexicon. Small clause (SC) accounts, on the other hand, take examples like (1b) as essential. Here, the relationship of the noun phrase to the verb preceding it is not that of direct object; instead, *the hangover off* is a predicational structure, a small clause. This captures the absence of any selectional relation between the verb and the noun phrase, and easily handles productive and compositional cases. The alternation between (1a) and (1b) is the result of movement (cf. Kayne 1985; Guéron 1990; Hoekstra 1988; Den Dikken 1995). An SC analysis generally treats examples of the sort in sentence (2) more or less as idioms – it is not unexpected that idiomatic expressions should be subject to the same constraints as compositional syntactic structures, when issues of referentiality and so on do not interfere. But the SC analysis is often felt to be unsatisfactory for examples like (2).For example it leaves unexplained what the denotation of the putative small clause *the pressure up* would be.

Proponents of the first set of approaches include also Booij (1990), Johnson (1991), and Koizumi (1993), while members of the second set of approaches include also Bennis (1992) and Mulder (1992) among others.

Then there is the original proposal pointed out by Gillian Ramchand and Peter Sveninius (2002) who exploited recent developments in *l*-syntax to capture the positive aspects of both the SC and the CP accounts. As on the SC account, the argument is merged with the particle before that substructure is merged with the verb, with no recourse being made to structured items in the lexicon, and no specifically lexical rules of structure building being posited.

Finally Susi Wurmbrand (2000) argued that VPCs do not display a uniform structure but are represented either as a small clause structure or a complex predicate structure depending on the semantics of the combination. In particular she proposed that transparent VPCs involve a small clause structure whereas idiomatic verb particle constructions involve a complex "V" structure. She discovered an interesting correlation between syntactic and semantic properties of idiomatic vs. transparent VPCs, by the assumption that a small clause structure is not motivated for idiomatic VPCs, since these combinations do not express a predicate/argument relation and a predicative use of idiomatic particles is impossible. Also Ray Jackendoff (2002) stressed the idea that directional and idiomatic VPCs share different syntactic structures, in particular as idiomatic combinations lack the appropriate directional meaning they cannot appear in locative inversion like (1.a) and they are meaningless without the verb, so they cannot appear in verbless explanative constructions *PP with NP* like (1.b):

a. * Up blew the building

b. * Up with your lunch! [in the sense of 'throw up']

An original approach on VPCs is proposed by Booj (2002) who, in line with the recent trends of the Construction Grammar (cf. Fillmore, Kay & O' Connor 1988; Goldberg 1995), claimed that VPCs are patterns on the boundary between morphology and syntax; they are constructions with a phrasal form and a unitary meaning that makes them close to words.

They are semi-specific syntactic structures with a partially non-compositional meaning that are stored in the lexicon and display a limited productivity. (cf. *constructional idioms*, Goldberg 1995: Jackendoff 2002)

2.3. Italian Verb-Particle Constructions: the state of the art

VPCs are usually considered a phenomenon typical of Germanic languages where the patterns we have analysed until now are very common and productive and largely studied (Bolinger 1971, Fraser 1976 and more recently Dehè et al. 2002, Cappelle Bert (2005), Villavicencio et Copestake, 2003). In Italian linguistics, lexicographers have always devoted very little attention to these constructions: VPCs have been a neglected topic until Schwarze (1985) Venier (1996) and Simone (1997) who coined the term "syntagmatic verbs" (cf. verbi sintagmatici) because of the strict analogy to English phrasal verbs. However, despite the discovery of these constructions in Italian too – that seem to be an exception in the picture of Romance languages – they have always been considered rare in standard Italian and widely attested in Northen Italian dialects[18]. Only a few years ago, Iacobini & Masini (2006) underlined that the phenomenon in present-day Italian is not marginal or sporadic, claiming that most of the new verbs with locative meaning in Italian are VPCs. Recent interest in VPCs has been shown by Jansen (2004), Masini (2005), and Poletto-Benincà (2006), Cini (2008), Calvo (2009) but there was a lack of copus-based investigations (with some exceptions in Antelmi, 2002 and Masini, 2008). The first who worked with evidence of the presence of VPCs in Italian Spoken Language was Iacobini (2008), who analysed the LIP corpus texts identifyng 180 lexemes (as types) and 460 occurences (as tokens).

Simone (1997) defines phrasal verbs (cf. "verbi sintagmatici") as formed by a verb and a particle strongly related with one another on the syntactic plane, such as *andare giù* (go down)*, correre dietro* (run behind)*, finire sotto* (come under)*, passare sopra* (pass over)*, venire avanti*(come forward). Verb and particle can be separated only by light constituents, as in:

(1) ho portato subito via il bambino,
(*I carried quickly away the child),

or if the particle is the head of another phrase, as in:

(2) *quella telefonata ha buttato mio fratello giù dal letto* (Simone, 1997: 56).

[18] Recent studies have shown the presence of these constructions also in Southern dialects, see Amenta (2007).

(That phone call knocked my brother off the bed)

Semantically they can take meanings different from the simple association of the meanings of their components, as *mandar giù* "to swallow", or *metter su l'acqua,* for "to put the water (pan) on the fire".

Other tests stress the notion of cohesion (Simone, 1997: 57-58). PVs cannot be nominalised, except for nominal infinitive. If the sentence:

(3) c*he tu sia venuto su è stato utile*

(That you came up has been useful)

is acceptable,

**la tua venuta su è stata utile*

(Your coming up has been useful)

is impossible. On the contrary:

(4) *che tu tiri via il lavoro non sta bene*

(That you gave up on the job is no good)

can be nominalised as:

il tuo tirar via il lavoro non sta bene

(Your giving up on the job is no good)

keeping the argumental structure of the verb. For transitive PVs the NP following the adverb does not form a phrase with it.

(5) *porta su la scala*

(Carry up the stairs)

cannot be analysed as

*[porta][su la scala], but as

[porta su][la scala].

Finally VPCs block the sandhi between adverb and Object:

(6) *abbiamo messo su il caffè*
(We have put on the coffee)

cannot be pronounced as

**abbiamo messo sul caffè.*

These criteria have been elaborated by Iacobini & Masini (2006) as follows: the verb root and the particle can be separated only by clitics or light constituents, but never by "heavy" constituents; thus, while the sentence (7)

(7) *Hai rischiato di metter lo sotto*
(You risked running it over)

is acceptable because the separating constituent is a clitic, the sentence in (8) is not very acceptable according to Mosca (2007), because the separating component is an Object NP.

(8) * *Irene ha buttato la bambola via.*
(Irene threw the child away).

Meanwhile Iacobini (2006) observed that such a property can be accepted, as in (7.1):

(8.1.) Spero che non mandino le pagine indietro
(I hope they do not send the pages back)

• **Topicalisation** of the particle by the construction `e. . . che' is impossible, thus from (8)a

the b form cannot be derived:

(9) a. *Luigi è saltato fuori al l'improvviso*
(Luigi jumped out suddenly)

b. **E' fuori che Luigi `e saltato all'improvviso*
(*It was out that Luigi suddenly jumped).

• **In coordinated structures**, the pair verb+particle behaves as a single constituent, as

in (10)a vs (10)b

(10) a. *Max porterà su la scacchiera e Yuri i pezzi*

(Max will carry the chess board and Yuri the pieces)

b. *Max gioca sulla scacchiera nuova e Yuri su quella vecchia*
(Max play on the new chess board, and Yuri on the old one).

Verb-particle constructions are often involved in locative meanings, combining with

motion verbs, and sometimes strengthening the Path information, as in e*ntrare dentro* (enter in) or *uscire fuori* (exit out). These combinations are defined as "redundant" or pleonastic (Swarze 1995).

From the semantic point of view, VPCs form distinct classes, as pointed out first by Simone (1997) and by Masini and Iacobini (2006):

a) **Directional constructions.** The particle functions as a directional marker, especially with manner verbs:

saltare dentro (to hop in) *andare dentro* (to go in)

b) **Redundant construction**s. When added to path verbs, particles may carry locative information already present in the verbal base as in:

entrare dentro "to enter (in)"

uscire fuori "to exit (out)"

c) **Idiomatic constructions.** The meaning of the combination is different from the meaning of the two separate parts, as in:

buttare giù una lettera "to write down a letter"

Iacobini and Masini (2006) added a novel class of VPCs, the so called **aspectual or actional constructions**, with particular regards to the telicity, like:

passare via "to fade away"

The aspectual value of verbal particles was pointed out also by Cordin P. (2011).

SECTION II

LEXICON – GRAMMAR OF ITALIAN VERB-PARTICLE CONSTRUCTIONS

Abstract

This chapter deals with the basic Lexicon-Grammar assumptions on Italian VPCs. I will describe the notion of verb-particle "use" or "entry" as opposed to the notion of verb-particle "lemma" and I will split VPCs into the two main families of constructions, i.e. compositional and non-compositional uses with different semantic and syntactic properties. Then I will provide in detail the lexicon-grammar classification of more than 200 idiomatic transitive uses, encoded into nine distinct classes. Finally I will describe the polysemy involving such constructions by providing some interesting evidence from data, in particular by analysing LIP corpus texts, the most important and representative Italian spoken language corpus (i.e. among 500,000 words) and finally I will provide a Lexicon Grammar-based *Polysemy Representation Model* of Italian VPCs in the LIP corpus.

1. The corpus and the results of the research

This work stresses the need for a Lexicon-Grammar approach to "syntagmatic verbs" or Italian Verb-Particle Constructions and it represents a first attempt to frame them within the theoretical issues pointed out by Z. Harris and M. Gross (as we have summarised in the previous section).

If, therefore, on one hand the aim of my work was the development of a taxonomy of the

compounds Verb + adverbial particle (henceforth VPCs), on the other, I was not able to proceed in this direction on the basis of the syntagmatic verb lists realised so far. This is for several reasons:

- The small size of these lists compared to the productivity and invasiveness of the phenomenon in the concrete use in spoken and written language: among others, 135 verbs (or "lemmata") in the "open list" by Simone (1997)[19], 165 in Iaconini & Masini (2006)[20], 107 in Masini (2008)[21], 180 in Iacobini (2007)[22], 220 in Cini (2008) from the most recent Italian dictionaries, and 319 in Calvo (2009) from many monolingual and bilingual dictionaries[23].
- The inclusion in them of V plus particle sequences that, rather than "syntagmatic verbs", should be classified or as (i) "MWEs" of different type (e.g. *volere bene/male* in the lists pointed out by Simone (1997) and Calvo (2009), in which *bene* (well) and *male* (cf. bad) work clearly not as "adverbs" but as "nouns") or (ii) should be viewed as simple combinations of a verb plus an adverb (for example, *guadagnare bene* (to earn well) in Calvo Rigual's list, where *bene* (well) appears an argument of the verb *guadagnare* (to earn), or, finally, (iii) as free combinations of a Verb plus a PP – such as *gettarsi contro* (to throw against) again in Rigual (2008) where *contro* (against) is a preposition introducing a simple PP: *Max si getta contro il nemico* (Max throws/rushes against the enemy).

- The fact that these lists record indexes of "words" rather than "sentences":

[19] No source cited.

[20] Data collected from from GRADIT and DISC.

[21] In terms of *types* extracted from the written Italian corpus *la Repubblica* (laR) (cfr. Baroni *et al* 2004, about 380 million words), and from the spoken corpus LIP (De Mauro *et al* 1993, ca. 500,000 words), ARCODIP (*corpus* collected at the University of Roma Tre, ca. 37,000 words) and C-ORALROM (COR) (Cresti and Moneglia 2005, ca. 300,000 words)

[22] Lemmata in terms of *types* from LIP corpus.

[23] The dictionaries consulted by Clavo Rigual (2009) are: De Mauro (1999-2000), Devoto Oli(2004), Sabatini-Coletti (2003), Doglietti Rosiello (1999), Tam (2003), Sane-Schepisi (2005), Giordano Clavo (2006), Arquès (2002).

The VPCs appear, in other words, outside of the special relationship interwoven with their arguments, and even when in text comments are illustrated examples of sentences, these are not formulated taking into account all the possible essential complements that may co-occur with them. I believe that the failure to spotlight the "**argument structure**" of the verb could produce misleading results like the consideration, for instance, that *buttare via* (to throw away) comes in a minimum discourse (or "'elementary sentence") such as *Max butta via il suo tempo (Max throws away his time)*. Such an example must be regarded as a "substructure" or "absolute use" from the full sentence *Max butta via il suo tempo in cose futili* (Max throws away his time on futile things). At the same time, the sentence *Eva spazzola via le briciole* (Eva brushes away the crumbs) represents for the Lexicon-Grammar a "reduction" from the full elementary sentence *Eva spazzola via le briciole dalla tovaglia* (Eva brushes away the crumbs from the tablecloth) by delection of the PP.

Moreover, since each verb + particle has a meaning related to the sentence context and usually displays a large number of uses or different meanings, I stress the need to identify and list not "brute" lemmata, i.e. isolated verbs (e.g. *andare avanti)* but "lexical uses", i.e. occurrences in sentence contexts (e.g. *andare avanti al camion* (go ahead of the truck)*, andare avanti a parlare per ore* (go on talking for hours)*, andare avanti con l'età* (became older) *andare avanti con uno stipendio solo* (continue to have one wage only)*, andare avanti nella carriera* (get ahead in a career), etc. and, as a consequence, the need to replace the list of verbs with a list of uses (or lexical entries).

On the basis of the quantitative and qualitative inadequacy of VPC data suggested so far, I decided to proceed independently in search of a corpus of VPCs as exhaustive and valid as possible (on the basis of the strict criteria of identification discussed in Chapter I.) To do that, I performed the manual counting of more than ten lexicographic works, both mono-and bilingual. In particular, the dictionaries consulted were:

monolingual dictionaries: D'Anna (2002), De Mauro (2006), Zingarelli (2004), Devoto Oli (2008);

bilingual dictionaries: Ragazzini-Biagi (English-Italian, 2006); Ghiotti (French-Italian, 2000), Boch (French-Italian, 2008), Castiglioni Mariotti (Latin-Italian, 2004);

others: "Dizionario dei sinonimi e contrari" (Rizzoli, 2002); "Dizionario d'uso dei *phrasal verbs"* (Hoepli, 2004); *Phrasal Verbs (*Garzanti linguistica, 2005);

online resources: www.wordreference.com; www.datasegment.com; www.dizionari.corriere.it;

electronic dictionary for learning Italian-German ELDIT (www.dev.eurac.edu); valency Italian-German dictionary, *Wörterbuch de italienischen Verben* (Blumenthal and Rovere 1998). www.unistuttgart.de/lingrom/stein/forschung/ontovit/iperverb

Unlike other lists produced on a lexicographic basis (the largest is the one pointed out by in 2008 who listed 319 Italian "syntagmatic verbs") my list (see APPENDIX 1 at the end of the dissertation) does not include only VPCs highlighted in dictionaries as verbal locutions (cf. loc.v.) or as "polyrematic units", but also those collected in the examples, as a result of the productive mechanisms. As for the other phraseological categories, in fact, lexicography has so far failed to establish a clear-cut boundary between what looks like phraseological units and what are free combinations of words (as examples): many of the first are treated as the second (see Calvo R., 2009).

I also inserted in my list data from the linguistic article cited and, furthermore, I checked on the Internet (via direct interrogation of the *Google* search engine) the presence in actual use of the language of many uses not attested to in dictionaries. The use of the web (forums, chats, websites, blogs)[24] and finally the inclusion of VPCs uses collected in dictionaries as examples or considered as fully syntagmatic on the base of my "native speaker's competence" explain the larger size of my list compared to Cesareo Calvo Rigual's (Calvo 2009).

The corpus showed that the verbal bases making up V+Part uses in Italian are:

abitare (live), agire (act), andare (go), arare (plough), arrivare (arrive), aspettare (wait), avercela (have it in for), avere (have), berci (lit.drink), buttare (throw), buttarsi (throw oneself), cacarsi (to shit oneself (vulgar)), cacciare (hunt), cadere (fall), capitare (happen), cascare (fall down), cenare (dine), chiamare (call), chiamarsi (be called), correre (run), dare (give), darci (give us), darla (give it), darsi (give oneself), dire (say), dirla (say it), domandare (ask), dormire (sleep), dormirci (sleep on), entrare (enter), essere (be), fare (do), farla (do it), farsela (do oneself), farsi (do), ficcarsi (sneak in), filare (figure), finire (finish), gettare (throw), gettarsi (dive in), girare

[24] The examples from Google have been taken from texts that in terms of level of planning and formality are similar to spoken texts and not to typical written texts.

(turn), gocciolare (drip), guardare (look), guardarsi (look at oneself), lasciare (leave), lavare (wash), lavorare (work), levare (remove), levarsi (get up), mandare (send), mettere (put), mettersi (put on), mirare (watch), montare (assemble), morire (die), nascere (be born), ottenere (obtain), parlare (speak), partire (depart), passare (pass), passarci (pass over), pensare (think), pensarci (think on), piangere (cry), piangersi (feel sorry for oneself), piantare (plant), piombare (drop), piovere (rain), pisciarsi (piss oneself (vulgar)), porre (put), portare (carry), portarsi (bring with), pranzare (lunch), prendere (take), prendersela (get upset), ragionarci (reason), reggersi (hold up), remare (row), rendere (return), restare (stay), riandare (go back), rientrare (return), ributtare (throw back), ributtarsi (throw oneself back), ridare (give again), ridere (laugh), riderci (laugh at), rifletterci (think on), rigare (line), rigettare (throw again), rimandare (put off), rimanere (remain), rimettere (put back), rispondere (reply), ritornare (return), ronzare (buzz), rotolare (roll), salire (climb), saltare (jump), sbattere (slam), sbavare (drool), sbalzare (throw), sbucare (come out), scacciare (drive away), scappare (run away), scagliarsi (hurl), scattare (spring into action), schizzare (squirt), scivolare (slip), scendere (get down), scorrere (flow), scrivere (write), sentire (hear), sfuggire (escape), sgattaiolare (sneak off), sparlare (speak ill of s.o), spazzare (sweep), spedire (send), spingere (push), sprizzare (burst with), sputare (spit), sparare (shoot), spazzolare (brush), starci (stay in), stare (stay), strappare (tear up), stringersi (cling to), tagliare (cut), tenere (hold), tenersi (hold on), tirare (pull), tirarsi (pull oneself), togliere (take off), tornarci (come back), tornare (return), trarre (drag), trascinare (drag), trascinarsi (drag oneself along), trattarsi (be about), uscire (exit), vedere (see), vederci (meet), vedersela (contend with), venire (come), venirsi (come), versare (pour), vivere (live), volare (fly), volere (want), votare (vote)

These combine with the following particles:

(b)

accanto (next to), addietro (back), addosso (on top of), alto (high), altrove (elsewhere), apposta (on purpose), appresso (after), assieme (together), attorno (around), avanti (in front of), contro (against), davanti (in front of), dentro (in/inside), dietro (behind), dritto (straight), fuori (outside), giù (down), indietro (behind), indosso (on), innanzi (on), inoltre (in addition), insieme (together), intorno (around), là (there),

lì (there), lontano (far), meno (less), oltre (beyond), presto (early/soon), prima (sson), qui (here), senza (without), sopra (up/over), sotto (below), sottobordo (alongside), sottosopra (upset), sotto sotto (deep down), su (on/at), tardi (late), tondo (round), via (away), vicino (near).

Since the elements in (b), when they occur in the so-called "syntagmatic verb", share each other's syntactic properties, I do not adopt the common distinction between prepositions and adverbs (present in many traditional grammars), but I will refer to the more general notion of "particle" (cf.Part) as suggested, among others, by Jespersen (1926), Venier (1996), Jansen (2004), Iacobini-Masini (2006) for Italian and supported by much of the literature on English *phrasal verbs* (among others Dehè, Jackendoff 2002, Cappelle 2005, and McIntyre 2002). Such particles can be:

1. of **locative or spacial** type, like: *sopra* (up/over), *sotto* (under), *giù* (down), *via* (away), *fuori* (out), *dentro* (in/inside), as in *andare sopra* (to go up), *saltare giù* (to jump down), *correre via* (to run away) and the deictic elements *lì* (there), *là* (over there), *qui* (here);

2. of **non-locative** type, *meno* (less), *prima* (first), *presto* (early/soon), *tardi* (late). For example, in *fare presto* (do quickly) e *la nonna viene meno* (Grandma fails);

3. of **adjectival** type, like: *alto* (high), *dritto* (straight): these are invariable adjectives, which, next to the verb – as noted by Renzi – assume an adverbial function (e.g. *il blog vola alto* (the blog flys high), *Max mira basso* (Max aims low), *Mio figlio riga dritto* (My son goes straight), *Eva parla chiaro* (Eva talks straight)).[25]

The combination of the verbal bases (a) and the particles (b) produces about 711 syntagmatic

[25] A large number of idiomatic compounds verb + adjective of the 3 came out from my research, e.g. *farsi bello* (primp), *farla finita* (end it), *passarla liscia* (get away with), *mettercela tutta* (go all out) and so on. In the course of the dissertation they will not be classified, as they appear to be multi-word units different from "syntagmatic verbs" under analysis. I will provide an in-depth analysis and taxonomic treatment of them in future works.

verbs or VPCs (as lemmata), as shown in the APPENDIX 1.

By applying a Lexicon-Grammar Approach – as pointed out by Gross (1979) – I replaced the generic and context-free notion of "syntagmatic verb" (cf. "verbo sintagmatico") with the more practical and context related notion of syntagmatic "use" or "verbal entry".

Dropping each verb into all the sentence structures where it may occur, I performed a constant "splitting of entries", which led me to distinguish compositional "uses" (where a concrete or locative interpretation may be associated) and idiomatic uses (where a non-concrete or figurative interpretation may be associated).

In particular, the verbal bases in (a) combined only with the locative particles like those in (1) produce approximately 200 locative or compositional lexical uses (e.g. *andare via*, (go away), *saltare giù* (jump down) and 600 non-compositional or idiomatic uses (e.g. *fare fuori qualcuno* (gun down-kill sb.), *passarci sopra* (to pass over, to forget), *mandare avanti l'azienda* (carry on the company).

2. Idiomatic and compositional VPCs: the splitting of entries

Now I provide some other examples concerning the "splitting of entries" between compositional/locative uses and non-compositional/idiomatic V+Part uses.

Taking into account a unique morphophonological verbal form like *venire fuori* (come out), we can proceed to a "multiplication" of this lemma by distinguishing the following uses:

I. "to go out from a closed place", which corresponds to the following sentence structure:

N_0 VPart Loc N_1

with the following distributional properties:

N_0 =: *N animate*

N_1=: *N Place*

as in the sentence:

1. (Max + il cane) <u>venne fuori</u> dalla stanza

(Max + the dog) came out from the room

accepting the substructure:

←→ *(Max + il cane) venne fuori*

(Max + the dog) came out

II. "To be discovered, come to the surface, said of information and similar". This use is recorded by dictionaries like Devoto Oli (2008) as figurative (**fig.**) and corresponds to the argumental structure of the type:

No VPart Loc N_1

with the property:

No=: Che F

as in the sentence:

2. Che sei innocente <u>verrà fuori</u> dalle indagini

(That you are innocent will *come out* from investigations)

where the syntagmatic operator *verrà fuori* selects a sentential argument in subject position (the completive *che sei innocente*) and a locative argument introduced by the preposition *da* (from). Sentence 2. is representable within Harris' notation system as **Oon.**

Notably, the use of the completive introduced by *che* (cf. that) is quite rare in Italian while the sequence *il fatto che* (the fact that) is stylistically more natural:

2.1 Il fatto che sei innocente <u>verrà fuori</u> dalle indagini

(The fact that you are innocent will come out from investigations)

At the same time, the postponed subject construction is pragmatically more acceptable (because of the "inaccusative" nature of *venire fuori* (to come out):

2.2. Dalle indagini <u>verrà fuori</u> che sei innocente

(From investigations it will come out that you are innocent)

The completive is also replaceable via **nominalisation** with a morphologically derived noun (V-n)

2.3. (Il fatto che sei innocente + La tua innocenza) <u>verra fuori</u> indagini

(The fact that you are innocent + Your innocence) will come out from investigations)

This is distributionally equivalent to a specific class of abstract nouns like *il problema* (the

problem), *la questione* (the question), *la notizia* (the news) - which can be labelled - according to harrisian concatenated discourse representation - as operators on operators (Oo) because they contain non-elementary arguments (i.e. sentential arguments).

2.4. ((*Il problema + la questione + la notizia +...*) *(E+ della tua innocenza + che sei innocente) verrà fuori dalle indagini*

(The problem + the question + news + ...) (E + of your innocence + that you are innocent) will come out from investigations

Additionally, use II of *venire fuori* admits the locative complement omission:

Che F VPart Loc N1

(Loc N1→ E) =: Che F VPart

i.e. the "transformational co-relationship" between the two sentences:

2.5. Dall'indagine verrà fuori che sei innocente

(*Dall'indagine*→E)= : *Verrà fuori che sei innocente*

III. "To be able to escape from a difficult and dangerous situation". This use has an apparently similar sentence structure to locative use I, that is:

N_0 VPart Loc N_1

although it is possible to associate a metaphorical reading to it (the dictionary Devoto Oli, 2008 marks it as **fig.**). The corresponding sentence example is, in fact:

3. Eva viene fuori dalla depressione
(Eva comes out of the depression)

where the "semantic role" of PLACE attributable to the N_1 argument (*depressione*, cf. depression) is not physical but psychological. The "coming out" of the subject (this time obligatorily of the human kind, unlike in use I) is in fact metaphorical, i.e. the coming out from an unpleasant mental or physical state (which represents the origin or source of the metaphorical motion).

N_0= N human obligatory

N_1= N psychological Place

Sentence 3. is correlated with:

3.1. Eva è in depressione

(Eva is depressed)

i.e. with a support verb sentence. But, compared to *essere* (to be), "venire fuori" is a motion verb functioning as a support verb variant of aspectual type (egressive/terminative). Let's consider the "**paraphrastic equivalence class"** built around sentence 3.1:

(3.2)

a. *Eva si deprime*

(Eva is depressed)

↔ *b. Eva è depressa*

(Eva is depressed)

↔ *c. Eva ha (la+ una brutta+ * E) depressione*

Eva has (*the + *a bad + *E) depression

↔ *d. Eva (è+cade) in depressione*

(Eva (is in + falls into) depression

↔ *e. Eva viene fuori dalla depressione*

(Eva comes out of the depression)

Such use, therefore, is clearly distinguishable from the concrete or compositional exemplified in **(I)** because the "syntagmatic verb" *venire fuori* does not work now as operator but as "**support"**: the role of operator is in fact played in all the sentences (a-e) by the common root *-depr* that, despite the differences in the surface "shape" (observed by moving from a to e) retains the predicative value and does not change the relationship between the operator and its

argument. All the sentences (a-e) can be formalised in fact as **On**.[26]

IV: "Of book or periodical: to be published". Also this use is figurative (fig.) and it comes in the minimal sentence:

No VPart

as in:

4. *Ultimamente è venuto fuori uno splendido romanzo*

(Lately a wonderful novel came out)

where the "inaccusative" nature of *venire fuori* remains, as demonstrated by the greater acceptability, at pragmatic level, of the subject-verb permutation and cliticisation in "ne" of the postponed subject:

(ppv→ne)= *ne è venuto fuori un altro*

Another came out

In this use we can note that, unlike other lexical uses (I-III), the structure N_0 *V Part* is not a sub-structure derived by "deletion of constants" but the minimum discourse (or "elementary sentence") that "saturates" all the argument positions (On). In addition, the argument in subject position undergoes very strong distributional restrictions:

N_0=: N restricted

That is, it falls in a particular class of names which are "hyponyms" with respect to the "hypernym" "PUBLICATION", such as the noun *articolo* (paper)*, libro* (book)*, romanzo* (novel)*.*

[26] Note that *depression* is one of the so-called "psychological predicates", also well-known as "names of passions" or feelings such as *anguish, fear, vanity, desire, paranoia*. See also Gross (1981, 1995), D'Agostino (2005), D'Agostino-Guglielmo (2007), Tronci (2007), D'Agostino (2010), Guglielmo (2010), Messina (2008), Messina, Santonicola, Langella (2010). Lexicon-Grammar studies point out that verbs co-occurring with these nominal predicates are "light" or of "support", both the semantically "empty" verbs like *essere* and *avere* and the support verb variants (often motion verbs) which carry aspectual information. This aspectual information can be of inchoative/ingressive type like in *Il lupo si avvicinò e a Cappuccetto Rosso venne una gran paura* (The wolf came close and a great fear came to Red Riding Hood came a great fear) (cf. Tronci, 2007), negative/terminative type like in the example (3) and in *Max si libera dall'angoscia* (Max frees himself from anxiety) (cf. D'Agostino 2005) or *Luca ha perso il suo affetto per Max* (Luca lost his affection for Max) (cf. *Luc a perdu son affection pour Max*, cf. Vivès 1984), and, finally of durative type like in *Eva rimane in coma per anni* (Eva remains in a coma for years).

V. "To emerge, to be known, to be noticed, to show themselves". Also this use is figurative (fig.) and it corresponds to the sentence structure:

N_0 VPart W

with

N_0= N human (obligatory)

W=: adverbial variable element(s)

as in the sentences:

5. Eva è una persona che ha difficoltà a venir fuori (E+ per quella che è + bene)

(Eva is a person who finds it difficult to show herself (E + for who she is + well)

5.1. Il cantante sta venendo fuori (E + alla grande + come meglio può)

(The singer is emerging (E + in a big way + at his best))

In this use we note that if the adverbial variable (the complements between brackets) is not expressed we cannot distinguish it from the use I, i.e. the locative sense of "*venire fuori*". It is a case of strong ambiguity that can be solved only by the help of contextual information.

VI. "To be extracted, in card games, bingo and similar". This use shows the syntactic structure:

N_0 VPart

with the following distributional property:

N_0= :N concrete

corresponding to the sentence example:

6. E' venuto fuori il jolly

(The joker came up)

where N_0 can be replaced by any name of the class "game numbers or cards", as evidenced by

the sentence:

6.1. E' venuto fuori (il 18+ l'asso+ il jolly…)

((The 18 + the ace + the joker) came up)

and it can be regarded, for this reason, as "restricted".

Summing up: The application of a Lexicon-gGrammar approach to syntagmatic verbs can address and solve the high polysemy phenomenon through a permanent process of decoupling the entries, i.e. *splitting of entries*, which consists – in Grossian terms – of identifying all the different simple sentences where a verb can occur with different meanings. In the case of a polysemic form like *venire fuori*, it splits into 6 unrelated lexical entries, of which one is compositional (or locative) and 5 are non-compositional (or idiomatic), as exemplified in table below:

POLYSEMY OF "VENIRE FUORI"				
USE	SENTENCE STRUCTURE	EXAMPLE	LOC. USE	FIG. USE
I	**N_0 V Part Loc $N1_{dest}$**	*Max venne fuori dalla stanza*	+	-
II	**CheF VPart Loc N_1**	*Dalle indagini verrà fuori che sei innocente*	-	+
III	**N_0 VPart Loc $N_{1\ abstract}$**	*Eva venne fuori dalla depressione*	-	+
IV	**$N_{0\ R}$V Part**	*E' venuto fuori un bel romanzo*	-	+
V	**$N_{0\ hum\ obl}$ V Part W**	*Il cantante viene fuori alla grande*	-	+
VI	**$N_{0\ R}$V Part**	*E' venuto fuori il jolly*	-	+

Table 1: Polysemy of *venire fuori* in Italian

This method represents one of the most important innovations that Lexicon-Grammar introduces to the study of VPCs. As shown in the table above, the difference between compositional vs. idiomatic does not involve only semantic descriptions but concerns also syntactic descriptions, i.e. the different syntactic-distributional structures (column 2) associated with the different uses.

3. Formal Identification criteria

At this point, we look at what criteria we have used to distinguish the compositional from the non-compositional uses. At a semantic level the first are characterised by the fact that the meaning of the composition is a function of the meanings of the two components (V + Part). That is, those where the particle maintains its locational-directional status. We can put in this group verbs such as *uscire fuori* (come out), *entrare dentro* (go in), and *salire su* (climb on), in which the particle has a pleonastic function because it emphasises a movement already encapsulated in the head verb. It is constructed by a generic head verb plus particle that acts as a "direction marker", pointing to the expressed motion of the verb in a certain direction (e.g. *saltare giù* (jump down), *andare via* (go away), *correre su* (run along).

In other words, within the definition of "compositional syntagmatic verbs" we put together the two sematic classes (a and b) proposed by Simone (1997) and summarised in section I. These uses can also be called "locative" or "transparent" (Poletto & Benincà 2006). The non-compositional or idiomatic uses, on the other hand, are those with a "lexical" character, because their meaning is not the sum of the meaning of their parts, and the particle no longer maintains its original locative/directional value, just as the head verb is not necessarily a movement/stative verb. In other words the idiomatic-type compositions V+Part have developed a metaphorical meaning, either derived from the locative meaning (as in "*mettere dentro*" (put away, lit.*put-in), and "*chase after*" (run behind)) or completely idiomatic without a locative counterpart (e.g. *fare fuori* (eat up), *venire meno* (fail, lit. *come-less)).

The application of single semantic criteria in order to identify a compositional-locative use in I, and an idiomatic use in II-II-IV-V-VI does not seem completely sufficient.

The locative interpretation of I actually persists in entries II and III, just as the particle "*fuori*" seems to maintain its original directional value in all the sentences which include "*venire*". Therefore, the composition has a higher level of compositionality and transparency, as demonstrated by the possibility to substitute it (with the exception of use V.) with its one-word equivalent verb "*uscire*" (exit) (expressed by the semantic sum of *venire* + *fuori*):

*I. Max è **venuto fuori** dalla stanza ←→ Max **è uscito** dalla stanza*

(Max came out of the room ←→ Max exited the room)

*II. Dall'indagine **verrà fuori** che sei innocente ←→ dall'indagine **uscirà** che sei Innocente innocente*

(From the investigation, your innocence will come out ←→ *from the investigation your innocence will exit)

*III. Eva **venne fuori** dalla depressione ↔ Eva **uscì** dalla depressione*

(Eva came out of the depression ←→ *Eva exited her depression)

*IV. **E' venuto fuori** un bel romanzo ↔ **E' uscito** un bel romanzo*

(A good novel has come out ←→ *A good novel has exited)

*V. Il cantante **verrà fuori** alla grande ←→ *? il cantante **uscirà** alla grande*

(The singer will emerge strongly ←→ *The singer will exit strongly)

*VI. **E' venuto fuori** il jolly ←→ **E' uscito** il jolly*

(The joker came up ←→ *The joker exited)

To distinguish the two families of uses, compositional and idiomatic, it is necessary to also employ lexico-syntactic criteria. (Let's remember that this distinction is of primary importance, because it is the basis of the fine-tuning of the separated LG classification).

In compositional and idiomatic uses, the particle can modify the argument structure of the head verb. In fact, *venire* selects a location of provenance and of destination, as in:

1. *Max è venuto a casa dal lavoro*
   (Max came home from work)

Meanwhile, *venire fuori* (compositional and idiomatic) only selects a location of provenance:

2. *Max è venuto fuori dalla stanza*
   (Max came out of the room)

3. *Eva venne fuori dalla depressione*
   (Eva came out of the depression)

The distributional structure of the compositional *venire fuori* is the same as the verb *venire*, that is,

N0 = :N animate

In the idiomatic use of *venire fuori* however, the particle added to the verb can also modify the "distributional structure", (something we have already seen without realising it when the particle combines with the verb within a locative use).

Therefore, in "*venire*" we have:

N0=: N animate

In *venire fuori* (locative) we have:

N0 =: N animate

While in *venire fuori* (idiomatic) we will have:

N0=:N astratto.

In "*E' venuto fuori un problema*"
(A problem has come up) (use II)

we see N0=: N concrete

And in:

"*E' venuto fuori un romanzo*"
(A novel has come out) (use IV)

Or in:

"*E' venuto fuori il jolly*"

(The joker has come up) (use VI)

Finally, in the idiomatic uses we can see a strong restriction on selection of the argument. In II, the composition *venire fuori* is obligatorily applied to a sentential complement (even the noun *problema*, as we have seen, is reducible to a discourse). In III, the N_2 that can be interpreted as "place" falls under an abstract class of nouns which identify "unpleasant situations". In IV and VI, the strong restrictions on the subject have required the identification of specific semantic classes, such as that of "publication" (in IV) and of "numbers in game cards" (in VI).

4. Compositional predicative constructions

The compositional uses are part of a work that is still in progress and further remarks will be outlined in the next sections. However, it is useful to provide some glimpse of the research, and display some of the problems that have emerged from our analysis.

First of all, let's remember that there is an internal dichotomy within compositional uses, traditionally distinguished into:

(a) Uses in which the particle is only emphatic and pleonastic, as in the following examples:

1. *Eva è uscita (fuori) di casa*
   (Eva has gone (out) from the house)

2. *Bob salì (su), verso il tetto*
   (Bob climed (up), toward the roof

3. *Max scende (giù) in cucina*
   (Max descended (down) to the kitchen)

(b) Uses in which the particle has a specific locative value and directs the expression of movement of the verb in a certain direction.

4. *Carlo va via da Roma*
   (Carlo goes away from Rome)

5. *Susi mette giù la borsa dalla scrivania*

(Susi puts the bag down from the desk)

6. *Eva tira avanti una sedia*

(Eva moves the seat forward)

Because in group (a) the determinant property is represented by the arbitrariness of the particle (arbitrariness signalled by use of brackets), which serves only to reinforce or duplicate the meaning of the verb, the operator seems to be the head verb. The particle can be freely omitted, without affecting the argumental structure of the verb:

7. *Eva è uscita (fuori) di casa*

[Part→ E] =: Eva è uscita di casa

8. Bob salì (su), verso il tetto

[Part→ E] =: Bob salì verso il tetto

9. Max scende (giù) in cucina

[Part→ E] =: Max scende in cucina

The compositional uses (2), however, are more problematic, because the particle acts as a "direction marker" and assumes a necessary role within the sentence, so that its omission would produce an unacceptable sentence:

10. Carlo va via da Roma

[Part→ E]=: Carlo va da Roma*

11. Susi mette giù la borsa dalla scrivania

[Part→ E]=: Susi mette la borsa dalla scrivania*

Alternatively, it could provoke a shift towards another use of the head verb, as in example 6. which becomes:

12. *Eva tira avanti una sedia*

(Eva pulls ahead a chair)

*[Part→ E]=:*Eva tira una sedia*

(Eva throws a chair)

If we take a moment to consider example 10, we can note that, while a verb like "*andare*" acquires specific meaning depending on the particular spatial particle it occurs with (e.g. *andare via* (go away)*, andare fuori* (go out)*, andare giù* (go down)), and therefore in a data combination V+Part corresponds to a specific phrastic structure, the operator seems to be the entire V+Particle construct.

Actually, the sentence structure contained in the synthetic operator "*andare*" is:

N_0 V Loc N_1 prov N_2 dest (classe 7DP),

corresponding to the sentence:

13. *Carlo va dall'ufficio a casa*

(Carlo goes from the office to home)

Here, only the locative of provenance can be omitted:

[Loc N1 prov→ E]=: Carlo va a casa

(Carlo goes home)

While it is not possible to omit the locative of destination:

*[Loc N 2 dest → E] =: *Carlo va dall'ufficio*

(*Carlo goes from the office)

Nor is an absolute use, of the NoV type, possible:

[Loc N 1prov Loc N2dest→ E]:= **Carlo va*

(*Carlo goes)

Looking instead at the syntagmatic verb "*andare via*", as illustrated in example 10 (*Carlo va via da Roma*), we can see that the particle produces a modification on the argumental structure of "*andare*". The new operator (of compositional type) contains within the sentence type N_0V *Part Loc* $N_{1\ prov}$. Following the model of *partire* (class 7D), and differently from *andare*, it can occur also on its own, in an absolute use:

14. Carlo va via

(Carlo goes away)

This throws into doubt the initial hypothesis that in type (b) compositional syntagmatic uses the operator is the entire sequence, as gradually new and initially ignored phenomena come to our attention. We refer to those very frequent cases in the spoken and written language in which the locative complement is directly selected by the spatial particle, often used "absolutely" (Jansen 2004), that is, without the support of the verb:

15. *Via di lì* (LIP)

(Off of there)

16. *Giù le mani dalle mie cose* (LIP)

(Hands off of my things)

17. *...su con la vita* (LIP)

(Lit. Up-with-life)

(Cheer up)

18. "*Sardegna: via i sommergibili Usa*" (Corriere della Sera)

("Sardinia: away with USA submarines")

So here I raise a question about group (b) compositional syntagmatic verbs: is the operator composed of V+Part or only the Particle?

I believe that examples 15-18 should be considered as "substructures" starting from the

sentences:

19. *Vai via di Lì*

(Go away from there)

20. *Metti giù le mani dalle mie cose*

(Get your hands off my things)

21. *Stai su con la vita*

(Lit.*Stay-up-with-life)

(Don't be depressed)

22. *Sardegna: mandiamo via i sommergibili Usa*

(Sardinia: let's send away the USA submarines)

These demonstrate the not-always-necessary character of the head verb. Because it can be cancelled, we see that the predicative function does not reside there, but in the adverbs. Intuitively therefore, we can claim that the principle information is contained in the particles, as in 19, where "*via"* carries the meaning *andarsene* (to go away), and contains within itself a form of sentence of the type N0 andarsene Loc N1 prov. In fact we know that also prepositions and adverbs (cf. section II) can act like operators, that is, like "syntactic centres of the enunciation", around which the other elements that make it up are arranged. It is worth noting also how the transfer of the predicative function of the different elements of the verb occurs in the support verb sentence: the examples 19-22 are also reducible to this type of structure, in which the verb is otherwise "empty" or "delexical".

By inserting a subject in sentences 19-22, we have the following correlations, starting from 19:

19. *Max va via di lì*

(Mac goes away from there)

←→ 19.1. *Max è via di lì*

(Max is away from there)

In which the operator *via* can be applied to two elementary arguments Max and *lì* (Onn).

Instead, sentence 20 and 21 are idioms associated with the following verbal sentences:

20.1. Eva mette giù le mani dalle mie cose

(Eva gets her hands off my things)

21.1. Eva sta su con la vita

(*Eva stays up with life)

(Eva is happy)

Finally, the imperative verbless sentence 22, is part of a long structure:

22.1. Noi Mandiamo via i sommergibili Usa dalla Sardegna

(We send the USA submarines away from Sardinia)

and it is also reducible to a support verb sentence:

22. 2. I sommergibili Usa sono via dalla Sardegna

(The USA submarines are away from Sardinia)

where the operator *via* is applied to the two elementary arguments *I sommergibili Usa* and *dalla Sardegna* (Onn).

In sentences 19-22 therefore, the obligatory syntactic and semantic element is the particle, while the head verb can be not only eliminated, but is also variable, in the sense that it can be freely substituted with synonymous forms. In both cases, the acceptability and the argumental structure of the sentences are not prejudiced.

19.2. *(E+Vai+vieni+corri+scappa…) via di lì!*

((E+Go+come+run+*escape…) from there!)

20.3. *(E+ Metti+tieni+colloca+ porta..) giù le mani*

* (E+put+keep+place+carry…) your hands off

21.2. *(E+ Stai+sii+tieniti) su con la vita*

* (E+ Stay+Be+Keep) up with life)

22.2. *(E+ mandiamo+portiamo+spingiamo…) via i sommergibili Usa dalla Sardegna*

(E+send+carry+push…) away the USA submarines from Sardinia

Now let's look at examples of sentences in which the particle "*via*" occurs in transitive verbs with a long structure, like:

23. *Max tira via il chiodo dal muro*

(Max pulls out the nail from the wall)

24. *Max raschia via il chiodo dal muro*

(Max scrapes away the nail from the wall)

25. *Max gratta via il chiodo dal muro*

(Max scratches away the nail from the wall)

Starting from these, we can find the imperative-exhortative tone:

26. *Via il chiodo dal muro!*

(*Lit. Away-the-nail-from-the-wall!)

(Get the nail out of the wall!)

And the corresponding substructure:

27. *Via il chiodo!*

(*Lit. Away-the-nail!)

(Off with the nail!)

Here we understand that we must take the nail out of a wall, even if we are not told "how". In other words, if the verbs *tirare* (pull), *raschiare* (scrape), and *grattare* (scratch) are omitted, it means that it is the "spatial particle" *via* that selects the object (the nail) and the location of provenance (the wall). In fact, sentences 23-25 are all correlated with the following support verb phrase:

28. *Il chiodo è via dal muro*

(The nail is out of the wall)

This has the structure **Onn**. In other words, phrases 23-25 can be interpreted as the result of

the application of the movement verbs *tirare, raschiare, grattare* (with their relative causative subjects) on an "*essere*" (to be) support sentence.

In the compound, the adverb "*via*" additionally has the important function of "telicizing" the head verb, producing a complete action:

29. Max tira il chiodo dal muro	[-telic] [+ durative]
Max tira via il chiodo dal muro	[+ telic] [- durative]
30. Max raschia il chiodo dal muro	[-telic] [+ durative]
Max raschia via il chiodo dal muro	[+telic] [- durative]
31. Max gratta il chiodo dal muro	[- telic] [+durative]
Max gratta via il chiodo dal muro	[+telic][-durative]

The predicative and aspectual value of the particle "*via*" is at the base of the continued productivity of syntagmatic compositional verbs that contain it, because as we have seen, it can be combined with a lot of base verbs, many of which are derived from a noun (e.g. *trapanare via* (drill out), *spazzolare via* (brush away) and so on. The chasm structure (chassè-croisè) of the example 23-25 is the following:

(23)

Max (tira) (via) il chiodo dal muro

1 2

Max (toglie) il chiodo dal muro (tirandolo)

2 1

(24)

Max (raschia) (via) il chiodo dal muro

1 2

Max (toglie) il chiodo dal muro (raschiando)

2 1

(25)

Max (gratta) (via) il chiodo dal muro

1 2

Max (toglie) il chiodo dal muro (grattando)

2 1

This chasm structure of the syntagmatic verbs is a characteristic that can be observed also in English phrasal verbs. Bolinger (1971) pointed out the *essential verb-like quality of the particle* in these constructions. Let's look at some examples from Philip Grew (2005):

(a)

1 2

We (cut) (down) trees

2 1

(Abbattiamo) gli alberi (tagliandoli)

(b) 1 2

We (chop) (down) trees

2 1

(Abbattiamo) gli alberi (con la scure)

(c)

1 2

We (saw) (down) trees

2 1

(Abbattiamo) gli alberi (con la sega + segandoli)

In the translations above for the phrasal verbs, you can see that the information coded into the

particle “down” (=*giù*) is incorporated in the Italian verb “*abbattere*”, while the information expressed by the free choice of the head-verb verbal-head can be reproduced with an adverbial phrase, a gerund or an indirect Italian complement. *Cut, chop, saw*, etc. can be eliminated from the sentence without altering the meaning, “verbizing” the particle “down”:

(d)

Down trees!

We have seen therefore that there is a strong analogy between compositional phrasal verbs and Italian syntagmatic verbs of the compositional type. In both, the particle plays a central role in the enunciation.

Now we will observe the behaviour of the Italian adverb “fuori”, in a sentence like

26. *Eva saltò fuori dal pub*

(Eva jumped out of the pub)

Here, the particle expresses the direction (path), becoming in a certain sense “verbized”, while the verb base specifies only the means with which the action is carried out. Applying the chassè-croisè, we get:

(26) 1 2

Eva (salta) (fuori) dal pub

Eva jumps out from the pub

2 1

Eva (esce) (saltando + con un salto) dal pub

Eva exits (jumping + with a jump) from the pub

On the basis of this chasm structure, I assume that in the sentence 26, the particle carries the meaning of “*uscire*” (exit), and contains within itself the sentence structure type *N0 uscire da N1 luogo* (N_0 exit from N_1 place). In other words, even when we look at “compositional syntagmatic verbs” it seems that they retain the predicative value that they have in a support verb sentence:

27. Eva è fuori dal pub

(Eva is out of the pub)

Saltare in sentence 26 is substitutable with more motion verbs, which demonstrates that with regard to the compositional syntagmatic uses, the "fixedness of the compound" is not rigid at all:

28.

←→ *Eva (è + va +corre +salta +scappa + scivola + ...) fuori dal pub*

Eva (is + goes + runs + jumps + escapes + slips + …) out of the pub

All the possible elementary sentences contained in 28 allow for the same substructure, that is, for the omission of the SP, headed by *fuori*:

29.

←→ *Eva (è + va +corre +salta +scappa + scivola + ...) fuori*

Eva (is + goes + runs + jumps + escapes + slips + …) out

They also allow the "omission" of the head verb in exhortative-imperative sentences (together with the omission of the subject):

←→ *Fuori dal pub!*

(Out of the pub!)

And the omission of all the argument, with the exception of the particle itself:

←→ *Fuori!*

(Out!)

This indispensability of the particle seems to corroborate the hypothesis that it acts as the central function of the enunciation, as, by definition, the operator is the element that can never be missing.

This hypothesis is nonetheless provisional; a deeper research on the compositional uses could easily refute it.

On the basis of these findings I stress the importance and the necessity of a study on the particle's regency, a study so far not carried out in the LGI framework, even if some suggestions about it are indicated by Rizzi (1988).

5. The object of study: idiomatic VPCs

The present doctoral work deals mostly with idiomatic VPCs, because these – unlike compositional VPCs – have been definitely recognised as having a lexical, multi-word i.e. "complex lexemes" (Venier 1996). For example, dictionaries have given these a lot of attention in recent years, identifying them as "loc. verbali" (De Mauro 2000), as "combinations" (ELDIT) or simply as "figurative meanings", as in Devoto Oli (2008).

My interest will also focus on the lexicon-grammar classification of the idiomatic uses occurring in transitive and neutral constructions. In the next chapter, I will provide tables and comments on these, and, finally a first attempt to address and resolve their ambiguity.

5.1 Syntactic properties of the idiomatic VPCs

For now, I aim at showing the lexicon-syntactic properties of idiomatic constructions such as *fare fuori* (eat up), *berci su* (try to forget)*, guardare indietro* (look back)*, andare avanti* (go on)*, parlare dietro* (talk behind)*, buttare giù* (throw down), and similar.

I have already mentioned the fact that this type of VPC is also known as "non-compositional", because the meaning of the composition does not equal the sum of the meaning of its two parts (V+Part).

Considered a sentence like the following:

1. *Eva corre dietro a quel tipo*

the VPC "run after" undergoes a *double interpretation*, i.e. it can be interpreted both literally and figuratively. In the first case, it is regarded as a "compositional use" corresponding to "*inseguire*" (follow). In the second case, it is regarded as a "non-compositional use" because its meaning does not derive from the internal composition of the sentence, which can be paraphrased as a whole with "*corteggiare, fare il filo*" (to court, fancy someone). Only discoursive contexts more extended than the simple sentence can help to disambiguate the sequence, as in the complex sentence:

2. *Eva corre dietro a quel tipo da un pezzo, anche se è sposato*

   (Eva chases after that guy (*for a while), even though he's married)

Here it is easy to associate a non-literal meaning with the compound, whereas in the following discoursive context:

3. *Eva corre dietro a quel tipo perché le ha rubato la borsa*

   (Eva chases after that guy, because he stole her bag)

a literal interpretation can be easily associated with "*correre dietro*".

However, there are also non ambiguous idiomatic uses, i.e. uses with no locative counterpart, such "*fare fuori*", in:

4. *Bob ha fatto fuori il criminale*

   (*Lit. Bob-did-out-the-criminal)

corresponding only to the paraphrase "Bob killed the criminal".[27]

[27] Note that, in NLP applications *fare fuori* can be ambiguous as in:

*Di spacciare questa roba, lo **farete fuori** da casa mia!* (LA STAMPA CORPUS, '98)

where the sequence does not form a VPC but a V plus a free PP. The parser cannot distinguish between the two interpretations (i.e. literal vs. non literal).

The second property concerning idiomatic VPCs is their *fixed distribution*. With regard to compositional (or locative uses), it is possible, in fact, to substitute the adverbial particle with a complement that preserves the "*valence stability*" (Venier 1996), as in the sentence:

5. *Metti giù la borsa*

   (Put down the bag)

   ↔ *Metti a terra la borsa*

   (Put the bag on the ground)

Here the head verb can be also replaced with a synonymous form:

6. *metti giù la borsa*

   ↔ *poni giù la borsa*

   (place the bag down)

Otherwise in the idiomatic uses the frozeness of the compound blocks the commutation task. Given the sentence:

7. *Eva si tirò indietro da quell'impegno*

   (Eva pulled out of that job)

the substitution of the adverbial particle "*indietro*" (lit. backward) with the prepositional paraphrasis *all'indietro* (lit. backward) allows for the following unacceptable sentence:

8. **Eva si tirò all'indietro da quell'impegno*

   (*Eva pulled backward of that job)

Likewise, the substitution of the verb *tirarsi* (pull oneself) with *portarsi* (carry with), can produce a sentence of dubious acceptability:

9. ??*Eva si portò indietro da quell'impegno*

   (*Lit. Eva-carried-herself-back-from-that-job)

   (??Eva was held back from that job)

A further criterion that allows me to identify the idiomatic uses is therefore the *invariability of the two element*s. Let's look at another example involving the VPC "*portare avanti*" (Lit.

carry forward) in the compositional use of it, as in:

10. *Max porta avanti la sedia dalla stanza alla cucina*

(Max carries forward the chair from the room to the kitchen)

or in the figurative use of it:

11. *Max porta avanti la famiglia*

(Lit. *Max-carries-forward-the-family)

(Max maintains the family)

In the former case it is possible to modify both the elements of the compound, obtaining two acceptable sentences:

10.a

Max tira in avanti la sedia

(Max pulled the chair forward)

Max spinge avanti la sedia

(Max pushed the chair forward)

Otherwise, in the example 11, i.e. *Max porta avanti la famiglia*, the links between the verb *portare* and the adverb *avanti* are narrower, as demonstrated by the unacceptability of the following sentences:

11.a

**Max porta <u>in avanti</u> la famiglia*

(*Max carries forward the family)

**Max <u>spinge</u> avanti la famiglia*

(*Max pushes forward the family)

The greater syntactic cohesion of idiomatic VPCs is showed by the fact that, compared to compositional uses, they respond worse to separation of the two components, through the

well-known movement and substitution transformations, such as interrogative and cleft sentences.

Let's observe for example a VPC like *fare fuori* (Lit. *do/make out, cf. "finish off") where the particle cannot ever occur in isolation, for example, as the answer to a question:

12. **Come lui ha fatto i soldi?*

    (lit. *How did he make the money?)

13. **Fuori*

    (*Out)

Nor can it be focalised via topicalisation or cleft sentences.

14. **Fuori, lui ha fatto i soldi*

    (*Out, he made his money)

15. **E'fuori che lui ha fatto i soldi*

    (*It is out that he made his money)

The same transformations produce unacceptable sentences also when the particle is extracted together with its complement:

16. *Cosa ha fatto?*

    (What did he do?)

    **Fuori i soldi*

    (*Out the money)

17. **Fuori i soldi, lui ha fatto*

    (*Out the money, he did)

18. **E' fuori i soldi che lui ha fatto*

    (*It was out, the money that he did)

This demonstrates that, as claimed by Poletto & Benincà (2006) the particle cannot form a constituent with the following object.

The interrogative, the topicalisation and the extraction are instead acceptable if is the variable element that is isolated, i.e. the object "*i soldi*":

19. *Cosa lui ha fatto fuori?*

(What did he finish off?)

I soldi.

(The money.)

20. *I soldi, lui li ha fatti fuori*

(The money, he finished off)

21. *Sono i soldi che lui ha fatto fuori*

(It was the money that he finished off)

The verb *fare fuori*, used as an example, also reacts badly to other transformations, like the inversion of the order between object and particle (object shift):

22. **Lui ha fatto i soldi fuori*

(He finished the money off)

However, the adoption of a Lexicon-Grammar approach stresses the need to test transformations on the full database of the idiomatic VPCs in order to avoid false generalisations based on a restricted number of examples. That is what I propose to do in the next chapter.

On the basis of the findings outlined so far VPCs can be regarded as members of the larger family of idiomatic sentences (or compound verb sentences) classified by Vietri (1984, 1996) since they share with these some properties: non-compositionality of the meaning, ambiguity, distributional fixedness and resistance to application of transformations. Furthermore, the idiomatic VPCs have, in addition to the verb, a fixed, or blocked element. The difference is that this is not a noun, traditionally indicated with Cj (e.g. *mangiare la foglia*, lit. eat the leaf, cf. "to understand") but an adverb or preposition (e.g. *fare fuori,* lit. to do out cf. "to kill")

From initial data, numerous compounds formed by a verb + fixed adjective were found. How should they be regarded?

I assume – capitalizing Renzi (1988) – that some adjectives have acquired, in co-occurrence

with the verb, an adverbial function, as in *mirare alto* (aim high)*, volare basso* (fly low)*, rigare dritto* (go straight). In Ramat and Ricca (1994), the authors also state that there is "a scale of prototypic-ness" involving the notion of adverbs, some of which assume forms indistinguishable from the adjectival ones (as in *chiaro* (clear) in *parlar chiaro* (speak clearly).

I regarded these kinds of two-word verbs as "syntagmatic", e.g. *tenere duro* (lit. *stay hard, meaning "persevere")*, filare dritto* (lit. *spin straight, meaning "behave"). Instead combinations like (23), i.e. made up with a verb and an adjective not clearly reducible to a "particle", were excluded (in a second step of the work) from the classification:

23. *Il cantante va forte*

    (Lit.* The-singer-goes-strong)

    (The singer is amazing)

24. *Max si fa bello con Ugo della promozione*

    (Lit. *Max-made-himself-beautiful-with-Ugo-about-the-promotion)

    (Max boasted to Ugo about the promotion)

25. *Bob se la prende comoda*

    (Bob takes it easy)

26. *Maria non si fa viva*

    (Lit. *Maria-didn't-do-alive)

    (Maria didn't show up)

Given a fixed element C_i, that can co-occur with a verb in a complex sentence, it can be "declined" as a noun, an adverb, a preposition (called for simplicity "particle"), or an adjective:

C_i=: N

C_i=: Part

C_i=: Agg

In the first case, an idiomatic sentence is actualised e.g. *Tagliare la corda* (Cut the cord), in the second case a syntagmatic verb (e.g. *fare fuori*), in the third a multiword unit of a different type (e.g. *fare fesso* (play the fool)), which in itself deserves a study and a Lexicon-Grammar classification as soon as possible.

5.2. Transitive and intransitive constructions

After identifying the compositional forms from the fixed or idiomatic ones, the second procedure used in the present Lexicon-Grammar treatment of VPCs consisted in the splitting of the idiomatic type – which represented the main object of my study – into two main classes:

- transitive VPCs

-intransitive VPCs

Refuting the traditional notional baggage associated to the transitive verb category, I adopted a distributional definition which appears more applicative for a classification purposes, as outlined by EMDA (1981) and D'Agostino (1983, 1992).

Given the sequence:

(*Ugo+ciò) questa persona*

(Ugo+this) this person

(Ugo+ciò) questa cosa

(Ugo+this) this thing

I identified as transitive VPCs any verbal use that can be inserted between (*Ugo+ciò*) and (*this person*) or (*this thing*) in order to create an acceptable sentence. For example, the entry *mettere via* (put away) provides only one:

(a)

**Ugo mette via questa persona*
(*Ugo puts away this person)

Ugo mette via questa cosa
(Ugo puts away this thing)

**Ciò mette via questa persona*
(*This puts away this person)

**Ciò mette via questa cosa*
(*This puts away this thing)

Let's look now at *buttare sotto* in (b) (lit. throw down, meaning "run over", for example, *un bambino* (a child) or *una bici* (a bicycle). This provides four sentences:

(b)

Ugo butta sotto questa persona
(Ugo runs over this person)

Ugo butta sotto questa cosa
(Ugo runs over this thing)

Ciò butta sotto questa persona
(This runs over this person)

Ciò butta sotto questa cosa
(This runs over this thing)

The definition of "transitive" adopted here is based on the presence of a non-prepositional complement, i.e. direct object, immediately on the right of the VPC. It is nonetheless necessary to integrate these transitive constructions' identification criteria with some tests, such as the INTERROGATIVE with the question form (*Chi+che cosa?* (Who+what?)), the PRONOMINALISATION with the clitic *lo* and the PASSIVISATION.

Applying these tests to sentences 3 and 4:

3. Ugo mette via i giornali vecchi

(Uge puts away an old newspaper)

4. Il treno buttò sotto una bici

(The train ran over a bicycle)

we get the following findings:

Question form:

3a. (*Chi+ Che cosa)Ugo mette via?*
(Who+What) Ugo puts away?

4a. *(Chi +Che cosa) il treno buttò sotto?*
(Who+What) the train runs over?

The clitic "*lo*":

3b. I giornali vecchi, Ugo li mette via
(The old newspapers, Ugo puts them away)

4b. Una bici, il treno la buttò sotto
(A bicycle, the train ran over it)

Passive sentence forms:

3c. I giornali vecchi sono stati messi via da Ugo

(The old newspapers were put away by Ugo)

4c. *Una bici è stata buttata sotto dal treno*

(A bicycle was run over by the train)

If the set of the possible elementary sentences – that is, those with a verbal operator – is well represented by a structure like the following:

(E+ N_0) V ((E+ (E+ Prep) N_1) (E+ (E+ Prep) N_2)

then the subset of the transitive constructions, can be actualised by a structure of the type:

N_0VN_1[(E+ Prep) N_2]

From which the following combinatorial possibilities can be derived:

a. N_0V N_1

b. N_0V N_1N_2

c. N_0V N_1PrepN_2

On the basis of the data available to me, transitive VPCs with the form (b) are not attested whereas combinations belonging to the (a) and (c) exist, called respectively "**short structure transitive constructions**" and "**long structure transitive constructions**". Below, we provide some examples of both types:

(a)

N_0VPart N_1

Eva ha <u>messo su</u> un negozio

(Lit. *Eva-put-up-a-shop)

(Eva has set up a shop)

(b)

N_0VPart N_1PrepN_2

I commercianti <u>tirano su</u> i prezzi del venti per cento

(The retailers lift up the prices by twenty percent)

The intransitive VPCs were also identified on the basis of Martinelli's definition (EMDA, 1981), i.e. those verbs or uses which present a prepositional verb phrase on their right. I therefore considered as "intransitive" the V plus Particle compositions which accept one of the possible constructions admitted by the formula:

[(E+ N_0)V (E* Prep N_1)]

That is, sentences of the following forms:

d. V

e. N_0V

f. N_0V Prep N_1

There are no intransitive VPCs of the structure d. The intransitive idiomatic uses are only reducible to the sentence form (e) , i.e. **short structure constructions** and (f.), i.e. **long structure constructions**:

(e) N_0V Part

La pillola <u>va giù</u>

(The pill goes down)

(f)

N_0V Part Prep N_1

Eva <u>da addosso</u> alla madre

(Lit.*Eva goes against her mother)
(Eva attacked her mother)

5.3. A first classification

In the first phase of the work, I classified the transitive and intransitive idiomatic uses on the basis of *structural* and *distributional criteria*. In particular:

- I created two separate tables for the uses that fit into short structure transitive constructions (class 2) and for those that fit into long structure transitive constructions (class 4);
- the intransitive uses having a definitional structure N_0V were collected into a single class (class 1);
- the intransitive uses with a sentence form N_0 *V Part Prep*N_1 were further subdivided into three subclasses, depending on the distributional characteristics of the prepositional complement, that is:
  - class 3a: containing the uses that don't licence particular distributional restrictions on the distributional complement;
  - class 3b: containing the uses that obligatorily select a human N_1;
  - class 3c: containing the uses that obligatorily require a non-human N_1.

The verbal locutions and V+fixed adjective were also inserted in the classes.

On the basis of these criteria, I classified 717 idiomatic uses, into 6 distinct classes, as illustrated in the following table.

CLASS	DEFINITIONAL STRUCTURE	SENTENCE EXAMPLES	ENTRIES
cl. 3c.	N_0 VPart Prep $N_{1\text{ -um obbl}}$	*Ugo **gira intorno** al problema* (Ugo circles around the problem)	155
cl.4	N_0 VPart N_1 Prep N_1	*Alex **tagliò fuori** Bob dalla conversazione* (Alex cuts out Bob from the conversation)	54
cl.1	N_0 VPart	*Mio figlio **riga dritto*** (My son goes straight)	225
cl.2	N_0 VPart N_1	*Max **butta giù** due righe* (Max jots down two lines)	153
		Tot = 718 entries	
cl. 3a	N_0 VPart Prep N_1	*Eva **da addosso** (alla questione+ alla madre)* (Eva has at (a question + her mother)	26
cl.3b	N_0 VPart Prep $N_{1\text{ um obbl}}$	*Fabio **dorme insieme** alla fidanzata* (Fabio sleeps with his girlfriend)	105
cl. 3c.	N_0 VPart Prep $N_{1\text{ -um obbl}}$	*Ugo **gira intorno** al problema*	155

Table 2: A first classification of the idiomatic uses

5.4. The New particle-oriented classification

A more careful study of the non-compositional constructions led me to revise the preceding classification. In particular, my attention shifted from the V+Particle composition to the single Particle, because I observed regularity and analogy of meaning and form among the syntagmatic entries gathered, different combinations of the same adverbial element, as in:

1. *Eva* ***butta giù*** *due righe*

   (Lit.*Eva-throws-down-two-lines)

   (Eva jots down two lines)

2. *Eva* ***mette giù*** *due righe.*

   (Lit. *Eva-puts-down-two-lines)

The constant semantic interpretation between 1 and 2 suggests that the metaphorical value is contained in the particle, rather than in the VPC entire. Philip Grew (2004), regarding one of the meanings of the particle "down", claims:

> *"The directionality towards down is a component of "root", and "plant", and therefore of fixing an object to a surface. On a metaphorical level, the concept* FIX *finds its equivalent in* WRITE, PUT IT DOWN IN BLACK AND WHITE, *which gives the information a certain stability, which reduces the possibility of misunderstanding".* (P. Grew, 2004)[28]

This is not the place to discuss how a language like English (although the discourse is extendible also to Italian) organises metaphors through a series of orientation concepts , for which I refer to Lakoff and Johnson (1980) or to the Italian tradition of Patrizia Violi, as well as Philip Grew (2004).

Rather, I want to underline that in the next phase of the research, I preferred to utilise the type of particle that could be part of a VPC as a "structural property" of class identification. In

[28] The translation is mine.

other words, I preferred to create distinct tables for V+*giù* (down), V+*su* (up), V+*via* (away), V+ *avanti* and so on.

An interesting insight in line with my assumption came from the tables built for English by Machonis (2007) and (2009) which classified idiomatic and neutral transitive phrasal verbs into three distinct classes: verbs followed by up (721 uses), out (200 uses) and other particles like back, down, in, off, and over (300 uses).

Below I provide an extract from his table of phrasal verbs followed by *up*:

N_0 =: Nhum	N_0 =: N-hum	Verb	Particle	Example of N_1	N_1 =: Nhum	N_1 =: N-hum	N_0 V N_1	N_1 V Part	N_1 V	Synonym
+	-	ante	up	ten dollars	-	+	-	-	-	pay into game/kitty
+	+	back	up	the information	-	+	-	-	-	make a copy of
+	-	back	up	the police	+	+	-	-	-	provide help for
-	+	back	up	traffic	-	+	-	+	-	make accumulate
+	+	ball	up	Max	+	+	-	-	-	confuse/bungle
+	+	bang	up	the desk	+	+	-	-	-	damage seriously
+	+	bank	up	the snow	-	+	-	-	-	make into a pile
+	-	bash	up	the oranges	-	+	-	-	-	damage
+	+	beam	up	the alien	+	+	-	+	-	transport by energy
+	+	beat	up	the door	-	+	-	-	-	damage
+	+	beef	up	the proposal	-	+	-	-	-	strengthen
+	+	blow	up	the balloons	-	+	-	-	-	inflate
+	+	blow	up	the building	+	+	-	+	+	explode
+	+	blow	up	the photo	-	+	-	-	-	enlarge
+	+	blow	up	the scandal	-	+	-	+	-	exaggerate
+	+	bolster	up	the theory	-	+	-	-	-	support

Table 3. Table of transitive and neutral uses followed by "up" (cf. Machonis, 2007)

On the basis of the new construction criteria of the tables, I reviewed the preceding classes of the transitive and intransitive uses. I remember that In this contribution, I am focusing on the transitive type syntagmatic verbs.

The Lexicon-Grammar classification of the intransitive idiomatic uses is instead a work in progress. However, I will illustrate, for informational purposes, a synoptic framework of the intransitive syntagmatic verbs as they emerged from the data, (long and short structures) followed by locative particle and not, with their relative occurrences.

N_0V Part (E+ Prep N_1)					
CLASSE	N_0V Part		N_0V Part Prep N_1		TOT ENTRATE
	ESEMPIO DI FRASE	ENTRATE	ESEMPIO DI FRASE	ENTRATE	
V+ addosso	*Eva se la fa addosso*	6	*Anna sta addosso ai figli*	14	20
V+attorno	*Girava attorno la voce che fossi gay*	2	*Quel tipo ronza attorno a Jo*	5	7
V+avanti	*La famiglia va avanti alla meno peggio*	7	*Ugo sta avanti nello studio*	13	20
V+dentro	*Il ladro è dentro*	9	*Max ci da dentro con il lavoro*	6	15
V+ dietro	_____	0	*Eva sbava dietro a quel vestito*	22	22
V+ fuori	*Il mio carattere finalmente verrà fuori*	18	*Dall'indagine saltò fuori che eri innocente*	20	38
V+giù	*Il governo andò giù di nuovo*	14	*Il tuo comportamento non va giù a nessuno*	9	23
V+ indietro	*Sono una persona che non torna indietro*	7	*L'orologio è indietro di due ore*	9	16
V+sopra	*Ci dormirò sopra*	9	*Bob passa sopra alle tue mancanze*	7	16
V+sotto	*Fatti sotto!*	9	*La squadra è andata sotto di tre punti*	8	17
V+su	*Max decide di berci su.*	*17*	*La cena tornò su a tutti*	13	30
V+via	*Sono andati via 50 euro!*	*10*	*Al malato andò via la febbre*	2	12
V + altre part locative	*Non arriverai lontano*	9	*Il partito remò contro al governo;*	44	53
V+ part non locativa	*Mio figlio tira tardi la sera* *La nonna venne meno*	4	*Cerca di far presto a venire* *Stavo insieme a Max*	12	16
V+*bene\male*	*La faccenda butta bene\male*	24	*Non devi parlar male dell'Italia*	26	50
V+ aggettivo fisso (anche *dritto*)	*L'hai fatta grossa* *Tuo nipote fila dritto*	44	*La do vinta al computer* *L'ho fatta finita con Max*	19	63
Tot=					364

Table 4: Intransitive VPCs

I found 364 intransitive uses overall in the corpus. Adding up the "total lines", I found that they fall in the following typology:

a) V with locative Part = 245 entries = 67%

b) V with non-locative Part (*bene, male, meno, prima, dopo, presto, tardi, meno, insieme*) = 66 entries =18%

c) V with adjective (both adverbial functions like *dritto, alto, basso,* and not, like *comoda, bello...*) = 63 entries=17%

6. Transitive VPCs classes

The basic criterion used to build transitive and neutral uses tables was therefore of the "structural" type, i.e. the co-occurrence of the entry with aa given particle. I restricted my classification solely to the main locative particles. The classes created in this way are the following:

1. V+ *giù* (down)= 38 entries
2. V+*su* (up)= 43 entries
3. V+*fuori* (out)= 47 entries
4. V+*Avanti* (forward)= 10 entries
5. V+*dentro* (in)= 15 entries
6. V+*dietro* (behind)= 14 entries
7. V+ *indietro* (back)= 14 entries
8. V+*sotto* (under)= 10 entries
9. V+*via* (away)= 22 entries

The second structural criterion used was the analysis of the number and type of complements that were pertinent or nuclear, i.e the identification of the argument structure of the of the transitive VPCs. These last realize either "short constructions":

1. N_0VPartN_1 =: *Max <u>tira giù</u> un boccone*

(Lit. *Max-pulls-down-a-mouthful)

(Max swallows down a mouthful)

or long constructions:

2. . N_0VPartN_1 Prep N_2 = :*Max <u>tira giù</u> i prezzi del 20%*

(Max drops down the prices by 20%)

However, this last family of constructions revealed itself to be quantitatively lacking (because, when organising the tables by "particle", the long constructions were disseminated across every class). Therefore I preferred not to create two separate classes of transitive use (for instance respectively with the definitional structures N_0Vgiù N_1 and N_0Vgiù N_1 Prep N_2), but to create a single taxonomy of transitive and neutral uses.

In order not to lose the "valency" information, I inserted the structural property PrepN_2 into the matrix, in order to account for the possibility that several entries could select a further complement (of prepositional type) in addition to the direct object (and in such cases I have provided an example).

In order to identify a pertinent or "nuclear" argument (Boons, 1992) in the complement "del 20%" in (2) (which is necessary to complete the minimal information carried by the entry *tirare giù*), I adopted the harrisian tests of cancellation and reduction. With these syntactic criteria it was possible to trace a line of demarcation between essential and circumstantial complements. By applying the cancellation of the prepositional complement in (2), an unacceptable sentence is realized:

(2.1)

Max tira giù i prezzi

(Max drops down the prices)

However this should not lead us to consider that (2.1) is the "elementary sentence" in *tirare giù* fall, because intuitively (and here my "speaker's competence" arises) one notes that *i prezzi* are reduced or "*tirati giù*" by a certain value, so that given (2.1) one could ask "by how much?"

Therefore, (2.1) lacks a quantitative specification. This intuition can be confirmed by inserting the prepositional complement within the supporting verb "*avenire*" (to happen), "*avere luogo*" (have place):

(2.2.)

**Max tira giù i prezzi e ciò avviene del 20%*

(*Max drops down the prices, and this happens by 20%)

The unacceptability of this sentence demonstrates that the prepositional complement is not a reduction or residualof sentence – therefore a structure in operator and argument – but it is a fully pertinent or essential complement.

For this reason the analysis of the number and type of arguments of the V+Particle composition represented one of the fundamental criteria used in my taxonomy of the transitive VPCs

6.1. The properties under analysis

In this work I present the Lexicon-Grammar classification of 213 transitive and neutral lexical entries formed by a verb plus a particle (i.e. VPCs). On the basis of the criteria analysed in the previous section I have create 9 distinct classes, corresponding to the 9 main locative particles

of Italian. The classification is presented in the form of a matrix: were inserted in the rows the entries (V1+Part, V2+Part, V3+Part…Vn+Part) and in the columns the properties considered pertinent for the analysis of the entries (P1, P2, P3…Pn). Where the lines and columns cross, I have put a "+" if the property is accepted by the entry, and a "-" if on the contrary, it is not accepted. The general structure of the 9 matrices is the following:

P1	P2	verb	particle	P3	P4	P5	P6	Pn
-	+	V1	Part	+	+	-	+	+
-	+	V2	Part	-	+	+	-	-
-	-	V3	Part	+	-	+	-	+
+	+	Vn	Part	-	-	+	+	+

In entirety, there are 21 properties used (and these are the same for all of the matrices).

6.2. Distributional properties

The "distributional properties" are the sentence form which identify the characteristics of the distributional selection on the nominal forms co-occuring with the specific verbal entry in N_0 and N_1 positions . In particular, with regard to the subject position, the properties N_0 =: Num, N_0 =: Nanim, N_0 =: N-um have been used. With regard to to the semantic selection operated by the entry in N_1 position , I used the distributional property N_1=: Che F, with which I tested the co-occurance of the entry with a object completive.

When this last is marked "-", it means that the entry only selects elementary arguments, which I distinguished into the two large classes: "*umano* (human)" and "*non-umano* (non-human)", or, respectively, N_1=: N um, N_1=:N-um.

I then carried out a more accurate analysis of the distributional restrictions, using two

additional properties which characterised the non-human type N, that is N_1=: N concreto and N_1=:astratto. To test the restriction of selection operating on the object position, I inserted the property N1=: N ristretto. For example, taking an entry like *fare fuori* in the minimal discourse:

3. Eva ha fatto fuori il gelato

(Lit.*Eva-did-out-the-ice-cream)

(Eva ate up the ice cream)

The N_1 jointly marks the properties N1=: N-um, N1:=N concreto and N1 =: N ristretto, because continuing towards a progressive restriction of the semantic properties, it enters into a specific class of concrete objects, which can be labelled as "edible".

6.3. Trasformational properties

With "transformational properties" I refer to the all the sentence forms correlated systematically - in paraphrastic terms - to the base sentences associated by definition with the VPC entry. They are at the same time, the result of manipulations of different nature and complexity.

In first place, I must cite the properties that identify the **absolute use** of the entry. In the uses examined, three possible cases of substructure exist, according to which the N1, the particle or the head verb can be missing:

· **Without N1**:

4. Eva decise di buttare giù la cornetta

(Eva decides to hang up the receiver)

[N1:= E] ←→*Eva decise di buttare giù*

(Eva decides to hang up)

· **Without particle**: I refer here to the optionality of the particle, which also in the non-compositional uses can have a pleonastic function. In this case it is indicated between brackets:

6. Bob getta (via) la sua vita dietro sogni impossibili

(*Bob throws (away) his life on impossible dreams)

[Part→ E] =: *Bob getta la sua vita dietro sogni impossibili*

(Bob throws his life on impossible dreams)

· **<u>Without verb</u>**: this is the case in which the verb can not occur. . See the example:

7. *Buttiamo dentro il ladro*

(We throw the thief inside)

[V→ E]=: *dentro il ladro!*

(Inside with the thief!)

In secondly for the transformational properties, I refer to the possibility of the entry to occur also in an intransitive sentence form, creating a correlationship of the type N_0VPart N_1←→ N_1VPart, known as a "**relationship of neutrality".**

Thirdy, I should highlight the manipulation of substitution and movement called "cliticisation", which is the possibility to represent the direct object in the form of the corresponding clitic (ppv=; *lo*).

An additional property of movement is the shift of position of the object (**object shift**) which allows me to monitor the continuous or discontinuous uses of the particle.

8. *<u>Butta dentro</u> la palla*

(Throw in the ball)

[object shift]=: *<u>butta</u> la palla <u>dentro</u>*

(Throw the ball in)

I then inserted the two **passive** sentence forms with which the entry could be in

transformational equivalence relation. These are the passive form that triggers the permutation between subject and object (passiv$_1$), and the passive form without agent and without permutation between subject and object (passio$_2$). The sentence forms associated with the two properties are respectively:

- Passiv$_1$= N$_1$essere Vpp da N$_0$
- Passia$_2$=: essereVpp N$_1$ ~~da N$_0$~~

The final manipulation property inserted in the matrix monitors **the insertion of** non-argumental **linguistic material** between the head verb and the particle.

In particular I tested the acceptability ofconstructions in which the V plus Particle sequence is interrupted by the adverb in *–mente*, like "*veramente*" (truly), "*velocamente*" (quickly) and similar.

6.4. Paraphrastic properties

With "paraphrastic properties" I account for the use of support verb sentences used to specify the relation between the operator and its arguments. Using the term "operator", as I have done until now, to identify the lexical entries composed of a verb + a specific locative particle is nevertheless incorrect. On the basis of several tests like the co-reference links between the N$_1$ and the subject, or the substitution of the entry with the support *avere-fare*, it was demonstrated that some uses did not behave as operators, but next to a predicative noun assumed the function of **syntagmatic support variants**.

Following are some examples:

9. Max porta avanti un discorso

(Max carries on a conversation)

Here, "*porta avanti*" (carry forward) has a parapharastic equivalence relationship with "*fare-tenere*" (make-hold), as in:

10. Max (fa+tiene) un discorso

Mac (makes+holds) a conversation

In the same way, the relationship between the operator-noun "*discorso*" and the subject *Max* is highlighted by:

11. Il discorso (di Max+ che Max fa)

(The conversation (of Max+that Max makes)

Entries of this type have been marked "+" in the matix under the property that signals the support use of the VPC, that is **VPart=: Vsup-ext.**

Finally, the property that accounts for the relationship between the entry and a support verb sentence is highlighted. An example is:

12. *Max <u>tira su</u> un palazzo*

    (Lit.*Max-pulls-up-a-building)

    (Max builds up a building)

←→ *Il palazzo è su*

    (The building is up)

Such link with a support verb sentence is indicated by the property N_0Part N_1←→ N_1 essere Part.

Below, I present the **list** of the properties used, following the the order with which they were inserted into the matrix.

1. N_0= : N *um*
2. N_0= : N *anim*

3. *N_0= : N -um*
4. *Prep N_2=: esempio*
5. *N_1=: N um*
6. *N_1=: N anim*
7. *N_1=: N -um*
8. *N_1=: N concreto*
9. *N_1=: N astratto*
10. *N_1=: N ristretto*
11. *N_1=: Che F*
12. *Senza N_1*
13. *Senza Particella*
14. *Senza verbo*
15. *Uso neutro*
16. *Uso supporto (VPart=: Vsup-ext)*
17. *N_o VPart N_1 ←→ N_1 essere Part*
18. *Ppv=:lo*
19. *Object shift*
20. *Passiva$_1$*
21. *Passiva$_2$*
22. *Inserzione di avverbio fra V e Part*

In the matrix, I also inserted some useful semantic information: the example of an instance of the direct object N_1 and any preposition complement PrepN_2. Finally, for each use, I identified the monorematic synonymous verb (or in its absence, an adequate paraphrase) and the corresponding English phrasal verb.

Please see the *Appendices* for the 9 tables of transitive and neutral VPCs created in this phase.

7. Classifying transitive VPCs: syntactic patterns

7.1 Absolute constructions

I claimed in the previous section that transitive and neutral VPCs can also fall in "absolute uses". In the case of long structure transitive constructions, this takes place by omitting the prepositional complement, as in the sentence:

1. *Maria De Filippi **tira su** gli ascolti del 50%*
   (Lit. *Maria-De-Filippi-pulls-up-the-listeners-by-50%)
   (Maria De Filippi **increases** her listeners by 50%)
   [Prep N_2→ E]=: *Maria De Filippi tira su gli ascolti*
   (Maria De Filippi increases her listeners)

2. *Hanno **fatto fuori** Prodi dal governo*
   (Lit. *They-made-out-Prodi-from-the-government)
   (They **kicked** Prodi **out** of government)
   [Prep N_2→ E]=:*Hanno fatto fuori Prodi*
   (They kicked Prodi out)

3. *La tesi **porta via** molto tempo a Daniela*
   (The thesis **carries away** a lot of time from Daniela)
   [Prep N_2→ E]=:*La tesi porta via molto tempo*
   (The these carries away a lot of time)

In some cases, the omission of the prepositional complement does not produce acceptable

results:

4. *Max **mette su** Ugo contro il fratello*

   (Lit.*Max-puts-up-Ugo-against-his-brother)

   (Max **sets** Ugo **against** his brother)

   [Prep N_2→ E]=:**Max mette su Ugo*

   (*Max sets Ugo against)

5. *Eva **tirò fuori** l'amica da quella situazione spiacevole*

   (Eva **pulled** her friend **out** of the unpleasant situation

   [Prep N_2→ E]=*: *Eva tirò fuori l'amica*

   (*Eva pulled her friend out)

What I want to highlight here is the possibility to omit the direct object, and, something that might put a few noses out of joint, omit the fixed parts. In the first case, the entry has been marked "+" in matrix the property "**without N1**". For example:

6. *Quando telefono e poi **butto giù** (E+ la cornetta) se non rispondi tu…*

   (When I phone and then hang up (E+the reciever) if you don't answer)

7. *Si passò l'indice fra le narici e iniziò a **Tirare su** (E+ la cocaina)*

   (He put his index finger to his nostrils and started to sniff up (E+cocaine))

8. *Max **dette fuori** (E + tutto quello che aveva mangiato) sul tavolo*

   (Max threw up (E+everything he had eaten) on the table)

By “omission of the fixed parts”, I mean the optionality of the particle (which is inserted in the brackets), as in:

9. *Eva **caccia (fuori)** una nuova moda*

   (Eva launches (*out) a new fashion)

10. *Max **butta (via)** il suo tempo in cose inutili*

    (*Max throws (away) his time on useless things)

Alternatively, I mean the omission of the head verb, as in the imperative-exhortative sentences:

10.

a. “***Fuori i soldi** dell’esproprio!”*

   (Lit.*“Money-out-of-the-expropriation”)

   (Give us the money for the expropriation)

b. ***Fuori** la verità!*

   (Out with the truth)

c. ***Fuori Prodi** dal Governo!*

   (Prodi out of Government)

These can be considered minimal sentences or “reductions” from:

11.

a. *(metti+caccia+tira+ dai..) fuori i soldi dell’esproprio*

   (*Put+*launch+*throw+give...) out the money from the expropriation

b. *(sputa+tira+butta..) fuori la verità*

   (spit+throw+throw) out the truth

c. *(facciamo + tagliamo) fuori Prodi dal governo*

(*we make+we cut) Prodi out of government

In the same way, with regard to the table of "*giù*", the following substructures (12) can be associated with more lexical entries, as those in (13):

12.

a. *Giù il governo*

(Down with the government)

b. *Giù la pillola*

(Down with the pill)

c. *Giù la porta*

(Down with the door)

d. *Giù l'asso*

(Down with the ace)

e. *Giù i prezzi*

(Prices down)

13.

a. *(butta+ metti) giù il governo*

((throw+put) down the government)

b. *(butta+ getta+ manda+tira)giù la pillola*

((throw+throw+send+throw) down the pill)

c. *(butta+ metti+tira) giù la porta*

((*throw+*put+*throw) down the door

d. *(butta+dai+metti) giù l'asso*

((throw+*give+put) down the ace

e. *(butta+ manda+porta+tira) giù i prezzi*

((throw+send+*carry+throw) down the prices)

This validates the hypothesis sustained in the previous chapter that there is some sort of "regularity" between the uses collected in the same table. This regularity is imputable to the particle more than to the combination as a whole its. The particle "*giù"* in particular carries the metaphorical meaning to the the sentence.

The particle when coupled with a verb base has the following fundamental metaphorical values:

1. "ABBATTERE (tear down), DEMOLIRE (demolish), DISTRUGGERE (destroy)", derived from the literal sense, that is, linked to the "directionality" downwards with which an erect object is placed into a horizontal position (e.g. *buttare giù un muro* (knock down a wall));
2. The metaphorical meaning of DIMINUIRE (decrease) by a certain value (e.g. *buttare giù i prezzi* (knock down the prices) or RIDURRE LA FORZA DI UN'OPPOSIZIONE (reduce the strength of an opponent) (e.g. *buttare giù il governo* (throw down the government)), CRITICARE (criticise), SMONTARE UN'IDEA (dismantle an idea), BOCCIARE (reject) (e.g. *quell'articolo buttò giù il regista* (that review took down the director);
3. A negative concept associates *giù* to TRISTEZZA (sadness): in fact, we can see the metaphor in Lackoff and Johnson's "CONTENTO E' SU. TRISTE E' GIÙ" (Happy is up. Sadness is down). So the particle can mean ABBATTERE PSICOLOGICAMENTE (destroy

pyschologically), DEMORALIZZARE (demoralise) (E.G. *il tuo comportamento mi butta giù* (your behaviour is bringing me down);

4. With reference to the direction of the path to the stomach, an extension of "giù" is INGOIARE (ingest), DEGLUTIRE (swallow) (e.g. *buttare giù un boccone* (swallow down a mouthful));
5. Also contains the concept of FISSARE (fix), SCRIVERE (write), METTERE NERO SU BIANCO (put it down in black and white), as in (*buttare+mettere+gettare) giù un appunto* ((jot+put+throw) down a note).

In the next sections I will enter into the detail of this semantic and syntactic power of particle.

At the moment I only note tha the absolute uses of VPCs (indicated in the matrix by the mean of the properties **without N1, without particle, without verb**) are not accepted in a uniform way by all the classes taken into account. In particular, the omission of the free and fixed elements is broadly accepted by the classes of V+*giù* (down), *V+su* (up), *V+fuori* (out), and *V+via* (away), while it is accepted by only a few uses of the classes *V+dentro* (in), and *V+dietro* (behind), and by none of the uses of the classes V+*avanti* (forward), *V+sotto* (under), and *V+indietro* (back).

7.2. Operator verbs

What I have just said about 10,11, 12, 13 led to note that the locative particle seems to combine always with the same head verb.

In particular, with regard to 33 different verbal bases that were collected in my tables, the most productive, that is, those falling in the most transitive and neutral compounds, were *buttare* (throw, 36 VPart), *mettere* (put, 30 VPart),and *tirare* (pull/throw, 38 VPart). In other words, around 50% of the VPCs classified here are formed by *buttare, mettere,* or *tirare*.

These realize the transitive sentence form N_0*VPart* N_1, which is definitionally associated with every class. However, it is possible to identify a correlationship between these and an intransitive sentence form of the type N_o *Vsup Part*. This sends back to another verbal use classified in the intransitive VPC table. Let's look at some more examples:

14. . *Il Senato buttò giù il governo*

(The Senate throws down the government)

←→14.a. *Il governo (va+è) giù*

(The government (goes+is) down)

15. *Eva mette avanti l'orologio di due ore*

(Eva puts forward her watch by two hours)

←→*15.a.L'orologio è avanti di due ore*

(The watch is forward by two hours)

16. *Ugo tirò su un palazzo*

(Ugo built up a building)

←→16.a.*il palazzo è su*

(The building is up)

The three verbs *buttare, mettere,* and *tirare* therefore behave as movement-causative operators. With their respective arguments, they apply to support verb structures of the type *No essere\andare Part*.

Because operators on elementary sentences, they leave the relationship contained in the original sentence unchanged,. In other words the sentences 14.a-15.a-16.a are contained respectively in the sentences 14, 15 and 16.

Additionally, sentences 14-15-16 have a paraphrastic relationship with the following factitive structures:

14.b. *Max fa che il governo sia giù*

(Max causes that the government goes down)

15.b. *Eva fa che l'orologio sia avanti di due ore*

(Eva causes that her watch is forward by two hours)

16.b. *Ugo fa che il palazzo sia su*

(Ugo causes that the building is up)

Additionaly, to Aall the sentences 14-16 a verb support paraphrase with *prima/dopo* (before/after) can be applied:

Prima (the process indicated by the verb): *il governo non (è + va) giù*

(the government (is+*goes) not down)

Dopo (the process indicated by the verb): *il governo è giù*

(the government is down)

Prima (the process indicated by the verb): *l'orologio non è avanti*

(*the watch is not forward)*

Dopo (the process indicated by the verb): *l'orologio è avanti*

(the watch is forward)

Prima (the process indicated by the verb): *il palazzo non è su*

(the building is not up)

The verbs *tagliare* (cut)*, mandare* (send)*, sbattere* (slam)*,* and *cacciare* (hunt) r*icacciare* (put again) behave in the same way in *tagliare fuori* (cut out)*, mandare giù* (send down)*, sbattere dentro* (shut in)*, ricacciare sotto* (put under), as in:

17. *Max <u>ha mandato giù</u> i costi azionari di molto*

(Max <u>sent down</u> the share costs by a lot)

←→ *I costi azionari <u>sono giù</u> di molto*

(The share costs <u>are down</u> by a lot)

18. *La società <u>tagliò fuori</u> la concorrenza dal mercato*

(The company <u>cuts out</u> the market competition)

←→ *La concorrenza <u>è fuori</u> dal mercato*

(The competition <u>is out</u> of the market)

19. *Il poliziotto <u>ha sbattuto dentro</u> il criminale*

(Lit.*The-police-<u>shut-in-</u>the-criminal)

(The police put the criminal in prison)

←→ *Il criminale <u>è dentro</u>*

(The criminal <u>is inside</u>)

20. *La squadra <u>ha ricacciato sotto</u> l'avversaria di due punti*

(Lit.*The-team-put-under-their-opponents-by-two-points)

(The team was two points up on their opponent)

←→ *L'avversaria (<u>è+va) sotto</u> di due punti*

ship(The opponent (is+goes) under by two points)

In the matrix, the property that signals the paraphrastic and transformational correlation of these entries with the form of intransitive support verb sentence , is **N_0VPart N_1←→ N_1esserePart**. This can be defined as a "cross-reference" property, since it refers for a given verbal entry, to another class, i.e. to another use of it.

7.3. Relation of neutrality

The table also included verbal uses that accept transitive and intransitive constructions, without them being considered autonomous uses. In other words, the relation of sense and form identifiable between the two possible structures led me to place them only in the transitive class. In the matrix, I marked them "+" for the transformational property labelled as a "neutral use". In particular, the expressions that exhibited what the literature calls a "**relationship of neutrality**" (Boons, Guillet and Leclere, 1976) or "causative alternation" (Levin, 1993) numbered around 29 uses, equal to 14% of the entries.

Let's look at some examples:

1. *Eva tiene su i figli fino a tardi*

(Eva keeps her children up until late)

←→ *I figli si tengono su fino a tardi*

(The children stay up until late)

2. *La squadra B chiama fuori la coppia avversaria*

(lit. *Team B calls out the opponent pair)

←→ *La coppia avversaria si chiama fuori*

(*The oppenent pair calls out)

3. *La prof mise sotto lo studente a studiare*

(Lit.*The-prof-puts-under-the-students-to-study)

(The prof pressures his students to study)

←→ *Lo studente si mise sotto a studiare*

(Lit.* The-students-put-themselves-under-to-study)

(The students buckle down to study)

From the examples, we can note that the object of the transitive sentence coincides with the subject of the pronominal intransitive sentence, so that between the two sentences there is a relative synonymous relationship, and a partially analogous meaning. The semantic and syntactic correspondence between the two structures is the formalised as follow:

N_0 VPart N_1 W ↔ N1 si VPart W

Now, let's observe the following sentence couple:

4. *I nemici fecero fuori Ugo*

(The enemies did away with Ugo)

←→ *Ugo si è fatto fuori*

(Ugo did away with himself)

In the transitive construction, the meaning is that of "to kill", and in the intransitive construction, the meaning is that of "to kill oneself, suicide".

It is nonetheless necessary to highlight that only two entries establish a non-oriented transformational correlation, of the type:

N_0 VPart N_1 ←→ N_1 VPart

That is, a paraphrastic relation between a transitive and "non-pronominal" intransitive structure. We can see this in *dare fuori* (put out) and *tirare avanti* (pull ahead), in the sentences:

5. *La pianta da fuori le rose*

(The plant puts out roses)

←→ *le rose danno fuori*

(*The roses put out)

6. *Jack tira avanti la famiglia con uno stipendio solo*

(Lit. *Jack-pulls-ahead-the-family-with-one-wage-only)

(Jack maintains the family on one wage only)

←→ *la famiglia <u>tira avanti</u> con uno stipendio solo*

(The family is maintained on one wage only)

Finally, one further use deserves to be noted, that of "*tirare fuori*" (pull out) in the following couple:

7. *Il giudice <u>tirò fuori</u> la verità all'imputato*

(The judge pulls out the truth from the accused)

←→ *l'imputato tirò fuori la verità*

(* The accused pulls out the truth)

Here, the relationship that is established is between the two transitive structures, and can be formalised as:

N_0VPart N_1 a N_2 ←→N_2 VPartN_1

7.4. VPCs as support verbs

On the basis of the notion of "support" [Gross (1978) Daladier (1979), EMDA (1981)] as an "auxiliary of the non-verbal predicate with a temporal-modal-aspectual function", I observed in the data that not all V plus Parts as a whole can be considered "operators" of the sentence. Instead, a certain number of them act as a support. Unlike more generic supports (*fare* (do/make)*, dare* (give)*, avere* (have)), these do not seem to be completely "empty" from a semantic point of view, but bring with themselves elements of meaning, carrying an analogous function of the so-called calls "**support extensions**" [(Gross 1981,1991), G.Gross (1987) and Giry-Schneider (1987) and for Italian De Bueris (1992) and Cicalese (1994)].

Obviously, the "extension" status of the V plus Part compound is determined by the co-occurring elements in the sentence, which means that the same compound can be considered as a "support extension" in the presence of a predicative noun, and as an operator if it selects its arguments by itself.

Let's take the following sentences:

1. *Nadia bevve troppo e **dette fuori** (E+ tutto) sul tavolo*

   (Lit. *Nadia-drank-too-much-and-gave-out-(E+everything)-on-the-table)

   (Nadia drank too much and threw up (E+everything) on the table)

2. *Max **dà fuori** il suo malessere per Ugo*

   (Max lets out his unease over Ugo)

3. *Bob **dà fuori** un grido di gioia per la vittoria del Napoli*

   (Bob lets out a yell of joy for Napoli's win)

From these, we see two different uses of *dare fuori:* that contained in 1, and that contained in 2 and 3.

In particular, in 3, *dare fuori* acts as a verbal operator which selects an edible N1, which represents an sub-categorised element and for this reason easily inferable. The absolute use (as I have also shown in paragraph 1) is therefore interpretable as an omission of a constant. Instead, the same possibility of a substructure via the omission of N_1 is not acceptable for *dare fuori* in sentences 2 and 3:

2.a **Max da fuori per Ugo*

(*Max lets out over Ugo)

3.a. **Max da fuori per la vittoria del Napoli*

(*Max lets out for Napoli's win)

This is due to the fact that in 2 and 3, the operator is not represented by the verb-particle compound, but respectively by the predicative nouns "*malessere*" and "*grido*". This is demonstrated by the mean of the following equivalent classes:

2.b. *Max (ha+mostra+nutre+da fuori) malessere per Ugo*

(Max has+displays+nourishes+lets out) unease over Ugo)

3.b. *Max (fa+da+prorompe in +da fuori) un grido di gioia per la vittoria del Napoli*

(Max (makes+gives+erupts in+lets out) a yell of joy for Napoli's win

Here, *dare fuori* plays the role of a "syntagmatic extension" of the generic support verb (**VPart= Vsup-ext**) by falling together with the classic one-word extensions (*mostrare, nutrire, prorompere*) into a "**supports network**".

Because the relationship between such elements can not be said to be oriented, that is, it does not go uni-directionally from a "zero support" to its "extensions", I believe it is more suitable, following a harrisian approach to transformational relations, to adopt the term "s**upport variant**", as has already been used by D'Agostino (1995).

Let's look at two other examples from the data:

4. *Ugo tira dietro insulti a Eva*

(Lit. *Ugo-throws-back-insults-at-Eva)

(Ugo hurls insults at Eva)

5. *Ugo tira dietro l'abito alle clienti*

(Lit. *Ugo-throws-back-the-clothes-to-the-clients)

(Ugo sells off the clothes to the clients)

In 4, the sequence *tirare dietro insulti* is substitutable with the verb *insultare* (insult), while in 5, *tirare dietro* is synonymous with "*svendere*" (sell off).

One of the ways of identifying the use of a verb as a support from the use of the same verb as

an operator is that a support verb can be omitted without affacting the argument structure. For example:

6. *Ugo tira dietro insulti a Eva*

←→ *Gli insulti (di Ugo+che Ugo fa) a Eva*

(The insults (of Ugo+that Ugo makes) at Eva)

7. Ugo tira dietro l'abito alle clienti

←→ **L'abito di Ugo alle clienti*

(*The clothes of Ugo to the clients)

An important property of support verbs is given by the co-reference relationship between the subject and the operator-noun. In fact, with regard to 6 and 7 the following expressions are inacceptable:

*6.a *Ugo tira dietro gli insulti di Max a Eva*

(*Ugo hurls Max's insults at Eva)

*7.a *Ugo tira dietro a Eva gli insulti di Max*

(*Ugo hurls at Eva Max's insults)

The noun "*insulti*" (hurls) in the sentence 6, retains a morphological derivation relationship (i.e. nominalisation) with the verb "*insultare*", as shown by the following "equivalence classes":

6.b Ugo insulta Eva

(Ugo insults Eva)

←→ *Ugo (fa+ tira+ tira dietro+lancia..) insulti a Eva*

(Ugo (*does+hurls+*hurls back+*throws) insults at Eva

As a consequence of this analysis "*tirare dietro*", when it is followed by a predicative noun (like *insulti, critiche* (criticize) and similar) behaves like a "**syntagmatic support verb variant**".

The same can be argued for some uses of *buttare giù* (throw down)*, buttare fuori* (throw out)*, mettere avanti* (put forward)*, mettere su* (put up)*, portare avanti* (carry on)*, tirare su* (pull up)*, tirare avanti* (pull ahead)*, tirare fuori* (pull out). The main variations of meaning that these carry with respect to the generic supports attain the level of *Aspect*[29]. In particular, I identified:

a) Inchoative variants

1. *Max <u>mette su</u> superbia*

   (Lit.*Max-puts-up-pride)

   (Max puts on air/ becomes proud)

←→ *Max (è superbo + ha la superbia*)

   (Max (is proud+has pride))

2. *Eva <u>tirò fuori</u> scuse*

   (Eva <u>pulled out</u> excuses)

←→ *Eva (addusse+ avanzò +trovò) scuse*

   (Eva (offered+advanced+found) excuses

←→ *Eva si scusò*

   (Eva excused herself)

[29] For a definition of the grammatical category of aspect, see Meillet (1965), Comrie, B.(1976), Bertinetto (1986, 1994) and Binnick, R. (2012). With regard to phrasal verbs see Bolinger (1971), Brinton (1985, 1988).

3. *Ugo tirò su una critica inutile*

(Lit. *Ugo-threw-up-a-useless-criticism)

(Ugo threw out a useless criticism)

←→ *Ugo (sollevò + fece) una critica inutile*

(Ugo (raises+makes) a useless criticism

4. *Bob butta avanti l'accusa di brogli*

(Bob puts forward an accusation of electoral fraud)

←→ *Bob (fa+ avanza) un'accusa di brogli*

(Bob (makes+advances) an accusation of electoral fraud)

←→ *Bob accusa di brogli*

(*Bob accuses of electoral fraud)

b) Egressive variants

1. *Mia sorella ha buttato giù tre chili*

My sister went down three kilos

←→ *Mia sorella ha perso tre chili*

(My sister has lost three kilos)

←→ *Mia sorella non ha più tre chili*

(*My sister no longer has three kilos)

2. *Il ragazzo buttò fuori la rabbia*

(The boy threw off his rage)

←→ *Il ragazzo si liberò dalla rabbia*

(The boy freed himself from his rage)

←→ *Il ragazzo non ha più la rabbia*

(The boy is no longer angry)

←→ *Il ragazzo ha (la+ molta) rabbia*

(The boy has (*the+much) rage)

←→ *Il ragazzo (si arrabbia+ è arrabbiato)*

(The boy (gets angry+is angry))

3. *Nello caccia via l'angoscia*

(Lit.*Nello-drives-away-his-distress)

(Nello gets rid of his distress)

←→ *Nello si libera dall'angoscia*

(Nello frees himself from distress)

←→ *Nello non ha più l'angoscia*

(Nello is no longer distressed)

←→ *Nello (ha l'angoscia+ è angosciato+si angoscia)*

(Nello (*has distress+is distressed+gets distressed)

c) Durative variants

1. *Lucia porta avanti un discorso*

(Lucia carries out a speech)

←→ *Lucia fa un discorso*

(Lucia makes a speech)

←→ *Lucia discute*

(Lucia debates)

2. *Max tira avanti le trattative di pace*

(Max <u>drives ahead</u> the peace talks)

←→ *Max conduce le trattative di pace*

(Max conducts the peace talks)

←→ *Max fa le trattative di pace*

(Max makes the peace talks)

8. Ambiguity of Italian VPCs

8.1 The problem

In this chapter, I offer a first attempt to resolve the ambiguity of "homonymous" compounds, i.e. VPCs presenting a high level of multiplication of entries, also called ambiguous (or "polysemic"). I have already discussed how it is possible to distinguish between the different uses of the same VPC "lemma" on the basis of the definitional structure it presents, i.e on the class it can be encoded. By the mean of this criterion a given usage can be seen as falling into a transitive or intransitive construction as well as in a long or short structure sentence.

The ambiguity that emerges from the data is nonetheless so much broad that it cannot be resolved only by the mean of these syntactical criteria. They do not seem to suffice. This evidence underlines the importance of a Lexicon-Grammar approach to VPCs since it allow for inserting both syntactic and semantic informations in linguistic data.

By quantifying the data (see APPENDIX 2), I noted that there are 213 transitive and neutral expressions, of which 143 are ambiguous. The ambiguity, in other words, involves 67% of the entries.

The Table 1 shows how this percentage is distributed among the classes: it is prevalently concentrated in the classes V+*giù, V+su, V+fuori* and V+*via*. These latter two contain together 125 ambiguous entries out of a total of 143 ambiguous entries. In other words, 89% of the total ambiguity involves the VPCs collected in the *giù, su, fuori* and *via* tables.

Class	**Total entries**	**Ambiguous entries**	**Percentage of ambiguous entries**
V+ giù	38	29	76%
V+ su	43	40	93%
V+fuori	47	39	82%
V+ via	22	17	77%

Table 1: Ambiguity involving theVPCs classes

Of these ambiguous expressions (i.e. 67%) over 41% involve just two or three homonyms, such as *portare avanti un progetto* (carry out a project, [=proceed]) vs. *portare avanti la famiglia* (lit.* carry-forward-the-family [=maintain]), whereas about 12% comprise from four

to five homonyms (like *buttare dentro la palla* (lit. throw-in-the-ball [=score), *buttare dentro l'aria* (lit. *throw-in-the-air [=breathe]), *buttare dentro la seconda* (lit.*throw-in-the-second) [=insert]), *buttare dentro il ladro* (throw inside the thief [=arrest]). Then over 19% have six or seven homonyms, as in the case of *fare fuori* (Table 2) and *tirare giù* (Table 3).

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	Esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi
+	+	+	fare	fuori	Il nemico	-	+	-	-	-	-	-	Uccidere\ farsi fuori=suicidarsi
+	-	-	fare	fuori	tutto il patrimonio	-	-	+	+	-	+	-	dilapidare
+	+	-	fare	fuori	La pasta,il vino	-	-	+	+	-	+	-	divorare
+	-	-	fare	fuori	una poltrona	-	-	+	+	-	-	-	disfarsi,buttare
+	-	-	fare	fuori	Prodi	dal governo	+	-	-	-	-	-	estromettere
+	-	-	fare	fuori	una donna	-	+	-	-	-	+	-	Sedurre, possedere (sett.)
+	-	-	fare	fuori	Il romanzo	-	-	+	+	-	+	-	Finire di leggere

Table 2: ambiguity involving the VPC *fare fuori*

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	esempio di N_1	Prep N_1	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi
+	+	-	tirare	giù	Un boccone	-	-	+	+	-	+	-	Ingoiare
+	+	+	tirare	giù	Un edificio	-	-	+	+	-	+	-	demolire
+	-	-	tirare	giù	Un lavoro	-	-	+	-	+	-	-	Eseguir in fretta, male
+	-	+	tirare	giù	L'ultima versione di Natscape	-	-	+	-	-	+	-	prelevare un file da un sistema remoto,scaricare
+	-	-	tirare	giù	due righe	-	-	+	+	-	+	+	prendere nota
+	-	+	tirare	giù	gli ascolti	del 20%	-	+	-	+	+	-	ridurre il valore
+	-	+	tirare	giù	Il sistema operativo	-	-	+	-	+	+	-	compiere l'azione di spegnimento

Table 3. ambiguity involving the VPC *tirare giù*

Finally, the remaining 28% of the ambiguity includes the verbs *mettere su*, which has 11 distinct meanings (Table 4), *tirare su*, which has 14 homonyms (Table 5) and *buttare giù*, which has 15 different meanings (Table 6):

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	Esempio di N1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi
+	-	-	mettere	su	Il caffè, L'acqua,la pasta, la pentola,il brodo	-	-	-	+	-	+	-	mettere sul fuoco
+	-	-	mettere	su	Ugo	contro il fratello	+	-	-	-	-	-	aizzare,istigare
+	-	-	mettere	su	superbia, rabbia	-	-	-	-	+	+	-	assumere
+	+	-	mettere	(su)	peso, carne, pancia,chili	-	-	+	-	-	+	-	ingrassare
+	-	-	mettere	su	Un negozio,uno spettacolo	-	-	+	-	+	+	-	Avviare,organizzare, allestire,iniziare
+	-	-	mettere	(su)	Un abito	-	-	+	+	-	+	-	indossare
+	-	-	mettere	su	Un articolo		-	+	+	-	+	-	Metter nero su bianco
+	-	-	mettere	su	una parete	-	-	+	+	-	+	-	costruire
+	-	-	mettere	su	La lavatrice	-	-	+	+	-	+	-	mettere in funzione
+	-	-	mettere	su	Casa	-	-	+	-	-	+	-	andar a vivere da soli
+	-	-	mettere	su	famiglia	-	+	-	-	+	+	-	sposarsi

Table 4 ambiguity involving the VPC *mettere su*

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	Esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi
+	-	+	tirare	su	una parete	-	-	+	+	-	+	-	costruire
+	-	-	tirare	su	Un numero	-	-	+	-	-	+	-	Estrarre tirare a sorte
+	-	-	tirare	su	I figli,la famiglia alcuni calciatori	-	+	-	-	-	-	-	Crescere,mantenere\ addestrare
+	+	-	tirare	su	Il cibo	-	-	+	+	-	+	-	vomitare
+	-	-	tirare	su	La donna anziana	-	+	-	-	-	-	-	aiutare a sollevarsi
+	+	+	tirare	su	Max, il morale di Max	-	+	-	-	-	-	-	Risollevare,ricaricare
+	-	-	tirare	su	gli ascolti	Di molto	-	+	-	+	+	-	aumentare
+	-	-	tirare	su	Un nuovo business, una band,una radio	-	+	+	-	-	+	-	avviare,allestire
+	+	-	tirare	(Su)	La cocaina	-	-	+	-	-	+	+	sniffare
+	-	-	tirare	su	soldi, un po' di soldi	-	-	+	+	-	+	-	guadagnare
+	-	+	tirare	su	Il server, il firewell	-	-	+	-	+	+	-	farlo ripartire
+	-	+	tirare	su	una questione,una critica,una polemica	-	-	+	-	+	+	+	Sollevare, tirare in ballo
+	-	+	tirare	su	Un pesce enorme,un'orata	-	-	+	+	-	+	-	pescare

Table 5: ambiguity involving the VPC *tirare su*

N_0=: Num	N_0=:Nanim	N_0=:N -um	Verbo	Particella	esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1 = :N concreto	N_1=: N astratto	N_1 = : N ristretto	N_1=: Che F	Parafrasi
+	+	+	buttare	giù	un palazzo	-	-	+	+	-	+	-	Demolire \ sfondare
+	-	-	buttare	giù	La cornetta	-	-	+	+	-	+	-	riagganciare
+	-	-	buttare	giù	una lettera, un poema	-	-	+	+	-	+	+	Abbozzare,scrivere frettolosamente
-	-	+	buttare	giù	Il malato	-	+	-	-	-	-	-	Stremare (N_0= la febbre)
+	-	+	buttare	giù	Max ,	-	+	-	-	-	-	-	deprimere
+	-	+	buttare	giù	la proposta	-	+	+	-	+	-	-	criticare,sminuire, bocciare
+	-	+	buttare	giù	Il governo	-	+	-	-	-	-	-	far cadere
+	+	-	buttare	giù	due chili,peso	-	-	+	+	-	+	-	Perdere\dimagrire
+	-	-	buttare	giù	I prezzi	del 20%	-	+	-	+	+	-	ridurre
+	-	-	buttare	giù	La notizia	-	?	+	-	+	-	+	accettare,sopportare
+	+	-	buttare	giù	Un boccone	-	-	+	+	-	+	-	Ingerire
+	-	+	buttare	(giù)	La pasta	-	-	+	+	-	+	-	mettere a cuocere
+	-	-	buttare	(giù)	La carta	-	-	+	+	-	+	-	Giocare
+	-	-	buttare	giù	Il sistema operativo	-	-	+	-	+	+	-	compiere l'azione di spegnimento
+	-	-	buttare	giù	Il driver	-	-	+	-	+	+	-	scaricare, fare un download

Table 6: ambiguity involving the VPC *buttare giù*

The tables show that VPCs assume a specific idiomatic meaning on the basis of the argument that follows the particle. In other words, as also suggested by Machonis (2008), the differences in meanings are determined by the nature of argument in the object position: this evidence allowed me to include in the Lexicon-Grammar tables an example of N_1 immediately on the right of the VPC sequence.

As a consequence, considering the particular co-occurrence relationship established between the VPC and the N_1, I believe that the **ambiguity** can only be resolved through a very detailed specification of the selectional restrictions operating on the object.

In order to perfom that, I provided a distributional analysis of each entry, where by "**distribution**" I mean the typology of the nominal forms that can co-occur with the same likelihood of co-occurrence with that entry, in particular, in the N_1 position.

I initially used only the properties *N1 =: N um, N1=: N-um* (N1=: N human, N1=: N non-human). Then, following Gross (1975), I subdivided the non-human objects into two

hyperclasses: *N1=:N concreto* and *N1=:N astratto* (i.e. N1=: N concrete, N1=: N abstract). This type of information allowed me to mitigate the ambiguity of just a small number of polysemic predicates, mostly those with few homonyms, like *mettere sotto.*

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	Esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	Parafrasi	Iperclasse
+	-	+	mettere	sotto	Un cane	-	+	+	+	-	-	investire	umano, non umano concreto
+	-	-	mettere	sotto	Lo studente	A lavorare	+	-	-	-	-	pressare	umano

Table 8: disambiguation of the VPC *mettere sotto*

I have used the expression "mitigate the ambiguity" because a certain amount of "doubt" still persist, as in the sentence:

(1) *La prof mise sotto lo studente*

(The prof puts the students under)

This can be disambiguated only within a broader sentence context, as in:

(1.a) *Poiché correva con l'auto, la prof mise sotto lo studente* [= investire]

(Since he was speeding in his car, the prof ran over his students) [=run over]

(1.b) *Durante l'esame la prof mise sotto lo studente* [=pressare, far lavorare]

(During the exam the prof put his students under pressure) [=pressure, make work]

In a second phase, I additionally inserted the property *N_1=: N ristretto* (N1=: N restricted) on the basis of the previous consideration that idiomatic VPCs tend to combine only with determinate typologies of nominal arguments, i.e. they operate a strong restriction on the direct object. In other words, once I had examined the possibility to select an *N_1 abstract* or *concrete*, I verified if the entry indistinctly accepted any member of the above-mentioned *hyperclasse*s, or if, among all the possible concrete or abstract arguments, the circle narrows

to just a few co-occurrences.

In the following chapter I will show how the specification of the *N1=:restricted* property allowed me to mitigate the ambiguity involving the lemmata *mettere su* and *buttare giù*.

8.2. A Lexicon-Grammar Disambiguation Model

Gaston Gross (1994, 2004) and other researchers at LLI (Le Pesant and Mathieu-Colas, 1998) have previously inserted semantic factors, or "object classes" into their linguistic data. Similarly, I used more refined *semantic classes* compared with the general hyperclasses or "traits" *N1=:non umano concreto* (non-human concrete) and *N1=: non umano astratto* (non-human abstract), to catalogue the VPCs arguments. These classes represent in other words a specification or refinement of the most generic property *N1 =: N ristretto*.

The semantic classes identified are the following:

1. < *cibo*> (food)
2. <*attività*> (activity)
3. <*testi*> (texts)
4. <*peso*> (weight)
5. <*costruzioni*> (buildings)
6. < *coalizione politica*> (political coalition)
7. <*carte da gioco*> (game cards)
8. <*droga*> (drugs)
9. < *soldi*> (money)
10. <*sentimenti*> (sentiment)
11. <*apparecchi telefonici*> (telephone devices)
12. <*elettrodomestici*> (household appliances)
13. <*software*> (software)
14. <*orologi*> (clocks/watches)
15. <*indumenta*> (clothing)

16. <*valori*> *(*value, e.g.. price, temperature, shares...)

These were added to the traditional hyperclasses:

- *umano* (human)
- *non umano concreto* (non-human concrete)
- *non umano astratto* (non-human abstract)

These allowed me to alleviate the ambiguity of the entries with a lot of meanings, like *mettere su* and *buttare giù*. This descriptive approach has an interesting application in NLP (Natural Language Processing) since it allows for the automatic recognition in a text of the meaning of these polysemic VPCs entries.

Let's look now at the VPC "*mettere su*" (put up), which falls into 11 different uses. However, only one of these selects for a human argument, together with an obligatory prepositional complement (non-omissable) introduced by "*contro*" (against):

2. *Ugo **mette su** Max contro il fratello* [= aizzare, istigare]

   (Ugo **sets** Max **against** his brother [=incite, instigate])

This minimal sentence is in fact easily recognisable.

Instead, there are eight uses selecting for a N_1 *non human*, additionally catalogable into N_1= *:N concrete* (five uses) and N_1=*: abstract* (three uses):

3. *Mettere su N* (with N_1= *concreto*)

   a. *Nadia mette su <u>un abito</u>*

   (Nadia <u>puts on</u> a dress)

   b. *Fabio mette su <u>un articolo</u>*

   (Fabio <u>whips up</u> an article)

c. *Lello mette su una parete*

(Lello puts up a wall)

d. *La mamma mette su la lavatrice*

(The mother puts on the washing machine)

e. *Eva ha messo su il caffè*

(Eva put on the coffee)

All the sentences 3.a-3.e select for non-human arguments of concrete type, with a "+" in the matrix under the property N_1*=: N ristretto*, because they require specific classes of objects, which are *indumenti* (clothing) in 3.a*, testi* (texts) in 3.b*, costruzioni* (buildings) in 3.c*, elettrodomestici* (household appliances) in 3.d, and *cibo* (food) in 3.e.

Let's look now at:

3. *Mettere su N* (with N_1 *=abstract)*

a. *Bob ha messo su un ristorante*

(Bob set up a restaurant)

b. *Lia ha messo su superbia*

(Lia put on airs)

c. *Eva ha messo su due chili*

(Eva put on two kilos)

Again, in these sentences, the value of *mettere su* depends on the specific selected object N_1:

the same linguistic form means:

(i) "organise" when it selects for a noun having to do with activity (*negozio* (shop)*, ristorante* (restaurant)*, compagnia teatrale* (theatre company), etc.);

(i) *assumere* ("take on") closed to an N_1 falling in the class of passions or sentiments;

(iii) *ingrassare* ("grow fat") when it co-occurs with nouns indicating weight, such as *chili* (kilos), *pancia* (gut), *carne* (meat)).

With regard to the objects classes that can be used in sentences 3a, 3.b and 3.c, the specific occurrences *ristorante, superbia, due chili* are in the semantic **hyponym-hypernym** semantic relashionship.

The following table presents the disambiguation of *mettere dentro* by the mean of the *semantic classes* inserted in the matrix to specify the nature of the N_1:

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	Esempio di N1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi	Classi semantiche
+	-	-	mettere	su	Il caffè, L'acqua,la pasta, la pentola,il brodo	-	-	-	+	-	+	-	mettere sul fuoco	Cibo
+	-	-	mettere	su	Ugo	contro il fratello	+	-	-	-	-	-	aizzare,istigare	-
+	-	-	mettere	su	superbia, rabbia	-	-	-	-	+	+	-	assumere	sentimenti
+	+	-	mettere	(su)	peso, carne, pancia,chili	-	-	+	-	-	+	-	ingrassare	peso
+	-	-	mettere	su	Un negozio,uno spettacolo	-	-	+	-	+	+	-	Avviare,organizzare, allestire,iniziare	attività
+	-	-	mettere	(su)	Un abito	-	-	+	+	-	+	-	indossare	indumenti
+	-	-	mettere	su	Un articolo		-	+	+	-	+	-	Metter nero su bianco	scritti
+	-	-	mettere	su	una parete	-	-	+	+	-	+	-	costruire	costruzioni
+	-	-	mettere	su	La lavatrice	-	-	+	+	-	+	-	mettere in funzione	apparecchi
+	-	-	mettere	su	Casa	-	-	+	-	-	+	-	andar a vivere da soli	?
+	-	-	mettere	su	famiglia	-	-	-	-	+	+	-	sposarsi	?

Table 9: disambiguation of the VPC *mettere su*

In the sentences 3.b. (*mettere su superbia*) and 3.c (*mettere su due chilli*), the lexical restrictions on the object are so strong to create a type of combinations very similar to those traditionally defined in literature "**collocations**" or "**restricted sentences**". This is clearer by observing the following sentences:

4. *Nunzio ha messo su casa*

   (Nunzio set up house)

5. *Bob <u>mette su famiglia</u>*

(Bob starts a family)

In these examples, the fixedness of the compound is joined by the total or partial fixedness of the argument, which leads me to claim that the more frozen the expressionis, the more restricted the lexical selection is. I argue that 4 and 5 appear as clear examples of a **semi-idioms**. Now let's apply the same disambiguation procedure to the most polysemantic VPC that came out of the data: *buttare giù* (throw down) by adding into the previous Table 6 the most appropriate semantic classes in which to catalogue each "restricted" object. This is displayed in the following new table:

N_0=: Num	N_0=:Nanim	N_0=:N -um	Verbo	Particella	esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	Parafrasi	Classi semantiche
+	+	+	buttare	giù	un palazzo	-	-	+	+	-	+	-	Demolire \ sfondare	costruzioni
+	-	-	buttare	giù	La cornetta	-	-	+	+	-	+	-	riagganciare	apparecchi
+	-	-	buttare	giù	una lettera, un poema	-	-	+	+	-	+	+	Abbozzare,scrivere frettolosamente	scritti
-	-	+	buttare	giù	Il malato	-	+	-	-	-	-	-	Stremare (N_0= la febbre)	-
+	-	+	buttare	giù	Max ,	-	+	-	-	-	-	-	deprimere	-
+	-	+	buttare	giù	la proposta	-	+	+	-	+	-	-	criticare,sminuire, bocciare	-
+	-	+	buttare	giù	Il governo	-	+	-	-	-	-	-	far cadere	politica
+	+	-	buttare	giù	due chili,peso	-	-	+	+	-	+	-	Perdere\dimagrire	peso
+	-	-	buttare	giù	I prezzi	del 20%	-	+	-	+	+	-	ridurre	valori
+	-	-	buttare	giù	La notizia	-	?	+	-	+	-	+	accettare,sopportare	-
+	+	-	buttare	giù	Un boccone	-	-	+	+	-	+	-	Ingerire	cibo
+	-	+	buttare	(giù)	La pasta	-	-	+	+	-	+	-	mettere a cuocere	cibo
+	-	-	buttare	(giù)	La carta	-	-	+	+	-	+	-	Giocare	carte da gioco
+	-	-	buttare	giù	Il sistema operativo	-	-	+	-	+	+	-	compiere l'azione di spegnimento	software
+	-	-	buttare	giù	Il driver	-	-	+	-	+	+	-	scaricare, fare un download	software

Table 10. Disambiguation of the VPC *buttare giù*

As we can see from this table, only three uses of *buttare giù* select for a human N_1; seven select for an *N_1=: N concreto* and the other five select for an *N_1=: N astratto*. Let's considere now the three following sentences:

6. *Alex buttò giù un palazzo*

   (Alex knocked down a building)

7. *Eva buttò giù la cornetta*

   (Eva hung up the reciever)

8. *Bob buttò giù un boccone*

   (Bob gulped down a mouthful)

Here the only indicatification of the feature [+ concrete] in which to label the object does not suffice to distinguish the three meanings of the same verb. It is necessary to indicate that in the first case, N_1 is part of a restricted class of nouns with the faculty of being knocked down or demolished, which I have called <buildings>. In the second case N_1 is part of a smaller list of nouns, i. *la cornetta* (receiver)*, il cellulare* (cell phone)*, il telefono* (telephone) called <telephone devices> whose members can be "hung up" . Finally, in 8, the N_1 is part of a class of elements that are edible, such as solid or liquids, which I have labelled as <food>. Despite this procedure, this last meaning of *buttare giù* can be confused with that paraphrasible with "*mettere a cuocere"* (put on to cook), which can also selects for an N_1 *cibo* (see Table 10). This can be seen in a sentence like:

9. *Bob **butta giù** la pasta*

Here , the two possible interpretations that can be associated to it are:

A= *mangiare, ingoiare* (eat, swallow)

B= *mettere a cuocere* (put on to cook)

Therefore, despite the use of the semantic class "food", the ambiguity persists.[30]

It is possible to refine the process by further restricting the N_1 arguments labeled "food" which could co-occur in the use B, and which make up a list composed of just a few members, like *la pasta* (pasta), *le verdure* (vegetables), *il sale* (salt), which all have the same faculty of being "*buttati in acqua bollente* (thrown into boiling water). This helps us to recognise without error that a sentence such as *Bob butta giù un gelato* (Bob gulps down an ice-cream) is only attributable to the meaning A.

To disambiguite usage A and B, I would also propose to expand the distributional restriction also of the subject (which is also inserted in the matrix). As matter of cat when *buttare giù* has the meaning of "eat", it accepts an animated subject beyond an N_0 human (e.g. *il mio cane butta giù solo croccanti di marca* (My dog only eats brand-name dog biscuits), while when it occurs with the meaning of *cucinare* ("put on to cook") can only select a human subject.

8.3. A continuum from frozen to free VPCs

There are some cases in which the verb-particle combination, together with the complement, is undeniably fixed or idiomatic, because only one or two complements are possible, as in:

1. *Tirar fuori le unghie+ gli artigli* [= mostrare aggressività]
   (Get out your *nails+claws) [=display aggressiveness]

2. *Tirare giù le madonne+ i santi* [= imprecare, bestemmiare]
   (Lit.*Pull-down-the-madonna-and-the-saints) [=blaspheme, curse]

3. *Mettere giù la maschera* [= rivelarsi per come si è]
   (Take off the mask) [=reveal one's true nature]

[30] In the meaning of "*mettere sul fuoco*" (i.e. "*iniziare a cuocere*") the particle in *buttare giù* is merely emphatic. This use in fact accepts the transformational property which reveals the absolute use of the particle, i.e. *Part=E*.

These sentences have an argumental structure of the type of **N_0V Part N_1**, with **N_1=: C_1** and are not included in the tables, because they require a separate treatment and a deeper study.[31]

Instead, my research highlighted how VPCs of the idiomatic type can select for an N_1 that are members of specific semantic classes, whose sizes are therefore variable.

There are in fact uses which can only co-occur with a limited number of members, and others which operate a weaker restriction on the arguments. Follow you can see how the distributional selection of N_1 gradually expands in each group of homonymous uses:

4. ***Mettere su*** **(lit. put-up):**

   a. *Mettere su casa*

   (set up house)

   b. *Mettere su famiglia*

   (start a family)

   c. *Mettere su (peso+chili+pancia)*

   (put on (weight+kilos+a gut))

   d. *Mette su (un negozio+ una società+ un team+ uno spettacolo+un blog…)*

   (Set up (a shop+a company+a team+a show+a blog+…))

[31] There are numerous examples in the data in which the particle acts on an idiomatic sentences already crystalised, carrying just an "emphasis" mark. In cases like this the particle is therefore not constitutive of the fixed sentence and the dictionary often signals this between brackets, as in:

Sputar (fuori) il rospo!

(Lit.*Spit (out) the toad!)

(Spit it out!)

Cavar (fuori) un ragno dal buco

(Dig (out) a spider from the hole)

Buttare (via) il bambino con l'acqua sporca

(Throw (out) the baby with the bath water)

5. ***Portare avanti*** **(carry on)**:

a. *Portare avanti (la casa+ la famiglia+ la baracca)*

(Maintain (the house+the family+the shack))

b. *Porta avanti (un progetto+un piano+ un'idea+un'indagine+una gravidanza+…)*

c. (Take on (a project+a plan+an idea+an investigation+*a pregnancy+...))

6. ***Mettere giù*** **(put down)**:

a. *Mettere giù (il partito+il governo)*

(Bring down (the party+the government))

b. *Mettere giù (un muro+la porta+un palazzo+un albero+…)*

(Knock down (a wall+the door+a building+a tree+...))

7. ***Tirare fuori*** **(Throw/pull out):**

a. *Tirare fuori (le palle+gli attributi)*

(Bring out (one's balls+one's talents))

b. *Tirare fuori (una sceneggiatura+una teoria+ una moda+ …….)*

(Pull out (a scene+a theory+a fashion+...))

8. ***Mettere avanti***i (**put forward**):

a. *Mettere avanti (la lavatrice+la lavastoviglie)*

(Put on (the washing machine+the dishwasher))

b. *Mettere avanti (gli interessi personali+il candidato preselto+ il fatto che...*)

(Put ahead (personal interests+the preselected candidate+the fact that+...))

The idiomatic VPcs can therefore exercise such a strong "restricted" (if not actually unique) selection on their arguments to be interpreted in some cases as **semi-idioms** such as:

9. *buttare via un'occasione*

(throw away an opportunity)

10. *mettere su casa*

(set up house)

11. *portare avanti la baracca*

(Lit.*maintain-the-shack, meaning "keep things going"))

The more blocked an expression is, the easier it is to define semantic classes containing few objects, while the freer or more compositional the V plus Part sequence is, the vaguer the information needed to disambiguate it is like

12. *buttare (via) un abito vecchio*

(throw (away) an old dress)).

Some entries, like the latter, have been inserted in the idiomatic constructions family, but it easy to observe that they share some common features with compositional constructions: the possible occurrance without particle (13) and the ability to select a variety of complements (14):

13. *buttare un abito vecchio*

14. *buttare via (un abito vecchio + un libro +la macchina +...)*

The uses in which the particle preserves its original locative value and acts as a "transparent metaphor" display a strong freedom in selection rules, as in *mettere sotto* (put under) in the meaning of "run over". This use has an extended class of objects which includes *N umani* (N human), *N animati* (N animated) and *N concreti* (N concrete), as in:

15. *Il tram <u>mise sotto</u> (un bambino+ + un cane + una bici)*

(The tram ran over (a child+a dog+a bicycle))

Another example of freedom in selection is *portare via* with the meaning "take away", as in:

16. *Max portò via* (*un oggetto+ un ricordo+ il figlio*) *alla madre*

(Max took away (an object+a memento+the son) from the mother)

This differences underlines the importance of a Lexicon-Grammar approach to VPCs, because, starting from the assumption that the minimum unit of meaning is the sentence and not a single lemma, I have inserted each verb-particle lemma into all of its possible sentence structures, in order to relate it with the other elements of the sentence. From these relationships, the strict dependence between the VPC and its object emerged.

In particular, the possible expressions constructed with VPCs can be positioned along a continuum, represented by:

1) completely idiomatic sentences (e.g. *tirar fuori le unghie* (get out one's claws));

2) sentences with a strongly restricted distribution, which I have also called collocations or **semi-idioms** (e.g. *metter su famiglia* (start a family));[32]

3) restricted distribution sentences, in which the argument falls into broader semantic classes than those that characterise the "collocations" (2) and which have a hyponomic-hypernomic relationship with the noun definitionally associated to the semantic class (e.g. *mettere su negozio* (set up a shop) with N_1=: *attività* (activity));

4) sentences with freer distribution compared to those above, in which the argument can vary and can be identified by the mega-features [+human] [-human] [+concrete] [+abstract] (as in the example *mettere via i giocattoli vecchi*+*gli abiti*+… (put away

[32] In the next section I put togheter the type 1) and 2) and I will regard both of them *frozen.*

the old toys+the clothes+...));

5) free sentences, in which the VPC, also called compositional, allows for changes in the spatial relationship between the arguments, and it does not exercise particular restrictions of selection on it (as in *Eva mette giù la borsa dalla mensola* (Eva puts her bag down from the shelf)).

To illustrate the graduality of the concept of selection restrictions characterising VPCs, I present the following table:

TYPE OF SENTENCE	TYPE OF V+PART COMPOSITION	N1 TYPE	EXAMPLE
Idiomatic expression	Non-compositional	Blocked	*Tirare fuori le unghie* (Get out one's claws)
Semi-idiom or "collocation"	Non-compositional	Strongly restricted	*Metter su casa* (Set up house)
Restricted distribution expression	Non-compositional	Medium restricted	*Buttare giù un palazzo* (Knock down a building)
Semi-free expression	Non-compositional	Not restricted	*Mettere sotto una bici* (Run over a bicycle)
Free expression	Compositional	Completely free	*Mettere giù la borsa dalla mensola* (Put down the bag from the shelf)

Tabella 11: a "continuum" between the VPCs

The idiomatic VPCs – which represent the object of my study – are part of the sentence forms highlighted in grey, that is in an intermediate position between the pole of greatest idiomaticity and fixedness (idiomatic expressions) and the pole of greatest freedom of selection, where there are "compositional VPCs".

There is a directly proportional relationship between the semantic cohesion and the syntactic cohesion: the more idiomatic the compound, the poorer it reacts to the separability of the particle from the verb. Scanning the examples in the table from top to bottom, one can see

how the acceptability of the transformations increases:

1. object shift

a. **Ugo tira le unghie fuori*

(Ugo gets his claws out)

b. **Eva mette casa su*

(*Eva sets house up)

c. *Bob ha buttato il palazzo giù*

(Bob knocked the building down)

d. *Il treno ha messo una bici sotto*

(The train ran a bicycle over)

e. *La mamma mette la borsa giù dalla mensola*

(The mother put the bag down from the shelf)

2. *passiva*$_1$ (passive$_1$)

a. ** Le unghie sono state tirate fuori da Ugo*

(*The claws were gotten out by Ugo)

b. ** Casa è stata messa su da Eva*

(The house was set up by Eva)

c. *Il palazzo è stato buttato giù da Bob*

(The building was knocked down by Bob)

d. *Una bici è stata messa sotto da un tram*

(A bicycle was run over by a tram)

e. *La borsa è stata messa giù dalla mensola dalla mamma*

(The bag was put down from the shelf by the mother)

The adoption of a Lexicon-Grammar approach required me to test each transformational property of all the entries collected, to avoid false generalisations. The results of this operation revealed the unpredictability which which a sentence form with separate components , i.e. *object shift*, can be associated with a VPC, as in (16):

16. *Bossi ha messo giù il partito*

(Bossi put together the party)

←→ **Bossi ha messo il partito giù*

(Bossi put the party together)

As matter of fact, in another VPCs, despite the strong restrictions on theobject, it is still possible to apply the same manipulation:

17. *Luca si arrabbiò durante la chiamata e mise giù il telefono*

(Luca got angry during the call and put down the phone)

←→*Luca si arrabbiò durante la chiamata e mise il telefono giù*

(Luca got angry during the call and put the phone down)

However, a sort of regularity in the behaviour of these idiomatic entries can be found. I state that when the particle preserves its locative-directional status (and therefore forms a "transparent" metaphor) the **object shift** is accepted, as in the examples:

18. Il giocatore ha messo dentro la palla

(*The player got in the ball)

←→*Il giocatore ha messo la palla dentro*

(The play got the ball in)

19. La mamma ha messo avanti la lavatrice

(The mother put on the washing machine)

←→*La mamma ha messo la lavatrice avanti*

(The mother put the washing machine on)

20. Eva si porta dietro il fratellino

(Lit.*Eva-carries-behind-her-brother)

(Eva brings along her brother)

←→*Eva si porta il fratellino dietro*

(Eva brings her brother along)

21. Anna si tira su i capelli

(Anna puts up her hair)

←→*Anna si tira i capelli su*

(Anna puts her hair up)

Otherwise, when the particle carries a figurative value, it is linked more strongly to the verb,

creating a non-separable lexical unit:

22. *Il lavoro porta via molto tempo a Eva*

(The work carries away much time from Eva)

←→**il lavoro porta molto tempo via a Eva*

(The work carries much time away from Eva)

23. *Ugo tira avanti le trattative*

(Ugo drives ahead the negotiations)

←→**Ugo tira le trattative avanti*

(Ugo drives the negotiations ahead)

24. *Lia mise su tre chilli*

(Lisa put on three kilos)

←→**Lia mise tre chili su*

(Lisa put three kilos on)

On the basis of the dataset classified until now (i.e. 213 transitive VPCs uses in 9 distinct LG tables, see APPENDIX 2), the object shift is fully accepted by 18% of the idiomatic VPCs.

The syntactic cohesion of idiomatic uses will be partly refuted in the next section where thanks to a novel particle-centred approach and predication theory a new syntactic typology of idiomatic VPCs will be outlined.

9. Evidence from Data: LIP Corpus Analysis

In this chapter I aim at showing that VPCs exist in Italian Spoken Language.[33] I will describe - from the quantitative and qualitative point of view - compositional and idiomatic VPCs extracted from the LIP Corpus (the most important spoken corpus, i.e. 500.000 tokens) and I will propose a *Polysemy Representation Model* based on the Lexicon-Grammar approach (M. Gross, 1991). The analysis and the classifications pointed out so far will be projected on 'real' data. Finally I will describe two main types of VPCs identified in the corpus, i.e. operators and supports.

9.1. Preliminary remarks

The starting point of the research in this section is represented by the theoretical issues provided in the previous section, where I stressed the need to analyse Verb-Particle constructions within the Lexicon-Grammar approach. This approach allowed me to replace the abstract notion of phrasal "verb" (cf. syntagmatic verb) with the more useful notion of phrasal verb "use" (cf. syntagmatic verbal use). This method (called so far in Lexicon-Grammar terms "splitting of entries") allowed me to identify two main families of VPCs in Italian language: compositional verb-particle uses and idiomatic verb-particl uses. At a semantic level, the first are characterised by the fact that the meaning of the whole is the function of the meaning of the two parts (V plus Part), as in the sentence:

(1) *Ugo **viene fuori** dalla stanza*

(Ugo comes out of the room)

Here, *viene fuori* (come out) is associated with the literal interpretation of *esce* (exit), because the particle preserves it locative/directional status. In the idiomatic uses however, the meaning of the V+Part is not the sum of the meaning of its parts, as in the sentence:

(2)

*Ultimamente è **venuto fuori** uno splendido romanzo*

[33] See also Iacobini (2007)

(Recently, a wonderful novel **came out**)

Here, *venire fuori* (come out) has assumed a metaphorical meaning, in fact it can be paraphrased with "to be published". From the distributional point of view, the compositional uses present a greater freedom in selecting arguments, as in the use of *venire fuori* in (1):

(1.1)

(Ugo + il cane + l'acqua) ***viene fuori*** *dalla stanza*

((Ugo+the dog+the water) **comes out** of the room

In 1.1, in the subject position it is possible to find human subjects (Ugo), animate subjects (the dog), or inanimate (the water). The idiomatic uses however exercise a greater restriction of selection on the arguments, as is demonstated in example (2), in which the nominal element in the subject position (*romanzo, "*novel") is part of a circumscribed class of members (like article, book, and others), which are all hyponyms with respect to the hypernym "publication":

(2.1)

Ultimamente u ***venuto fuori*** *uno splendido (romanzo + libro+ articolo)*

(Recently a wonderful (novel+book+article) **came out**)

The two uses of *venire fuori* in (1) and (2) can be differentiated also in pure "valency" terms, because they make up two different elementary sentences (or minimum sentences). Use (1) realizes the sentence structure:

N_0 V Part Loc N_1

in which N_0 represents the argument in subject position, *VPart* is the VPC *venire fuori* and *Loc* N_1 is the locative *dalla stanza*. The locative complement can also not be realised "in surface", as in the following absolute use (or sub-structure):

(1.2)

(Ugo + il cane + l'acqua) ***viene fuori***

(Ugo + the dog + the water) **comes out**

The idiomatic use of *venire fuori* (2) instead falls into an argumental structure of the type **N_0**

V Part. This is not a sub-structure like (1.2), but rather the minimum sentence that saturates all the argument positions.

9.2. Extracting VPCs from the LIP corpus

In the following chapters I will describe the results of a research conducted on the LIP corpus (the most important italian corpus of spoken language, i.e. 500.000 tokens). The aim of the following chapters is of empirically verifying the presence of both the macro-families of syntagmatic uses in spoken Italian. I will also provide the frequency distribution of the compositional and idiomatic constructions and I will illustrate how the **polysemy** of the VPCs in the LIP is deployed. Finally, I will demonstrate how the Lexicon-Grammar, which offers the possibility to insert syntactic and semantic information into linguisticdata, represents a valid instrument of analysis and disambiguation of the polysemic VPCs.

9.2.1 The computational procedure

The quantitative and qualitative considerations presented in this work are based on a corpus of around 157 syntagmatic verbs (see the Appendices) extracted by direct interrogation of the search engine inserted into the BADIP (*Banca data del LIP*) and freely consultable online. The units of analysis were all the lemmata and verbal uses followed by any of the following 21 locative particles:

(a)

> *Accanto* (next to), *addosso* (on), *appresso* (next to), *attorno* (around), *avanti* (foward), *contro* (against), *dentro* (in), *dietro* (behind), *fuori* (out), *giù* (down), *incontro* (towards), *intorno* (around), *indietro* (back), *insieme* (together), *lontano* (far), *oltre* (beyond), *sopra* (above), *sotto* (under), *su* (up), *via* (away), *vicino* (near).

The type of particle that can co-occur to the right of a head verb represented the **structural criterion** with which the lemmata and the lexical uses were grouped into as many as 21 classes (see Table 2). In calculating the type and the tokens of each lemma and then usage, I

considered the occurrence of both continuous and discontinuous VPcs. The "regular expressions" (or *queries*) used to search on the BADIP were the following:

1. [.V. accanto] = to identify for example all the continuous occurrences of "V+accanto", as in the example: *non ci **sarà accanto** a me l'amico* [FE18];

   (There will not **be** my friend **next to** me)

2. [.V % accanto] = to identify all the discontinuous occurrences of "V+accanto", as in the example: *i' **sto** semp' **accanto** a te* [NE91].
   (I **am** always **there** for you)

9.3. Results of the analysis

From the quantification of the data, I found that the number of VPC lemmata (in terms of type) was 157, while the total registered occurrences were 714 (in terms of tokens). The number of different lexical uses was equal to 248, which were distributed over around 107 different compositional constructions (43%) and 141 different idiomatic constructions (57%). Table 1 shows an interesting result of the research:the idiomatic particle uses do not only exist in the LIP, but they are also quantititaviely more numerous and frequent than the locative (or compositional) uses.

V+ PART		**Usi Composiz**	**Usi idiomatici**	Tot. Usi (composiz.+idiom)
	Usi diversi	107 (43%)	141 (57%)	248
	Frequenza	333 (47%)	381 (53%)	714 (*tokens*)

Table 1: compositional uses vs. idiomatic uses (total data from the LIP)

In statistical terms, however, the difference between the two typologies of uses can not be said to be relevant: the frequency distribution they manifestly is similar. In Table 1 in fact, the total data of the research is presented (obtained by adding up the partial data of each VPC class). A more analytical account of how the compositional and idiomatic uses are distributed

across each VPCs class is presented in Table 2.

CLASSE V+PART	N di Lemmi	Tot. usi diversi	Usi Composizionali	Usi idiomatici	Tot. Freq. (*tokens*)
V + avanti	5	12	4 (fr. 9)	8 (fr. 134)	143
V + via	16	27	10 (fr.100)	17 (fr. 30)	130
V + fuori	15	33	11 (fr. 30)	22 (fr. 76)	106
V + su	13	23	12 (fr. 41)	11 (fr. 19)	60
V + giù	17	31	18 (fr. 43)	13 (fr. 16)	59
V + dentro	13	20	13 (fr. 39)	7 (fr. 8)	47
V + dietro	8	15	4 (fr. 5)	11 (fr. 19)	24
V + vicino	5	10	5 (fr. 12)	5 (fr. 11)	23
V + indietro	9	10	2 (fr.4)	8 (fr.15)	19
V + sopra	8	11	5 (fr. 11)	6 (fr.6)	17
V + insieme	6	8	6 (fr.13)	2 (fr. 3)	16
V + contro	8	8	0 (fr. 0)	8 (fr. 14)	14
V + sotto	5	8	3 (fr. 7)	5 (fr. 5)	12
V + accanto	6	6	4 (fr. 7)	2 (fr. 3)	10
V + addosso	6	7	2 (fr. 2)	5 (fr. 8)	10
V + oltre	5	6	3 (fr. 4)	3 (fr. 5)	9
V + intorno	4	4	1 (fr. 1)	3 (fr. 3)	4
V+ incontro	3	3	1 (fr. 1)	2 (fr. 3)	4
V + lontano	2	2	1 (fr. 1)	1 (fr. 2)	3
V+ appresso	2	2	1 (fr. 2)	1 (fr. 1)	3
V + attorno	1	1	1 (fr. 1)	0 (fr. 0)	1
TOTALI	157	248	107 (fr.333)	141 (fr.381)	714

Table 2: Distribution of frequency of the V+Part classes (Guglielmo 2010)

For every class (column 1) I calculated both the number of lemmata (column 2), and the number of different uses (column 3). This last was obtained by adding together the number of different compositional uses (column 4) and the number of different idiomatic uses (column 5). The total occurrences of each class (column 6), were calculated by adding the frequency of the compositional and idiomatic uses (within brackets in column 4 and column 5).

While the total frequency distribution of compositional and idiomatic uses in the LIP (Table 1) appears to the symetrical or balanced, the frequency distribution of single VPC classes appears instead to be asymmetrical or unbalanced (Table 2).

In particular, a close reading of Table 2 establishes that:

1) the VPCs in the classes *V+via* (away), *V+giù* (down), *V+su* (up), and *V+dentro* (in), present the greatest number and frequency of locative or compositional uses (in grey in Table 2);

2) the VPCs in the classes *V+avanti (*forward), *V+fuori* (out), *V+ dietro* (behind), *V+indietro* (back), and *V+contro* (against) have the greatest number and frequency of idiomatic uses (in blue in Table 2).

The hypothesis I am advancing in this work is that the VPCs of the LIP tend to be used in compositional or idiomatic constructions according to the type of particle that structurally defines them. The particles *via, giù, su* and *dentro* are employed in their original locative value, while the particles *avanti, fuori, dietro, indietro* and *contro* are seen and used by speakers of the LIP prevalently in their metaphorical extension.

The particle *avanti*, for example, appears in 12 different lexical uses, of which 4 are compositional and 8 are idiomatic (see the second row of Table 2). The original spatial value of *avanti* is utilised by LIP speakers in just a few uses, such as:

(1)

a. *insomma **vanno avanti** piano piano* [FB6];

(anyway, they're **going ahead** slowly)

b. *che fai **mandi avanti** prima te o Bonaria* [FB9];

(who you let go on first, you or Bonaria)

c. ***venga avanti** dai* [MC4];

(come on, **come in**)

d. *si tratta capito di **tirare avanti** questi* [NA3]

(it is about, you know, **moving** these **forward**)

It has a total of just 9 occurrences. 93% of the uses of *V+Avanti* are idiomatic (134 occurrences). Let's observe the following examples:

(2)

a. ***vanno avanti*** *le trattative* [ME6];

(the negotiations **go ahead**)

b. ***mandare avanti*** *l'impero* [FC6];

(the Empire **continues on**)

c. ***portare avanti*** *un discorso* [RA9];

(**carry on/develop** a discourse)

d. ***tirare avanti*** *con una vita normale* [ND6];

(**get by** with a normal life)

e. ***tirano avanti*** *certi lavori* [FE19].

(they **drag out** certain works)

The progress in SPACE, which represents the primary value of *avanti*, becomes a progressin TIME by a mechanism of metaphorical extension. The particle *avanti*, in all the uses in which it co-occurs, acquires a verbal meaning of "continue/carry on". Interestingly, the lemma with the highest frequency is *portare avanti* (carry on) (25 occurrences), which never appears in a locative or compositional use as in "*portare avanti una sedia*" (carry forward a chair), but only in idiomatic uses (cf. par. 4), as in the examples:

(3)

a. *abbiamo **portato avanti** questa esperienza senza una lira* [RC2];

(We **carried out** this experience without a cent);

b. *comunque noi **abbiamo portato avanti** una proposta* [MC4];

(anyway, we **carried on with** the proposal)

c. *un discorso lo può **portare avanti** un pochino meglio* [RA9].

(we can carry out the discussion a little better)

9.4 The polysemy of VPCs in the LIP

Table 2 shows that the phenomenon of polysemy is positively correlated with the frequency of use, in the sense that the classes that present a major number of different uses (column 3) are those that also have the highest frequency (column 6). The data contained in Table 2 however, does not adequately illustrate the phenomenon of polysemy: in appearance the multiplication seems limited to a total use/lemmata relationship equal to 1.57 (that is, less that two uses for each lemma). However, to observe how the polysemy of the VPCs in spoken Italian is deployed in a more analytical way, it is necessary to identify which specific VPCs it involves. To do this, I individually calculated the number of the different verbal uses associated with each lemma in the corpus (for the list of lemma, see the *List of Frequency* in the Appendix of this section). The quantification of the data shows that of 157 VPCs, a good 51 of them are polysemic. The polysemy, in other words, involves 33% of the VPCs of the LIP.

N di usi distinti		N di lemmi	POLISEMIA
1 uso	hapax	70	il 67% dei lemmi presenta un solo uso (non è polisemico)
	Non hapax	36	
2 usi		25 (49%)	Il 33% dei lemmi presenta più di un uso (è polisemico)
3 usi		12 (23%)	
4 usi		9 (18%)	
5-6 usi		5 (10%)	

Table 3: The polysemy of V+Part in the LIP

Of the total polysemy, 49% regards verbs with two meanings of uses, like *"portarsi dietro"* (carry back) in:

(1)

a. ***portarsi dietro*** *le foto* [= portare con sé]

(**carry** the photo) [= take with oneself]

b. ***portarsi dietro*** *un problema* [= trascinare, protrarre]

(**drag out** a problem) [=drag, prolong]

See also "*tirare giù*" (pull down) in:

(2)

a. ***tirare giù*** *quella maglia* [= abbassare]

(**pull down** that top) [=lower]

b. ***tirare giù*** *le strategie di un film* [= abbozzare]

(lit.***pull-out**-the-strategies-of-a-film)

(**sketch out** the strategies of a film) [=outline]

23% involve lemmata with three meanings, like "*buttare via"* (throw away), in:

(3)

a. *dobbiamo **buttare via** le cose che non servono* [= disfarsi]

(we must **throw out** the things we don't need) [=get rid of]

b. *a Capalle c'è gente si **butta via*** [= essercene troppa]

(Lit.*At-Capelle-there-are-people-to-**throw-away**)

(At Capalle, there are too many people) [=be too many]

c. *hai fatto uno sforzo notevole che non è **buttare via*** [= essere di poco conto]

(lit. *you-made-a-great-effort-which-is-not-to-be-**thrown-away**)

(you made a great effort, which is not to be discounted) [=be of little value]

See also "*mandare giù*" (send down) in the following three meanings:

(4)

a. *lo **mando giù** in Pola* [= spedire]

(I **sent** him **down** to Pola) [=send]

b. ***ho mandato giù** un colpo* [= accettare]

(**I got over** the blow)

c. ***mandare giù** il menabò* [= abbozzare]

(**sketch out** the draft)

18% are composed of a VPCs with four distinct uses, like *tirare su* (see the chapter 9.5) and *andare avanti*. The remaining 10% of the general polysemy includes the lemmas *andare via*, with five different meanings, and *venire fuori, tirare fuori, essere fuori* and *buttare giu*, which occur in the LIP in 6 different sentence contexts (for *buttare giù* see the chapter 9.5). As can be seen in Table 4, of the 51 polysemic VPCs, almost half present only two uses, while the number of lemmata decreases as the grade of splitting increases. Table 4 below (see Guglielmo 2010), presents the most polysemic VPCs of the LIP (that is, those with 4 or 6 different uses), next to the verbal class they are part of, and the number of splits (or uses) and the occurrences of each lemma.

Classe	Lemmi	usi	occorrenze
V+ FUORI	Venire fuori	6	64
	Tirare fuori	6	44
	Andare fuori	6	13
	Essere fuori	6	11
V+ GIU'	Buttare giù	6	9
V+ VIA	Andare via	5	69
	Portare via	4	12
V+ SU	Tirare su	4	12
	Mettere su	4	8
V+ AVANTI	Andare avanti	4	107
	Tirare avanti	4	6

Table 4:The most polysemic verbs in the LIP (Guglielmo 2010)

9.5. A Polysemy Representation Model

Given a polysemic lemma, we can produce a "multiplication" of its lexical entries any time that we take into consideration characteristics concerning the level of form and sense, and make an attempt at association between the two. Applying the criteria discussed in the previous chapter, it is possible to distinguish, starting from the verbal form or lemma *buttare giù*, the following verbal uses extracted from the LIP, of which one is compositional or locative (1) and 5 are idiomatic (2-6):

1. *Secondo me è accaduto, l'hanno **buttato giù*** [=lanciare]

(In my opinion, it happened, they **threw** it **down**) [=throw]

2. *Ho sentito un botto % avessi **buttato giù*** [= riagganciare]

(I heard a bang, as if you had **hung up**) [=hang up]

3. *Se c'era da **buttar giù** un muro coi piedi* [= demolire]

(If there was a wall to **knock down** badly) [=demolish]

4. *Ha il comando in mano e quindi è inutile che **buttino giù*** $$ [= abbattere]

(She is in charge and so it's useless to **knock (it) down**)

5. ***Butteranno giù** un testo* [= abbozzare]

(They **sketch out** a text)

6. *Questa è la casacchina senza bottoni da **buttare giù*** [=apporre]

(This is the jacket without buttons to **fix on**) [=affix]

The VPCs lemmata of the LIP all present a *first level splitting* (that is the dichotomy compositional vs.idiomatic) and a *second level splitting* (that is the explosion of idiomatic uses). Within a Lexicon-Grammar Model (Gross, 1991) the first solution to distinguish the different meanings of the same verb is represented by the identification of all the possible sentence structures in which the verb occurs with distinct meanings. In the case of a

polysemic verb like "*buttare giù*", this criteria allows for splitting the locative use (1) from the idiomatic uses (2-6) by the mean of the syntactic structure in which they fall:

(1) **N_0 *buttare giù* N_1 Loc N_2**

(2-6) **N0 *buttare giù* N1**

The locative use (1) in fact selects for three arguments while the idiomatic uses (2-6) selects only two arguments.

Otherwise, with regard to the *second level polysemy* (i.e. that involving only the explotion of idiomatic uses) it is clear that idiomatic uses assume a specific meaning on the basis of the argument immediately realized on the right of the VPC (i.e. in N_1 position). In other words, there exists a strong co-dependant relationship within the elementary sentence. The polysemy of the idiomatic VPCs of the LIP is so elevated that it cannot be described (and therefore resolved) only on the basis of the syntatic formalisations: an adequate **representation model of the polysemy** must also take into account an analysis of the nominal distribution of each entry, that is, it must specify the selection and co-occurrence features shown in the various uses, in particular in the N_1 position.

As I have shown in the previous chapter, the N_1 in the idiomatic uses is frequently "restricted" and must be defined therefore not only by means of its mega-features [+ human], [- human], [concrete], [abstract], but also by whether it belongs to the **semantic classes** or "**object classes**" of smaller dimensions [e.g. food, sentiments, values, constructions, writing, etc.].

I believe that the polysemy can be resolved only through a specification in the most possible detailed of the selectional restictions operating on the object.

Table 5 present the various verbal uses of "*buttare giù*" as extracted from the LIP, this time through a **Polysemy Representation Model** based of the Lexicon Grammar matrix:

POLISEMIA DI 'BUTTARE GIÙ' NEL LIP						
Esempio di frase tratto dal LIP	USO	STRUTTURA FRASTICA	IPERCLASSE DELL' N_1	CLASSE SEMANTICA DELL'N_1	PARAFRASI	*Fr*
M B9: è caduto, **l'hanno buttato giù**	Loc	N_0 *V Part* N_1 *[Loc* N_2*]*	Uman Concr	_____	Lanciare/ far cadere	1
MB3: **buttino giù** $S (il governo)	idiom	N_0 *V Part* N_1	Uman	ristretto	Far cadere	2
FE4: **buttare giù** i bottoni sulla camicia	idiom	N_0 *V Part* N_1	Concr	____	apporre	1
F B 14: **Butta giù** un muro	idiom	N_0 *V Part* N_1	Concr	costruzioni	abbattere	3
C3F: **butteranno giù** un testo	idiom	N_0 *V Part* N_1	Concr	scritti	Abbozzare	1
FB14: % avessi **buttato giù** [la cornetta]	idiom	N_0 *V Part* N_1	Concr	Apparecchi telefonici	riagganciare	1

Table 5: The polysemy of *buttare giù* in the LIP through an LG model

From Table 5 we can observe how only the first two uses of "*buttare giù*" select arguments belonging to the hyperclass [+ human]. The third (*buttare giù i bottoni*, fix on the buttons) requires a non restricted argument of the concrete type. Instead, let's consider the last three uses:

7. ***Butta giù*** *un muro* [FB14]

(Knock down a wall)

8. ***Butteranno giù*** *un testo* [FC3]

(They jot down a test)

9. *% avessi* ***buttato giù*** (la cornetta) [FB14]

(% would have hung up (the receiever))

Here, the only indication of the feature [+concrete] associated with the object does not suffice to identify the three meanings of the same verb. It is necessary to indicate in the first case that

the N_1 is part of a restricted class of nouns with the faculty of being knocked down or demolished, and which I have labelled "constructions". In the second case, N_1 represents a hyponym of the hypernym "writings" (which includes words like "*nota"* (memo), *"libro"* (book), *'appunti'* (notes), etc.). In the third case, however, it is necessary to specify that the argument is from a more reduced list, composed of a finite number of members and empirically listable as *telefono* (telephone), *cornetta* (reciever) and *cellulare* (cell phone), which give the verb its meaning of "hang up". Below, I apply the same procedure to the resolution of the polysemy of "*tirare su*" in the LIP (Table 6).

POLISEMIA DI 'TIRARE SU' NEL LIP						
Esempio di frase tratto dal LIP	USO	STRUTTURA FRASTICA	IPERCLASSE DELL'N_1	CLASSE SEMANTICA DELL' N_1	PARAFRASI	FR
FA1: **tirare su** la forchetta	Loc	*N_0 V Part N_1 [Loc N_2]*	Concr. Uman	_____	sollevare	*5*
FB17: **ho tirato su** i miei ragazzi	idiom	*N_0 V Part N_1*	Uman	_____	allevare	*3*
FB12: **ho tirato su** [la cornetta]	idiom	*N_0 V Part N_1*	Concr.	Apparecchi telefonici	alzare	*1*
RA7: per **tirare** un po' **su** questi voti	idiom	*N_0 V Part N_1 [di N_2]*	Astratto	valori	aumentare	*3*

Table 6: the polysemy of *tirare su* in the LIP through the LG model (cf. Guglielmo 2010)

Following this, I present the occurrences of the lemma in the LIP:

F A 1 49 B *che per tirar su su la forchetta bisogna aver la bisogna ave' la laurea in ingegneria ;*

(***F A 1 49 B*** that to lift up the fork you need to have a degree in engineering);

F A 1 127 B *nulla dicevo che la carne c'e' il problema che per tirarla su era un casino;*

(***F A 1 127 B*** nothing, I said that the meat is the problem, that to lift it up was a mess);

F B 12 3 A *ma no ho sbagliato eh quando ho tirato su [la cornetta]io ho pigiato un bottone con quello della Giovanna non ci capisco niente;*

(***F B 12 3 A*** but no I was wrong eh, when I picked up [the reciever] I pressed a button, with Giovanna's one I don't understand anything);

F B 17 54 B *ho avuto due figli me lì son tirati su da me;*

(***F B 17 54 B*** I had two children, and I raised them myself)

F B 17 84 B *ho tirato su i miei ragazzi che non voglio dire grazie a me fortunatamente mi sono venute due persone meravigliose;*

(***F B 17 84 B*** I raised my boys, and I don't want to say thanks to me [but] fortunately they became two wonderful people);

M A 5 185 A *si' infatti io tiro su questo a capo per far stare e anche questo eh non so si' poi è completamente diverso perché qui c' era il papa e Gorbaciov;*

(***M A 5 185 A*** yes in fact I lift this up from the top to make room, and also this, eh, I don't know, then it's completely different, because there was the Pope here and Gorbachov):

M A 5 452 A *tirate su un po' di si alza a centoventi e lo fate rifare praticamente va be' questi qui sono i dati nuovi;*

(***M A 5 452 A*** get up a bit and to raise to one hundred and twenty and have them redo it practically, ok, these here are the new data):

M B 46 173 A *purtroppo lei m' ha detto lei XYZ dice vedi mio padre fosse come te come tu hai tirato su XYZ e XYZ saremmo tutti più felici;*

(***M B 46 173 A*** unfortunately she told me, she XYZ said, you see, if my father were like you, like you raised XYZ and XYZ, we would all be happier

R A 9 241 D *eh la professoressa XYZ e' molto severa con i eh le votazioni cioè sicuramente io la trovo eh un po' forse troppo rigida e allora loro invece mentre da loro c' era la supplente hanno cercato di studiare tanto di farsi interrogare per vedere di tirare su ecco che poi;*

(***R A 9 241 D*** eh, the professor XYZ is very strict with me, eh my grades, definitely I find her, eh, a bit too strict, and then instead they, while they had the substitute they tried to study and do tests to see if they could lift [the grades] up a bit;

R A 7 *per tirare un po' su questi voti*

(***R A 7*** to lift up these grades a bit)

R E 4 189 H *che ha avuto uno strappo diciamo adesso il nome non me lo ricordo # tirando su $ uno strappo qui alla schiena.*

(***R E 4 189 H*** that had a pulled muscle, lets say right now I don't remember his name, #lifting up $ a pulled muscle here on the back.)

9.6. Theoretical implications: VPC operators or supports?

Additionally, a qualitative analysis of the various uses of particles in the LIP allowed me to identify the VPcs not only on the basis of the compositional vs. idiomatic dichotomy, but also according to the element that plays the predicative role in the sentence (the so-called **operator** in the LG terminology). In particular, I identified the two main types of VPCs occurring most often in the LIP:

(1) When the operator is the V plus Part together. There are in turn uses that selects only nominal complements and behave like "elementary operators", as in the example:

(1.1)

Una societa deve ***mettere su*** *un'industria truffaldinamente* [FB18]

(A company has to set up an industry dishonestly)

And uses that select sentential complements. They wbehave like “non elementary operators”, as in the sentences:

(1.2)

a. ***E’ venuto fuori*** *che ci facciamo nemici* [MA4];

(It’s **turned out** that we’re enemies)

b. *Studiare mi piace poco* ***andando avanti*** *non ne posso piu* [FE25].

(I don’t like studying, I can’t **go on)**

2) When the role of operator is played by the argument following the VPC

In the LIP, there are cases in which the VPC co-occurs with a predicative noun, carrying out the de-lexical function typical of light verbs (the so-called “**support verbs”** in the LG terminology). Unlike more generic supports (*avere* (have), *dare* (give), *fare* (do/make), *essere* (be)), the VPCs in these uses is not completely “empty” from a semantic point of view. Rather, they carry meaningful informations, playing an analogous function to what the specialised literature calls “**support extensions**”. Naturally, the character of the “extension” of the VPC is determined by the elements co-occurring with him in the elementary sentence. This means that the same syntagmatic lemma, like *tirare fuori* can be considered an “operator” if it selects its own arguments, as in:

(2.1) ***Tirano fuori*** *tutti ventimila lire* [RC6]

(They all **bring out** 20,000 lire)

The same lemma can be regarded as “support extension” if it co-occurs with a predicative noun:

(2.2) ***Tira fuori*** *tutta la tua volonta, personalita* [MB6]

(**Bring out** all your will, personality)

The use of "*tirare fuori*" in (2.2) is paraphrasible with "*mostrare*" (display), and is distributionally equivalent to the support "*avere*" (have), although compared to these, it carries out an inchoative aspectual feature. This can be seen in the following paraphrastic relationship:

avere personalità

(have personality)

↔ *mostrare personalità*

(display personality)

↔ ***tirare fuori*** *la personalità*

(**bring out** the personality)

In these examples, the VPC can be replaced in the same position with the generic support *avere* and *mostrare*, which are posit in a "**support verb network**". Another **syntagmatic support verb** from the LIP is high frequency lemma *portare avanti* (carry on), with 25 occurrences (see before). By the mean of a distributional analysis involving it, we can see that "*portare avanti*" always co-occurs with predicative nouns, like *discorso* (discourse), *riflessione* (reflection), *proposta* (proposal), *analisi* (analysis), *iniziativa* (initiative), *intervento* (intervention), *ipotesi* (hypothesis). We can see this in the following sentence:

(3) *un discorso lo può* ***portare avanti*** *un pochino meglio* [RA9].

(we can carry out the discussion a little better)

The "equivalence class" displayed by this use is in fact the following:

discutere (discourse)

↔ *fare un discorso* (make a discourse)

↔ ***portare avanti*** *un discorso* (**carry out** a discourse)

Here the role of the syntactic centre of the sentence (the "operator") is played by the common root ***disc-***, while *portare avanti* assumes the function of a durative type **aspectual variant** of

of the support *fare*. The aspectual nature of avanti will be discussed in the next sections. I will also undego the *causative support* nature of *portare* in Italian VPCs.

9.7 Conclusion

In this chapter I have sought to deepen the knowledge of the VPCs in spoken Italian, through a quantitative and qualitative analysis of the LIP texts. The research has demonstrated the presence in the corpus of VPCs of both the compositional and idiomatic types. The latter in particular occupy a significant role in the spoken language, both in terms of diverse uses (141) and of occurrences (381). In spoken Italian, there is in fact a clear propensity to use the principle locative particles not only in literal-compositional way but also in metaphorical-figurative ways. I have further illustrated the phenomenon of **polysemy** involving the VPCs of the LIP (such as *buttuare giù* and *tirare su*) and I have tried to describe it through a formal **representation mo**del based on both taxonomic criteria as formulated by M. Gross (1975) and on the concepts of "distribution" and "equivalence class" as indicated by Z. Harris (1976).

9.8 Appendix: VPCs frequency list from LIP corpus

I present the lemmatized frequency list of 157 VPCs extracted from the LIP: in the left column there appears only the lemma (of citation form) and next to it the total occurance of all its inflected forms found in the corpus.

Andare avanti	107	Andare indietro	2	Ridare indietro	1
Andare via	69	Avere contro	2	Riportare giù	1
Venire fuori	44	Andare vicino	2	Rimandare dentro	1
Portare avanti	25	Dare via	2	Rimettere dentro	1
Tirare fuori	25	Dire dietro	2	Rimettere fuori	1
Venire via	14	Esserci dietro	2	Riprendere su	1
Andare fuori	13	Essere lontano	2	Ritirare su	1
Mandare via	13	Essere sotto	2	Riscendere giù	1
Uscire fuori	13	Guardare dentro	2	Ritornare fuori	1
Mettere dentro	12	Infilare dentro	2	Ritornare su	1
Portare via	12	Mettere fuori	2	Riunirsi insieme	1
Tirare su	12	Lasciare fuori	2	Rivenire giù	1
Essere fuori	11	Parlarci addosso	2	Schierarsi contro	1
Essere vicino	11	Passare sopra	2	Scrivere contro	1
Mettere insieme	9	Portare appresso	2	Scrivere sopra	1
Andare giù	9	Portare giù	2	Sfuggire via	1
Buttare giù	9	Rimanere addosso	2	Sgattaiolare fuori	1
Venire su	9	Saltare fuori	2	Spararsi addosso	1
Buttare via	8	Spingersi oltre	2	Spenderci dietro	1
Essere su	8	Stare insieme	2	Sputarci sopra	1
Mandare giù	8	Stare sopra	2	Stare appresso	1
Mettere su	8	Tenersi dentro	2	Stare intorno	1
Andare su	7	Tenersi lontano	2	Strappare via	1
Entrare dentro	7	Tirarsi indietro	2	Tenere dentro	1
Essere giù	7	Tornare giù	2	Tenere dietro	1
Portare su	7	Tornare via	2	Tenere fuori	1
Andare dietro	6	Abitare insieme	1	Tenere lontano	1
Essere dentro	6	Andare accanto	1	Tirare via	1
Stare dietro	6	Andare insieme	1	Togliere via	1
Stare accanto	6	Andare sopra	1	Tornarci sopra	1
Stare vicino	6	Andare vicino	1	Tornarsene via	1
Tirare avanti	6	Arrivare su	1	Trattenere oltre	1
Mettere sopra	5	Aspettare oltre	1	Uscire incontro	1
Portarsi dietro	5	Avere addosso	1	Venire contro	1
Stare fuori	5	Avere dentro	1	Venire insieme	1
Tornare indietro	5	Avere indietro	1	Venire incontro	1
Andare sotto	4	Cacciare via	1	Vivere accanto	1
Esserci dentro	4	Capitare sotto	1		
Mettere vicino	4	Dare via	1		
Scendere giù	4	Essere accanto	1		
Stare sotto	4	Essere attorno	1		
Scrivere sopra	4	Essere indietro	1		
Venire giù	4	Essere intorno	1		
Andare contro	3	Farsi addosso	1		
Andare oltre	3	Girare attorno	1		

Avercela su	3	Guardarsi intorno	1
Avere su	3	Mandare dentro	1
Buttare fuori	3	Mettere sotto	1
Essere contro	3	Mettere via	1
Mandare avanti	3	Mettersi contro	1
Mettere giù	3	Passare accanto	1
Mettere via	3	Passare oltre	1
Rimanere indietro	3	Passare sopra	1
Saltare addosso	3	Portare dietro	1
Spazzare via	3	Portare fuori	1
Stare dentro	3	Portarsi giù	1
Stare giù	3	Ragionarci sopra	1
Tirare giù	3	Rendere indietro	1
Votare contro	3	Riandare giù	1
Andare incontro	2	Riandare su	1

SECTION III

THE EMERGENCE OF A PARTICLE-CENTRED APPROACH: PREDICATIVE ELEMENT(S) AND SYNTACTIC STRUCTURE(S)

Abstract:

This section is a contribution to the Predication Theory and syntactic-semantic interface of Italian *Verb-Particle Construction.* I aim at providing - within the Lexicon-Grammar framework (Gross M.1975) and Operator-Arguments Grammar (Harris 1968, 1976) – an original proposal regarding the predicative structure of Italian idiomatic VPCs, arguing that they can be distinguished into different syntactic types on the basis of two main issues: the predicative argument structure of the constructions (PAS) and the pattern of variation exhibited by them. This section outlines the internal syntactic environment involving idiomatic and compositional VPCs by sketching out differences and convergences between them.

1. Introduction

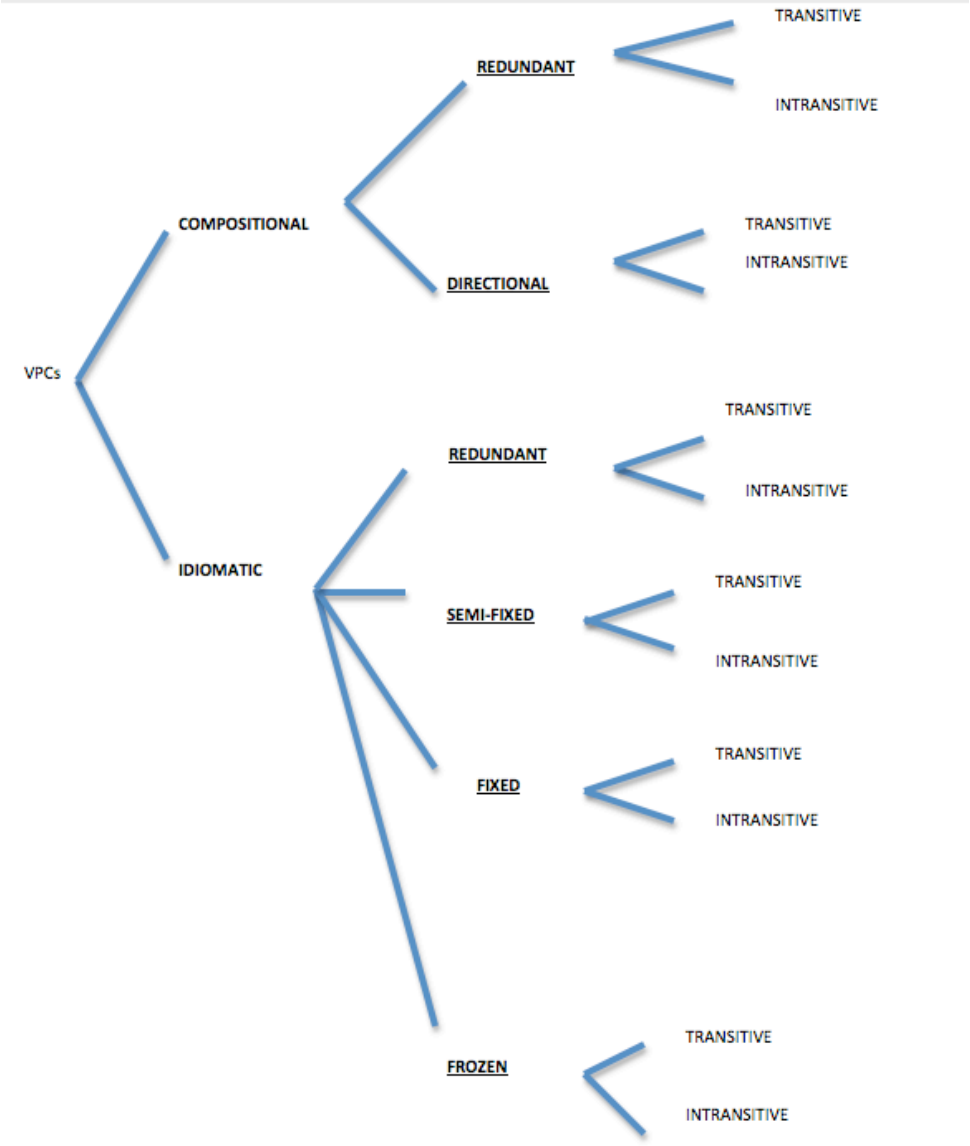
The point of departure of the syntactic-semantic analysis described in this section is represented by data - collected and classified in the lexicon-grammar tables of idiomatic transitive and intransitive VPCs (cf. Section II and APPENDIX 2) - in light of a new *fixed strings free slot theory* that I aim at providing now.

I partially review the previous assumptions on idiomatic VPC patterns arguing that they differ not only with regards to the higher or lower likelihood of occurring of N1 (as viewed in Section II) but also with regards to the element (or elements) that play the role of predicate of the construction, as well as with regards to the pattern of variation which they exhibit. A detailed analysis in tables, in fact, showed that a sub-set of

idiomatic constructions (i.e. fixed) display a fixed distributional structure, while others (i.e. semi-fixed) display a more flexible and less cohesive one, so that a unified syntactic representation can not be used for all of them.
Considering the difficulties involved in giving a unitary account of Italian VPC syntax I am going to identify four idiomatic VPC patterns (i.e. redundant, semi-fixed, fixed, frozen) and two compositional VPC patterns (redundant vs. directional) by matching the following syntactic-semantic properties:

a) compositionality vs. non compositionality of the meaning;
b) internal predicative relation (in terms of operator-argument) of the pattern;
c) syntactic variation degree;

With respect to these main six types, transitive and intransitive structures are taken into account. The following diagram presents a relatively detailed outline on Italian VPCs outlined in this chapter:



Structure of the section. The first part of the section is devoted to the revisiting of transitive idiomatic verb-particle analysis (like *buttare giù, tirare su, mandare avanti)* by showing how they, behind the same N_0 *V Part* N_i "surface" structure, require different predicate-argument relationships and exhibit different transformational and distributional behaviour. Then I will extend this hypothesis on VPC syntax – fixed slot

free slot based - also to intransitive VPC uses like *andare avanti, correre dietro*, showing that they can be split into different syntactic types in exactly the same manner as transitive uses, providing further evidence for the validity of this predication model. Even though the point of departure of my hypothesis is represented only by idiomatic VPC data, I will also compare idiomatic VPC types' behaviour with the compositional VPC ones, in order to sketch out an overview of Italian VPC syntactic structures.

2. The linguistic debate

Despite the numerous studies on VPCs, especially over the last decade and with particular regard to German languages, where the pattern is very common and productive (Bolinger 1972, Fraser 1976, Jackendoff 2002, Dehè, 2002, among others) there are still some considerable linguistic controversies, among competing theoretical approaches, with respect to the following questions[34]:

(i) what kind of syntactic structure must be assigned to VPCs?
(ii) are they syntactic combinations of two separate words, i.e. "phrases" or do they form a "single item" which need to be stored in the lexicon as complex units?;
(iii) does the syntactic structure depend on their meaning (compositional vs. idiomatic)?
(iv) what is the underlying structure of VPCs?

Almost all the linguists claim that verb-particle constructions fall into two main semantic classes: compositional and idiomatic. For instance *put out* in *Pat put out the garbage* is compositional and *bring up* in *Eva brings her kids up* is idiomatic. Compositional are considered semantically transparent while idiomatic (including also no motion head verbs) have a meaning which is not the function of the meaning of the two components, since the particle does not retain its original "locational/directional" meaning (Poletto & Benincà, 2006). With regard to the linguistic debate, compositional and idiomatic are not considered as "instances of the same phenomenon" (Fraser, 1976). Compositional are regarded as made up with a directional particle which satisfies one of the verb's argument positions and can be replaced by a full PP (e.g. Bob (tossed/took/put/carried) (up/in/away/back)).

[34] For more details about this debate see Jackendoff (2002) Cappelle (2010) and Machonis (2008).

The combinations are analysed, in other words, as full productive, and there is no need to list them in the lexicon. Otherwise idiomatic VPCs like *give up* need to be memorized with some effort, and, because of their non-compositional and idiosyncratic meaning they are inserted into syntax as complex verbs, i.e. as "wholes" (Aarts, 2001, Dehè, 2002, Fraser 1976) and they are listed in the lexicon as complete units (Jackendoff 2002).

Despite that at the end of *Aspect of Theory of Syntax***,** Chomskys (1965) claimed that semantically transparent (i.e. compositional) and semantically opaque (i.e. idiomatic) VPCs are syntactically identical, with respect to the possibility of applying familiar transformations, a number of arguments based on differences in syntactic properties have been adduced for a structural and (semantic based) distinction between compositional and idiomatic VPCs (Fraser 1976). These studies carried out a key role of semantics for the linguistics analysis of phrasal verbs. Susi Wurmbrand (2000), for instance, argued that VPCs do not display a uniform structure: compositional involve a *small clause structure* (Kayne 1985, Den Dikken 1995) whereas idiomatic involve a *complex V' structure* (Zeller, 2001).

Taking the syntax/semantics connection seriously, Wurmbrand (2000) claimed that a small clause structure is not motivated for idiomatic VPCs, since these do not express a predicate/argument relation whereas directional particles are in the predicate/argument relation with the DP (the relation between the *garbage* and *out* in the construction *throw out the garbage*) as tested by the copular construction with "be" in which they can appear (*the garbage is out*).

This section tries to shed light on this long-standing debate by providing empirical evidence from Italian. In particular I will show that Italian VPCs fall into two main semantic classes, compositional and idiomatic, but this interpretative difference cannot be associated with a very different syntactic and predicative structure. In particular I will revise the traditional and simplified dichotomy compositional vs. idiomatic and I will distinguish on the basis of a transformational test battery (optional particle usage, frozenness of the N_1 argument, factorisation, substitution of the head verb, verbless usage) at least four types of idiomatic VPCs (i.e. redundant, semi-fixed, fixed, frozen) situated on a *continuum* which range from more flexible to more blocked constructions. I will show that an interesting percentage of idiomatic VPCs are *semi-fixed constructions*, which share the semantic interpretation of idiomatic and the flexible syntax of compositional directional, allowing me to hypothesize (contra Wurmbrand 2000) that directional particles and idiomatic particle (of the semi-fixed type) share the same syntactic and predicative

structure, i.e. a small clause structure.

3. Compositional vs. idiomatic VPCs in Italian

The dichotomy compositional vs. idiomatic VPCs is widely accepted also by Italian linguistics who provided several syntactic arguments to split the two types of constructs on the basis of their meaning (Simone 1997, Masini 2006, Poletto & Benincà 2006, Cini 2008 among others). In Section II, although I argued for a *continuum* of constructions from compositional to idiomatic, I also stressed the importance of splitting the former from the latter by means of distributional and syntactic identification criteria[35].
Consider the following sentences:

(1)

a. *Max ha messo su un negozio*
(Max set up a shop)

b. *Eva ha fatto fuori il gelato*
(Eva ate up the ice-cream)

Mette su and *fare fuori* are transitive verb-particles (of $N_0VPart\ N_1$ structure), *Max* and *Eva* are the first argument (N_0) while *un negozio* and *il gelato* are the second arguments (N_1).
In (1) VPCs are "**idiomatic"** or non-compositional because the meaning of the compound is not analysable from the meanings of the two elements (*V* and *Part*). Meanwhile, we can see the contrary in the following sentences:

(2) a. *Il camino butta fuori il fumo*
(Lit. The-chimney-throws-out-the-smoke)
(The chimney puffs out the smoke)

b. *Bob porta giù la spazzatura*
(Bob takes down the rubbish)

[35] Within the framework of the Lexicon-Grammar Machonis (2007) claimed that although compositionality can be viewed on a continuum with varying degrees of compositionality – from truly opaque to clearly compositional – "linguistics generally must choose to have a phrasal verb listed as either idiomatic or compositional from a simple verb plus particle and not along a continuum of degree of compositionality".

The verb-particle combinations *butta fuori* and *porta giù* are "compositional" because the meaning of the compound is function of the meaning of the two elements, verb and particle.
In (2) the particle is "directional" because it still retains its relational/directional status by connecting an "object" with an "agent" into a "localization space"[36]. The object for the influence of the agent changes its position in the space: at the end of the causative event indicated by the verb, in fact, *il fumo* (= the smoke) is *fuori dal camino* (= *out* of the chimneypot) and *la spazzatura* (= the rubbish) is *giù* (= down). Compositional sentences (2) are in fact related with the following "resultative" sentences (2.1) with the support verb "essere":

(2.1)

a. *Il fumo è fuori (dal camino)*
(The smoke is out (of the chimney))

b. *La spazzatura è giù*
(The rubbish is down)

Even though the sentences in (2) are both compositional because of the transparent semantic which they share, there is a clear difference between them: *butta fuori* in (2.a) is a **redundan**t compositional VPC (Schwarze 1985, Hampe 2002), because the particle has a pleonastic status. It just reiterates the directional value of "expelling" already carried by the verb *buttare* (= to push out) and it can be smoothly omitted without affecting the meaning of the sentence:

(2.2) *Il camino butta fumo*
(The chimney puffs smoke)

Meanwhile, *porta giù* in (2.b) is a **directional** compositional VPC because the particle functions as a "directional marker" indicating a certain direction (i.e. *giù, cf.* down) for the motion expressed by the verb (Simone 1997, Masini Iacobini 2006). The particle omission, in fact, in directional VPCs affects the semantics and the syntax of the verb. Applying the particle omission on (2.b) we have the following "undirectional" sentence:

[36] In cognitive linguistics the "located object" is also called *trajector* and the "localization space" *landmark* (cf. Schwarze 1985*).* Another couple of terms used to denote the two conceptual entities entering in the spatial relationship are *Figure* vs. *Ground* (Talmy, 2000).

(2.3) *?Bob porta la spazzatura*
(? Bob takes the rubbish)

which is no longer in synonymous relationship with (2.b).
With regard to the differences between (1) and (2), it is interesting that within Harris' theoretical framework the notion of compositionality has also a strong "distributional" basis. In compositional VPCs, for instance, the particle can be commuted with other forms, e.g. with directional PPs or directional particle without unexpected semantic effects.

(2.4) *Max porta (fuori + fuori di casa) la spazzatura*
(Max takes (out + outside) the rubbish

(2.5) *Bob porta (su + sopra) la borsa della spesa*
(Bob takes (up+ upstairs) the shopping bag)

Furthermore in compositional (directional) VPCs, also the verb can be commuted with other synonymic motion verbs, as in:

(2.6) *Max (mette + porta + trascina) giù la spazzatura*
(Max (puts + carries + drags) down the garbage)

This is the reason for which compositional VPCs have so far been considered as less assembled or "cohesive" combinations compared with idiomatic VPCs, where both the elements, verb and the particle, cannot be commuted with other forms, as in the following example (1.2) where "mettere" (lit. "to put") cannot be commuted with "portare" ("to carry"):

(1.2) *Max (mette + * porta) su un'attività*
(Max (sets + *carries) up an activity

as well as "su" (cf. "up"), which cannot be commuted with "sopra" ("above"), as shown in:

(1.3) *Max mette (su + *sopra) un'attività*
(Max sets (up + *above) an activity

Furthermore, with regards to the argument requirements, compositional VPCs are characterized by a high likelihood of occurrence of N_1, that is, by a free lexical selection on

the arguments, as shown in:

(2.7) *Max mette fuori (la spazzatura + la borsa della spesa + il cane + i bimbi)*
(Max puts out (the rubbish + the shopping bags + the dog + the children)

Whereas idiomatic are characterized by lexical restrictions on the nominal arguments as in (1.4):

(1.4) *Max mette su (un negozio + una compagnia teatrale + una band + *un bimbo + *il cane +* la borsa)*
(Max sets up (a shop + a theatrical company + a band + *a child + *the dog + *the bag)

In 1.4, only a specific semantic class of abstract arguments, labelled as <ACTIVITIES> can co-occur with "mettere su" with the meaning of "to organize", "to set up". Likewise, also "fare fuori" (cf. "to eat up") in the first example acquires the meaning of "to finish eating", "to devour" by selecting only a specific class of concrete arguments, in hyponimical relation with the semantic hyperclass <FOOD>:

(1.5) *Eva ha fatto fuori (il gelato + la pizza +*la tv)*
(Eva ate up (the ice-cream + the pizza + *the TV)

In the present section I partially revise this previous simplified and traditional dichotomy (compositional vs. idiomatic) by identifying a novel in-between type of VPCs in the Italian language, which shares the non-literal interpretation and the lexical restrictions of the idiomatic type (1) and the flexible syntactic status of the compositional type (2). I have defined this as "*semi-fixed*". The proposal will be that in the semi-fixed type the adverbial particle plays a predicative role.

4. The basis of data: the Lexicon-Grammar tables

In this section I focus only on idiomatic Verb-particles entering in transitive structures. I consider both the "short" transitive structure **N_0 V Part N_1**, as in the following examples:

(a)

Eva mette su un negozio

(Eva sets up a shop)

Bob butta giù un boccone

(Bob gulps down a mouthful)

and the "long" transitive structure **N_0 V Part N_1 Prep N_2**, as in the following examples:

(b)

I commercianti tirano su i prezzi del 20%

(The shop keepers lift up the prices by 20%)

Eva ha tagliato fuori Max dal discorso

(Eva cut Max out of the conversation)

In these examples, a further prepositional phrase (*del 20*% and *dal discorso)* is selected on the right of the N_1 arguments *(i prezzi* and *Max*). The prepositional phrase in long structure (b) cannot occur, actualizing the following "shorter" sentences:

(b.1)

I commercianti tirano su i prezzi

(The shop keeper lift up the prices)

Eva ha tagliato fuori Max

(Eva cut Max out)

The short structure (a) and the long structure (b) were grouped in the following formula:

(c)

N_0 V Part N_1 (E+ Prep N_1)

This defines the basic transitive structure, i.e the object of study, that I aim at describing in

this work. Focusing only on these transitive idiomatic uses, a corpus of 300 idiomatic verb-particles was taken into account.[37] Data was divided into 10 separate lexicon-grammar classes (V+fuori, V+su, V+giù, V+via, V+dentro, V+dietro, V+indietro, V+ avanti, V+sotto, V+ other particles). The presence of a given locative particle on the right of the verb represented, in other words, the basic structural criterion used to construct the tables, as in Machonis' (2009) and Vega's (2010) classifications of English phrasal verbs.[38]

LG classes	EXAMPLE OF SENTENCE	n.
V+ fuori	Max **tira fuori** un argomento interessante (Max **brings up** an interesting topic)	65
V+ su	Lo show **tira s**u gli ascolti del 20% (The show **increases its listeners**by 20%)	60
V+ giù	Maria non **butta giù** un boccone (Maria does not **gulp down** a mouthful)	50
V+ via	Gli sposi **mettono via** un po' di soldi (The bridegrooms **put aside** some money)	35
V+ dentro	Hanno **sbattuto dentro** il criminale (They **bang up** the felon)	20
V+ dietro	Eva in storia **lascia dietro** tutti gli altri (Eva in history **leaves behind** all the others)	18
V+ indietro	Max **porta indietro** il libro alla biblioteca (Max **brings back** the book to the library)	16
V+ avanti	Ugo **manda avanti** l'azienda (Ugo **carries on** the company)	13
V+sotto	L'auto **butta sotto** il cane (The car **runs down** the dog)	10
V+other Part	Gli studemti **gettano là** un'idea (The students **throw out** an idea)	13
	Tot.	**300**

Table 1:Lexicon-Grammar classes of idiomatic N_0V Part N_1 uses

37 The study is corpus based. Data were collected from different sources: 1) monolingual dictionaries (Gradit 2006; Sabatini-Coletti 2003; Zingarelli 2004, Devoto Oli 2008); 2) bilingual dictionaries: Ragazzini-Biagi (English-Italian, 2006); Ghiotti (French-italian, 2000), Bosch (French-Italian, 2008), Castiglioni Mariotti (latin-italian, 2004); 3) other dictionaries: Dizionario dei sinonimi e contrari, (Rizzoli, 2002), Dizionario d'uso dei phrasal verbs (Hoepli 2004), Phrasal verbs (Garzanti linguistica, 2005);

4) On line dictionaries and website (such as *www.wordreference.com*;*www.dizionari.corriere.it*, http://www.oxfordparavia.it/lemmaIta29715,http://dev.eurac.edu:8081/MakeEldit1/Eldit.ht); 5) by looking up in Google; 6) Linguistic articles cited; 7) native speaker competence; 8) VPCs extracted from Italian Spoken language corpus LIP (500.000 words) by Guglielmo (2010).

38 See section II.

Below I provide an extract of *V + giù* table of Italian language (as outlined in Section II). It encodes an example of the arguments in object and prepositional positions (i.e. N_1, Prep N_2), the semantic class associated with N_1 (e.g. <buildings>, <telephones>, <texts>, <value>, <food>), the Italian paraphrase and, finally, the corresponding English phrasal verb[39]:

N_0=:N hum	N_0= N anim	N_0=: Che F	Verb	Part	Ex. of N_1	Prep N_2	N_1=: N hum	N_1=: N -hum	N_1= :N concrete	N_1=: N abstract	Semantic Class of N_1	Paraphrase	Phrasal verb
+	+	-	Buttare	Giù	Un muro	-	-	+	+	-	<buildings>	Demolire	to knock down
+	-	-	Buttare	Giù	Il cell.	-	-	+	+	-	*<telephones>*	Riagganciare	to ring off/to hang up
+	-	-	Buttare	Giù	Un libro	-	-	+	+	-	*<texts>*	Abbozzare	to write down
+	-	+	Buttare	Giù	I prezzi	del 20%	-	+	-	+	*<values>*	Ridurre	to drive down
+	-	+	Buttare	Giù	Max	-	+	-	-	-	-	Deprimere	to bring down
+	-	-	Buttare	Giù	Un dolce	-	-	+	+	-	*<food>*	Ingoiare	to gulp down

Table 2. Idiomatic transitive *Verb-Adv Particle* uses followed by the particle "giù" (cf. down)

The table shows that the previous classification (see Section II) was overly simplified (at least for the aim of the current analysis): the syntactic difference between *buttare giù un muro* (cf. to knock down a wall) and *buttare giù un libro* (cf. "to write down a book"), in fact, does not emerge from that unified taxonomy. This "fact" encouraged us to provide a more careful and predicate/argument-based analysis, which is the aim of the following chapter.

[39] As suggested by Machonis (2008), in fact, the different uses of the same "ambiguous" idiomatic Verb particles (such as the lemma *buttare giù* in table 12) can be distinguished by associating each selected N_1 with a specific semantic class - or "object class" within G. Gross' approach (Gross G. 1994) - and by adding such a semantic information into the LG tables. On the basis of such a formalisation of the lexical restrictions on the arguments, a *Lexicon-Grammar Disambiguation Model* concerning Italian idiomatic V-AdvPCs was devised and applied on LIP corpus by Guglielmo (2010). See Section II.

4. Difference in Predication

A more detailed analysis of data collected in lexicon-grammar tables of VPCs (table 1 and 2 above) pointed out that idiomatic transitive uses exhibit a considerable variety: even though their "surface" sentence structure is the same (N_0 *V Part* N_1) they differ greatly in transformational behaviour and degree of syntactic cohesion. The aim of this work is to provide a systematic description of this difference within the theoretical orientation of the grammar as a mathematical characterization of natural language, as outlined by Harris Z. (1968).

I consider that a proper understanding of *VPCs* syntax and semantics requires the identification of the element (or the sequence of elements) that in the construction itself plays the role of predicate or "operator" (because "'it says something about its arguments"), as well as a deeper analysis of the degree of syntactic variation of the pattern. Drawing from these main aims, I identified four novel construction types (depending on the predicative element identified) from the initial database of transitive VPCs (Table 1).

Type 1. **Redundant**: constructions in which the predicative element is represented only by the verbal head, as the adverb is emphatic and can also not occur (e.g. *Buttare via un'occasione* ←→ *buttare un'occasione,* (cf. "to throw away an opportunity");

Type 2. **Semi-fixed**: constructions in which the predicative role is played by the adverb, (e.g. *mettere dentro il ladro*, cf. "to send down the thief", "to imprison") because the verbal head is variable (e.g. *mettere dentro il ladro* ←→ *sbattere dentro il ladro* ←→*buttare dentro il ladro*) and/or it can also be "missing" (e.g. *mettere dentro il ladro* ←→*dentro il ladro*!);

Type 3. Fixed: constructions in which the predicative element is represented by a verb and adverb as a whole (e.g. *fare fuori il gelato*, lit. to do out an ice cream, cf. "to eat up") because both of them are fixed, they cannot vary and they can only occur together (e.g. **fare il gelato*, **fuori il gelato*);

Type 4. **Frozen**: constructions in which all the sequence verb-adv-N_1 plays the role of predicate because also N_1 is constrained ($N_1 = C_1$) while N_0 is free. This is the case of "frozen sentences" embedding a verb-Adv particle (e.g. *mandare giù un boccone amaro*, cf. "to send down a bitter pill", "to swallow hard", *mettere su famiglia*, cf. "to start a family").

Indicating with PRED between square brackets the predicative element of N_0 V AdvPart N_1 structure, we formalised the four "new" VPC types:

Type	DEFINITION	PREDICATIVE STRUCTURE	EXAMPLE	Uses
1	Redundant	N_0 $[V]_{PRED}$ Part N_1	Eva **[ha buttato]**$_{PRED}$ **via** un'occasione	44 (15%)
2	Semi-Fixed	N_0 V $[Part]_{PRED}$ N_1	Il poliziotto **ha messo** [**dentro**]$_{PRED}$ il ladro	90 (30%)
3	Fixed	N_0 [V Part] $_{PRED}$ N_1	Bob [**ha fatto fuori**]$_{PRED}$ il gelato	106 (35%)
4	Frozen	N_0 [V Part N_1] $_{PRED}$	Bob [**ha messo su famiglia**] $_{PRED}$	60 (20%)

Table 3: idiomatic transitive VPC types' distribution ***Tot. 300***

This table shows that the Italian idiomatic VPC family does not represent a homogeneous class of constructions: they are situated along a *continuum* which ranges from more flexible to more cohesive constructions.

I will display the criteria used to distinguish between them in terms of different morpho-syntactic properties that they accept. In particular chapter 5. is devoted to redundant, 6. to frozen, while chapter 7. focuses on the two central types, i.e. semi-fixed and fixed with the pattern of variation and the predicative relations that they exhibit.

5. Redundant VPCs

There are 44 redundant verb-particle uses entering in **N_0 V Part N_1** sentence structures, i.e. 15% of the total.

The redundancy is tested by omitting the particle, which does not contribute to the syntax and the semantics of the VPCs. This means that redundant VPCs uses accept the particle deletion (or "optional particle usage") with a plus [+] sign in the table under the property **N_0 V N_1**, indicating the relative synonymy with **N_0 V Part N_1**. If the arrow (←→) indicates the relative synonymy, then the following examples are all redundant verb-particle uses:

(1)

N_0 V Part N_1 ←→ N_0 V N_1

a. *Max ha buttato giù la pasta ←→ Max ha buttato la pasta*
(Max put on the pasta ←→ *Max put the pasta)

b. *Eva ha gettato via il suo tempo in cose inutili ←→Eva ha gettato il suo tempo in cose inutili*
(Eva threw away her time on useless things ←→ *Eva threw her time on useless things)

c. *Ugo cova dentro propositi di vendetta ←→ Ugo cova propositi di vendetta*
(Ugo harbours thoughts of revenge inside ←→ Ugo harbours thoughts of revenge)

According to Machonis' analysis of English phrasal verbs followed by "up" (Machonis, 2009) the verb particle uses that accept the "optional particle usage" might be considered "compositional" and the optional particle usage might be analysed as a property of the simple verb and for this reason it might be added in the lexicon- grammar table of simple

verbs (*buttare, gettare, covare* in the examples 1a -c). I argue instead that redundant VPCs can be of two kinds, i.e. compositional, like:

(2)
Il camino butta (E+ fuori) fumo
(The chimney puffs (E + out) smoke)

Il ragazzo ***tira*** (E + ***su***) *la cocaina*
(The girl sniffs (E + up) the cocaine)

and idiomatic, like the examples seen above in (1):

Max ha buttato (E+ ***giù****) la pasta*
(*Max put (E + on) the pasta

Eva getta (E+ ***via****) il suo tempo in cose inutili*
(*Eva throws (E + away) her time on useless things)

Here, the notion "E" indicates the possibility of the particle position being filled by an "empty" element.
What is relevant in the predication model provided here is that the "predicate" in redundant compositional and idiomatic VPCs is just the head-verb, because the particle does not affect the syntactic and distributional structure of the simple verb, which stays the same even if the particle is not used.

6. Frozen VPCs

Frozen VPCs are situated on the opposite side of the predicative continuum illustrated in Table 2. They are the 20% out of the total idiomatic VPCs.
As we have seen in the previously, they are characterized by having a constrained nominal argument in addition to verb and particle. For this reason they need to be taken as a complex, multiword lexical unit and for NLP applications they need to be located in texts as a block.

Within an LG framework I consider frozen VPCs as a subset of Italian frozen sentences[40] with which they share:

1. the ambiguity of meaning,
2. the frozenness of the argument in object position,
3. the attitude to block transformations.

With regards to ambiguity of meaning let's look at the following examples of frozen VPCs having N_0 *VPart* N_1 structure:

1. *Lucia tira fuori le unghie*
   (Lit. Lucia-gets-out-her-nails)
   (Lucai gets out her claws)

2. *Bob mandò giù un boccone amaro*
   (Bob swallows down a bitter pill)

Here, a double interpretation (compositional vs. idiomatic) is possible and only a larger textual context can help to disambiguate.

[40] Frozen sentences or ("idiomatic sentences") are elementary sentences where the main verb and at least one of its argument are distributionally constrained, and usually the global meaning of the expression is "idiomatic" or "non-compositional" because it cannot be calculated from the individual meaning of its components when they are used independently (M. Gross 1982, 1989, 1996, G. Gross 1996, Ranchhod 2003, Vietri 1996, Baptista J. et al). They are usually collected in general and specialized dictionaries of "idioms" and, for NLP applications they have to be identified in the text as a block.

7. The pattern of variation

Even though the two central types of Table 3, i.e. semi-fixed and fixed VPCs share (i) the non-compositionality of their meaning, (ii) the "same" surface form *N_0 V AdvPart N_1*, and (iii) the lexical restrictions on N_1 arguments, they differ greatly in predicate-argument structure(s) (i.e. PAS), as well as in transformational behaviour. I used the following three variation tests to distinguish between fixed and semi-fixed:

(1) syntactic decomposition (or "factorisation");
(2) variability of the head verb;
(3) verbless use.

7.1. Syntactic Decomposition

I call "Syntactic Decomposition" the factoring operation (also defined in mathematics as "factorisation") of an "extended" VPC, such as:

(1)	*Max*	*mette dentro*	*il ladro*	(Max sends down the thief)
	N_0	V Part	N_1	

into two sub-structures:

(1.1)	*Max mette*	#	(1.2)	*Dentro*	*il ladro*
	N V			Part	N

I argue that the "extended" VPC in (1), i.e. *Max mette dentro il ladro*, with an apparent *N_0 V Part N_1* sentence form, must be regarded as a "complex structure", resulting from the application (#) of a causative verb (*mettere*) together with its causative argument (*Max*) on the basic syntactic structure (1.2), i.e. *Dentro il ladro* (cf. "down the thief").
In mathematics, the factorisation (or **factoring)** is the decomposition of an object (for example, a number, a polynomial, or a matrix) into a product of other objects, or factors,

which when multiplied together give the original. For example, the number 15 factors into primes as 3 × 5, and the polynomial x2 − 4 factors as (x − 2)(x + 2). In all cases, a product of simpler objects is obtained.

The aim of factoring is usually to reduce something to "basic building blocks," such as numbers to prime numbers, or polynomials to irreducible polynomials. Factoring integers is covered by the fundamental theorem of arithmetic and factoring polynomials by the fundamental theorem of algebra. The opposite of factorization is **expansion**. This is the process of multiplying together factors to recreate the original, "expanded" polynomial.

The following formula represents the multiplying operation of two factors. The product of them is the full VPCs *N_0 V Part N_1*:

[(Max mette) * (dentro il ladro)] = > *Max mette dentro il ladro*
N_0 V Part N_1

I formalise the syntactic decomposition property with the syntactic formula:

N_0 V Part N_1 ←→ N_1 essere Part

indicating the synonymic relationship between an "extended" VPC and a support verb construction:

(1.3)

Max <u>mette dentro</u> il ladro ←→ il ladro <u>è dentro</u>.

I considered idiomatic VPCs that passed the syntactic decomposition test as "**semi-fixed"** since they are less cohesive or "assembled" and more flexible and decomposable. They have a plus sign in the tables [+] under the property **N_1 essere Part** since they can be reduced to SVCs, as seen in (1.3).

On the other hand, VPCs that do not pass the syntactic decomposition test - with a minus sign [-] in tables under the property **N_1 essere Part** - were defined as **"fixed"** because of a higher syntactic cohesion property. Given the sentences (2):

(2) *Bob <u>fa fuori</u> il gelato*
(Bob <u>eats up</u> an ice-cream)

(3) *Eva ha messo su un negozio*
(Eva has set up a shop)

for instance, it is not possible to achieve the syntactic decomposition of these into the following substructures :

(2.1) *Bob fa* # (2.2) * *fuori il gelato*
(3.1) *Eva ha messo* # (3.2) * *su un negozio*

This suggests that *fare fuori* and *mettere su* display a higher syntactic and lexical cohesion and they must be considered as "fixed" VPCs, not as decomposable ones. *Fare* (lit. "to do") and *mettere* (lit. "to put") in fact, fall into the idiomatic verb particle uses (2) and (3), and lose their original causative value. They are not related with support-verb sentences:

(2.3) *Bob fa fuori un gelato* ←→ * *il gelato è fuori*
(Bob eats up an ice-cream ←→ *the ice-cream is up)

(3.3) *Eva ha messo su un negozio* ←→ **il negozio è su*
(Eva has set up a shop ←→ *the shop is up)

In fact, whereas semi-fixed V-AdvPCs accept the "factitive" paraphrase **N_0 cause N_1 to be Part**, as in (1.4):

(1.4) *Max mette dentro il ladro* ←→ *Max fa che il ladro sia dentro*

fixed VPCs, like *fare fuori* and *mettere su*, never accept it, as it is easily tested by (2.4) and (3.4):

(2.4) *Bob fa fuori un gelato*←→ **Bob fa che il gelato sia fuori*

(3.4) *Eva ha messo su un negozio* ←→ * *Eva fa che un negozio sia su*

In particular, what I am saying is that, with regard to semi-fixed uses, the causative transitive structure (*N_0 V Part N_1*) is related, via a paraphrastic equivalence relation (ßà), with the

support verb structure N_1 *essere Part,* which is of a "resultative" nature, and such a CAUSATIVE ←→ RESULTATIVE relation can be well encoded into the Lexicon-Grammar.

7.2 Variability of the head verb

Moreover, with regards to the larger pattern of variation involving semi-fixed VPCs, I noted that the causative head verb forming the combination (i.e. *mettere* in *mettere dentro il ladro*) can be easily substituted by other synonymic verbs without affecting the syntax and semantic of the construction, such as in the following network of "alloconstructions", or "paraphrastic equivalence class" in harrisian terms:

(1)

Max (mette + porta + sbatte + butta + manda + spedisce) dentro il ladro

(Max (puts + takes + slams + throws + sends + sends) inside the thief)

Here the particle is the semantic and syntactic "core" of the constructions network (i.e. the operator) selecting the human argument, i.e. DENTRO (Num), while the head-verb is variable into a finite range of possibilities: the verb *mettere* can be replaced by another causative motion verb, such as *portare* (cf. to take), *sbattere* (cf. to slam), *buttare* (cf. to throw), *mandare* (cf. to send), *spedire* (cf. to send).

This is the reason for which, in my view, semi-fixed VPCs are associated with the predicative structure $\mathbf{N_0\ V\ [Part]_{Pred}\ N_1}$ with a fixed slot for the particle (playing the role of predicate) and a semi-free slot for the verb[41].

The **variability of head verb** was formalised by the syntactic formula:

$$\mathbf{N_0\ V_x\ Part\ N_1 \leftrightarrow N_0\ V_y\ Part\ N_1}$$

[41]"A semi-fixed slot for the verb" means that when I encode each lexical item I discover lexical restrictions on the causative motion verbs accepted as variants of "be", like in the case of "be Prep" structures analysed by Vietri (1996).

which is, as demonstrated in (1.5) well accepted by semi-fixed uses, but, conversely, completely rejected by fixed V-AdvPCs like *fare fuori* and *mettere su*, as tested respectively by:

(2)

Bob fa fuori un gelato ←→ **Bob (manda + porta +...) fuori un gelato*

(Bob eats up an ice-cream ←→ *Bob (sends + takes + …) up an ice-cream)

(3)

Eva mette su un negozio ←→* *Eva (porta + manda + tira +...) su un negozio*

(Eva sets up a shop) ←→ *Eva (takes + sends + pulls + …) up a shop)

7.3 Verbless use

Finally, semi-fixed VPCs pass the third diagnostic test, i.e. "**verbless use**" by accepting a "small" sentence consisting only of a predicative adverbial particle plus its selected argument, with no head verb in the pre-particle position, as in:

(1)

Max mette dentro il ladro ←→ *dentro il ladro*!

(Max sends down the thief) ←→ down with the thief!

Bob butta giù la porta ←→ *Giù la porta!*

(Bob kicks down the door) ←→ Down the door!

The following formula represents the equivalence between a full verb-particle use and the corresponding verbless use:

N_0 V AdvPart N_1 ←→ AdvPart N_1

Semi-fixed VPCs have a plus sign [+] in the tables under the property **Part 1** indicating the relative synonymy with **N_0 V Part N1** while fixed VPCs such as *fare fuori* or *mettere su* have a minus sign [-], because they do not pass such a variation test:

(2) *Max fa fuori il gelato* ←→ **fuori il gelato*!

(Max eats up an ice-cream ←→ * up an ice-cream!)

(3) *Eva <u>mette su</u> un negozio* ←→ **su un negozio*!
(Eva sets up a shop ←→ * up a shop!)

8. The Syntactic Structure(s) of VPCs within the Operator-Argument Grammar

I consider only fixed VPCs like *fare fuori* and *mettere su* as independent lexicon units that must be listed into the tables and/or dictionaries as verb-particle lexical entries. They cannot occur without one of the two elements, since verbs and particles have no more syntactic and semantic autonomy and they are assembled by a high lexicalization process.

The predication is spread in fact on both the elements of the combination, as diagrammed in the predicative structure that we associated to them, i.e. $\mathbf{N_0\ [V\ Part]_{PRED}\ N_1}$.

In Harrisian terms, the predicative structure of fixed VPCS like *fare fuori un gelato* or *mettere su un negozio* can be rewritten out as **Onn**, i.e. verb-particle predicate applied on two selected nominal arguments (the subject and the direct object).

Instead I assume that semi-fixed VPCs like *mettere dentro il ladro* in (1) show a less assembled and lexicalized structure. They can be split into two sub structures via a "syntactic decomposition" process: they are in other words the result of the application of a causative verb with its subject (N_0 V) on a basic syntactic structure (Part N).

Within Harris' Operator-Grammar formalism, the "expanded" VPCs (1) can be now rewritten out as: **Ono** (i.e. "operator on a non-elementary argument") with **On** corresponding to **N V** (*Max mette*), and with **o** ("non elementary argument") corresponding to the base clausal structure **Part N** (i.e. *dentro il ladro*). I argue that the underlying syntactic structure associated with semi-fixed VPCs of the type (1) should not be considered the full or "extended" N_0 V Part N_1 structure, but the embedded, "small" Part N structure, that I consider the predicative kernel of the construction and of the "paraphrastic constellation" as a whole, which I called "verbless particle construction" (see also section V) and Guglielmo (2012). As a consequence of such predication-based analysis of Italian VPCs I claim that semi-fixed

VPCs should not be listed into a lexicon-grammar table/dictionary as "verb-particle entries"- as in the case of fixed VPCs – but as "verbless particle entries".

The following table provides an outline of the pattern variation described so far with the three diagnostic tests - factorization (or "syntactic decomposition"), variability of head verb and verbless use - as the main criteria used to separate semi-fixed from fixed (with semi-fixed accepting them and fixed blocking them):

	VARIATION TEST		
	factorization ***N_0 V Part N_1 ←→ N_1 essere Part***	**variability of verb** ***N_0 V, Part N ←→ N0 V, Part N_1***	**verbless use** ***N_0 V Part N_1 ←→ Part N_1***
SEMI-FIXED	*Max mette dentro il ladro ←→ il ladro è dentro*	*Max mette dentro il ladro ←→ Max sbatte dentro il ladro*	*Max mette dentro il ladro ←→ Dentro il ladro!*
FIXED	*Max mette su due negozi ←→ *due negozi sono su*	*Max mette su due negozi ←→ *Max porta su due negozi*	*Max mette su due negozi ←→ * Su due negozi!*

Table 4. semifixed vs. fixed VPCs uses: pattern of variation

On the basis of the test battery used as linguistic criteria to single out the typology of idiomatic VPCs, it is possible to describe the behaviour of a given idiomatic VPC by defining a matrix of properties that hold for that construction. The properties used diagnostic tests to discern each type (and inserted in Table 5 below), summarised as follows:

1) **N_0V N_1**= particle deletion } redundant

2) **N_0 essere Part** = factorisation;
3) **N_0 Vy Part N_1** = variability of head verb;
4) **Part N_1**, = verbless use } semi-fixed

5) **N_1=: C_1** = frozeness of N_1 argument } frozen

9. An outline of constructions

In this work I revised the previous unique lexicon-grammar database of idiomatic VPCs (Tables 1-2) by distinguishing the *N_0 V Part N_1* transitive structures first in two main sets of sentences: redundant and non-redundant. I used N_0 V N_1 column (see Table 5 below) – that is the "optional particle usage" property- as the main criterion to separate between redundant and non-redundant: **redundant** (when N_0 V N_1 = plus) and **non-redundant** (when N_0 V N_1 = minus). In a second step, I filtered out **frozen** VPCs from the non-redundant transitive VPC database. I used N_1 =: C_1 property – that is the 'frozenness of N_1' - as the main criterion to separate between frozen VPCs and the remaining idiomatic VPCs: frozen (when 'N_1 =: C_1'= plus) and non-frozen (when 'N_1 =: C_1' = minus). Finally I split this remaining idiomatic VPC uses i.e., non-frozen, into two main types of constructions – fixed and semi-fixed - on the basis of acceptability of three tests of variation: "factorization" (N_0 essere Part), "variability of head verb" (N_0 Vy Part N_1) and "verbless use" (Part N_1): **fixed** (when the three properties = minus) and **semi-fixed** (when at least one of the three properties = plus). In order to associate each lexical entry to a specific idiomatic VPC type I inserted the morphosyntactic properties used as diagnostic tests in columns of the initial lexicon-grammar taxonomy, as shown in the following table:

table 5: an overview of idiomatic VPCS types in

N_0 =: um	Verb	Part	Ex of N_1	$N_0V\ N_1$	N_0 essere Part	N_0 Vy Part N_1	Part N_1	N_1=: C_1	Type of construction	Predicate
+	buttare	via	il tempo	+	-	-	-	-	redundant	buttare
+	mettere	dentro	il ladro	-	+	+	+	-	semi-fixed	dentro
+	fare	fuori	Max	-	-	-	-	-	fixed	fare fuori
+	mettere	su	casa	-	-	-	-	+	frozen	mettere su casa

This table includes prototypical VPC types. In the following chapter, I will present cases which are not clear-cut, showing the categorisation problems involving Italian verb-particle constructions' syntactic analysis.

10. Categorisation problems: towards a Syntactic "Gradience"?

The four types of construction – redundant, semi-fixed, fixed and frozen - define syntactic categories that are not clear-cut. There are prototypical members situated in the centre of the each category and other non-prototypical members situated in the intersection space between different categories. For instance *buttare via* in (1.a):

(1.a)

Ugo butta via (il suo tempo + I soldi) dietro cose inutili

(Ugo throws away (his time + his money) behind useless things)

This is a prototypical redundant VPC easily tested by omitting the particle. (1.a) is in fact in equivalence relation with the simple verb *buttare* (1.b).

(1.b)

Ugo butta (il suo tempo + I soldi) dietro cose inutili

(*Ugo throws (his time + his money) behind useless things)

It is situated in the centre of the category "redundant". At the same time, *mettere dentro* in:

(2.a)

Ugo mette dentro il ladro

(Ugo puts the thief inside)

is a prototypical semi-fixed VPC because it passes all of the three variation test described above, i.e. the factorisation, the substitution of the head verb and the verbless use, and it is situated in the centre of the "semi-fixed" category.

Moreover, *fare fuori* in

(3.a)

Bob fa fuori un gelato

(Bob eats up an ice-cream)

is a prototypical fixed VPC because it does not accept the factorisation test (3.b), the substitution of the head verb with any synonymy (3.c) and finally it cannot occur without the verb (3.d):

(3.b)

**Un gelato è fuori*

(*An ice-cream is up)

(3.c)

**Bob manda fuori un gelato*

(*Bob sends up an ice-cream)

(3.d) **Un gelato fuori!*

(*An ice-cream up!)

It is, in other words, at the centre of the "fixed" category.

Finally *metter su casa* (set up house) is a prototypical "frozen" VPC because it does not pass the particle omission (4.a) as well as any variation test (4.b-4.d) used to single out semi-fixed uses:

(4.a) **Ugo mette casa*
(*Ugo sets house)

(4.b) **Una casa è su*
(*A house is up)

(4.c) **Ugo manda su una casa*
(*Ugo sends up a house)

(4.d) **Su la casa!*
(*Up the house!)

Furthermore it differs from fixed in having a frozen or "constrained" argument in N1 position (*casa*) which cannot be substituted with other synonyms (4.e), or modified with determiners (4.e) and post-modifiers (4.f):

(4.e) **Ugo mette su abitazione*
(*Ugo sets up a residence)
(4.e) **Ugo mette su (la+ una) casa*
(Ugo sets up (the + a) house)
(4.f) **Ugo mette su casa di Max*
(Ugo sets up Max's house)

Mettere su casa is situated in the centre of the category "frozen".
The identification of these four types of constructions on the basis of variation tests is summarised in Table 5 (above) and raises no categorisation problems.
Some problems emerged when I tried to categorise uses situated at the boundary between the four types. For instance, in the sentence (5.a) the particle can be omitted because it does not affect the meaning and the argument requirement of the verb *sputare*:
(5.a)
Ugo sputa fuori la verità
(Ugo spits out the truth)

There is in fact an equivalence (5.b) between N0 V Part N1 verb-particle sentence and N0 V N1. Simple verb sentence:

(5.b)

N0 V Part N1 ←→ N0 V N1

Max sputa fuori la verità ←→ Max sputa la verità

(Max spits out the truth ←→ *Max spits the truth)

And, as is well-known now, this equivalence represents the diagnostic test used to single out redundant verb-particle uses.

It is interesting to observe that even though *sputare fuori* has a plus sign (+) under the property N0 V N1 it accepts at the same time also the three diagnostic tests used to identify semi-fixed VPCs, i.e.: the verbless use Part N1 (5.c), variability of the head verb (5.d) and syntactic decomposition property (5.e). Let's look at:

(5.c)

N0 V Part N1 ←→ Part N1!

Max sputa fuori la verità ←→ Fuori la verità!

(Max spits out the truth ←→ Out with the truth!)

(5.d)

N0 V Part N1 ←→ N0 Vy Part N1

Max sputa fuori la verità ←→ Max (tira + caccia+ butta) fuori la verità

(Max spits out the truth ←→ Max (pulls + throws + throws) out the truth)

(5.e)

N0 V Part N1 ←→ N1 essere Part

Max sputa fuori la verità ←→ La verità (è + viene) fuori.

(Max spits out the truth ←→ the truth (is + comes) out.)

The applications of these tests provide evidence of the convergence between two distinct and apparently distant verb particle syntactic categories (i.e. redundant and semi-fixed) which instead seem to intersect in some points.

In other words the question raised by these categorisation problems is the following: how should we treat '*sputare fuori*'? Is it a redundant use or a semi-fixed use? In which lexicon-grammar taxonomic classification should we encode it?

Considering the difficulties involved in categorising (and for this reason classifying) VPCs situated at the boundary between different categories, I have applied some priority levels to the properties used to differentiate VPCs.

Since the main and underlying aim of this work is testing the importance of the particle in the Italian VPC system, I used the three main variation tests (i.e. factorization, verbless uses, replacement of the head verb with synonymies) diagrammed in the second, third and fourth grey columns of Table 5, as the most relevant diagnostic criteria applied to distinguish the redundant from the semi-fixed (as well as the semi-fixed from fixed.) In other words when a use accepts at least one of the three variation tests, (i.e. factorisation, verbless uses, replacement of the head verb with synomymies) - even if it accepts at the same time the optional particle usage - it has been counted in the semi-fixed family.

This represented the formal and test based reason for which '*sputare fuori la verità*' is treated as a semi-fixed VPC.

Let's look now at the entry *buttare giù* in (6) with a unrestricted argument in the subject position (which can also be a sentential complement) and a human argument in the object position :

(6)

Il tuo comportamento butta giù Max [= *rattristare*]

(You behaviour brings Max down) [=saddens]

It is very clear that *buttare giù* in the use (6) can not be a "redundant" verb particle use because it does not pass the particle omission property, that is, the equivalence:

N0 V Part N1 ←→ *N0 V N1

*Il tuo comportamento butta giù Max ←→ *il tuo comportamento butta Max*

(You behaviour brings Max down) ←→ * (Your behaviour brings Max)

At the same time, it can not be a "frozen" use because the N_1 position is not constrained as it is demonstrated by the variability of N_1 in the following sentence:

Il tuo comportamento butta giù (Max+ Eva + il pubblico+ la porta…)*

(You behaviour brings down (Max + Eva + the public + *the door…)

The only lexical restriction operated by *buttare giù* on N1 refers to the selection of a human argument (N1=: human).
Categorisation problems are raised for '*buttare giù*' in (2) concerning the doubt in considering it semi-fixed or fixed. It does accept in fact the "verbless" proprerty, that is the equivalence:

N_0 V Part N_1 ←→ Part N_1
Il tuo comportamento butta giù Max ←→ *Max giù*[42]
(Your behaviours brings down Max) ←→ (Max down)

but does not undergo the variability of head verb, formalised by the equivalence:

N0 V Part N1 ←→ N0 Vy Part N1
Il tuo comportamento butta giù Max ←→ **Il tuo comportamento (manda+mette+tira) giù Max*
(Your behaviour brings down Max) ←→ (*Your behaviour (sends + puts + throws) down Max

It shows the same cohesion of fixed uses (like *fare fuori Max* in the third row) where both the verb and the particle cannot be replaced by synonymic forms. It is at the boundary between semi-fixed and fixed VPCs.
Anyway, '*buttare giù*' has a plus sign (+) under the property *N0 essere Part*, i.e. the syntactic decomposition property, as formalized by the equivalence:

N0 V Part N1 ←→ N1 essere Part
Il tuo comportamento butta giù Max ↔ *Max è giù*
(Your behaviour brings down Max) ←→ (Max is down)

This means I can consider '*buttare*' a causative operator applied on a base support verb sentence. As I have demonstrated many times, this test is not accepted by fixed uses where the head-verb no longer has a causative interpretation as well as an operator status. I regarded in fact the *syntactic decomposition* property as an important diagnostic test used to individuate

[42] As in the absolute-like verbless sentence *Con Max sempre giù, è dura la vita* (With Max always down, life is hard). Otherwise the imperative verbless is not accepted, i.e. **Max giù! Max giù!* (*Max down! Max down!)

semi-fixed VPCs and to single them out from the other syntactic types, (as in the case of *sputare fuori*).

Following this line of thinking I do not consider '*buttare giù*' as belonging to both the categories (semi-fixed and fixed) but (in a future work) I will embed it only into semi-fixed lexicon grammar taxonomy. Such priority levels helps to mitigate the doubt involving categorisation and allow us to increase the classification process economy. The morphosyntactic similarity of a category to another category in VPCs is modelled in other word by appealing to the notion of 'convergence'. The intersection between the categories analysed so far raised in fact the question of the presence of a syntactic *gradience* (Aarts 2003) in VPCs grammar.

11. Intransitive Constructions

So far I analysed transitive VPCs such as *buttare giù* (throw down)*, tirare su* (pull up), and *fare fuori* (eat up), and I pointed out that they exhibit a considerable variety: even though their "surface" sentence structure is the same (N_0 V Part N_1), they differ greatly in transformational behaviour and syntactic cohesion degree. In particular, I showed that transitive VPCs fall into four main types of constructions: redundant, semi-fixed, fixed and frozen. Furthermore, because of the difference in predication and in the pattern of variation involving the four types, I claimed that a parallel and independent treatment needs to be used for each type.

Let's look now at intransitive VPCs. Do they display the same heterogeneous syntactic behaviour? If yes, it would be a very powerful argument to support my point of view – *fixed string free slot based* - which emphasises the importance of distinguishing idiomatic VPCs into different syntactic types in order to classify each identified type in an independent way.

I take into account "short" intransitive structures, such as (a):

(a)

N_0 V Part W

in which N_0 is the subject, *V Part* the verb-particle and W is a variable which can be filled by a large range of different adverbial elements, including no element at all (W=: E). This can be seen in the following uses:

(a)

1. *La famiglia tira avanti (alla meno peggio + con uno stipendio solo + E)*
   (The family make do (to their best + with one wage only + E)
2. *Max ci dorme sopra*
   (Max sleeps on it)
3. *Lo studente si piange addosso*
   (The student feels sorry for himself)

I also take into account "long" intransitive structures, such as (b):

(b)

N_0 V Part Prep N_1

in which a further *Prep* N_1 is required on the right of the verb particle constructions. This can be seen in the following uses:

(4)	*Gli operai ci danno dentro con il lavoro*	[= impegnarsi]
	(The workmen knuckle down to work)	[= dedicate to]
(5)	*Max saltò addosso alla ragazza*	[= assalire]
	(Max assaulted the woman)	[= assault]

The prepositional phrase can also be not expressed, as in the following absolute sentence:

(4.1) Gli operai ci danno dentro

(The workmen knuckle down)

In other cases it is obligatory, as in the sentence (5) which does not accept the following absolute use:

(5.1.) **Max saltò addosso*

(*Max assaults)

I grouped the short structure (a) and the long structure (b) in the following syntactic formula:

(c) **N_0 V Part (E+ Prep N_1)**

defining the basic intransitive structure that I aim at describing here.[43]

By also applying the predication model and the battery test (discussed so far with regard to transitive idiomatic VPCs) to the set of intransitive idiomatic VPCs, I singled out four main syntactic types: redundant, semi-fixed, fixed and frozen.

The **redundant constructions** are characterised by an emphatic or pleonastic particle, which is unneccessary, as clearly tested by the particle omission property (Part=: E):

(6)

Il boss ce l'ha proprio su con te	[essere arrabbiato]
(The boss really has it in for you)	[be angry]
←→ *Il boss ce l'ha sempre con Maria*	
(The boss always has it in for Maria)	

i.e. by the following equivalence:

N_0 V su Prep N_1 <---> N_0 V Prep N_1:

The **semi-fixed constructions** are characterised by a large pattern of variation, as shown by the following sentence:

(7)

Bob corre dietro alla barista	[= corteggiare, fare il filo]
(Bob runs after the barmaid)	[= to court]

where the head verb *corre* (run) can be replaced by other verbs, such as *smania* (craves),

[43] From herein after we will refer to intransitive verb-particle constructions just within the easier syntactic formula N_0 V Part N_1 (E+ Prep N_2). The notion "E" (=empty element) indicates at the same time two possibilities: the empty slot for the variable W, as in the case of the short structures exemplified in (a); and the "contraction" of the long structures in the absolute structures, as exemplified in (4.1). A corpus of about 300 idiomatic verb-particle uses – falling both in short and long intransitive structures – are taken into account.

sbava (drools), *ronza* (hums), *muore* (dies), *è* (is), *sta* (stays), *si mette* (going to be), *va* (goes), *viene* (comes), without affecting the syntax and the semantics of the construction. I can see this in the following *paraphrastic equivalence network* (←→):

(8)

Bob corre dietro alla barista

←→ *Bob (smania + sbava +ronza+ muore + è sta +si mette + va + viene + E) dietro alla barista*

This can also be represented as follows:

Figure 8. Paraphrastic network for *correre dietro alla barista* (= to court)

In this network, the verbal slot is *semi-fixed*, i.e. variable into a finite (and lexically restricted) range of possibilities, while the particle slot represents the constant (or invariable) element of each construction and of the network as a whole, i.e. it is "fixed".
According to this assumption, all the VPCs included in this network (8) are defined as "*semi-fixed VPCs*" and, as a consequence, they are not treated as independent constructions but as syntactically and semantically related constructions: they are "**allocontructions"** arranged around the central pivot element (consisting of the particle) and connected together by links of meaning and form.

With regard to the meaning, the semantic *shift*, i.e. the shift from the concrete or locative interpretation of the VPC *corre dietro* (run after) to the abstract or metaphorical interpretation of it, i.e. *corteggia* (courts), involves only the particle. This can be clearly checked by *transformational facts,* i.e. by replacing the head verb *corre* with (i) the basic support verb *è* (is), (ii) motion verbs functioning as inchoative aspectual variants (such as *si mette, va, viene*) and finally (iii) verbs functioning as intensifying aspectual variants (*ronza, sbava, smania*). This operation does not affect the semantic interpretation of the constructions, i.e. the fact that *Bob is courting the barmaid,* offering evidence for the hypothesis that the head verb is semantically weak while the particle is meaningfull.

With regard to the form, all the constructions characterised by the particle *dietro* with the meaning of "court somebody" share the same sentence form N_0 *V Part (Prep + E)* N_1 with always *a* ("to") as preposition heading the PP (*Prep* =: a):

(8.1)

Bob (corre + sbava + va + ...) dietro ***a****lla barista*

Bob (corre + sbava + va +..) dietro ***a*** *Eva*

Bob (corre + sbava + va +...) dietro ***a*** *lei*

[Prep N_2*=:ppv]* → *Bob* ***le*** *(corre + sbava + va +...) dietro*

Optionally, a *direct regency* of DP (Prep=:E) is licensed:

(8.2)

Bob (corre + sbava + va + ...) dietro ***la*** *barista*

In addition, as matter of fact, all the constructions included in the paraphrastic network are characterised by the unacceptability of the absolute use, i.e. by the obligatory of N_2,:

(8.3)

**Bob (corre + sbava + va + ...) dietro*

(*Bob (runs + drools + goes + …) after)

which can be only of human type (N_2=: human):

(8.4)

Bob (corre + sbava + va + ...) dietro (alla barista + Eva + lei + il cane + *la porta*)

(*Bob (runs + drools + goes + …) after (the bairmain + Eva + her + *the dog + *the door)

These findings suggest that in all the constructions of the same network (8) there is an invariance in the *predicate argument structure* (PAS) with the particle *dietro* governing the simple preposition(s) and the typology of the arguments. Within Harris (1976) all the constructions arranged around the particle *dietro* with the meaning of "to court somebody" share the same predicate-argument structure, i.e **Onn**. This is also true with regard to the following *verbless particle construction* with the verbal slot filled by no elements (V=: E):

(8.5)

Quanto tempo ha perso Bob dietro alla barista?Più di un anno.

(How much time has Bob lost after the barmaid? More than a year.)

This means that one of the basic properties concerning the intransitive semi-fixed VPCs is that the "semi-fixed" slot for the verb can not only be filled by support verbs or support motion verbs - which are, by definition, semantically weak verbs (also named 'light') - but it can also be "optional", that is, not filled at all.

The syntactic decomposition of the extended N_0 *V Part (Prep + E)* N_1 structure into the support verb construction N_0 *Vsup Part (Prep + E)* N_1, the variability of the head verb and the verbless particle constructions represented the main criteria used to single out semi-fixed intransitive VPCs.

Fixed intransitive constructions, indeed, are characterised by a higher syntactic and distributional cohesion. In the following sentence, for instance:

(9)

Bob dà addosso alla madre	[= attaccare]
(Bob gets on at the mother)	[=attack verbally]

the verb and the particle form an unique lexical unit, i.e. *multi-word unit*, with the meaning of "attack verbally, be very critical" which needs to be stored in the lexicon-grammar as a chunk since the particle is obligatory (i.e. *Part=:*E*):

(9.1)

←→* *Bob dà alla madre*

(*Bob gets at the mother)

and the head verb cannot be replaced by variants (i.e. V_x= *V_y):

(9.2)

←→ * *Bob va addosso alla madre*

(Bob goes on at the mother)[44]

Finally, fixed intransitive VPCs do not pass the verbless property:

(9.3) **Addosso alla madre! Addosso alla madre!* [=attack verbally]

*On at the mother! On at the mother!

The fourth intransitive type is represented by **frozen constructions**, characterised by a "constrained" PP, (i.e. Prep C_1) beside the verb and the particle. In the following sentence, for instance:

(10)

Eva passa sopra ai cadaveri

(Eva passes over the dead bodies)

the entire V + Part + Prep C_1 combination means something like "harm someone or win over extreme resistance to reach one's goals". It is listed in the dictionaries as figurative and it causes some problems in multilingual translations as in the case of *idioms*. I decided to regard this use as a frozen sentence embedding a VPC, i.e. an idiom, because it blocks the three main properties used to single out the other types. In particular it does not pass the syntactic decomposition into a support verb construction, i.e. the paraphrastic equivalence between the two structures N_0 *V Part Prep* C_1 ←→ N_0 *essere Part Prep* C_1*:*

(10.1)

Eva passa sopra ai cadaveri

←→ * *Eva è sopra ai cadaveri*

(*Eva is over the dead bodies)

In addition, it does not accept the second test, of the variability of the head verb, i.e. the paraphrastic equivalence between the two structures N_0 V_x *Part Prep* C_1 ←→ N_0 V_y *Part Prep* C_1*:*

[44] Note the difference with the corresponding English phrasal verb in the translation, which accepts 'go' as variant of 'get' in the structure *Someone (goes + gets) on at somebody* (= attack verbally).

(10.2)

Eva passa sopra ai cadaveri

←→ * *Eva (cammina + corre + ...) sopra ai cadaveri*

(*Eva (walks + runs + …) over the dead bodies)

Finally *passare sopra ai cadaveri* cannot occur without the verb *passare*; it does not accept the verbless use, i.e.the paraphrastic equivalence between the two structures N_0 *VPart Prep* C_1 ←→ *Part Prep* C_1:

(10.3)

Eva passa sopra ai cadaveri

←→ **Sopra ai cadaveri!*

(*Above the dead bodies!)

←→ **Con Eva sopra ai cadaveri, è difficile competere*

(*With Eva above the dead bodies, it's difficult to compete)

However, I remark that an interesting range of syntactic and distributional variation is admitted. While the verb *passare* is constrained or distributionally "blocked" the particle can be indeed commuted with the prepositions *su*, *sullo, sulla, sui* (on). In the same way, the noun *cadaveri* (dead bodies) can be converted into the singular form *cadavere* (dead body) or commuted with a finite list of variants such as *corpo* (body)*, testa* (head)*, pelle* (skin). Furthermore a possessive such as *mio* (my), *tuo* (your), *suo* (his), *nostri* (our), *loro* (their) can occur between the particle (or the preposition) and the noun. This variation is exemplified as follow:

(10.4)

Se davvero vuoi vincere dovrai passare (sopra al mio cadavere +sul mio cadavere + sul mio corpo + sulla mia testa + sulla mia pelle + su di me)

(If you really want to win, you'll have to pass (over my dead body + *on my dead body + *on my body + *on my head + *on my skin + *on me)

SECTION IV

THE SYNTACTIC AND SEMANTIC POWER OF PARTICLES

Abstract

This section is based on the variation pattern and on the predication theory concerning VPCs pointed out in the previous section. I aim at providing here syntactic and semantic arguments to support a Particle-Centred Approach on Italian VPCs.

I will describe the power of particles in semi-fixed VPCs where the particle displays its maximum autonomy and then I will sketch out an original proposal concerning their syntactic and transformational structure(s) based on Harris' minimal Syntactic Theory.

After discussing the predicative value of particle in semi-fixed and compositional constructions – with a *paraphrastic networking system* - I will point out the similarity between compositional and idiomatic VPCs since both of them fall in a causative/resultative relation as well as in a predicative small clause structure.

1. More on the Semi-fixed VPCs: the paraphrastic network

As I have shown in the previous section, an interesting percentage (30%) of idiomatic transitive verb-particle uses are *semi-fixed*, i.e. more flexible and less cohesive constructions than fixed ones as they accept a large range of variation and need to be analysed in an autonomous way.

If the object of my linguistic investigations is the "elementary sentence", the set of transitive semi-fixed VPCs cannot be regarded as elementary sentences, but as *complex sentences*, i.e. expanded sentences containing *short sentences*, with the minimal predicate/argument, i.e. *Part (N).* This can be formulated as a minimal expansion principle. In addition, I analysed semi-fixed transitive VPCs as characterized by a semi-free slot for the verb and a fixed slot for the particle:

$$\mathbf{N_0\ V\ [Part]_{PRED}\ N_1}$$

For instance the sentence:

(1a)

Max <u>mette dentro</u> il ladro

(Max puts inside the thief)

is in 'paraphrastic equivalence' ("<--> ") with all the following sentences:

(2a)

↔ *Max <u>sbatte</u> dentro il ladro* (Max shuts inside the thief)

↔ *Max <u>butta</u> dentro il ladro* (Max throws inside the thief)

↔ *Max <u>manda</u> dentro il ladro* (Max sends inside the thief)

↔ *Max <u>spedisce</u> dentro il ladro* (Max sends inside the thief)

↔ *Max <u>porta</u> dentro il ladro* (Max takes inside the thief)

In these examples the particle *dentro* is the characteristic (or "constant") element of the construction (=operator) while the head-verb is variable into a finite range of combination possibilities: the verb *mettere* in (1a) is substituted in (2a) with synonymic forms, that is with other causative motion verbs such as *buttare* (= to throw), *sbattere* (= to shut), *mandare* (= to send), *portare* (=to take), *spedire* (to send).

My analysis – as I tried to show so far - suggests that the sentences (1a) and (2b) are "**related constructions"**, associated with the following support verb construction:

(3a)

↔ *Il ladro è dentro*

(The thief is inside)

Also the verb *essere* in (3a) can be replaced by distributional variants like *stare* (stay), *rimanere* (remain), *restare* (stay), *andare* (go), *tornare* (return), *trovarsi* (be located), *ritornare* (return), *finire* (finish), *vivere* (live) which carry an aspectual value to the *essere* base construction:

(4a)

↔ *Il ladro vive dentro*

↔ *Il ladro sta dentro*

↔ *Il ladro si trova dentro*

↔ *Il ladro rimane dentro*

↔ *Il ladro resta dentro*

↔ *Il ladro va dentro*

↔ *Il ladro finisce dentro*

↔ *Il ladro torna dentro*

In particular *vivere* (similarly to *essere*) designates a permanent state with respect to *stare* and *trovarsi,* which indicate a temporary state; *Restare* and *rimanere* refer to the duration of the condition "to be imprisoned" while *andare* and *finire* are motion verbs with an 'inchoative' aspectual value. Finally *tornare* (= to return) is a "reiterative" support verb variant in paraphrastic equivalence with the sequence *essere di nuovo* (= be again):

(5a)

↔ *Il ladro (è di nuovo + torna) dentro*

(The thief (is again + returns) inside

Within Harris' reductionist theory of the grammar, verb-particle uses like (1a) and (2a) are regarded as "full" sentences because they display the maximum expansion of the arguments, while verb-particle uses like (3a) and (4a) are "reduced" sentences because they are the result of a "decomposition" process.

Otherwise I do not allow for a *top-down* process, which starting from the sentences (1a) and

(2a) gives as output the sentences (3a) and (4a). Rather I assume a *bottom-up* minimal hypothesis, that starting from the support verb sentence like (3a) gives as results the transitive expanded sentences (1a) and (2a) by adding elements.

I assume in fact that, in order to describe syntax and semantics of semi-fixed VPCs, the direction of the process has no importance, according to the main Harrisian hypothesis on the *transformational process* (Harris 1956) that - in fact – is not unidirectional (A → B) but bidirectional (A ↔ B). The transformation is the mechanism that allows for moving from one sentence to another or from a set of sentences to another set of sentences, in this case from a sentence to its equivalent sentences (or "variants") and from the set of full sentences to the set or reduced sentence, and vice versa.

Looking at the following paraphrastic equivalence relation:

(5)

Max (mette + butta+ sbatte + porta + spedisce + E) ***dentro*** *il ladro*

↔

(6)

Il ladro (è + va + finisce+ si trova + rimane + E) ***dentro***

what I suggest in my descriptive analysis is very clear: the set of the "expanded" VPCs (5) is correlated with the set of the "short" VPCs (6) via a bidirectional transformation process (indicated with "↔ ") that defines a *"paraphrastic equivalence class*" (also called in the recent lexicon-grammar works metaphorically "paraphrastic constellation"). In this constellation the particle is invariant, or "fixed": it is the syntactic and semantic *pivòt* element (or "operator") of each construction and of the constellation as a whole.

The particle in fact is the key element of semi-fixed VPCs, that is, the constant component. Together with its restricted semantic class of arguments (N) – it can never be missing, unlike the verb, which both in the extended sentences and in the short sentence sets can be substituted by variants or can simply not occur at all.

In (5) and (6) in fact the possibility of actualising a sentence without the verb is indicated by the symbol "E" (= empty). I have called sentences like (7) "verbless" VPCs:

(7)

(a.) *Dentro il ladro!*
(In with the thief!)

(b) *Con il ladro dentro, tutto il quartiere è più tranquillo*
(With the thief inside, the entire area will be more tranquil)

Indicating with *N_0 V Part N_1* the sentences in (5), with *N_1 essere Part* the sentences in (6), and with *Part N_1* the verbless in (7a and 7b) the "paraphrastic equivalence class" of semi-fixed VPCs like *mettere dentro* (= to imprison) is formalised as follow:

N_0 V Part N_1 ↔ N_1 essere Part ↔ Part N_1

In this example, the arrow (↔) indicates the relative synonymy or "paraphrastic equivalence" between the three surface forms of semi-fixed VPCs, i.e. transitive constructions, support-verb constructions and verbless constructions:

transitive ↔ support verb ↔ verbless

Since support-verb and verbless are the two "surface" forms of the "short" constructions set, - differing from each other in having the verbal slot (situated on the left of the particle), filled by a support verb or a support verb variant in the former case and completely empty in the case of verbless constructions - the previous equivalence relation can be rewritten out also as follow:

expanded ↔ short

The following picture illustrates such equivalence relation between expanded and short VPCs by outlining the "**paraphrastic constellation**" involving the semi-fixed VPCs *mettere dentro* (= to imprison).

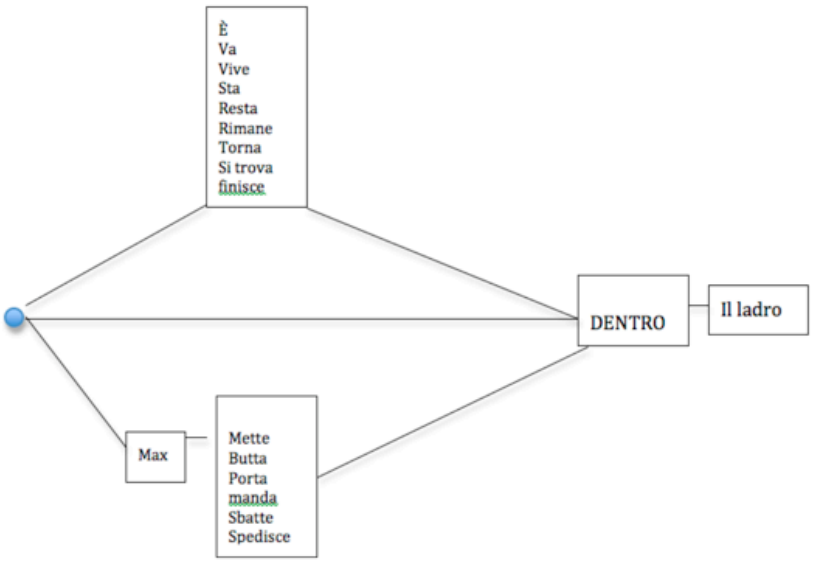


Fig. 2 Paraphrastic costellation of *mettere dentro* (= to imprisoner)

The upper path indicates the set of **short sentences** (6), that is, all the possible synonymic support verb constructions forming the constellation (both with "essere" and with aspectual variants); the lower path represents the set of **expanded sentences**, that is, all the possible transitive sentences with the particle *dentro* having the meaning of "to imprison" (in which the further argument *Max* occurs). The central path indicates the possibility to have a perfectly acceptable sentence just made up with the particle *dentro* and its selected human argument class, that is the **verbless sentence** (7) *Dentro il ladro!*

Futhermore it is very clear that the set of the short sentences is included in the set of expanded sentences. Let's look at the following examples:

8. *Il Senato **buttò giù** il governo*
(The Senate throws down the government)

←→ *(8.a) Il Governo va giù*
(The government goes down)

9. *Ugo **ha tirato su** un palazzo*

(Ugo built up a building)

←→ *9.a. Il palazzo è su*

(The building is up)

*10. Maria **ha messo avanti** l'orologio di due ore*

(Maria set her watch forward by two hours)

←→ *10.a. L'orologio (è + va) avanti di due ore*

(The watch (is + goes) forward by two hours)

*11. La societa **ha tagliato fuori** la concorrenza dal mercato*

(The company cut the competition out of the market)

←→ *11. a. La concorrenza è fuori dal mercato*

(The competition is out of the market)

The verbs *buttare*, *tirare*, *mettere, tagliare* are causative motion verbs that together with their causative arguments (*Il Senato, Ugo, Maria*) are applied on the basic support verb construction N_0 *essere Part*. The object of the transitive construction becomes the subject of the support verb construction. Because these verbs are "*supérieure*" operators on elementary sentences they leave the relationships contained in the original sentences unchanged. Sentences (8), (9), (10), (11) include the sub-sentences (8.a), (9.a), (10.a), (11.a).
Furthermore the full sentences (8), (9), (10), (11) are in paraphrastic relation with the following "factitive" sentences:

(8.b) *Il Senato fa che il Governo (sia + vada) giù*

(The Senate makes it so that the government (is + goes) down)

(9.b) *Ugo fa che il palazzo sia giù*

(Ugo makes it so that the building is up)

(10.b) *Maria fa che l'orologio sia avanti di due ore*

(Maria makes it so that the watch is forward by two hours)

(11.b) *La società fa che la concorrenza sia fuori dal mercato*

(The company makes it so that the competition is out of the market)

From the event-semantic point of view (Table 5 below) expanded sentences are **causative** while short sentences are **resultative**. At the end of the process indicated by each verb, the government goes *down*, the building is *up*, the clock is *forward*, the competition is *out*.
Let's look at the following *before/after* support verb paraphrases applied on the sentences (8), (9), (10), (11) used to test the resulative value of the support verb sentences (8.a) (9.a) (10.a) (11.a):

(8.c.)

Before (the process indicated by the verb): *il governo non va giù* (the government is not down)

After (the process indicated by the verb): *il governo va giù* (the government goes down)

(9.c.)

Before (the process indicated by the verb): *il palazzo non è su* (the building is not up)

After (the process indicated by the verb): *il palazzo è su* (the building is up)

(10.c)

Before (the process indicated by the verb): *l'orologio non avanti di due ore* (the watch is not forward by two hours)

After (the process indicated by the verb): *l'orologio è avanti di due ore* (the watch is forward by two hours)

(11.c)

Before (the process indicated by the verb): *la concorrenza non è fuori dal mercato* (the competition is not out of the market)

After (the process indicated by the verb): *la concorrenza è fuori dal mercato* (the competition is out of the market)

The claim that in semi-fixed VPCs the particle (together with its selected arguments) constructs the core event of the predication is further validated by the data. I see this in the

following 30 different head-verb lexemes (a) forming transitive idiomatic *N_0 V Part N_1* structures:

(a)

Avere (have), *buttare* (throw), *cacciare* (hunt), *chiamare* (call), *covare* (brood), *dare* (give), *dire* (say), *fare* (do), *gettare* (throw), *lasciare* (leave), *mandare* (send), *mettere* (put), *portare* (carry), *prendere* (take), *ricacciare* (drive back), *sbattere* (beat), *scacciare* (drive away), *spazzare* (sweep), *spazzolare* (brush), *spedire* (send), *spingere* (push), *sputare* (spit), *strappare* (tear), *tagliare* (cut), *tenere* (keep), *tirare* (pull), *trascinare* (drag), *volere* (want), *vomitare* (vomit)

The most highly productive of these, i.e. those entries with more transitive uses, are *buttare, mettere* and *tirare,* which form respectively 36, 30 and 38 VPCs. In other words about 50% of VPCs included in the lexicon-grammar tables are made up with the generic causative motion verbs *buttare, mettere*, and *tirare*. This suggests that these verbs lend themselves to many idiomatic combinations, or verbal uses, because of their "emptiness" of meaning, as in the case of the support verb.

2. The Causative/Resultative Alternation

It is clear that the semi-fixed VPCs examined until now (i) are not fully lexicalised patterns (ii) the particle plays a central syntactic and semantic role in them. I observed an interesting regularity concerning the Event Semantic involving this large set of Italian idiomatic VPCs. They are always of two kinds: CAUSATIVE and RESULTATIVE.

On data collected in my work I tested all the transitive semi-fixed VPCs of the form SUBJECT-VERB -PARTICLE -OBJECT, like

(1)

a. *La polizia **mette dentro** il colpevole* (N_0 V Part N_1)
(The police puts inside the guilty)

or in the shifted order, with the OBJECT moved on the left of the particle:

b. *La polizia **mette** il colpevole **dentro*** (N_0 V N_1 Part)
(The police puts the guilty inside)

These structures mean something like SUBJECT CAUSE that OBJECT go PARTICLE by means of VERB (cf. Ejerhed, 1981). I termed transitive structures like that in (1) as CAUSATIVE.

Then I observed that all of these transitive structures, i.e. *causative*, are in paraphrase with the following intransitive sentences, which denote the RESULT (or the 'final state') of the causative event:

(2)

a. *Il colpevole è dentro*
(The guilty is inside)

I termed sentence (2) RESULTATIVE. To obtain (2) from (1), I applied an operation of scission of (1) termed 'syntactic decomposition', used as a diagnostic test to check the semi-fixed status of each transitive verb particle configuration.[45]

The support verb *essere* in (2) can be replaced by other motion or stative verbs playing

[45]The syntactic decomposition test represented the main criterion used to identify semi-fixed VPC patterns and to treat them separately from fixed VPCs, like *Ugo ha fatto fuori Maria* (Ugo killed Maria) which does not pass such a test (* *Maria è fuori* (*Maria is out)).

the role of aspectual variants, like the following:

(2)

b. *Il colpevole finisce dentro*
   (The guilty finishes inside)
c. *Il colpevole va dentro*
   (The guilty goes inside)
d. *Il colpevole sta dentro*
   (The guilty stays inside)

Sentences in (2.b, 2.c, 2.d) are in synonymic relation (i.e. 'paraphrastic equivalence') with the basic one (2.a) and so, in our view, they are also interpreted as RESULTATIVE.

Additionally, there are sentences without a head-verb like:

(3)

Dentro il colpevole!
(lit. *Inside - the- guilty!)
(In with the guilty!)

Una volta dentro il colpevole, avremo finalmente giustizia.
(lit. * Once the guilty inside, we will finally have justice)
(With the guilty in prison, we will finally have justice)

These constructions are related in some way to the sentences (1) and (2). I termed semi-fixed VPCs like (3) *verbless particle uses*. From the event semantic point of view they are situated between causative (1) and resultative (2).

In other words, verbless uses are in paraphrastic equivalence relation both with the transitive/causative sentences (i) and the support verb/resultative sentences (ii):

(i)

La polizia mette dentro il colpevole
↔ *Dentro il colpevole*

La polizia mette il colpevole dentro
←→ *Il colpevole dentro*

(ii)

Il colpevole (è+ va +finisce+sta) dentro

↔ *il colpevole dentro*

(E'+ va +finisce+sta) dentro il colpevole

←→ *dentro il colpevole*[46]

The CAUSATIVE-RESULTATIVE alternation is valid for directional compositional VPCs as well. Let's look at the following compositional example of the transitive form SUBJECT -VERB -PARTICLE -OBJECT:

(4)

a. *Ugo mette dentro la macchina* (N_0 V Part N_1)
(Ugo puts away the car)

or in the shifted order:

b. *Ugo mette la macchina dentro* (N_0 V N_1 Part)
(Ugo puts the car away)

The transitive sentences (4a. and 4.b) are CAUSATIVE and they are related via paraphrastic relation (↔) with the following support verb sentences:

(5)

a. *La macchina è dentro*
(The car is inside)

b. *è DENTRO la macchina*[47]

[46] Here a 'real' verbless sentence:
Meglio un colpevole fuori che un innocente dentro (www.ilgiornale.it)
(Better a guilty person free than an innocent one in prison)

[47] As in the 'real' example:
Non preoccuparti, è DENTRO la macchina (e non fuori!)

(*Is inside the car)

I consider these sentences RESULTATIVE. These are in turn related – in a *star networking system* - to the following sentences where the support verb *essere* is replaced by the aspectual variants *stare* (stay) and *trovarsi* (be located):

c. *La macchina sta dentro*
(The car stays inside)

d. *La macchina si trova dentro*
(The car is located inside)

with exactly the same structure of (5), i.e. **N_0 V sup Part**.
As a consequence, the following syntactic-semantic mapping can be used to represent both semi-fixed idiomatic and directional compositional VPCs:

	N_0 V $[Part]_{PRED}$ N_1	= transitive	CAUSATIVE
←→	N_0 VSup $[Part]_{PRED}$	= support verb construction	RESULTATIVE

Since semi-fixed idiomatic VPCs and compositional directional VPCs represent the larger set of Italian VPCs (both in terms of lemmata and lexical uses), I stress the general hypothesis that Italian VPCs have an essentially causative and resultative nature, in which the post-verbal NP (i.e. N_1) in the transitive structure *N_0 V Part N_1* acquires the property denoted by the particle (the property of being down, up, out or whatever) as observed for English VPCs by Bolinger (1971)[48] and more explicitly proposed in Svenonius (1996). [49]

(Don't worry! The car is INSIDE (and not out))
The upper case indicates the tonal prominence.

[48] According to Bolinger (1971), the particles in simple (non-ditransitive) verb-particle constructions are frequently predicative (in *put the hat on*, the hat becomes on) and in some cases these particles have 'transitive' counterparts (e.g. *put the hat on your head*).

[49] Note that in Svenonius (1994, 1996) *resultative* is regarded as synonym of *causative*. In our view, instead,

3. Semi-fixed VPCs, Directional VPCs and Free Locative Constructions: an unified Small Clause Analysis

Now, let's consider idiomatic semi-fixed uses of the *N_0 V Part N_1* structure, like:

Ugo mette dentro il ladro [= arrestare]
('Ugo puts inside the thief') [=arrest]

and compositional directional uses of the same N_0 V Part N_1 structure, like:

Ugo mette dentro la macchina [= parcheggiare in garage]
('Ugo puts away the car') [=parks in the garage])

Both share the same causative semantic interpretation and they are associated, syntactically and semantically, with support verb constructions, i.e. *Il ladro è dentro* for semi-fixed, and *la macchina è dentro* for compositional-directional. These represent the final status or the RESULT of the process indicated by the verb. The syntactic structure directly reflects this meaning in that the post-verbal NP forms a Small Clause with the Particle (Bolinger 1971, Kayne 1985, Svenonius 1994, 1996), with the *Part N* as a sentential complement, i.e. a predicative 'nexus'.

Ugo mette [*dentro il ladro*]$_{SC}$ [idiomatic semi-fixed]
Ugo mette [*dentro la macchina*]$_{sc}$ [compositional-directional]

As matter of fact, as in the case of idiomatic semi-fixed constructions, also the compositional-directional constructions in (4) and (5) are related with the following verbless sentences:
(6)

"causative" refers to the "expanded" transitive constructions and "resultative" to the "unexpanded" support verb constructions which denote the final state or the RESULT of the event. This allows us to better distinguish the "inchoative" status of causative and the "final" or "terminative" status of resultative constructions within the framework of the Lexicon-Grammar.

a. ***La macchina dentro****, per favore!*
(The car away, please!)

b. *Con* ***la macchina dentro****, siamo al sicuro da eventuali furti*
(With the car away, we are safe from any theft)

I argue that this hypothesis can be extended also to the larger set of Italian free locative constructions of N_0 *V* N_1 *Loc* N_2 transitive structure, such as (7.a) and (8.a) where the motion verb has a causative (and for this reason "weak") nature while the *Loc* N_2 complements (i.e. *in cantina* (in the basement) in (7) and *in garage* (in the garage) in (8) represent the semantic and syntactic powerful elements, i.e. the predicates or "operators".
At the end of the process indicated by the verb, the N_1 arguments (i.e. *la bici* (the bicycle) in 7.a and *la macchina* (the car) in 8.a) acquire the property denoted by *Loc* N_2, i.e. the property of being respectively *in cantina* and *in garage* as shown by 7.b and 8.b:

(7)

a. *Max trascina la bici in cantina*
(Max drags the bicycle to the basement)

b. ←→ *La bici (è + si trova + sta) in cantina*
(The bicycle (is+is located+stays) in the basement

(8)

a. *Ugo mette la macchina in garage*
(Ugo puts the car in the garage)

b. ←→ *La macchina (è+ sta+ si trova) in garage*
(The car (is+stays+is located) in the garage)

The predicative nature of *Loc N* in both the couples of constructions in (7) and (8) is also tested by the acceptability of the following (minimal) verbless constructions:

(7) c. *La bici in cantina!*[50]

[50] See also the following non-imperative sentence of the absolute type:

Con la bici in cantina, andremo a piedi in città
(With the bicycle in the basement, we will walk in the city)

(The bicycle in the basement!)

(8) c. *La macchina in garage!*[51]
(The car in the garage!)

The former can be added to the paraphrastic class in (7) and the latter to the one in (8).
In other words, in my analysis, both idiomatic semi-fixed uses of N_0 *V Part* N_1 structure, like *Ugo mette dentro il ladro* [= arrestare] and compositional directional uses of the same N_0 *V Part* N_1 structure, like *Ugo mette dentro la macchina* [= parcheggiare in garage] as well as free locative constructions like *Ugo mette la macchina in garage* can be represented within a **Small Clause Analysis**, i.e. SC (cf. chapter 8):

(9)

a.	*Ugo mette [il ladro dentro]*$_{SC}$	(idiomatic semi-fixed VPC)
b.	*Ugo mette [la macchina dentro]*$_{sc}$	(compositional-directional VPC)
c.	*Ugo mette [la macchina in garage]*$_{SC}$	(free locative construction)

in which the predicative relation between *N* and *Part* (in 9.a. and 9.b.) and *N* and *Loc N* (in 9.c) is sketched out. This unified analysis offers evidence for the syntactic similarity not only between idiomatic semi-fixed VPCs and compositional-directional VPCs (9.a-9.b) but also between compositional-directional VPCs and free locative constructions (9.b-9.c). This latter assumption is clearly shown by replacing *in* with *dentro,* as they are distributionally equivalent:

(10)

	a.	Ugo mette la macchina ***in*** garage (Ugo puts the car in the garage)	(free locative construction)
←→	b.	Ugo mette la macchina ***dentro*** (il + al) garage (Ugo puts the car away in the garage)	(compos/directional VPC)

[51] See also the following non-imperative sentence of the absolute type :

Con la macchina in garage, siamo al sicuro da eventuali furti
(With the car in the garage, we are safe from any theft)

I claim that compositional-directional VPCs (such as 10.b) have a lot in common with free locative constructions (such as 10.a), by sharing the same 'causative' meaning, the same syntax, i.e. a Small Clause Analysis, and differing only in the possibility of not overtly expressing the Ground (or 'landmark'), i.e. the PP headed by the particle:

Ugo mette [la macchina [[dentro$_{PART}$] al garage]$_{PP}$]$_{SC}$

←→ Ugo mette [la macchina [[dentro$_{PART}$]$_{SC}$

In Lexicon-Grammar terms I have the following relation:

←→ N_0 V N_1 dentro (E+ Prep) N_2

←→ N_0 V N_1 dentro

Here, the latter is a 'contraction' of the former. The same possibility is not given to free locative constructions consisting of "functional" or "simple" prepositions (Rizzi, 1985) like *in* (in), which can occur only with an expressed Ground (or 'landmark'), i.e with the NP following the preposition:

Ugo mette la macchina in garage
(Ugo puts the car in the garage)

←→ **Ugo mette la macchina in*[52]
(Ugo puts the car in)

In light of Harris (1976), *put* (it. 'mettere', fr. 'mettre') is no longer a three place verb, i.e. someone puts something somewhere, as traditionally (and also currently) regarded by grammars[53] but a variant of the causative operator "cause" (fr. "faire"), which "cause" takes

[52] Since *mettere in* cannot occur in an absolute use, i.e. without the selected NP, it does not form a verb-particle construction (at least in Italian).

[53] This represents an interesting difference between Tesnière based theories (Helbig, G./Schenkel, W. (1975), Engel, U. /Schumacher H. (1978), Engel, U./Savin, E. (1983)) and Harris (1976). According to Tesnière's scholars in fact *mettere* (fr. "mettre") is trivalent, i.e. it selects for three arguments, while for the latter it includes two nominal arguments ('n') and a sentential argument ('o'), i.e. *Ono*. For a traditional account of *mettere* see Serianni (1989), Marotta (1989), Renzi (1988). A brief discussion on the verb's valency where *mettere* is

has when the operator it is applied to is a locative.

(9)

a. *John caused the picture to be up* (Harris, 1976: 67)

b. *John put the picture up*

With respect to the Italian verb *mettere* (put), I claim that, following Harris's analysis of *put* (Harris, 1976)[54], it does not select for two nominal arguments and an adverb or a locative prepositional phrase (i.e. *John*, *the picture* and *up*). It is not a *first order operator* (of the type 'Onnn') but rather, it selects for a causative subject on its left and an operator-argument structure, i.e. a sentential argument on its right: it is a "second order operator" (of the type "Ono").

Likewise, Rigter & Beukema (1985) hold that *the flower in the vase* in the following sentence (10) constitutes a SC complementing the verb *put*, with the predicative relation between DP and PP clearly stated by the existence of a copulative counterpart (10.b)[55]:

(10)

a. *Mary put [the flowers in the vase]*$_{SC}$

b. *The flowers are in the vase*

The predicate *put* would select two arguments only, the external argument *Mary* and the SC as its internal argument. Also Reinhart & Reuland (1993) argue that predicates such as *put* in (10.a) do not select three arguments (also labelled as AGENT, THEME, LOCATIVE) but an SC complement.

Following this assumption[56] I regard put-like verbs, such as *buttare* (throw), *mandare* (send),

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regarded as trivalent is available at the following link (from Accademia della Crusca, 13 June 2008): http://www.accademiadellacrusca.it/en/italian-language/language-consulting/questions-answers/valenze-reggenze-verbi**.** See also the valency dictionary (E-VALBU) at http://www.ids-mannheim.de/e-valbu

[54] See also Danlos (1988) who classified *être Prep* constructions as lexical entries of the lexicon grammar tables and verbs such as *mettre* (put), *jeter* (throw), *pousser* (push) as causative support verbs, applied on them. The same analysis is worked out for Italian *essere Prep* constructions (such as *essere in mostra* (be on display) by Vietri (1996).

[55] Let's remember that according to the main Small Clause approaches, in an SC there is a "hidden" copula *be*.

[56] In Aart (2001) a different analysis of the verb *send* in the sentence *Valerie sent a memo out* is pointed out. Despite the author elsewhere supporting a Small Clause account, here he argues that a verb like s*end* subcategorises for an NP and a PP complement:

1. Valerie [sent]$_{V}$ [a memo]$_{NP}$ [out]$_{PP}$

cacciare (hunt), motion verbs involving a transition of the object from one location or state to another, i.e. *causative motion verbs* applied with their AGENT (I.E. CAUSATIVE SUBJECT) on predicative particle constructions, that is "large" constructions embedding small constructions (or small clauses):

Il portiere butta [fuori gli ubriachi [dal bar]$_{PP}$]$_{SC}$
The doorman throws [the drunks [out of the bar]$_{PP}$]$_{SC}$

Il portiere butta [fuori gli ubriachi]$_{SC}$
The doorman throws [the drunks out]$_{SC}$

4. Interim conclusions and speculations

One of the main findings of my research is represented by the interesting relation of similarity discovered between compositional-directional VPCs and semi-fixed idiomatic VPCs. Compositional-directional VPCs like *Max mette dentro la macchina* and *Ugo porta giù la spazzatura* (Ugo carries down the rubbish), have a "causative" nature and are related via "syntactic decomposition" with the support verb sentences *La macchina è dentro* and *La spazzatura è giù* (The rubbish is down), which have a "resultative" nature. Similarly, the so-called "semi-fixed" VPCs, like *Max mette dentro il ladro* or *Ugo butta giù i prezzi* (Ugo brings down the prices), also have a "causative" nature, and the same paraphrastic relation with the "resultative" support verb sentences, as in *Il ladro è dentro*, *i prezzi sono giù* (The prices are down).

Both compositional-directional VPCs and semi-fixed idiomatic VPCs, in fact, accept the same pattern of variation (*factorization, substitution of head verb with synonymic causative verbs, verbless use*) allowing us to hypothesize that, even if they are different in semantic

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At the same time for him the verb *go* subcategorises for a PP intransitive complement (i.e. a PP in which the preposition is not followed by an NP complement):

2. Valerie [went]$_{PP}$ [out]$_{PP}$

In Aart's view, based on a linguistic economy principle, i.e. *Occam' razon,* there is no longer a need to posit a class of phrasal verbs. *Send* and *Go* are just like other verbs in their complement-taking properties: he calls constructions like 1-2 *verb-preposition constructions.*

interpretation, they share the same syntactic behaviour. Therefore, a unique representation form can be created for both of them, i.e. (a) for transitive construction and (b) for intransitive constructions:

(a) $\mathbf{N_0\ V\ [Part]_{PRED}\ N_1}$

(b) $\mathbf{N_0\ V\ [Part]_{PRED}\ Prep\ N_1}$

with a fixed slot for the particle (playing the role of predicate) and a semi-fixed slot for the verb before the particle. The verb can vary into a finite range of possibilities (Vx =: Vy), or can even not occur at all (V=: E) as in the case of the so-called "verbless particle constructions" (*infra* section V).

This work represents an original lexicon-grammar contribution to the theoretical linguistic debate concerning the formal description of VPCs. It argues that the interpretative difference between compositional and idiomatic VPCs cannot be associated with a different syntactic and predicative structure, since the meaning (transparent or non transparent) does not play a key role in determining the flexible vs. cohesive status of the combination. I throw doubt on the postulated structural difference between idiomatic and compositional VPCs (Fraser, 1976; Dehè, 2002; Wurmbrand, 2000) by identifying a novel, in-between type of construction, i.e. *semi-fixed*, which shares the semantic interpretation and the lexical restrictions (on the arguments) of the idiomatic forms and the syntactic flexible behaviour (i.e. pattern of variation) of the compositional, and where the predicative and "fixed" status of the particle is sketched out. These constructions have a lot to do with the so-called *constructional idioms* (Jackendoff, 1997), that is, patterns containing an open slot for the verb and a "preinstalled" slot for the fixed particle, e.g. *pissed/ browned/cheesed/… off* (used in colloquial English to express one's irritation or exasperation).

I have shown that verb and particle together form a lexical item only in *fixed* VPCs which can be diagrammed with (c) if transitive, such as *mettere su un negozio* (set up a shop) and with (d) if intransitive, such as *dare addosso alla madre* (get on at the mother):

(c) $\mathbf{N_0\ [V\ Part]_{PRED}\ N_1}$

(d) $\mathbf{N_0\ [V\ Part]_{PRED}\ Prep\ N_1}$

Because of their refusal to the transformational test battery provided so far I claimed that they have to be listed in the lexicon-grammar as complete units. Otherwise, semi-fixed VPCs (as

well as compositional directional VPCs) show a different syntax: the NP is not licensed by verb and particle together but only by the particle which form the predicate of a small clause (SC) whose "subjects" is the NP. I argued that the underlying structure associated with semi-fixed VPCs is not the "extended" one (i.e. N_0 *V Part* N_1 for transitive uses and N_0 *V Part Prep* N_1 for intransitive uses) but the "minimal" verbless one, i.e. *Part N* which has to be listed in the lexicon-grammar as lexical entry.

As matter of fact, *semi-fixed idiomatic* plus *compositional-directional* VPCs, i.e predicative particle constructions form together the larger set of Italian VPCs (both in terms of lexical uses and frequency), I stress the need to substitute the traditional verbocentrism (which still dominates the Lexicon-Grammar taxonomies and the studies on VPCs as well) with an original *Particle-centred approach*, as suggested by Cappelle B. (2005).

Further evidence concerning the power of the particle will be discussed in the following section.

5. The Power of Particles in Semi-fixed Constructions

As I have seen above, the particle selecting its semantic class of arguments functions as the predicate or 'operator' of the three variants of semi-fixed VPCs. i.e. verbless sentences, support verb sentences and full sentences. In this chapter I provide further evidence for this claim, showing how particles play a central role in the argument realization as well as in the event structure of semi-fixed VPCs.

In particular I aim to show how the particle in *N_0 V Part N_1* semi-fixed VPCs affects:

(a) the argument structure of the simple verb (i.e. the number and the type of arguments);

(b) the distributional structure of the simple verb (i.e. *human, non human, concrete* etc.);

(c) the aspectual structure of the simple verb (i.e. *durative, terminative aspect*).

5.1. Change in the argument structure

The simple-verb *spedire* (send) has the following 'ditransitive' structure (= someone sends something to somebody else):

(12)

N_0 V N_1 a N_2

Max spedisce una lettera a Ugo (= to send)

(Max sends a letter to Ugo)

However, it assumes a transitive structure when it occurs in the verb-particle construction *spedire dentro* (=somebody sends somebody else into):

(13)

N_0 V Part N_1

Il poliziotto spedisce dentro il ladro (= to imprison)

(The police sends the thief inside)

There is a clear reduction of the number of arguments of the sentence, moving from the simple sentence (12) to the verb particle sentence (13).

5.2 Change in the distributional structure

Furthemore, while for the simple verb *spedire* the required argument in the object position (N_1) can be both *human* and *non human*:

(12.1) *Max spedisce (la lettera + la figlia) a Ugo* (= to send)

(Max sends (the letter + the daughter) to Ugo)

for the verb-particle *spedire dentro* the required N_1 argument can be only *human*.

(13. 1.)

Il poliziotto spedisce dentro (**una lettera + il ladro)* (=to imprison)

(The policeman sends inside (*a letter + the thief)

The asterisk indicates not that *spedire dentro* in co-occurence with the noun *lettera* ('letter') is 'unacceptable' but that it loses the idiomatic meaning of 'to imprison', allowing for the transparent meaning of *sending a letter.*

The distributional restrictions observed in (12.1) suggest that the presence of the particle *dentro* affects the type of arguments selected by the the verb.

In particular the simple-verb construction *spedire* is characterizied by a large distributional structure, with a high likelihood of occurence of *N*, (according to Harris, 1976) that is, by normal restrictions on lexical selection (according to Chomsky, 1965). The verb-particle construction *spedire dentro* on the other hand is characterizied by a lower likelihood of occurence of *N*, requiring necessarily that its arguments are [+ human] hyperclass members.

5.3 Change in the event structure

There is a fundamental distinction (already pointed out by Aristotele) between, on the one hand, verbs referring to events which inevitably lead to an endpoint beyond which they cannot go on and, on the other hand, verbs referring to events that could in principle go on forever and whose endpoint is therefore arbitrary. Verbs of the former kind are called *telic*; verbs of the latter kind are called *atelic*. Let us consider again the examples in (a) and (b), that is, the simple verb *spedi*re and the verb-particle *spedire dentro*.

(12)

Max spedisce la lettera a Ugo

(= Somebody sends something to somebody else)

(13)

Il poliziotto spedisce dentro il ladro

(= Somebody sends somebody else into)

From the aspectual point of view the simple verb *spedire* denotes an 'atelic' event: at the end of the process indicated by the verb, we do not know if the letter has arrived to Ugo or if it is still in travel. In fact, given the simple-verb construction:

(12.2)

Max spedisce la lettera a Ugo (+ atelic; - telic)

the following *before/after* paraphrases with the support verb *arrivare* do not produce a true resultative sentence. The question mark [?] indicates the impossibility of allowing for a 'truth value' to the resultative support verb sentence[57]:

Before (the process indicated by the verb): *la lettera non è arrivata a Ugo*

[57] This undecidable semantic question is a phenomenon defined by J.P. Boons (1980, 1983), one of the main lexicon-grammar scholars, *Amlet effect*. For more detail see also D'Agostino (1983,1992) and La Fauci (1982).

(The letter has not arrived to Ugo)

After (the process indicated by the verb): **?***la lettera è arrivata a Ugo*

(? The letter has arrived to Ugo)

Instead the verb-particle construction *spedire dentro* denotes a 'telic' event: at the end of the process indicated by the verb, in fact, the man is *dentro* (= inside):

(13.2)

Il poliziotto spedisce dentro il ladro

(= Somebody sends somebody else into) (- atelic; + telic)

As I analysed above, in fact, *spedire dentro* in (13.2) is clearly 'causative' because it is in correlation with the resultative support verb construction:

Il ladro è dentro (-atelic; + telic)

(Somebody (is + comes) inside)

via a trasformation that I called 'syntactic decomposition'. The *before/after* paraphrases with support verb *essere* produce acceptable sentences:

Before (the process indicated by the verb): *il ladro non è dentro*

(The thief is not inside)

After (the process indicated by the verb): *il ladro è dentro*

(The thief is inside)

This suggests that Italian particles can carry aspectual values to the construction affecting the event semantic. *Dentro*, in particular, telicizies the head-verb and causes it to become 'causative'.[58]

[58] One could object that the telicizing effect of *dentro* is carried also by other distributional equivalent, like the free PP *in prigione* in:

La polizia ha spedito il ladro in prigione

←→ *Il ladro è in prigione*

and the fixed one *dietro le sbarre* in:

La polizia ha spedito il ladro dietro le sbarre

This findings are in line with the Iacobini's proposal (Iacobini 2007) concerning the actional contribution of the particles to the head verbs by telicizing or detelicizing them.[59]
In the next section the aspectual power of particles will be discussed in more details.

6. Conclusive remarks to the sections III and IV: A particle-centred approach

Points (a), (b), (c) and (the follwing section) represent further arguments to support a particle-centred approach on Italian verb-particle construction analysis: the particle affects the argument requirement of the head-verb and it semantically allows for the core meaning of the construction when it occurs with a generic or manner or causative motion head-verb in semi-fixed VPCs.
The syntactic arguments that we find in semi-fixed verb-particle constructions, in fact, cannot be related with the simple verb, because the verb in verb-particle combinations do not occur as a verb in other grammatical environments.
The "**verbity**" of the verb – with the term *verbity* referring to the intrinsic predicative status of verb – is, in other word, tampered with when it occurs in fixed verb-particle combinations because the predication is spread over the two verb and particle elements (which work on the whole as a predicate). This is completely reduced or zeroed when the verb occurs in semi-fixed VPCs, due to the fact that, as in the case of support verb, the predicative value of the verb is shifted onto the particle which becomes the *pivòt* element of the sentence, semantically and syntactically impoverishing the verbal base. This takes place not only in the semi-fixed constructions seen above but also in compositional directional constructions (*Max mette la macchina dentro* Max puts the car in) and in several free constructions (in which

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←→ *Il ladro è dietro le sbarre*

At the end of the causative event indicated by the verb *spedire,* in fact, *the thief* is respectively *in prison* and *behind bars*.

[59] With regards to the telic/atelic aspectual value of the particles in English see Bolinger (1971), Brinton (1985) and, more recently, Jeschull (2003) and Cappelle (2005).

particle does not have a clear-cut status with respects to prepositions, i.e. V+PPp such as *Max mette la macchina dentro al garage* Max puts the car in the garage, *la macchina è dentro al garage* the car is in the garage).
I present the *continuum* from free to frozen VPCs below:

FREE → DIRECTIONAL→ SEMI-FIXED → FIXED → FROZEN

Particles function as a syntactic centre into free, directional and semi-fixed VPCs, that is, into the larger section of Italian VPCs, regardless of the traditional semantic distinction compositional vs. non compositional. This is the reason why I stress the point that a particle-centred approach towards Italian verb-particle constructions is really a necessity.
What I am dealing with in this work is that the semantic distinction (compositional vs. idiomatic) between VPCs is not enough by itself to describe syntactic facts. Free constructions (or rather, constructions in which the particle works as a simple-preposition) and directional VPCs are, in fact, semantically "compositional", because the particle retains its original "spatial value", while semi-fixed and fixed constructions are semantically idiomatic because the particles have a metaphorical meaning. However, free, directional and semi-fixed constructions are syntactically similar from the point of view of the predication theory, because they display the autonomy of the particle as in 'verbless combinations'.

-verbless property for free locative constructions:

a. *Gli sci **in** cantina!*

(The skis are in the basement!)

-verbless property for compositional VPCs:

b. ***Giù** di lì*

(Down there)

c. *Tutti **fuori** di casa*!

(Everyone out of the house!)

d. ***Via** la pancia con la palestra.*

(Work away the belly with the gym)

On the contrary, such a variation test, that is the missing head-verb (which underscores the power of the particle), is not totally accepted by fixed verb-particle constructions.

-verbless property for fixed constructions:

e. *Eva non butta giù la notizia*
(Eva doesn't put up with the news)
←→ * *giù la notizia*
(*the news up)

SECTION V

VERBLESS PARTICLE CONSTRUCTIONS: SYNTACTIC STRUCTURE(S) END EMPIRICAL EVIDENCE

Abstract

This section examines the syntax and semantic involving a specific set of Italian constructions made up with a locative particles *su* (up/on) *giù* (down) *avanti* (forward) *indietro* (back) *fuori,* (out) *dentro* (in/inside)*, via* (away/off) combined with a DP or a PP and without a verb, like *su i prezzi* (prices up) and *fuori i soldi* (money out). I will define them "verbless particle constructions" (from hereinafter VPCs). From the point of view of traditional (verbocentric) grammar, 'full' VPCs such as *tirare giù i prezzi* (knock down the prices) or *mettere fuori i soldi* (put out the money) are seen as lacking the head verb, e.g. *tirare* (lit. pull) *mettere* (lit. put), and for this reason they are regarded as incomplete, reduced, verb-elliptical constructions. By contrast, in light of the Particle-centred approach pointed out during this dissertation, I will show that these "utterances" are not incomplete and elliptical but they e form predicative and syntactically autonomous *minimal sentences*. They represent a specific sub-class of the larger family of verbless or *nominal sentences*. Finally by the mean of empirical evidence, I will demonstrate that they are not marginal or sporadic at all, but well attested both in the spoken and written Italian language (as well as in other typologicaly different languages). I will conclude that V-less PCs can no longer be regarded as a neglectic topic and, in future, they need to be analysed in a exhaustive way.

1. Introduction

I have considered so far the verbless particle construction (hereinafter referred to as *V_less PC*) as one of the three syntactic diagnostic tests, i.e. a *transformational property* (indicated in the tables by means of the notation *Part N*) useful for splitting idiomatic transitive VPCs (with the sentence structure N_0 *V Part* N_1) into two main kinds of constructions: "fixed" (with a minus sign under the property *Part N*) and "semi-fixed" (with a plus sign under the property *Part N*).

As previously shown (cf. section 4) the verbless property *Part N* allowed me to distinguish, for instance, two apparently similar lexical entries: (1) *buttare giù i prezzi* (cf. to knock down prices) and (2) *buttare giù una lettera* (cf. to write down a letter) (2) as only the former – called by me "semi-fixed" - accepts a "triple of alloconstructions", i.e. a paraphrastic network between three "surface" forms, a causative construction (1.a) a support verb construction (1.b) and a verbless construction (1.c)

(1)

	a.	Max butta **giù** i prezzi	CAUSATIVE
		(*Max knocks down the prices*)	
←→	b.	I prezzi (sono + vanno) **giù**	SUPPORT VERB
		(*The prices* (*are +going down*))	
←→	c.	I prezzi **giù**	VERBLESS
		(*Prices down*)	

In this paraphrastic network the syntactic and semantic *pivòt* element (i.e the predicate or "operator") is always the particle, which selects its nominal argument i.e. *i prezzi*, and carries the meaning of "reducing". On the contrary, with regards to the last sentence (2) *buttare giù una lettera* (to write down a letter) – which I called "fixed" - the same "triple" shown in (1) is not actualised, as *buttare giù*, in this particular lexical use, rejects both the syntactic decomposition into a support verb construction (2.b) and the verbless use (2.c):

(2)

	a.	Max **butta giù** una lettera	CAUSATIVE
		(*Max writes down a letter*)	
←→	b.	*Una lettera (è + va + viene) giù	SUPPORT VERB
		(**A letter (is + goes + comes) down*)	

←→ c. * Giù (la + una) lettera VERBLESS
(* *Down with (the + a) letter*)

I also showed that 30% of idiomatic VPCs within the transitive N_0 *V Part* N_1 sentence structure are related to V_less PCs, i.e. the *semi-fixed* type such as (1). Meanwhile 35% of idiomatic VPCs, the *fixed type* such as (2), are not related to V_less PCs. The paraphrastic network involving idiomatic semi-fixed VPCs, as I displayed so far, was also shared by compositional VPCs of a *directional type* such as (3), with which the same triple of (1) can be associated:

(3)

a. Max mette **fuori** la spazzatura CAUSATIVE
(Max puts out the garbage)

←→ b. La spazzatura (è + sta) **fuori** SUPPORT VERB
(The rubbish is out)

←→ c. La spazzatura **fuori** VERBLESS
(the rubbish out)

This evidence aroused my interest on the topic of Italian *V_less PCs*, allowing me to go into the details of the syntax and the semantics involving them. This is the aim of the current section. I claim that the *V_less PCs* represent a strong argument to support the particle-centred approach on Italian VPCs: I stress, in fact, the assumption that, since for a large set of Italian particle constructions – both idiomatic such as (1) and compositional such as (3) the verb can be non-occurring (V=:E) it means that it is "weak" from a semantic and syntactic point of view and the syntactic and semantic power is carried out only by the particle which, in fact, can never be missing and, as a consequence, can no longer be regarded as a "small" added element (lat. '*particula*').

In this chapter I draw attention to the third construction type of the paraphrastic network (1) and (3), i.e. the so-called "verbless particle constructions", such as *i prezzi* giù (the prices down) in 1.c and *la spazzatura fuori*, (the rubbish out) in 3.c.

The questions that I will raise are the following:

1) What is the relation between the verbal particle constructions (such as 1.a and 3.a) and the verbless constructions (such as 1.c and 3.c)?

2) Can we see these utterances as "incomplete", verb-elliptical, reduced sentences, derived from the "full" or extended ones via deletion of the verb? Or, on the contrary, are they

syntactically and semantically autonomous and pre-existing?
4) Which syntactic structure can be associated with them? In other words is there a difference, in the syntactic behaviour, between idiomatic verbless constructions such as 1.c *giù i prezzi* (prices down) and compositional verbless constructions such as3.c *fuori la spazzatura* (the rubbish out)?
5) Can I outline a possible classification of them which considers syntactic features (transitive vs. intransitive structures) and semantic features (compositional vs. idiomatic meaning) *in tandem*?
6) Furthermore, can I check on empirical evidence the hypothesis that the pattern under analysis is not marginal but is very vital?
7) How can I investigate the frequency and the regularity of V_less PCs in texts and corpora of Italian Language within computational tools?
8) Are the V-less PCs attested in other languages typologically different?

The section is organised as follow: the chapter 2 provides an (interim) definition of verbless particle constructions in light of the issues pointed out by the old and the present-day literature; the chapter 3 raises the question of the elliptical vs. non elliptical nature of V_less PCs in Italian and the chapter 4 describe the minimal syntactic structure I associate with them; the chapter 5 provides a classificatory proposal of them; the chapter 6 presents empirical evidence from dictionaries, web and written and spoken Italian texts while the chapter 7 is devoted to the automatic extraction of them from La Stampa newspaper corpus, within the software Nooj. Afterward he chapter 8 presents a quasi typological investigation of V-less PCs from different languages and, finally the chapter 9, i.e. conclusive remarks and speculations, points out the main theoretical implication of this verbless based study.

2. A definition of Verbless Particle Constructions and related works

I consider Verbless Particle constructions (from hereinafter V_less PCs)[60] as a specific set of "absolute" constructions of Italian, made up of an adverbial particle (with a predicative function) heading a DP and/or PP, with no verb on the left of the particle such as:

(1)

a. *Palla dentro*!
(Ball down!),

b. *Giù i piedi dal tavolo!*
(Feet off the table!)

c. *Su le mani*!
(Hands up!)

d. *Fuori i soldi*!
(Money out!)

e. *Via di qui!*
(Away from here!)

From the point of view of the traditional (verbocentric) grammar these utterances are seen as lacking the motion verb - for instance *buttare* (throw) in 1.a, *mettere* (put) in 1.a,1.b and 1.c *tirare* (pull) in 1.c, 1.d, and *andare* (go), in 1.e - and for this reason are regarded as "incomplete", reduced, verb-elliptical utterances.

Fornaciari (1881), for instance, argued that Italian Time and Place Adverbs can often entail an "implied" or "understood" verb and he presents the following examples:

(2) a. *Renzo accostò di nuovo l'uscio piano piano, e tutt'e quattro* ***su*** *[salirono]*[61] *per le scale* (Manzoni)

[60] See also Guglielmo (2012)

[61] The motion verb *salirono* was added between brackets, as an "understood" verb, by Fornaciari

(Renzo approached the door slowly slowly, and all four **up** [go up] the stairs)

b. *Misericordia! grida anche Agnese, e di galoppo **dietro** l'altra* (Manzoni)
(Mercy! Agnes also yells, and off at a gallop behind the other

c. *Agnese scende e **dentr**o di corsa.* (Manzoni)
(Agnes descends and **in** at a run.)

Despite the presence of V_less PCs in everyday Italian speech (1), as well as their attestation in literature (2) and also in Latin (e.g. *Aqua foras, vinum intra*, Petronio, Satyricon, *Sursum corda*, Religious texts) - the well-known and larger pattern formed by a verb and particle concomitants, i.e. a "syntagmatic verb" (cf. verbo sintagmatico, Simone 1997) or a Verb-particle Construction (VPC), such as *tirare su* (pull up)*, andare via* (run away)*, mettere giù* (put down)*, buttare dentro* (throw in)*,* was always considered as being the "complete", the most frequent and familiar one and it drew the attention of many linguists, coming from different theoretical and methodological backgrounds, while only scant attention has been paid to the verbless pattern.

The only one, in fact, which outlined the presence of an "absolute" use of the spatial particle in Italian without the support of the verb, was Jansen (2004) who analysing VPCs discovered some"verb-elliptical" constructions. The author, following Jespersen (1924) and Croft (2001), noted the parallels between locative adverbs occurring in VPCs (such as *fuori* (out)*, dentro* (in)*, avanti* (forward)*, sopra* (above) and so on) and locative prepositions occurring in prepositional phrases - such as *a* (in) *su* (up) *dentro* (into), *sopra* (on), suggesting that they should be considered as members of a joint class of "spatial particles". Both prepositions and adverbs, in fact, share several properties such as the possibility to be the predicative and cognitive *pivot* elements of the sentence as in the following *imperative* and *exclamatory* sentences with the spatial particle as the predicative:

(3)

a. Mani **in** alto! (Jansen, 2004: 132)
(Hands up);

b. **Giù** le mani!
(Hands off!);

c. **Su** con la vita!
(Cheer up);

d. **A** tavola!
(At the table!);

e. **A** letto!
(In bed!).

The phenomenon was analysed as involving not only *imperative sentences* (or commands) such as (3) but also non-imperative sentences (or statements) such as the following colloquial examples that she drew from the Italian spoken corpus LIP (De Mauro et al.1993):

(4) a. *carico le coppe/mh/ tutte le mie robe e **via** torno a casa*
(I'll load up the cups/mh/all my things and **be off,** I back home)
[LIP, MB36]

b. *Ogni volta che esce un servizio su sta Caterina Parma e dintorni **via,***
scompaiono le copie dei giornali
(Every time that a story on Caterina Parma comes out, in the area **gone,** disappear all the copies of the newspaper)
[LIP, MB8]

As a matter of fact, Jansen's hypothesis on the predicative role of the spatial particle in the spoken Italian language is, of course, of crucial importance for the current analysis, even though I raise doubts about the "verb-elliptical" nature of the *absolute spatial constructions* such as (3) and (4).

As already suggested elsewhere, in fact, I substituted the traditional verbocentrism on Italian VPCs with an original Particle-centred approach (Guglielmo 2012, 2013). This was suggested for English VPCs by Cappelle (2005) who dealt with patterns in which the particle combines with a verb, i.e. *verb-particle constructions,* as well as with less frequent patterns that "do not involve a verb at all, at least not overtly", defined by him as "*verbless clausal particle patterns* " such as:

(5) a. Out! (Cappelle, 2005)
b. Away with the rubbish!

c. Down with the king!
d. Hands up!
e. Pen down!

As he claimed, these commands or exhortations are perfectly understandable without the presence of a verb, which suggests that the particles themselves should have a clearly discernible predicative power. Considering a specific type of verbless clause that he calls *verbless directives with-PP whose NP functions as a predicate*:

(6) a. On with the show!
b. Off with the head!
c. Down with Chomsky and modularity! Up with Cognitive Grammar and related theories (www.listserv.brown.edu/archivies/cgi-bin/wa)

Cappelle (2005) noted, within the framework of the Pattern Grammar, that:

> "Though the first example can be expanded, rather coincidentally, as "Let's get on with the show!", the other examples show that this type cannot simply be considered as elliptical. For example, *Off with the head!* is not a short version of *Let's get off with the head!* (Cappelle, 2005)

Jackedoff (1973, 2002) mentioned a "curious exclamative sentence type" of the type *PP with NP* involving directional particle (7.a) as well as ordinary directional PPs (7.b):

(7)

a. Off with their head! (Jackedoff, 2002: 75)
Down with the king!
Out with the gargabe!

b. Off to the shelves with these books!
Down into the hole with the jewels!
Out the window with the garbage!

Jackendoff (2002), following Klima (1965) stated that directional particles (such as those in 7.a) behave like ordinary directional prepositions (such as those in 7.b) by sharing the same

properties including the possibility to fall into *with-exclamative constructions*. However, for him, idiomatic particles - differently from directional particles - "are meaningless without the verb, so that they cannot appear in the verbless with-exclamative":

(8) a. *Up with your lunch! Jackendoff (2002: 75)
[in the sense of *throw up, blow up*..]

In this work I will provide different evidence from Italian, that is the existence of idiomatic particles as predicates of verbless pattern, both of imperative/exclamative kind and of declarative/ narrative kind. I will show that they form a predicative 'nexus' with the following DP and /or the PP without a finite verb, in exactly the same way of directional (or spatial) particles.

However, what is attractive in Jackendoff's constraints-based framework (Culicover, Jackendoff 2005) is the attention paid to verbless constructions called *noncanonical utterance types* "whose syntax does not fall under the standard X-bar theory"(Culicover, Jackendoff 2005). Here are some examples:

(9)	a.	PP with NP	Off with his head! Into the house with you!
	b.	How about X?	How about a cup of coffe? How about we have a little talk?
	c.	NP +acc Pred?	What, me sorry? Him in an accident? John drunk?
	d.	NP and S	One more beer and I'm leaving.
	e.	Scores	The Red Sox 4, The Yankees 3.
	f.	The more…the more	The more I read, the less I understand

Within the mainstream generative grammar these could be analysed in two ways, i.e. as idioms, that is exceptions listed in terms of their surface structure or as derived from more canonical forms. However Jackendoff claimed that "such utterance types are never addressed in P&P and MP literature". He provided in fact a third possibility concerning their structure, which, in my opinion, represents the best solution to the problem and can be extended also to Italian verbless constructions. In other word "noncanonical utterance types" (9) represent a specific kind of idioms which are stored in the lexicon as associations of meaning with an exceptional syntactic structure. Such sentences are among the motivations for Construction Grammar (e.g. Fillmore, Kay and O' Connor1988) in which the grammar contains explicit

constructions, i.e. stored pairing of syntactic structure and meaning. He also provided an acquisition based argument to support his constructional hypothesis: with regard to (9) "a childe not only must learn the surface form, but must infer a canonical covert syntactic form and the complex details of the derivation" (Jackendoff, 2005).

Before to enter into the detail of my personal contribution to the syntax of verbless particle constructions I will provide a brief outline of the old and current mainstream linguistic studies on verbless (or nominal) sentences. In my view, in fact, V-less PCs are a specific class of the larger and heterogeneous family of verbless (or nominal) sentences and they need to be analysed also in relation to this.

2.1. More on the problem of the so-called verbless (or 'nominal') sentences

Verbless constructions (or 'verbless sentences' or 'nominal sentences') raise several questions which are far to be all addressed here[62]. First of all they put a strain on the traditional definitions of 'sentence' as pointed out (among others) by: (i) the logic-based models of syntax and Port-Royal Grammar (subject-copula-predicate), (ii) European and American structuralism, (ii) Generative Grammar, (iii) Operator-Argument Grammar and Lexicon-Grammar.

Following a verbocentric tradition that's goes back to Aristotele, Boezio and Prisciano and carried on by the logicists, in fact, quite all the mainstream approaches on the sentences syntax assumed the presence of a finite verb as the condition *per excellentiam* for the actualization of a 'normal' and 'complete' sentence. As consequence, 'non canonical sentences' i.e. sentences without a finite verb, both of one-member type (e.g. *Splendid!, Help! Bob! What? Here*?) and of two-members type (e.g . *What fun! Poor Ann! Me worry?*) were usually explained by appealing to the 'expedient' of the ellipsis.

Starting with Meillet (1906) the linguistic status of *nominal sentences*, (i.s. sentences lacking a finite verb) both in old and modern Indo-European languages (e.g. Sanskrit, Greek, Latin, Old Persian, Russian, Arabic, Hebrew) has been recognized. Example of nominal sentences

[62] For the linguistic debate concerning the notion of sentence and verbless sentence see Stati (1976) and Graffi (2001)

from Latin are *omnia praeclara rara* ('All excellent things <are> rare'), *omnis homo mortalis* (i.e. 'Every man <is> mortal') and *vox populi vox dei* ('People' voice <is> God's voice'). In Russian the nominal sentence represents the normal type in the present tense where the copula does not occur (e.g. *Ona doma*, 'She <is> at home'). By contrast, in the past tense the copula *bybla* (be) needs to be specified (e.g. *Ona bybla doma*, 'She **was** at home'). This phenomenon piqued the interest of many important linguistics from different theoretical background like Sapir (1921), Jespersen (1924), Sechehayes (1926), Bloomfield (1933), Hjelmselv (1948), Benveniste (1950), Tesnière (1959), Bally (1966), Mathesius (1975) and, more recently De Mauro & Thorton (1985), Voghera (1993, 2010), Cresti (1993, 1996, 2005), Renzi, Salvi, Cardinaletti (1995), Biber et alii (1999), Merchant (2001), Graffi (1985, 2001), Lefeuvre (1999, 2004), Blance-Benveniste (2008).

The central questions that verbless expressions raise are also the following: are they elliptical, i.e. formed by the deletion of the verb? Can the absence of the verb be explained in terms of *zero copula* or 'understood' verb?

Bloomfield (1933) distinguished two main typse of sentences, the major and the minor. The former are f*avourite* or 'full' sentences containing a finite verb and can be 'command' (e.g. 'Come!' or statements (e.g. 'He came'). The latter are interjections, particles (e.g. 'Yes', 'No'), exclamatory expressions like 'This way, please!', aphoristic expressions (e.g. 'The more, the merrier'). According to Bloomfield some languages have both narrative sentences (e.g. latin *Amat* ('he/she/it loves'), Italian *Canto* ('I sing') and 'equational' sentences, i.e. two substantive forms 'such as the latin *beatus ille* ('happy he <is>'). This latter type corresponds to the traditional nominal (or 'verbless) sentence. Both narrative and equational types realize for him a 'predication', i.e. they are both bipartite sentence-form which can be regarded as predicative. The presence of sentences whose predicate is not not a verb will be a central claim both of Harris (1976) and Tesnière (1959).

Harris (1976) as shown in the section I (par. 1) outlined an original Operator-Argument representation of the sentence which goes beyond the traditional bipartite analysis (F→ SN SV). According to Harris, in fact, every sentence can be represented in a linear order. It is formed by a sequence of words arranged around a *pivot* element which is constant (operator) and governs (or operates on) its variables ('arguments') by determining the conditions of acceptability of that string as well as the reductions required by it. The operator role (predicate) is not associated with a given class of words or 'parts of speech': not only the verbs can be an operator but also the nouns, the adjectives, the prepositions, the adverbs, the prefixes and suffixes can play sucha a role. This assumption is of a crucial importance for my

work, since he recognized the predicative role of prepositions and adverbs in locative constructions (e.g. *Bob is in the garden*, *Max is down*).
But unfortunately he approached the non-verbal sentences not in autonoumous way. He analysed the predicative role of non verbal element (i.e preposition, adjectives, nouns and so on) only in a verbal sentence context, i.e. the so-called support verb sentence (e.g. *Mary is the mother of Lucia*). In this type of sentences the support verb (that he called 'carried' verb) is semantically empty and it carries only modal, temporal and aspectual informations. Verbless strings of words do not form sentences but they are only 'utterances', they can be be derived from full sentences via reductions or zeroing operations. He said that:

> "The utterance is, in general, not identical with "sentence" (as that word is commonly used), since a great many utterances, in English for example, consist of single words, phrases, "incomplete sentences", etc. (Harris, 1951)

This concept of sentence (as well as the role of support verb for predicative nouns, adjective and prepositional phrases) influenced also Gross (1977, 1968, 1981) and all the Lexicon-Grammar scholars. Gross (1992) claimed that:

> "The empirical basis of the syntactic studies is the intuitive recognition that some sequences of words have a distinguished status which has ben expressed by the concept of sentence. Thus the sequence *This solution places a large number of her friends* is perceived as a sentence. […] On the other hand, sequences of words such as *as large as a postcard* or *inside the house* are not perceived as sentences". (Gross, 1992).

According to Gross and his team all the 'elementary sentences' have the shape of subjects-ordinary verbs-essential complements (e.g. *Mary eats an apple, Bob runs in the room*) or subject- support verb-predicative noun (e.g. *Mary is a mother, Bob makes a mistake*) or subject-support verb-predicative adjective (*Max is said*) or subject-support verb- predicative prepositional prase (*Bob is in crisis*). Gross, following Harris, applied zeroing operations of verbs (i.e. reductions) in order to account for the strong intuition of sentence which is trigged by some non verbal sentences such as:
(10)

Too bad for Bob that Jo left <= It's too bad for Bob that

No problem with his leaving! <= There is no problem with his leaving

Other reductions are restricted, appropriate in Z. Harris terminology:

(11)

A la santé de Bob! <= [Bevons] a la santé de Bob!

To Bob's health! <= [Let's drink] to Bob's health!

Otherwise he claimed that:

> "In same way it is difficult to analyse by zeroing the following utterances to which the intuition of full sentence is clearly attached: *Good bye! So long! A votre santé*!"

Gross (1992) decided to classify these verbless utterances as frozen sentences (i.e. about 700 expressions in the syntactic table ECO of the lexicon-grammar of French).[63]

Mathesius (1975) devoted a rather ample space to the analysis of verbless sentences. He distinguished two main kinds of them: 'thetical' (*The bell sir, No apologies*) or predicative (*Nonsense, Off with you*). Bipartite verbless sentences are exemplified by cases such as *An excellent idea, this!, Ticket downstairs at the office*, or by the so-called headline style. As Graffi (2001) describes, Mathesisu did not explicitly address the question of wheter verbless sentences are elliptical or not, but, apparently at least, he would answer in negative: there is no need to postulate further entries when communication succeeds in one way or another.

This position is very similar to Benveniste (1950) who worked out a concept of nominal sentences as complete structures in themselves and not elliptical at all. Nor do they contain a *zero copula* as argued by Bally (1922) or zero-morphemes as claimed by Hielmslev (1959).

Every sentence (*phrase*) can coincide for Benveniste (1950) with a 'finite assertive utterance' (*ènoncè assertif fini*) no matter if the verbal function (i.e. predicative function) is played by a verb or by a noun (e.g. *omnia pleclara rara* vs. *omnia pleclara perunt)*. In many langages in fact, he argued, the verbal syntactic function is played by the noun and not by a verb (e.g. *ari'-ak*, lit. 'king I'= I am a king). According to him the properties of the nominal sentences

[63] Other expressions listed in the table ECO by Gross and his team are *en avant la musique! bas le pattes! à le abordage! à table! en voiture!, bon week end!*

in Indo-European are the following:

(12) a) Nominal sentence presents a subject/ predicate structure with a pause between them. The only difference between *omnia pleclara / rara* and *omnia pleclara /perunt* is morphological since the former lacks temporal, modal and personal informations.

b) The nominal sentence in Indo-European must not be regarded as derived by a verbal sentence or by a copular sentence via ellipsis. Nominal and copular sentences are two different constructions which cannot be freely interchanged since they serve for different purposes: the *copular sentence* is narrative, it is used to describe an event whereas the nominal sentence is atemporal, aphoristical, it is used to express general or absolute statements and advices. It can never be used to describe particular events:

omnia pleclara rara	vs.	*omnia pleclara rara sunt*
(assertive use only)		(narrarive use)

c) Nominal sentence can occur only in the direct speech;

d) It is a finite assertive utterance, uttered between two pauses. It has a specific final intonantion that makes it different from other types of utterances (i.e. interrogative, exclamative, imperative and so on)

Otherwise, Tesnière (1959) stated that the analysis of the sentence into subject and predicate derives from an unwarranted transference of logical categories to grammar. A sentence for him is an organised set of word arranged around a node. He classified four types of sentences depending of the central node characterising them:

(13)

a) verbal sentence (e.g. *Alfred donne le livre à Charles*)
b) substantival sentence (e.g. *Garde a vous, A d'autres*!)
c) adjectival sentence (e.g. *Ouvert la nuit*);

d) adverbial sentence (e.g. *à la recherché du tempu perdu*)[64]

With regard to the adverbial type he claimed that "un adverbe, s'il n'est accompagnè d'aucun règissant, suffit à lui seul à former une phrase" and he listed the following examples:

(14)

a) *à domain, à vostre service, à vostre santé;*
b) *celle-là rubis sur l'ongle!*
c) *Charles X…En uniforem chamarrè*

In addition, he argued that in German language the role of independent sentence can be played by separable particles which are basically motion adverbs:

(15)	a)	*Fort!*	(fr. partez! 'go away!')
	b)	*herein!*	(fr. entrez! 'came in')
	c)	*hinaus!*	(fr. sortez!/dehors! 'out!)
	d)	*weiter!*	(fr. continuez! 'go on!')
	e)	*heraus damit*!	(fr. *qu'on sorte ca*! 'lit. out with you!')
	f)	*hinaus mit ihm*!	(fr. qu'on le flanque à la porte! 'lit. out with him!')

Other adverbial verbless sentences are built in German by the juxtaposition of two adverbs of the same type:

(16)

ja länger, je lieber	(the longer, the better)
Aus den Augen, aus dem Sinn	(out of sight, out of mind)

The notion of *predicative nexus* was also worked out some years before by Jespersen (1926) who accounted for the presence of *nexuses without a verb* by criticizing the traditional verbocentrism, i.e. the tendence to classify only sentence formed by a finite verb as well as the tripartite schema (i.e. subject-copula-predicate). His position on verbless sentences is clearly anti-elliptical. He provided several examples of verbless sentences (*Quite serious all this*, *Amazing the thing that.., What a pity that.., How odd! One minute*!) claiming that they fall into the same typology of the the 'normal' sentences, i.e.statements, questions, desires,

[64] According to Tesnière also titles of books form sentences.

exclamations, commands and proverbial locutions (*One man, one vote*). He claimed that grammarians generally fail to appreciate these constructions and also with respect to one-word sentences (such as *Splendid! Come*!) they are inclined to explain them by his panacea, the ellipsis. In *Come!* they would say theat the subject 'you' is understood and in *Splendid!* not only the subject but also the verb *'is'* is understood. And he goes on claiming that:

> "Grammarians should always be wary in admitting ellipses except where they are absolutely necessary and where there can be no doubt as to what is understood, as for instance, in "*He is rich, but his brother is not* [*rich*]". But what is understood in "*Watercresses*!" or "*Special edition*!"? "*I offer you*…" or " *Will you but*…?" or "*This is*…" If the word "John!" forms a whole utterance, it may according to circumstances and the tone in which it is said be interpreted in various way: "How I love you, John", "How could you do that?", "I am glad to see you", etc.. How can these various "Jhon!" be reduced to the scheme subject-predicat, and how can ellipses assist us in analysing them? Yet it would not to deny their being sentences." (Jespersen, 1926)

In addition Jespersen (1926) distinguished the utterance from the sentence: the former is used as a comprehensive term, while the latter is used for every utterance able to stand alone, to play the role of a complete and independent peace of communication. However, differently from Tesnière, the identification of *nexus* is not enough for him to form a sentence: not every *nexu*s constitutes a sentence: only an independent nexus forms a sentence. Some utterances, for instance, are so much condensed that they cannot be recognised as sufficiently complete to form sentences, for instance signboard (J.C.Mason), book-titles ("Hamlet"), entries in diary (Sunday. Soap and Conditioner). Jespersen divided sentences into the following classes:

(17)

a. Inarticulate sentences: *Thanks! /What? /Off*!
b. Semi-articulate sentences: *Thank you! What to do? / Off with your head!*
c. Articulate sentences: *I thank you/ What am I to do? / You must strike off your head!*

What is interesting in Jespersen's position and allows for setting him apart from the mainstream generative and transformational approaches is that (a) is not a reduction of (b) and (b) is not a reduction of (c) by omission of elements. Why not postulate instead that (c) is an expansion of (a) and (b)?

In De Mauro's opinion (De Mauro 1974) the syntax of a given language which takes into account only verbal sentences, i.e. signs with VP, is unsatisfactory, as there are many non-verbal sentences which convey a sense to Italian native speakers such as // caspita// (goodness), //uff questo// (ooph, this) and must be regarded as linguistic signs, with an extensional definition of "sign" as in the Sassurian linguistic tradition of L. Hjelmslev, L. Prieto and R. Godel. With his schematic classification called "Albero di Porfilio", De Mauro (1974) distinguishes between *non-predicative signs* (i.e. titles, exclamations, shops signs as in // frutta e vedura// (fruit and vegetables)) and *predicative signs*, which in turn, can be split into *verbless predicative sentences* (i.e. nominal and exclamative sentences such as // buona questa!// (that's a good one!) or assertive sentences such as //*di qui alla svelta*//, come here quickly) and *verbal predicative sentences* as in the canonical structure S=> NP VP, which has a finite verb. De Mauro stressed the claim that the syntactic theory cannot analyse only the verbal sentences if it wants to be a good and complete theory.

In his appendix *Nessi nominali presenti nel "Quaderno di Muscillo" (Roma 1958)* he lists a corpus of "nominal sentences" with the predicative "nexus" in italics:

(18)

a. *Tutti d'accordo*
(Everyone in agreement)

b. *Tutti soddisfatti e contenti*
(Everyone satisfied and happy)

c. *Lì, una vera baraonda*
(There, everything in total chaos)

d. *Guai a chi* portava un bottone sbottonato
(Woe betides he who had his shirt unbuttoned)

e. *Quella sera una perquisizione tremenda*
(That evening a terrible search <took place>)

f. Appena scoperto il carico, *all'assalto*
(As soon as the landing was discovered, to the attack!)

g. In un batter d'occhio *tutti in fila*
(In the blink of an eye, everyone in line)

h. *Ufficiali e soldati, una cosa*
(Officials and soldiers, on the same level)

i. Facemmo l'adunata, *tutti in riga*
(Once we were all together, all in line)

l. Dissi: “Io, *viveri ai tedeschi*?”
(I said: “Me, food to the Germans?”)

m. *Ecco che* arriva lo chef
(Here comes the chef)

n. *Detto fatto*
(No sooner said than done)

o. *Tutti noi convinti che* vincevamo
(We all convinced that we would win)

p. Fra un’ora, *tutti puliti e sbarbati*
(In an hours’ time, everyone clean and shaved)

I found in this list some of the verbless particle constructions I aim at analysing here:

(19)

a. Ci diedero il solito tè *e **via***
(They gave us the usual tea and went away)

a. *Ricopriti per bene, **via** di corsa*
(Wrap yourself up well, and off you go!)

b. Gridavano: “***Giù** continuare*!”
(They shouted: “Get down and carry on!)

c. ***Oltre***: *la scena della distribuzione del pane*
(Moreover:the loaf-giving scene)

d. Avevo una divisa di tela Americana, *quelle con quei grandi tasconi **avanti***
(I had an American-style uniform, one of those with those large pockets at the front)

For all studies based on the Benveniste tradition, in fact, the notion of predication does not depend on the presence of the verb, as verbal sentences and nominal sentences can coexist in a given language without postulating that the latter derives from the former. The condition that allows for predication is simply the juxtaposition of two nominal elements separated by a pause (Benveniste, 1969, De Mauro & Thorton 1985)

// SX / SX //

According to De Mauro & Thorton (1985) in fact the pause marks the border between the two syntactic elements and makes the sequence predicative. The predication in other words is realized with the prodosy rather than the morphology, like in the following examples:

(20) a. *due più tre / cinque*
(one plus three/ five)
b. *Oggi /sciopero*
(today/strike)
c. *Domani/ gnocchi*
(tomorrow/dumplings)
d. *Tu/ puntuale?*
(you/on time?)

Renzi et alii (1995) in their GGC claimed that nominal sentences can be formed by different syntactic elements (i.e. DP /DP; SA/ infinitive; N/SA, and so on):

(21) a. *Cosa rara / cosa cara*
(Rare thing, expansive thing)
b. *Difficile/ dirlo*
c. (Difficult to say that)
d. *E lui /via di corsa*
(And he runs away)

Despite the presence of these expressions in Italian spoken language is largely accepted and some corpus based studies led to recognize that al least one-third of the total sentences of Italian are non verbal (Voghera 1993, Rossi 1996), there is still a considerable linguistic controversy regarding (i) the nature of the verbless sentences, (ii) its status in grammar, (iii) its explanation in terms of elliptical or non-elliptical structrures and (iv) the formal criteria by which they can be identified (Cresti 1996, Merchant 2001, Blanche-Benveniste 2008, Voghera & Giordano 2010).
The following chapters
Follow I contribute to such a debate by presenting my descriptive and empirical approach to a specific type of verbless sentences, i.e. the pattern formed by a locative particle (as predicate) and/or a noun phrase or prepositional phrase as argument(s). .

3. Against the hypothesis of an 'implied' verb

Let's look at the following Italian newspaper headlines containing V_less PCs (in bold the predicative nexus):

(1)

a. *Crollano i consumi, **giù** anche **gli alimentari*** (LaRepubblica, 27/09/2012)
(Consumption collapses, food prices are also down)

b. *Banchieri, **gli stipendi su** del 36%* (La Repubblica, 27/09/2012)
(Bank managers, wages up 36%)

c. *Tennis, **Grande** subito **fuor**i. Rita Grande è stata eliminata* (La Stampa'98)
(Tennis, Grande right out. Rita Grande has been eliminated)

d. *Coppa Italia. **Inter su, Milan giù**, nella polvere* (Il corriere della sera)
(Italian Cup. Inter up, Milan down, in the dust)

e. *Elezioni: **centrodestra avanti*** (Il Mattino)
Elections: centre right ahead

It is clear that the sentences are perfectly understandable without appealing to a "missing" verb and not even to a *silent copula* (Munaro, 2006), in exactly the same way as the so-called "nominal sentences" (Benveniste, 1966; De Mauro 1974; Thorton 1983; De Mauro & Thorton 1985; Graffi 2001, Cresti 2005).

With regard to the examples (1.e) for instance a short pause (indicated with/) splits the two parts of the 'nexus', i.e. the comment-predicate *avanti* (aheadl) from the topic-argument *centrodestra* (centre-right) as indicated below:

(2)

//SX /SX //
//centrodestra / avanti//

Following Benveniste, in fact, I argue that the short pause splits the verbless into two tonal

units corresponding to the two syntactic phrases and it makes the structure predicative.
In my opinion the sequence particles plus NP and/or PP represent complete and independent pieces of communication, i.e. *sentences* (according to Jespersen's definition) because of their capability of standing alone, i.e to form a *nexus*, not matter if it is without a verb.
Let's look now at the following examples:

(3)

a. Chatta e moglie lo becca, ***via*** *da casa*. (www. ansa.it)
(Chatting online, caught by his wife, out of the house)

b. Scuola, più di tremila in corteo: "***Fuori*** *la mafia dalla regione*!"
(www.milano.repubblica.it)
(School, more than 3,000 demonstrators in the streets: "Mafia out of the region*)*

c. Ruspe in azione. Ogni tre giorni ***giù*** *un ecomostro* (Il Mattino)
(Excavators in action. Every three days an ecological-monster comes down)

It is clear that these headlines immediately confer a meaning without the need to read the article they introduce. The particle has a meaning of its own and such meaning is regardless of any particular verb. What are the "missing" or "implied" verbs that we have to piece together in (3) in order to give sense to *via di casa* (away from home), *fuori la mafia dalla storia* (the mafia out of the history) and *giù un ecomostro* (down comes an eco-monster)? Let's look at the following harrisian "equivalence classes" we can associate with (3):

(4)

a. Chatta e moglie lo becca, (va + è mandato + cacciato+….+ E) *via di casa*
[Chatting online, caught by his wife and (goes + is sent + sent + … + E) out of the house

b. [(Portate + cacciate + tagliate + tenete +vogliamo…+ E) *fuori la mafia dalla regione*!]
[(Carry + throw + cut + keep + we want+ … + E) the mafia out of the region!]

c. Ruspe in azione. Ogni tre giorni (buttato +buttano + tirano + …+ finisce + viene + va + va a finire +E) *giù un ecomostro*

(Excavators in action. Every three days an ecological-monster (gets torn + *they throw + *they throw + *finishes + comes + goes + *goes and finishes + E) down).

Here all the verbs between brackets can co-occur with the *V_less* structure with the same *likelihood-of co-occurring*. In the sentence (4.c) in particular, we can fill the empty slot for the verb (V=:E) both with support verbs such as *è* (is), *va* (goes), *viene* (comes), *finisce* (ends) in intransitive patterns and causative motions verbs such as *buttano* (they throw), *tirano* (they throw) in possible transitive patterns or passive pattern *buttato* but the core meaning of the sentence, i.e. the fact that a building comes down, is destroyed, is embedded just in the particle with its selected nominal class, i.e. *Part N* structure, while the verb is not essential as "weak", such as the support verbs and the generic motion verbs used as causative variants.

This gives rise to the hypothesis that the setting up of the "missing" or "implied" verb on the left of the particle is not necessary in order to understand the sentences such as (3) and it is an arbitrary and useless pragmatic procedure. *V_less PCs* are semantically and syntactically autonomous. They are the kernel predicative structure of (4) and this intuition is confirmed by *transformational facts*, i.e. by replacing the head verbs with other distributional variants, an operation that does not affect the syntax and the semantic of the constructions. Would it not be more natural to postulate that the particle selects a specific syntactic type of argument (i.e. PP in 3.a, NP PP in 3.b and only NP in 3.c) as well as, from a distributional point of view, a specific semantic class of arguments (such as *buildings* for the noun phrase in 3.c) before selecting a specific semantic class of verbs (specifically verbs of motion) on its left?

Let's look at the following newspaper example in order to provide further evidence for our assumption:

(5)

a. I *salari* ***giù*** e i *prezzi* ***su*** (Il Giornale)
(Wages down and prices up)

If we did not take a look at the newspaper article it would be arbitrary to reconstruct (5.a) as lacking the copula *sono* (are) rather than the support verb variant *vanno* (are) or the causative passive verbs *vengono tirati* (are pulled), *vengono portati* (are brought) as all of them are distributionally equivalent (+) as shown by the following equivalence class:

(5.1)

a. *I salari (sono + vanno + finiscono + vengono tenuti + vengono tirati +*

vengono portati +E) giù e i prezzi (sono + vanno + salgono + finiscono + vengono portati + vengono tirati + E) su

Wages (are + go + finish + are kept + are pulled + are brought + E) down and prices (are + go + climb + finish + are carried + are pulled + E) up

The same difficulty concerning the identification of the exact "missing" verb on the left of verbless clauses characterises also the following every day sentence:

6. a. ***Fuor****i la spazzatura*!
(Out with the rubbish!)

Are we sure that the missing verb here is "*metti"* (put)? Could it not be *porta* (bring)? Or *trascina* (drag)? Does not the comprehension take place immediately without the need to think of the "missing" verb? Again, also for the particle *fuori* (cf. out) I assume that it selects the argument *la spazzatura* (the rubbish) before an optional causative motion verb class is selected on the left of the Particle.
The syntactic structure associated with *V_less PC* will be illustrated in the next chapter.
What I are stressing here is the arbitrariness of associating a verbal sentence with one of a V_less nature. This appears more evident by looking at the following examples:
(7)

a. *E* ***giù*** botte, acque parolacce (Gradit)
(Down come the blows, words are of no use)
b. *E* ***via*** a ridere (La Stampa)
(And let's start laughing!)

Which are the missing (or implied) verbs now? Are we sure that they exist, i.e. that these verbless constructions are "reduced" or derived from VPCs, i.e. verb-elliptical? I claim that the indecisiveness (or "indecidibility") concerning the "missing" verb in V_less PCs such as (1), (3) (5) (6) and more clearly in (7) represents a strong argument supporting the main hypothesis carried out in this paper, that *V_less PCs* are syntactically autonomous and that they do not derive from "full" or extended sentences via the omission of a verb.
Sentences like (7) do not need an hidden syntactic structure. Probably, as pointed out also by Jackendoff' simple syntax hypothesis (2006) the semantic interpretation has a more elaborate structure than the syntax can express. In other word there is no need to fill the verbless with

the verbal element and than postulate a process of deletion. And, also when this is possible, such as in (6), it is unnecessary. If the elliptical hypothesis was valid, i.e. if we 'imply' elements when we utter sentences, we should be able to fill with certaitly the 'elliptical' structure with the elements we have regarded as 'implied'. Following Jespersen (1926) in fact, I argue that the expedient of th ellipsis should be used only it it is absolutely necessary and where there are no doubt about what is understood.

This is the reason for which, in line with a tradition that refers back to Jespersen (1924), Benveniste (1966) and De Mauro (1972) and against an old–fashioned and verbocentric grammar, I consider *V_less* as syntactically autonomous utterances and I analyse them as a subclass of the larger family of-"verbless clauses" (cf. Voghera et al. 2010) with which they share several syntactic and prosodic properties as well as their frequency both in Italian and in many other languages.

I will illustrate my original theoretical contribution to the syntax of *V_lessPCs* based on the main syntactic theories of Zellig Harris (1976), i.e. distributional and transformational Grammar and Operator-Argument Grammar

4. The "small clause" structure

The claim that *V_less* are autonomous is not in contradiction with the assumption that they are in such a way "related" to verbal sentences (as I assumed in the introduction). To the question whether verbless clauses are syntactically autonomous I answer now "Yes" but I argue that the syntactic autonomy of *V_less PCs* is not index of atomicity *strictu sensu.* The interrelationship between VPCs and V_lessPCs can be captured within the Transformational Grammar of Harris (1976). I argue that the **predicative particle constructions** can be of two types: **verbal constructions** (or verb-particle constructions) such as (1.a) and **verbless constructions** such as (1.b):

(1)

a. *[Eva porta [la spazzatura fuori]*$_{\text{V-less}}$]$_{\text{VPC}}$
[Eva takes [the rubbish out]$_{\text{V-less}}$]$_{\text{VPC}}$

←→ b. *La spazzatura fuori*
The rubbish out

I consider the verbless construction *fuori la spazzatura* a "small structure" (or Small Clause structure) embedded into the full "verbal" structure *Eva porta fuori la spazzatura* (Eva takes out the rubbish). Following Harris' transformational grammar (Harris, 1976) the relationship between 1.a and 6.b is of a paraphrastic equivalence (←→) as shown several times describing the so-called "paraphrastic network" built around the predicative particle. Farther within Harris' *concatenation discourse* account (Harris, 1972) there is also an inclusive relation (<) between the verbal 1.a and the verbless sentence 1.b: the latter is included or embedded into the former: (*fuori la spazzatura* < *Eva porta fuori la spazzatura,* cf. the rubbish out < Eva takes out the rubbish). This calls to ming the metaphorical case of the Chinese box, where one is contained inside the other (or applied on top of the other).

In my view 1.b does not derive from 16a by deletion of the verb *portare* (to take) and not even from an in-between *copular* or supporting verb sentence *la spazzatura è fuori* (the rubbish is out), which is not necessary to explain and understand (1.b) as it represents only one of the three possible surface forms of the *semi-fixed* VPCs network, as the one shown in:

(2)

N_0 V Part N_1

←→ N_1 essere Part

←→ N_1 Part

In other words, I do not allow for a *top-down* derivational (or reductional approach) on V_lessPCs (verbal → support verb sentence → verbless). On the contrary, on the basis of a novel particle-centred approach on VPCs I allow for a minimal account on V_less PCs by postulating a low-level predicative relationship between the particle and the noun:

(2.a)

[Part] N

[fuori] la spazzatura

*(*the rubbish [out])

This represents the pre-existing and **underlying predicative kernel** of the "full" construction (1.a). I called this the "verbless predicative construction", with the particle as predicate (PRED) selecting its argument (N). Within Harris' formalism, the predicative relation formalised in (2.a) can be rewritten as:

(2.c)

On

with the Particle acting as "operator" (O) selecting its argument (n). This operator-argument requirement clearly represents a perfectly understandable sentence, without a verb, that is an autonomous utterance both syntactically and semantically and not "incomplete" at all. On the contrary, the first part of the sentence *Eva porta fuori la spazzatura* (Eva takes out the rubbish), i.e. the argumental relation between the causative verb and its subject - *Eva porta* (i.e. N V) is clearly "incomplete" without the *Part N* sequence:

(2.d)

N V

? *Eva porta*

*Eva takes

This incomplete utterance represented in Harris' terms with On needs to be applied on "something" to make sense. I claim that such an incomplete structure is applied to the pre-existing predicative kernel (1.a) as follows:

(2.e)

N	V	#	Part	N
Eva	*porta*	#	*fuori*	*la spazzatura*

(Eva takes the rubbish out)

In my account, full VPCs such as *Eva porta fuori la spazzatura* (Eva takes the rubbish out), called "semi-fixed" are **complex constructions**, which are the result of the application of a causative verb with its subject (*Eva porta* # Eva takes) to the kernel predicative structure (*fuori la spazzatura* out the rubbish) that I called a "verbless predicative structure". The simplified Harris mathematical procedure in (2.e) can be rewritten as follows:

(2.f)

	O	**n**	#	**o**
	Eva	porta	#	fuori la spazzatura
=	**Ono**			

The notation **Ono** indicates that the elementary sentence **o** i.e. the verbless *fuori la spazzatura,* is included - as a low-level operator - into the upper-level operator **Ono**, which describes the predicative relationship between the "incomplete" sequence *Eva porta* (On) and the verbless *fuori la spazzatura*, i.e. (o).

What I have demonstrated here is that a "small clause account" for Italian verb particle constructions is really necessary in order to account for the syntax of verbless and VPCs as a whole. I show that such a small clause description can be well outlined within Harris' main syntactic theories which can make an interesting contribution to the theoretical linguistic debate concerning the clausal vs. the non-clausal status of the "small clause" (Ramchand, Svenonius 2006, Svenonius 1996) showing that the argument-plus-particle structures, i.e. verbless particle constructions, are truly clausal.[65]

The small clause account for VPCs syntax is that with regards to the so-called semi-fixed VPCs, the particle selects its class of arguments, i.e. [**Part**]$_{\mathbf{PRED}}$ **N** before that a causative verb with its subject (*N V*) is applied to the left of the particle. Semi-fixed constructions display a fixed slot for the particle, playing the role of predicate (as it selects its own arguments) and a semi-fixed or "variable" slot for the verb as it can vary into a finite range of possibilities (V=: V_x) or it can simply not occur at all (V=:E) as in the case of Jackendoff's *constructional idioms* (2002).

The syntactic structure that I associate with VPCs is the following:

(3) N_0 [(V + V_x +E) **(Part N_1)$_{\mathbf{V\text{-}less}}$**] $_{VPC}$

with **Part N_1** as the predicative kernel of the construction, i.e. *V_lessPC* embedded in the largerl VPart construction. The notation [V+ Vx + E) means that the verbal slot on the left of the particle-noun combination can be filled in an alternative way (the notation "+" stands for "disjunction") by a verb (transitive or intransitive), a verb variant (V=Vy) or no verb at all. (V=E).

[65] Clauses whose predicate is not a verb (i.e. verbless clauses) are known as **small clauses**: hence, in 'John considers [Mary intelligent]', the bracketed expression is sometimes referred to as a **small clause** (Radford, A. 2004, *English Syntax: An Introduction*, Cambridge University Press, Cambridge)

4.1. Interim conclusions

What I stress in this thesis is that the presence of V_less PCs in Italian can no longer be ignored and it should encourages us to review the syntactic analysis of VPCS, since a wide range of them (both directional and idiomatic) display a small clause structure by accepting the verbless property.

On the other hand, there are verbless which are not small clauses (at least in the traditional sense): it is the case of constructions such as *e via con N, e giù N, e avanti con N* can not be analysed as embedded in larger or full verbal constructions. They represent genuine verbless, i.e autonomous entries not related with verbal counterparts (contra Radford) and for which the elliptical approach seems to be unsatisfactory. These will be carried out elsewhere.

5. A classificatory proposal

Here I focus on the internal syntax and semantics of V_less PCs by describing the argument structure and the selectional properties licensed by the particle which gives rise to the assumptions that (i) the particle is predicative and (ii) together with its governed or selected arguments, i.e "essential arguments", it forms a complete sentence, no matter if short.

I provide a typology of V_less PCs (in terms of abstract patterns) by crossing semantic properties (compositionality vs. the non-compositionality of the pattern) with syntactic properties (presence of NP(s) and/or PP(s)).

With regards to the semantic interpretation of the pattern, Italian *V_less PCs* instances can fall into one of the following main types:

1. **directional** (or compositional), if they have a spatial meaning;
2. **idiomatic** (or non-compositional), if they have an idiomatic meaning
3. **frozen** (or "idiom") V_less PCs, if they have an idiomatic meaning and a frozen (or constrained) NP and/or PP argument, as in the case of the *full idioms*.

Each of these semantic types can be, in turn, syntactically sub-classified in different patterns on the basis of the number and of the type of argument(s) licensed by the particle (noun

phrase vs. prepositional phrase). The licensed argument(s) can occur in pre-particle position i.e. normal (or linear) order or in post-particle position i.e. marked (or inverted) order.
Considering the predicate as a function (f) selecting a variable element (x) I can identify the following directional type, with Part selecting only a noun phrase:

(1) a. f (x)=: Part (N)

Avanti *il prossimo!*
(On with the next one!)

I bambini ***dentro***!
(The children inside!)

This corresponds to the predicate-argument relation **Part [Figure]** where the particle playing the role of predicate and selecting only the Figure, respectively *il prossimo* (cf. the next one) and *i bambini (*cf. the children). Type (1.a) corresponds, with Harris' Operator-Argument formalism, to the notation "**On**" that is an operator (O) on an elementary argument (n).
In the second type below (1.b) we have a function (f) on two distinct variables (x, y) that is a particle selecting both a NP and a PP:

(1) b. f (x, y) =: Part (NP PP)

Via *le briciole dalla tovaglia*
(Brush the crumbs off the tablecloth)

Giù *la borsa dalla mensola*
(Take the bag off the shelf)

Here we have a transitive configuration **Part (Figure, Ground),** in which the particle selects both the Figure and the Ground and which equals, in Harrisian terms, a sentence structure **Onn**, i.e. an operator on two elementary arguments.

With regards to **idiomatic V_less PCs** (type 2) I can identify the sub-type (2.a) where the particle selects only a noun phrase (NP), sharing the basic **On** representation form:

(2) a. f (x) = Part (NP)
Giù *l'ecomostro*
(down comes an eco-monster)

b. ***Giù*** *il Governo*
(down with the Government)

and the sub-type (3) where both a NP and a PP are selected, with **Onn** Harrisian representation form:

(3) a. f (x, y) = Part (NP PP)

Su *i prezzi del 20%*
(Prices up by 20%)

Even though directional and idiomatic constructions share the same syntactic structures, they differ in the *distributional structure*, i.e. in the free or restricted section of the arguments.
In the case of **idiomatic verbless constructions,** the selection of the nominal arguments is higher compared with the "free" selection that directional particles operate on their arguments, in the compositional figure-ground configuration schema. Let's look at the following *distributional equivalence* class associated with the compositional type (1.a):

(1.a) *(I bambini + il cane + la spesa + la spazzatura +...)* ***dentro***
(Children + the dog+ the shopping + the rubbish +…) **in(side)**

In 1.a the figure (or argument) position can be filled by many different arguments, both of a human nature, such as *I bambini* (children) and of a non- human, such as *la spesa* (the shopping), or *la spazzatura* (the rubbish). In other words, directional particles carry out a free distributional selection on their arguments.
Instead, looking at idiomatic V_less PCs we can note that the particle does not select a "generic" argument but an argument member of a specific semantic class or "objects class". In the case of (2.a) *giù un ecomostro* (down comes an eco-monster) the particle *giù* does not select a generic concrete argument but a specific concrete argument, which is member of the semantic class (or "object class") labelled as <buildings>:

giù [N] **building**

Such intuition is checked by the "commutation" task, i.e. by substituting *un ecomostro* (*an eco-monster)* with other arguments:

(2.a) *giù (un ecomostro + un palazzo + una casa + *un libro + *un bambino*)
(an eco-monster + a building + a house + *a book + *a child) comes down

This confirms that, with the meaning of "to destroy", "to demolish", the particle *giù* can co-occur only with arguments of the same semantic class <buildings> such as *un palazzo* (a building), *una casa* (a house) and so on but not with *un libro* (a book) or *un bambino* (a baby). [66]

The same restrictions on the nominal arguments characterises the second example in (2.b) *giù il governo* (down with the government) where only a restricted and listed number of nominal arguments can be substituted with *il Governo* in the NP position, such as *Berlusconi, il premier* (the Prime Minister)*, il partito* (the political party), which are in hyponymic relation with the hypernonimous noun phrase *il governo* (the government) but not *la borsa* (the bag) or *la mano* (the hand).

(2.b) *giù (Berlusconi + il governo + il premier + il partito + Monti + * la borsa + *la mano)*
*Down with (Berlusconi + the government + the Prime Minister + the political party + Monti + * the bag + *the hand)*

Also with regards to the idiomatic V_less PC (3.a) *su i prezzi del 20%* the noun phrase *I prezzi* can be easily substituted only by other arguments indicating "value", i.e. members of the specific semantic class <value>:

(3.a.) *su (i prezzi + i voti + la temperatura + lo share + * Maria + * la palla) del*

[66] The co-occurrence of *giù* with *un libro* or *un bambino* will make the use unacceptable or semantically different from the one taken into account in 2.c).

20%

(prices + votes + temperatures + shares + *Maria + *the ball) (are) up by 20%

Finally, the last type of V_less PCs, called **frozen**, are characterised by higher selectional restrictions on the arguments, so that we cannot identify a semantic class of arguments but a unique frozen or "constrained" element (indicated with the notation "C"). We can identify this subtype as follow:

(4) f(x) = Part [C]

a. ***fuori*** *le unghie!* (Get your claws out!)
b. ***giù*** *la maschera!* (Take off your mask!)
c. ***su*** *il sipario*! (Up with the curtain!)

which represents "transitive" frozen V_less PCs. There also intransitive frozen V_less PCs such as:

(5) f(x) = [Par Prep C]
a. *su con la vita* (cheer up!)
b. *giù di morale* (in a bad mood)
d. *fuori di testa* (out of one's mind)

where the particle selects a frozen prepositional phrase and the entire sequence is analysed as a lexical unit and is identified in NLP applications as a "block". There also frozen V_less PCs such as:

(6)
f(x, y) =: Part [C Prep N]
giù le mani (dall'Italia + dall'articolo 18+.....)
(Hands off (Italy + Art. 18!))

where the entire sequence *giù le mani* (Part C) is frozen while the PP is variable.
The following table summarizes the types and subtypes identified so far:

TYPOLOGY OF ITALIAN V_LESS PCs					
semantic types	**syntactic structures**				
compositional	Part (N) Fuori la spazzatura	Part (Prep N) fuori di qui!		Part (N Prep N) *via le briciole dalla tovaglia*	
idiomatic (semi-fixed)	Part (N_R) *Giù il Governo!*	Part (Prep N) avanti con le accuse	**On**	Part (N Prep N) *su i prezzi del 20%*	**Onn**
idiomatic (frozen)	Part [C] su il sipario!	Part (Prep C) *su con la vita!*		Part (C Prep N) *Giù le mani* dall'Italia	

If there are also "**frozen verbless constructions**" such as *su con la vita, giù la maschera* it means that the power of the particle involves also lexicalised patterns (or "full" idioms) such as *stare su con la vita* (Stay cheerful)*, mettere giù la maschera* (put down your mask) and not only the full productive **directional** and partially productive **semi-fixed idiomatic** patterns which (as demonstrated in the previous section) are characterised by a large flexibility of the two parts and by the maximum autonomy of the particle. This assumption led us to conclude that there is a general trend involving Italian particles to be "predicative" that is to play the role of the syntactic centre of the construction, both in directional, idiomatic and frozen constructions. Furthermore, the attestation of verbless particle constructions in the Italian language represents an important argument to support such a power. This is the topic of the next chapter.

6. Empirical evidence from Italian

The claim that V_less PCs are not a sporadic or marginal phenomenon of the Italian Language is verified by means of empirical evidence from written and spoken texts and corpora. First of all, V_less are also attested in Italian language dictionaries, even if they are treated in a different way, sometimes relating to the "absolute" use of the particle and sometimes as regards the "elliptical usage" of the verb. Subsequently, I present the same V_less constructions extracted from Italian dictionaries (with the predicative "nexus" in italics and the predicative particle in bold):

(1)

Il Bar chiude, ***tutti fuori***! (Gradit)
(The bar is closing, everybody out!)

Fuori *i soldi*! (Garzanti)
(Get your money out!)

Balzò in piedi *e* ***via*** *di corsa* (Garzanti)
(He stood up and ran out)

Avanti! La porta è aperta (Sabatini Coletti)
(Come in! The door's open)

Avanti *march*! (Sabatini Coletti)
(Forward march!)

*Macchine i****ndietro***! (Garzanti)
(Cars/machines in reverse!)

E ***giù*** *botte, acqua, parolacce* (Gradit)
(Down come the blows, words are of no use)

A large typology of V_less PCs is attested in the headlines of the newspapers, such as the ones reported below:

(2)

*Salari **giù** e prezzi **su*** (Il Giornale)
(Wages down and prices up)

Unicredit: dopo Profumo ***via** anche Ramp* (Corriere della sera)
(Unicredit: after Profumo also Ramp quits)

*Piazza affari **giù*** con le banche (La Repubblica)
(Stock exchange down due to banks)

*Borriello **via**,* volti nuovi alle elezioni (Il Mattino)
(Borriello quits, new faces at the elections)

Ruspe in azione, ogni tre giorni ***giù** un ecomostro* (Il Mattino)

***Fuori** la guerra dalla stori*a (Il Manifesto)
(Take war out of history)

Domani *lancette **avanti*** (Il Corriere della sera)
(Tomorrow put the clocks forward)

Finally in (3) I list a sample of V_Less PCs deriving from text analysis:

(3)

No, no poche storie e **fuori il grano**! (Medico in famiglia);
(No, no messing around and give me the money!)

Fuori tutti, eh, tutti quanti, dai! (Medico in famiglia);
(Everyone out, yeah, everyone, come on!)

La possono anche aver rapita o **sotto una macchina**! (Medico in famiglia)
(They could have even kidnapped her or she could have ended up under a car!)

Via! Via la camicia (Medico in famiglia);
(Take it off! Off with the shirt!)

O **dentro** o **fuori**! (Medico in famiglia);
(In or out!)
Ho perso il burrocacao, tutto **via** (Medico in famiglia)
(I've lost my lip balm, everything gone!)

Giù le mani dalle mie cose (LIP)
(Hands off my things!)

Prendo la mia roba **e via** (LIP)
(I'll take my things and be off!)

One of the interesting remarks emerging from this first text analysis is that V_less constructions occur in different types of text–forms, even though they are favoured in newspapers and speech for the extemporaneous nature of the predicative particle, which covers a finite range of meanings in co-occurrence with particular nouns. Another remark is that V_less PCs exist for all the particles taken into account in this thesis (*su, giù, avanti, indietro, via, dentro, fuori, sopra, sotto*). They are lexically distributed among all the Italian particles which could suggest that all the Italian particles can play this predicative role and this can represent a further argument to support their semantic and syntactic power.

7. Discoursive types and restrictions

Verbless particle constructions fall into different types of sentences which different pragmatic functions (*illocutive forces*) and intonation curve:

(1) Assertive (or declarative, or narrative)
(2) Exclamatory
(3) Imperative (or command)
(4) Interrogative
(5) Absolute (or subordinate)

Assertive V_lessPCs differ from all the other types for a non marked intonation. They usually present a full point, a semicolon or a colon separating it from the previous and following sentences. They are used to describe particular situation, current or past events, sport scores, news and for this reason they usually occur in the journalistic and newspaper style:

(1) a. *Asti (29a) e Cuneo (33a). Più indietro Novara (5a0)*
(Asti (29a) e Cuneo (33a). Behind Novara (5a0))

b. *Gran parata di Kernel e palla fuori di poco*
(Great goalkeeper of Kernel and nearly scored)

c. *Lazio sempre avanti. Improvviso contropiede, tre rossoneri contro*
(Lazio always ahead. Sudden counterattack, three "Red-black" counter it)

d. *Inghilterra **fuori**: l'ira della stampa inglese*
(England excluded: the anger of the british press)

e. *Max **giù**, Eva in lacrime: un vero disastro*
(Max down, Eva in tears: a true mess)

f. *Anche in questo caso telefonata, rapido intervento e **giù** la cornetta. **Giù** la cornetta e subito un nuovo trillo*

(Also in this case, a phone call, a quick operation and down with the receiver.
Down with the receiver and immediately a new ring)

Assertive V_less PCs are also very used for the description of long stories. They can also be called 'narrative':

g. *Sembra solo ieri che la domenica ci si chiudeva in casa con la radio,*
vedevamo le partite contro il muro, non allo stadio.
Poi verso sera ***tutti fuori*** *ad ingrossare il mucchio della gente,*
ad annusare il mondo e i suoi colori (Dalla)

(It seems like only yesterday that we closed on Sunday at home with the radio,
we saw the matches against the wall, not in the stadium.
Then in the evening, **all o**ut to swell the pile of people,
to sniff the world and its colors)

h. *Vi si appese* ***e giù****! They alla strappata, precipitarono tutti insieme,*
con fracasso indiavolato (Pirandello, Novelle per un anno)
(They hung up **and down**! They, at the torn, rushed together, with
furious din)

i. *Un saluto militare, uno strillo: "Maestà!"* ***E via*** *a gambe levate* (Pirandello, Novelle per un anno)

In the example (1.h) and (1.i) the sequence *e giù* and *e via* introducing a verbless sentence directly related with the previous part of the text: from the temporal point of view, the events described by these verbless occur just after those described before. These type of narrative verbless can often be followed by an infinitive. In my opinion, they share many properties with the so-called "narrative infinite"(Fornaciari 1988, Renzi et alii 1995, Englebert 1998, Melis 2000). Let's look at the following examples:

l. *Gli altri impiegati, alle grida del capoufficio imbestialito, erano entrati*
nella stanza, ***e****, sentendo parlare Belluca,* ***giù a ridere*** *come i pazzi.*
(Pirandello, Il treno ha fischiato)

This example shows that the sequence *e giù* marks the sudden start of of the action (i.e the

laughing) as consequence of what is uttered in the first sentence. It has a clear aspectual power. The narrative verbless *E giù a ridere* in fact cannot be paraphrased with "and they fell on the floor to laugh" (i.e. locative inerpretation of *giù*) but with "and they start laughing".
This narrative and temporal function of V_less PCs is in contrast with Benveniste' hypothesis: as I have shown before, according to him 'nominal sentences' can serve only to express general and atemporal statements. My examples gave different evidence from italian showing that they can serve also (and especially) to narrate and describe 'particular' events and to express temporal informations, in exactly the same way of verbal and copular sentences.
Exclamatory V_lessPCs serve to express the emotion of the speaker. They can be advices, admonitions, expressions of happiness or surprice. They differ from the declarative type for the intonation curve (usually not descendant but ascendant) and are for the presence of the exclamation mark:
(2)

Per trasmettergli buone notizie: "Umberto, ***avanti*** *così!"*
(To send him good news: "Umberto, go on so!"

Imperative V_lessPCs are usually requests of movement in the space. They are usually marked by an exclamative mark (which is not obligatory) and by a descendant intonation curve:
(3)

"***Fuori di qui****, demonio! Non voglio più vedervi*" (Pirandello, *Novelle per un anno*)
(Devil out from here! I never want to see you!)

Interrogative V_less PCs are characterized by a specific illococutive force: the request of informations. They usually expect an answer, but sometimes they can be used rhetorically, to ask for confirmation or to express doubts and perplexities:
(4)

a. *Cosa? La spazzatura* ***dentro****?*
(What? the rubbish in?)

b. *Ognuno di per sè, e tutti* ***avanti*** *verso l'Euro*?
(Each for himself and everybody along to the euro?)

In the types analysed so far the V_lessPC play the role of main clause, i.e an independent sentence which – following Jespersen' definition - can also stand alone. Follow I provide examples of another 'narrative' V_lessPC type which can serve to describe events, in excact the same way of the narrative type (1) but differs from this because it form a dependent clause, i.e. a temporal or causal subordinate clause in form of an *absolute sentence.*

(5) **Absolute V_less type:**

a. *Con la macchina dentro, dormiamo più tranquilli*
b. *Una volta fuori la spazzatura, possiamo uscire*
c. *Con il Napoli fuori dalla champions, è inutile guardare le partite*
d. *Con Berlusconi dentro, saremo tutti più felici*

These findings provide evidences of the autonomy of the V_less since they can occur in many positions in the sentence and in different discoursive types (or *speech acts* within Searl 1969).

I already described the possibility for a V_lessPCs to be an embedded clause, i.e. a small clause, in a inclusive relationship with an expanded sentence representing a 'full' verb-particle contruction" (8 below). There are also verbless that can occur in object position of a completive sentence, forming an epistemic small clause:

(6)

La finanza teme ***[la sterlina fuori dall'euro]***$_{sc}$
(The finance fears the pound out of the euro)

The sequence *la sterlina fuori dall'euro* can occur in a variery of positions and in all the sentences types described so far, i.e. assertive, exclamatory, interrogative and absolute sentences:

(7)

a.	*Oggi: la sterlina fuori dall'euro.*	(assertive)
b.	*La sterlina fuori dall'euro! Che bello!*	(excalmative)
c.	*Cosa? La sterlina fuori dall'euro?*	(interrogative)
d.	*Gridavano: "la sterlina fuori dall'euro!"*	(command)
e.	*Con la sterlina fuori dall'euro, non so cosa accadrà*	(absolute)

as well as predicative kernel of many verb-particle constructions:

(8)

a. *Hanno (portato+ spinto + mandato) la sterlina fuori dall'euro*

Following Jackendoff (2002) I regard these type of V-less free from strong links with the verb, i.e. "genuine" small clauses. However, I stress the need to limit the autonomy of verbless to the direct speech as exemplified in (9.a):

(9) a. Ordino: "La sterlina fuori dall'euro!"

b. *Ordino che la sterlina fuori dall'euro

c. Ordino che la sterlina (sia +vada + venga portata) fuori dall'euro

By contrast in the indirect speech (9.b) i.e with the presence of completive verbs such as *chiedere, domandare, ordinare* (class 47 of italian, Elia 1984) the verbless use is blocked (9.b) and the presence of the verb is obligatory (9.c).

8. Automatic extraction of V_less PCs from corpora

The interest in the field of Italian V_less PCs and the hypothesis that they are not marginal but frequently and lexically distributed among all the finite set of particles allowed me to carry out an in-depth investigation into this assumption by providing a corpus-based study of V_less PCs in Italian by means of the support of computational tools.
The questions I aim to answer now are the following:

- Can we automatically and not manually extract V_less PCs from corpora?
- Can we build sophisticated computational tools to locate them in large corpora?
- Can we finally create a corpus of V_less PCs?

The importance of dealing with the Computational Grammar of Italian V_less PCs is clear. It can help to extract concrete "uses" of them in "real" contexts thanks to the concordance file and, as a consequence, to discover how many V_less exist in the Italian language, based on the statistical counting of the lexical uses (type) and the total number of occurrences (tokens) in the corpus analysed. This quantitative data can be used afterwards to compare VPCs with V_less PC uses as well as to investigate the frequency distribution of V_less among all particles.

8.1 The computational procedure

This study carried out a first experiment in this direction. The analysis focused on the extraction of *avanti, via, giù, fuori, dentro, indietro* constructions from the corpus La Stampa (Gaeta and Ricca 2002, approx. 72 million words). For the aim of this doctoral research, we limited our investigation of La Stampa to the year 1998 (a total of approx. 29 million tokens). The syntactic parser used to locate Italian VPCs is Nooj, software used for the automatic treatment of natural languages developed by Max Silberztein (2005, 2007) as the direct evolution of Intext software (Silberztein 1993). Silberztein worked on it from 1992 to 2002 under Maurice Gross' linguistic supervision at the LADL laboratory of Paris. Nooj is a freeware linguistic engineering environment (www.nooj.com) which allows the formalisation

of orthographic, morphologic, semantic and syntactic linguistic phenomena. It makes use of two main linguistic resources: dictionaries and grammars and it applies them to large corpora of a given natural language in order to recognise patterns. In a first step, on the basis of *matching* between the words included in the texts and the words classified as lexical entries in the dictionaries, an electronic dictionary of that text is produced. In a second step of the analysis, Nooj allows the searching of specific text structures which can displayed in the form of "concordances". One of the tools used to extract specific structures of interest are the so-called "regular expressions" (i.e. *queries*) that is, sequences of commands governed by a pre-established syntax (Silberztein 1993, 2005, 2007). They can be used when the patterns to be recognised consist only of one, two or more words. Instead, when the structure to be located is more complex, Nooj allows for the building of "automata" as well as "finite state transducers" in the form of graphs (also called *local grammars*) and which are applied to texts as elements to be read and parsed.
To extract V_less PCs we used the following regular expressions:

(1) <PART> <N>

to locate uses showing *Part N* syntactic structure such as:

nulla è successo. Ancora ***Lazio Avanti***
(Nothing happened. Lazio is still on top)

and

(2) <PART> <Prep> <N>

to locate *Part Prep N* syntactic structures such as:

Fuori dalle palle
(Out of my way)
E avanti con disegni e frasi
(Continue with pictures and sentences)

Of course, the large number of mistakes generated by the concordances allowed me to improve the results by associating simple queries such as (1) and (2) with "local grammars[22]

able to "locate" both "**simple verbless sequences**" such as *Part N,* or, with the inverted order *N Part,* and "**double verbless sequences**" such as *Part N / Part* N as well as only the sequences which are truly verbless and not something of a different nature. These "local grammars" are sophisticated enough to achieve a more satisfactory output by identifying, for instance, also V_less PCs occurring with some non-argumental materials in between. The local grammar represented below (cf. *giù i prezzi e su i salari.nog)* allowed for extracting "double verbless structures" with the opposition *giù/su* (cf. down/up), i.e. *giù GN su GN* (the notation "GN" indicates the nominal group that, of course, can be extended more than a simple N and including, for instance, adjectives, determiners, modifiers and so on).

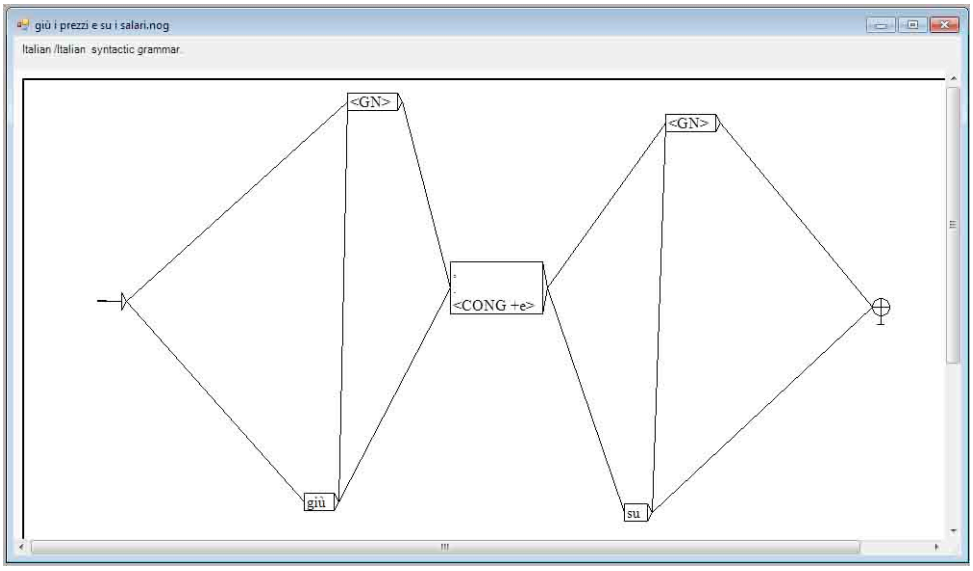

Figure 1. Local Grammar for "*giù GN/ su GN*"

This grammar locates the following possible pattern of "double verbless structures":

giù GN, su GN
giù GN e su GN
GN giù, GN su
GN giù e GN su

Below I report some of the extracted concordances of this type (about 10% of the total

amount):

1. *Prezzi alla produzione **giù**, prezzi al consumo **su**.* (La Stampa)
   (Production prices down, food prices up)
2. Il presidente accusa: *prezzi al campo **giù**, inflazione **su*** (La Stampa)
   (The president accuses: prices down, inflation up)

The following two types of local grammars (Figure 1) and (Figure 2) allowed for capturing a large typology of V_less PCs introduced by the conjunction "e" (cf. and) or a punctuation (such as',' '.' ':') and followed by a noun (<N>) with the option of some possible materials in between (<WF> cf. *word form*).

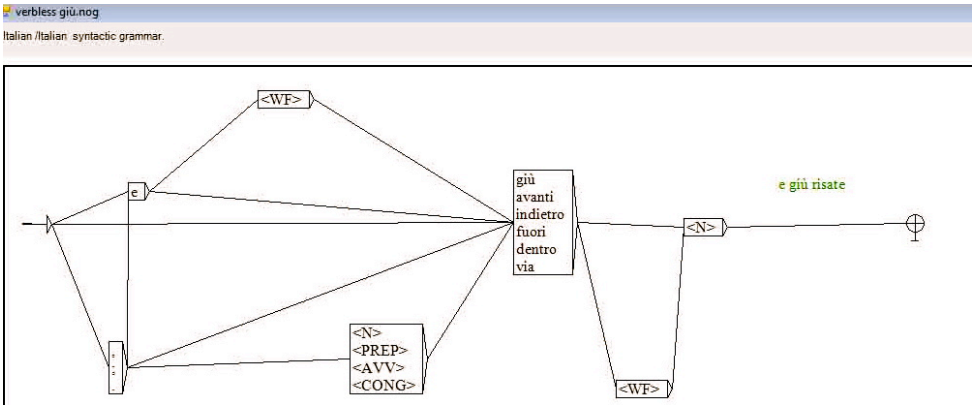

Figure 2. Local Grammar for '*e giù risate'*

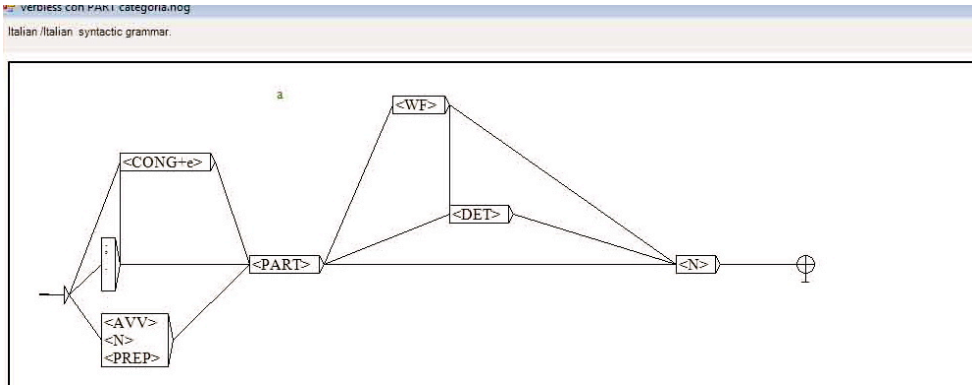

Figure 3. Local Grammar for generic V_less PCs

The node (<AVV> + <N> + <PREP>) preceding the particle node (<PART>) includes categories such as adverbs, noun, prepositions and so on, i.e. all categories that have no verbs, in order to reduce the possibility to locate canonical VPCs and be able to mitigate the error in the parsing procedure of V_less PCs.

Below we provide a sample of the generated concordances:

vagamente folle: niente Del Piero , *e fuori anche Inzaghi e Zidane* per rispettare
(vaguely foolish: no Del Piero , and out also Inzaghi e Zidane for respect)

visita che non ci sarà , *e fuori i soliti ammonimenti dei suoi portavoce*
(a visit that won't be , and out with the usual reprimands from his spokespeople)

Cristina Capotondi e Gabriele Patriarca) , *e fuori la fidanzata bonazza* che gli dà soddisfazioni
(Cristina Capotondi and Gabriele Patriarca , *and out with the hot girlfriend* who gave satisfaction)

ha chiesto: "Hanno fischiato?". Massì , *e giù a ridere*. Preparava il suo colpo
(He asked "Did the whistle?". But yes , *and fall about laughing*. He prepared his blow

arabeggiante come trompe-l'oeil , *e giù articoli* in caratteri latini. La
Moorish like trompe-l'oeil , *and down with articles* in latin characters. The

francofobia, pernacchi spaventosi , *e giù corna ;* se la sua educazione europea
Francophobia, frightening shadow *,and horns down;* if his European education

"Buffoni! Razzisti!", gridano	, *e giù fischi* .	Marina è spinta via,
“Buffoons! Racists!” they yelled	, and whistled.	Marina was pushed away,
"Italia Mafia" e "Italia Traditrice"	, *e poi avanti popolo ;* ogni partito il suo	
“Italian mafia” and “Italian traitor”	*,and onwards people;* every party his own	
hanno trasferiti nel "Braccio D"	*, e poi fuori dal carcere ,*	nella comunità
they transferred to “Branch D”	, *and then out of prison,*	into the community
francamente più irresponsabile. Tre bis	, *e poi giù a cambiarsi*.	Ciao Max.
frankly more irresponsible. Three more	, *and then down to change*.	Ciao Max.

8.2 Results

The following tables outline the results of this first corpus-based investigation on V_less PCs by showing the predicative particles found in the La Stampa ’98 corpus and their total and relative frequency. At the moment, the total occurrences extracted are 253 representing the first “corpus” of V_less PCs of the Italian language.

The two columns on the right of the frequency list are interesting as they display the distribution between compositional (or directional V_less PCs) and idiomatic V_less PCs (so they give information about their lexical uses in context):

PARTICLES	**frequency (tokens)**	**compositional uses**	**idiomatic uses**
Avanti	100	8	92
Giù	70	10	60
Fuori	40	10	30
Dentro	15	0	15
Indietro	15	0	15
Via	13	4	9
Tot.	**253**	**32 (13%)**	**221 (87%)**

Table 1: The distribution of frequency of V_less PCs in the “La Stampa” corpus

The most frequent V-less pattern is formed by the particle ‘avanti’ with about 100 occurrences followed by “giù” (70 occurrences) and “fuori” (40). Compared with these three

particles, the following *dentro, indietro, via* occur in the corpus (into verbless sentences) much less frequently.

15% of the data is characterised by what we call "double verbless constructions" i.e. by sequences of Part N / Part N or in the inverted order N Part / N Part with the second particle being the opposite of the former (i.e. *avanti/indietro, su/giù, dentro/fuori*). Below we provide some examples of such patterns:

(1)

L'auto avanti, il motorino dietro.
(The car ahead, the scooter behind)

Corpo indietro e gambe avanti.
(Body back and legs forward)

Fuori Del Piero e dentro Fonseca
(Del Piero out and Fonseca in)

Dentro Bellucci e fuori Vitali
(Bellucci in and Vitali out)

Let's look now at the frequency distribution between compositional and idiomatic uses. As in the case of my previous LIP corpus investigation (Guglielmo 2011) the idiomatic uses exceed the compositional ones. In particular, out of the total of 150 occurrences of V_less PCs, 87% are idiomatic and only 13% are directional or compositional. This represents one of the most interesting results of this study. The particle tends to be used more in its metaphorical sense(s) rather than in its prototypical locative or spatial sense(s) also in verbless sentences.

8.3 **V-less Avanti_constructions**

With respects to the particle *avanti*, for instance, 92% of the total occurrences are represented by idiomatic uses of "avanti", while only in 8 occurrences, such as the following, *avanti* occurs with its original "spatial" meaning:

(2)

a. *La signora Luciana e allora **avanti** per la foto a questa*
(Mrs. Luciana and so come forward to take the photo of her)

b. *Poi, a**vanti**, piano ecco via XX settembre*
(Then, come forward, slowly, here is via XX settembre)

c. *La statale 341 e poi sempre **avanti** verso Turbigo*
(State road 341 and then go straight ahead towards Turbigo State)

d. *Fateli andare avanti. **Avanti**, Avanti!*
(Let them go forward. Forward! Forward!)

e. *Prendo la terza strada e **avanti** finchè le case si abbassano*
(Take the third road and go straight on until the houses become smaller)

With regards to the idiomatic senses of "avanti" the most frequent are the following:

(3) *Different idiomatic senses of V.less avanti constructions*

(a) be in advantage, to win, to pass over (usually in the matches):

***Un set avanti**, due palle break sul 5 pari*
(One set ahead, two break balls on the 5 even)

***La Juve** sempre **avanti**? Non ci penso*
(Is Juve still ahead? No, I don't think of it)

*Ma il **Belgio avanti** di tre reti*
(but Belgium ahead by three goals)

*Marchiggiani para, sempre **giallorossi avanti***
(Marchiggiani saves the goal attempt and so the Giallorossi are still ahead)

(b) with regards to age, to get old

*E' vedova un po' più **avanti con l'età***
(She is a widow who is a little over the hill)

*Suoceri o genitori **avanti con gli anni***
(In-laws or parents who are over the hill)

(c) with regards to time (forward)

*ora **le lancette dell'orologio avanti** o indietro*
to move the clocks forward or back

(d) in a leading or advanced position

*Un po' snob sempre **avanti in tecnica e sicurezza***
(A little snobbish and always up-to-date with technical and safety skills)

Con Kaiserslautern più avanti di preparazione..
(With Kaiserslautern further ahead with their preparation..)

*Con ricchi mezzi finanziari e molto **avanti nel processo di digitalizzazione?***
(Rich financial means with a state-of-the-art digitalization process?)

Ragazzi avanti negli studi!
(young people who have completed advanced studies!)

(e) to continue, to go on, to keep on doing something

E** allora **avanti con il Superpippo dei buoni!
(And so let's go on with the Superpippo of the good)

***E avanti a** ridere e scherzare*
(And so let's go on laughing and joking)

***E avanti a** parlare sempre di Biagi*
(And so let's go on speaking about Biagi)

(f) with the idea of the future, to make progress, to improve

*Basato su un motto "**Tutti avanti** perchè la famiglia avanzi"*
(Based on a motto "Let's all go forward so that the family makes progress")

*Un mondo giovane e già **avanti nel futuro***
(A young world and already ahead of the times)

This particle-based study allowed me to recognise that the variety of senses of *avanti* constructions depends on the metaphorical *shift* from space to time which seems to involve only the particle. The same range of meanings (a-f) is present in fact also in the VPCs which *avanti* combines with. Let's look at the following VPCs (4) grouped by meaning in exactly the same way as the V-less *avanti* constructions seen before. VPCs are extracted from the La Stampa '98 corpus with the query <V > *avanti* for continuous sequences and <V > <WF> avanti for locating discontinuous sequences (a Glossary of *V+avanti* combinations collected from the La Stampa corpus is presented in the Appendix):

(4) *different idiomatic senses of V+ avanti constructions*

(a) be in advantage (usually for matches and scores):

*Fucka **ha riportato avanti** la Teamsystem*
(Fucka has put the Teamsystem in advantage)

*Cuneo **era scattata avanti** fino al 2 a zero*
(Cuneo had burst ahead until reaching the 2-0 result)

*il colpo che **ha spedito avanti** la Juve*
(the shot that put Juve ahead)

***Hanno portato** gli azzurri **avanti** di 11 punti*
(They put the Italian team ahead by 11 points)

***Hanno proiettato** i Lombardi **avanti** di un punto*
(They put the Lombards ahead by one point)

*Gli Usa **erano avanti** 2-0*
(The USA team was ahead 2-0)

(b) with regards to age, to get old

*E chiunque **sia avanti** con gli anni*
(And anyone who is getting old)
***Va avanti** con gli anni*
(He is getting older)

(c) with regards to time (forward)

*L'orologio **va avanti***
(The clock is forward)

*La tua sveglia **è avanti***
(Your alarm clock is forward)

*Un impegno tacitamente **spostato avanti** nel tempo*
(A commitment that has been postponed)

*Per **spostare** sempre più **avanti** le lancette della storia*

(In order to move the hands of time further and further forward)

(d) in a leading position

*Alcuni **si sono messi avanti** con il lavoro*
(Some people have got on with their work)

*Biondi **si è portato avanti** nei lavori*
(Biondi has got on with his work)

(e) to go on

*Le indagini **vanno avanti** fra mille difficoltà*
(The investigation is going on, despite many difficulties)

*Speravano di **tirare avanti** ancora un po' nella logica*
(They hoped to go on a little further with the logic)

*Un terreno ostile nel quale **mandare avanti** le ricerche*
(A hostile land in which to go on with the research)

***Porta avanti** la gravidanza*
(To go on with the pregnancy)

*Un accordo per **condurre avanti** i lavori in condominio*
(An agreement to go on with the works in the palace)

*Salò **spinge avanti** le precedenti dichiarazioni di Fini*
(Salò goes on with Fini's previous statements)

(f) with the idea of the future, to make progress, to improve

*La ricerca farmaceutica **va avanti***
(The pharmaceutical research makes progress)

*La Marcia giusta per **spingersi avanti***
(The right way to make progress)

It is clear, by looking at this parallelism between V_less and Verbal *avanti* constructions that the core meaning of VPCs is carried out by the particle (or "encoded in the particle slot") rather than by the verb or the combination verb-particle together. Different VPCs built with different head verbs but with the same predicative particle a*vanti* can convey the same meanings regardless of the verb. I argue, at this final stage of the thesis that the polysemy belongs to the particle and not to the VPC.

Also the aspectual meaning of some VPCs such as the ones listed in (4.e) which have a durative sense need to be traced back to the particle *avanti* which extended its spatial sense to the abstract domain of the aspect and this is verified by the presence *of aspectual V_less avanti construction*s such as (3.e). In these verbless sentences, the particle plays the role of an "aspectual operator" (cf. Harris 1976) which selects an infinitive sentence or a prepositional phrase on its right:

(5)

E avanti a V-inf =: *E avanti a ridere*
And go on laughing

←→ **E avanti con V-n** =: *E avanti con le risate*
And go on laughing

The two structures represented in (5) are in a paraphrastic relationship as the noun "risate" is V-n, i.e. a noun that is morphologically correlated with the verb.

Let's note, moreover, that in addition to the aspectual meaning of "to go on", "to continue", the particle in (3.e) and in (5) conveys another aspectual value concerning the quantity, the excess, as in the following V_less Avanti construction the use of which is characterised by the structure **e avanti con N (plural):**

(6)

*Proprio nella fase Rem **e avanti con sonniferi e tranquillan**ti*
(Right during the REM phase and let's go on with the sleeping tablets and tranquilisers)

Delle polemiche. Per ora. ***E avanti con le notizie****.*
(Scandals. For now. And now let's go on with the news)

E *nell'attesa* ***avanti con penne e cartoncini***
(And while we are waiting, let's go on with pens and card)

Le armate rivali. ***E poi avanti con le raffiche di incontri***
(The rival armies. And then on with the rapid succession of meetings)

This "quantitative" aspectual value of *avanti V-less constructions* which means something such as repetition, rapidity, the beginning of a new "action" with respects to the antecedent, is marked by the conjunction "e" co-occurring in the large set of these aspectual V_less PCs.
It is also common to V_less PCs consisting of other particles, such as *via* and *giù* which are described in the next chapters.

8.4 V_less giù constructions

V-*less giù constructions* extracted from the La Stampa '98 Corpus are of two main kinds: compositional and aspectual. Those of a compositional nature, as shown in table 1 are very few. Below I provide some examples of "spatial" verbless giù constructions:
(7)

E poi ***giù*** *per corso Vittorio Emanuele*
(and then down towards corso Vittorio Emanuele)

Tre bis, e poi ***giù*** *a cambiarsi*
(three curtain calls and then down off the stage to get changed)
Si sfida la morte? E giù dal treno di corsa
*(*Challenge death? And down from the train at a run)

The large set of V_less constructions involving "giù" are both idiomatic and, in particular, aspectual such as in:
(8)

a. ***E giù*** *batoste*

(and rain down blows + then there was a hail of blows)

b. ***E giù*** *lodi*

(and Rain down praises praises)

b. ***E giù con*** *i particolari*

(And on with the details)

d. ***E giù*** *con ricami sul segreto istruttorio*

(and And on comes the exaggerating about the secrecy of disclosures)

. e. **E giù** una serie di insulti sanguinosi

(And on with a series of bloody insults)

These examples are all characterised by an "e giù N" structure such as (8.a-8.b) or an "e giù con N" structure (8.c-8.e) and all the Ns selected by the particle are plural. The interpretation of the sentences is clearly aspectual with regards to the immediacy of something which takes place directly after something else. The co-occurrence with plural nouns contributes to the aspectual meaning of "intensity", "repetitive action" and "quantity".

It is interesting that such a use was attested also in Tommaseo Bellini's dictionary (1861-1879), - the most important Italian dictionary of the 1800s (also available online at http://www.dizionario.org/index.php?dizionario-italiano) - where it is described as follow: "*Di cosa o cose che vengono in quantità grande o di forza (*Of whatever comes in great quantities or strengths):

a. *E giù acqua!, E giù bastonate! E giù applausi! E giù croci!"*

*(*And come down the water! And come down wthe blows! And on with the applause! And down with the crosses (to be borne)!

In the "Grande dizionario della lingua italiana" by Salvatore Battaglia (2002) the aspectual use of the particle *giù* is described in a similar way: "Per indicare un'azione ripetuta con insistenza e rapidità" ("To indicate a repeated action with insistence and rapidity"):

Nieri, 43 *Quel giorno al monte* ***giù*** *acqua a rovesci* 1920
(That day at the mount, down came water overturning all. 1920)

Di Giacomo II 814, ***E giù*** *poemi vernacoli a carrettate,* ***giù*** *immagini paradossali, esagerate, artifiziose* 1934
(Di Giacomo II 814, And on came cartloads of vernacular poems, on with paradoxical exaggerated, artificial images. 1934)

DeRoberto, 57 *Perché - proruppe Don Blasco… - per questo! -* ***e giù*** *una mala parola da far arrossire gli antenati dipinti*. 1927
(DeRoberto, 57 Because – burst in Don Blasco… -for this! And on came bad words to redden the painted forebears. 1927)

Pea, 7-14: *Poi si ripiantava il pettine sulla scriminatura al centro della nuca,* ***e giù*** *un'altra passata di striglia*. 1958
(Pea, 7-14: Then he regretted the having combed the part in the centre of his skull, and on with another quick comb. 1958)

Montale, 2-21, *Ad uno scrollo* ***giù****/foglie a elice, a freccia/nel fossato* 1939
(Montale, 2.21, With a shake down/leaves like helixes, arrows/in the moat. 1939)

Cassola 2-331, *Gino ed io siamo soltanto buoni amici - diceva l'altra voce di donna - Tu non ci credi Lucia? - e* ***giù*** *una risatina soffocata*. 1960" (S. Battaglia, 2002)
(Cassola,2-331, Gino and I are just good friend – said the other female voice – Don't you believe us, Lucia? And on came a suffocated giggle. 1960

(S. Battaglia, 2002)

Also in De Mauro's Gradit (2006) it was claimed that the adverb *giù* grouped with the conjunction 'e' (having a reinforcement value) allows for indicating intensity, fullness, continuity such as in the example *e giù sberle! e giù bestemmie! E giù acqua!*
Another *V_less giù* construction extracted from the La Stampa corpus shares the aspectual value, but, from a syntactic point of view it 'appears' to be different from the type seen in (8) as it selects an infinitive clause on the right of the E giù structure, such as ~~l~~in the examples:
(9)

a. *resiste alla tentazione del blasfemo.* ***E giù a considerare*** *il SacroLino [..]*
(He resists the temptation to blaspheme. And let's all consider the SacroLino)

b. *Non me lo ricordo.* ***E giù a ridere*** *ancora*
(I don't remember. And let's all laugh again)

c. *Hanno fischiato? Massì* ***e giù a ridere***
(Have they blown the whistle? Oh yes and we all started laughing)

d. *E quando passa la gente..****E giù a mimare*** *un altro sputo a terra*
(And when the people pass.. we all start miming spitting on the ground)

The V_less use in (9) can be formalised as in *E giù V-inf* complex sentence structure that is a canonical Harrisian operator of an aspectual kind as it selects a non-elementary sentence (the infinitive) on its right, i.e. **Oo.**
In (9) *E giù* conveys an inchoative value as it stresses the beginning of the actions indicated by the infinitive clause.
But, by means of an in-depth analysis, I can easily note that there is a correlation between the three surface types of *V_less giù* constructions i.e. *E giù N*, *E giù con N* and *E giù a V-in*f and such a correlation can be captured within Harris' concept of the "paraphrastic and distributional equivalence class". Let's look at these three apparently different *verbless E giù structure*:
(10)

E giù a ridere
And let's all start laughing
E giù con le risate
And let's all start laughing
E giù risate
And let's all start laughing

The sequences *a ridere, con le risate* and *risate* are distributionally equivalent as they share the same context on their left *E giù* and can be freely commuted with each others without affecting the semantics of the sentences. They can occur on the right of *e giù* with the same *likelihood of occurring*. So (10) can be formalised as (11), i.e. a paraphrastic and distributional equivalent class (that we called also a "paraphrastic network" or a "set of alloconstructions"):
(11)

	E giù <u>a ridere</u>		**E giù V-inf**
	And let's all start laughing		
←→	*E giù <u>con le risate</u>*	←→	**E giù con V-n**
	And let's all start laughing		
←→	*E giù <u>risate</u>*	←→	**E giù V-n**
	And let's all start laughing		

From this viewpoint, the three apparently different patterns of *E giù V-less constructions* are correlated discovering that they share the same syntactic behaviour and the same aspectual interpretation with *E giù* as an aspectual operator applied to a non-elementary sentence (i.e. **Oo**).

8.5 V-less via constructions

Also for V-less via constructions only a few compositional uses are attested in the corpus, as in the following:

(12)

*La ditta che dobbiamo rapinare. **E via** in auto a tutta velocità*
(The company that we have to rob. And let's drive off at high speed)

*Si potesse prendere Bugno, **via** alle sette del mattino*
(One could get Bugno, leaving at 7 am)

***E** allora **via** tutti! Adesso aspettate la sorte*
(And so everyone go away! Now wait for your fate!)

Here "via" retains its original spatial value and means something like "to go away", but when compared with the verb "andarsene" (cf. to go away) in these verbless constructions, it conveys an additional semantic value which can be again analysed as being "aspectual". It is implied not only to be a movement but a "fast" movement, a sudden action heading towards an unspecified direction.

The idiomatic uses of V-less *via* constructions, instead, are aspectual in the same way as V-less *avanti* and V-less *giù* constructions.

Let's look at the following aspectual V-less *via* constructions:

(13)

a. *Diceva panino e listino* ***e via con l'identikit sociologico***
(He said sandwich and price list and then on with the sociological identikit)

b. ***E*** *poi* ***via con il solito composto***
(And then on with the usual compound)

c. *Entra.* ***E via a spiegare*** *anche il superlative*
(He comes in. And then he also goes on to explain the superlative)

d. *Incredibile ma vero* ***e via infilando*** *frasi stupefatte*
(Incredible but true and he goes on uttering extremely surprising phrases)

As for these, I can identify the same paraphrastic network seen for the other two aspectual constructions with *E via* selecting an infinitive or gerundive sentence, a PP or an NP in an equivalence relationship with each other and with the possible noun in correlation with the verb (N=: V-n):

(14)

E via (*a spiegare* + *spiegando* + *con la spiegazione* + *la spiegazione de) il superlativo*

The *alloconstractions* in (14) can also be formalised as:

E via (a V-inf + V-ndo)
←→ E via con V-n
←→ E via V-n and

with *E via* as an aspectual operator (of an inchoative type) applied on a non-elementary sentence (i.e. Oo).

These aspectual verbless constructions need to be analysed in relationship with the "narrative infinite" and this will be the aim of a future work. What is interesting to say now is that I assume no 'implied' verb between the *E* and the particle. By contrast is the particle that fill the position of a verb*: avanti, giù* and *via* in this type of constructions can be replaced by the

aspectual verb “start”. These type of verbless particle constructions cannot be related with verb particle constructions: they are autonoumus syntactically and do not fall into a small clause structure.

8.6 Interim conclusion and results of the automati extraction

This study pointed out a corpus of about 250 V-less PCs distributed among all the particles taken into account (i.e. avanti, indietro, fuori, dentro, giù, su, dietro, via, sopra, sotto), but with a high frequency rank for *avanti, giù* and *fuori*. The corpus-based analysis described in this chapter was developed on the basis of sophisticated computational procedures, queries and local grammars applied to the corpus La Stampa ’98 (about 22 million of words) within the softtawe Nooj in order to extract V_less PCs and to build a typology of them under the semantic and the syntactic points of view.

The study showed that particles are meaningful elements as they display a large set of idiomatic and aspectual meaning derived via a metaphorical process from their directional basic meanings and these idiomatic meanings, i.e sense or lexical uses in lexicon-grammar terms, are more frequent than composional ones, in exactly the same way of what we discovered for VPCs in the LIP corpus (Guglielmo 2011). Furhemore by applying an Harrisian account we showed that in same cases it is possible to identify a semantic parallelism between the set of meanings displayed by the particle in verbless clauses and in VPCs (as we observed for V-less avanti constructions (3) and V+ avanti constructions (4)). In other cases, V-less PCs have no verbal counterparts as we observed with regard to the so-called **aspectual verbless constructions** (like *E avanti, E giù* and *E via*) which are similar among each others but do not have any corresponding VPCs coverying the same aspectual information and syntactic structure.

This gives rise to the assumpion pointed out in this work that the identification of the missing verb in a V-less PC is completely arbitrary or unnecessary and, in the case of aspectual verbless constructions, it is probably impossible. On the basis of the theoretical syntactic account and empirical evidences provided in this chapter we stress the claim that verbless particle constructions in Italian language are syntactically and semantically autonoumous.

9. A quasi typological investigation

In this short chapter I provide a quasi-typological investigation of V_less PCs in different languages of both an Indo-European and non-Indo-European nature in order to check if they represent a syntactic type limited to the English and Italian languages or, on the contrary, they are also attested in other languages.

In particular, I focus here on the so called verb-framed languages (i.e. V-framed or V-languages) and "agglutinative" languages where, usually VPCs are not attested as speakers prefer to use – as movement coding strategy – "synthetic" or "one word" verbs: for this study they are French, Japanese and Turkish. Let's look, first of all, at the French language, which, in the traditional Talmy (1985, 2000) classification is a verb-framed language and (theoretically) it does not make use of VPCs, but, in an unexpected way I discovered the following V_less PCs:

(1) Part (N)

Bras bas

(lit. arms-down)

Dehors le petit!

(lit. out-the-kids)

Haut la jambe

(lit. up-the-leg)

V_less in (1) are fully acceptable French expressions forming "compositional" patterns with the predicative particle selecting only a "free" NP, of both a human and non-human nature.

Instead, in the V_less (2), the particle selects a "unique" NP that I sign as "C" (cf. constrained element) and the pattern is defined as "frozen":

(2) Part (C)

Bas le masque!

(lit. down-the-mask!)

Bas les voiles!

(lit- down-the –veils!)

Bas les pattes!
(lit. down- the-legs)

V_less in (2) are commands or exhortations in the form of imperative sentences. In addition to these, in French, there are also Part N/ Part N patterns that I called "double verbless sentences":

(3) Part N/ Part N

Bas les mains, haut les coeurs
(down the hands, up the heart)

Haut les mains, bas les pattes
(up the hands, down-the legs)

Finally, in French, there is the pattern **en avant avec (N**) which is similar to the Italian pattern *avanti con N:*

(4)

en avant avec (N)

Réne Coty: **en avant avec** le sourire
(lit. Réne Coty- forward- with- a smile)

La France **en avant avec** Francois Hollande
(lit. France-ahead-with-Francois Hollande)

The second language taken into account is Japanese which is, traditionally, a semi-agglutinate language without VPCs. Japanese, to say something like *pull up the hands*, uses the synthetic verb 'agero' (cf. to raise), that actualizes a verbal sentence such as the following:

(5)

te-o	**agero**!
hands.ACC	pull-up

(cf. pull up the hands!)

Turkish lacks verb particles use but predicative adverbs such as “ue” (cf. up) occur in verbless constructions in exactly the same way as Italian and English:

(6)

te-	**wa**	**ue**!
hands. ACC		up.AVV
(cf. hands up!)		

In other words I noted that V_*less* PCs are attested in colloquial Turkish as well, where even though to express the movement it prefers to use synthetic verbs. For instance, to say “to demolish a house” it does not use a V+ Part such as the English *to break down* or the Italian *buttar giù* but they use the one-word verb “yikmak” (lit. to demolish):

(7)

Max	***evi***	***yikar***
Max	house.ACC	demolish.3.p.s
(cf. Max breaks down the house)		

Nevertheless they have a verbless imperative such as (8) where the adverb “asagi” (cf. “down”) plays a predicative role and conveys the sense of the verb “yikar” (cf. to demolish)

(8)

asagi	***ev-i***!
down.AVV	house.NOM
(cf. down the house!)	

Finally, the same double verbless sentences *N Part/ N Part* found in English, Italian and French are present in colloquial Turkish as well:

(9) N Part / N Part

eller	**yukari,**	**donlar**	**asagi**!
hands	up.AVV	pants	down.AVV
(cf. hands up and pants down!)			

The presence of V_less PCs in many typologically different languages will be the aim of a future study, but the empirical evidence provided here shows that the pattern can be vital and frequent also in other languages, of both an Indo-European and a non-Indo-European nature and it raises the question of the possible "universal" nature of V_less PCs. Finally, the occurring of V_less Pcs also in verb-framed and agglutinate languages, where traditionally VPCs are not attested could represent a further argument to support the main hypothesis carried out in this work, i.e. the clausal, predicative, pre-existing and not verb-elliptical nature of verbless particle constructions.

10. Conclusive remarks

My descriptive study pointed out that *V_less PCs* exist in the Italian language and that they do not represent a marginal or sporadic phenomenon, limited only to colloquial speech. I provided empirical evidence for this hypothesis, taken from current Italian language dictionaries as well as investigations carried out in corpora, texts, Google search engines and newspaper headlines and from a corpus-based study, i.e. by automatically extracting *V_less PCs* from the La Stampa corpus by means of Nooj software.

Within my original particle-centred approach I showed that V_less PCs cannot be regarded as "elliptical" and incomplete structures, derived from the full verb-particle constructions via the omission of the verb (e.g. *tirare su i prezzi* →*su i prezzi*, cf. *push up the prices* → *up the prices*) but as predicative structures which are both completely syntactically and semantically autonomous. In this structure the particle plays the role of predicate (PRED) as it selects the number and the typology of the nominal arguments (N) and it contributes to the meaning of the construction. The larger VPCs (e.g. *I commercianti tirano su I prezzi,* cf. the shopkeepers push up the prices) are regarded as "complex constructions" derived from the verbless constructions by applying causative motion verbs together with its argument (# *I commercianti tirano,* the shopkeepers push) on the verbless predicative kernel (*su i prezzi,* up the prices).

This descriptive hypothesis was developed on the basis of the main syntactic theories pointed out by Harris Z. (1976) and it represents an original small clause approach on Italian VPCs.

What is very interesting in my view is that verbless particle constructions represent the "underlying" form, that is, the basic syntactic structures, so that they need to be stored in the lexicon as a "unit". The particle selects its class of argument firstly, then an adding verb is

required on its left. The predicative structure Part [N] is autonomous and this can be considered the reason for which the open and variable slot for the verb can be not "filled" [V=:E]. This approach has a lot to do with a small clause approach on VPCs even if we stress the clausal status of such smaller structures by applying a distributional transformational and predicate-argument approach as developed by Zellig Harris.

11. Further speculations

V-less PCs do not represent a marginal or sporadic phenomenon of Italian Language, limited only to colloquial speech. The construction is attested in literary language as well, although the small size, the meaningful semantic and the *illocutive force* of the particle are well suited to the concise nature of the spoken communication and to the nominal style of headlines and journalistic prose.

They need to be analysed with respect to "full" VPCs, of which they are the predicative kernel. I stated that a Small Clause account on Italian VPCs is really a necessity, as most of them (i.e. directional, semi-fixed and $fixed_C$) can be decomposed into V_lessPCs, while only a little group of them, i.e. frozen (i.e. *fare fuori il dolce*) can not be traced back to V_less PCs.

The relationship between the verbal and the verbless patterns (VPC vs. V_less PCs) was captured within Harris' Transformational Grammar (Harris 1968, 1976), i.e. by postulating a bi-oriented paraphrastic and transformational equivalence between them (N_0 V Part N1 ←→ Part N1). In other words, I regarded the V_less PC as a diagnostic test, i.e. a *transformational property*, inserted in the columns of the lexicon-grammar tables by the meaning of the notation V=:E (i.e. verb fill an empty slot).

Following the empiricism of the lexicon-grammar method, in fact, we systematically projected this syntactic property to the lexical database of Italian transitive VPCs (of the type N0 V Part N1) which was previously encoded in an unique taxonomy and we split them into two main sets of constructions (Guglielmo 2013): the one accepting the verbless (with a plus sign in the tables under the property V=:E) and the one that does not accept it (with a minus sign in the table under the property V=:E). As I have seen above, the instances of the former set can be well represented with the small clause structure *N0 V* $[Part\ N1]_{SC}$ with *Part N1* as

underlying predicative structure - in Harris' term: Ono (with 'o' standing for the sentence *Part N1*) - while the instances of the second set (e..g. fare fuori un dolce) do not form a Small Clause structure as the particle does not form a unit with N, it cannot occur without the verb and both of the elements of the combination, verb and particle, represent a multi-word lexical entry, playing the role of predicate as a whole by governing the two nominal arguments, i.e. *N0 [V Part] N1,* (within Harris: Onn).

In other words I approached the V-less structure as a *transformational structure*[67] which, as a such, is a sentence-form, (like the passive, the pronominalised, the relative, cleft-sentence and so on) that is, a minimal or "elementary sentence" with a basic predicate-argument configuration which cannot be broken down into smaller units having semantic and syntactic autonomy.

After that, I investigated the **conditions of autonomy** concerning V_less PCs by showing the main discourse types of verbless identified in Italian (assertive, interrogative, exclamatory, absolute, narrative) and the **restrictions** on their usage in the discourse (the lexical item and syntactic structure it can not co-occur with). Only by limiting the lexical and syntactic distribution of the phenomenon and by listing the applicability and existence conditions of it we can give evidence for the existence of the phenomenon.

The findings point out that *V_less PCs* represent a phenomenon lexically and syntactically dependent (not all the lexicon of VPCs accept the verbless property and not in all the types of Italian discourses can we find verbless). Furthermore the *illocutive force* and the specific intonation curve allowed us to recognise the key role played by pragmatic and prosodic facts in the comprehension of the construction which can be, with good reason, situated in an interaction area between lexicon, syntax, pragmatic and prosody.

Finally, this study posits itself in the ongoing debate on the functional vs lexical role of spatial prepositions, demonstrating that for the property of selecting the number and type of arguments they behave like lexical elements (Jespersen 1926, Jackendoff, 1997, Svenonius 2004, den Dikken 2003, Cinque, 2010). Different approaches could therefore converge by considering adverbs and locative prepositions as "predicative elements". The presence of

[67] In Harris' "Co-Occurrence and Transformation" paper (Harris 1957) his criterion for a transformation between two sentence-forms was that inter-word co-occurrence restrictions should be preserved under the mapping; that is, if two sentence-forms are transforms, then acceptable word choices for one also obtain for the other.

sentences in which the centre is not a finite verb but the spatial particle represents a proof of their predicative nature. It encourages us to review determined assumptions on VPCs, and to analyse them starting from the “minimal sentence”, i.e. from the kernel structure Part N.

This chapter represent a strong argument to support a particle-centred approach on Italian Verb-Particle Constructions.

SECTION VI

THEORETICAL AND APPLICATIVE IMPLICATIONS

1. Type of VPCs

To sum up, some assumptions clearly emerge from my analysis regarding the types of VPCs. I substituted the compositional vs. idiomatic dichotomy with a more articulated one that takes into account syntactic and semantic properties *in tandem*, and is in some aspects similar to Hampe's. Following Hampe's (2002) English phrasal verbs analysis, in fact, this work shows that a binary opposition between idiomatic and non-idiomatic VPCs does not suffice to account for their syntactic behaviour. My approach distinguished - on the basis of some criteria (factorisation, substitution or omission of the verb, verbless usage, optional particle usages) at least four kinds of VPCs.

- **Compositional uses** generally allow for substitutions of their (literal) particles with other particles or with a locative prepositional phrase, as well as for the substitution of the head-verb with a synonymic verb, if they are the '**directional**' type (1), like:

(1)

a. Max sposta dentro la macchina

←→ *Max (mette +porta + E +...) dentro la macchina*

←→ *Max sposta (dentro + all'interno + dentro al garage + nel garage) la macchina*

(tr. 'Max puts the car in')

←→ *Max (puts + *carries + *E +...) the car in*

←→*Max moves the car (in + *into + *in the garage + into the garage)*

or allow particle deletion if they are the '**redundant**' type (2) , like:

(2)

Max <u>butta via</u> un'occasione importante

←→ *Max butta (via + E) un'occasione importante*

(Max <u>throws away</u> an important opportunity

←→ *Max throws (away + E) an important opportunity)

- **Semi-fixed uses** (3) show more limited variation possibilities compared with compositional, but more variation possibilities compared with fixed, involving the factorisation (3.c), the substitution of the head verb into a finite combinations possibilities range (3.b) and the verbless uses (3.d):

(3)

a. *Ugo mette dentro il ladro*
(Ugo puts the thief inside)

b. ←→ *Ugo (butta+ spedisce+ manda + sbatte +...) dentro il ladro*
(Ugo (*throws + sends + sends + *slams + …) the thief inside)

c. ←→ *il ladro (è + finisce+ va + sta...) dentro*
the thief (is + *finishes + *goes + *stays…) inside

d. ←→ *dentro il ladro!*
(*inside the thief!)

- **Fixed** VPCs such as (4) do not accept any substitutions (4.b), or the factorisation (4.c) or verbless usage (4.d)

(4)

a. *Eva fa fuori il dolce*
Lit. *Eva-does-out-the-dessert
(Eva polished off the dessert)

←→ *b.* *Eva (mette+ porta+ spinge...) fuori il dolce*
(*Eva (puts + carries + pushes…) out the dessert)

←→ *c.* *il dolce è fuori*

(*lit. the dessert is out)

←→ *d.* ** fuori il dolce*

(*Lit. out the dessert)

- Finally **frozen** block all the pattern of variation, i.e. substitutions (5.b), or the factorisation (5.c) or verbless usage (5.d)

(5) a. Max mette su famiglia

(Lit. Max-puts-up-family)

(Max start a family)

←→b. *Max (manda + tira + porta) su famiglia

(*Max sends, pull, carries) op family

←→c. *La famiglia è su

(tha family is up)

←→d. ?* Su famiglia! Sposati!

(*Up family, merry!)

From the syntactic point of view compositional include two types, redundant vs. directional, and idiomatic includes four different types, redundant, semi-fixed, fixed and frozen. The following table sums up the typology of VPCs in Italian on the basis of the semantic-syntactic properties that we saw:

	semantic	**syntax**			
VP C typ es	**COMPOSITIONAL**	**redundant**	**directional**		
	IDIOMATIC	**redundant**	**Semi-fixed**	**fixed**	**frozen**

Table 1. The semantic-syntactic types of VPCs in Italian

Directional – as we have seen in the sentences in (1) - share some properties with semi-fixed (3) , *i.e*. 'verbless use', the 'factorisation', and the substitution of the head-verb with synonymic variants (see grey part in the table 1). But compared with the *semi-fixed* uses, *directional* uses of the head-verb are variable in a larger combinations possibilities range (which explains why they are so highly productive). Another difference is that the particle slot in directional uses is less fixed then in semi-fixed VPCs. In fact the particle can be replaced in many cases by synonymic locative forms, like in the compositional directional sentences:

(1)

Eva sposta dentro la macchina

←→ *Eva sposta all'interno la macchina*

*Lit. *Eva-moves-in-the-car*

Eva puts the car away

←→**Eva puts the car inside*

Luca butta giù la borsa

←→ *Luca butta per terra la borsa*

Luca throws the bag down

←→*Luca throws the bag on the ground*

Maria tira avanti la sedia

←→ *Maria tira in avanti la sedia*

Maria pulls the chair forward

←→ *Maria pulls the chair ahead*

The difference between compositional and idiomatic VPCs is so far to be analysed in this work but here we underscore the interesting "syntactic similarity" between *compositional-directional* type (3) and *idiomatic-semi-fixed* type (1) that even if they look to be different from the semantic point of view share the same syntax. I consider that a unique representation form can be used for both the types. The syntactic and predicative structure that they exhibit is in fact is the same, i.e.:

$\mathbf{N_0\ V\ [Part]_{pred}\ N_1}$

This shows that the predicative element of the construction is the particle, which works as function (or 'operator'), while the head-verb works as the variable. The variable or semi-free slot for the verb can also be unfilled, so that we have:

N_0 [(V + E) **(Part N_1)**]

Here **Part N_1** is a **predicative kernel** of the construction and embedded in the **expanded VPart** construction. In my view, **Part N_1** has a clausal status, i.e. verbless sentence, so it can be represented in harrisian terms as an 'o', on which a causative operator with its argument, i.e. *On*, is applied. The full VPC has, in other words, the form of a complex sentence or 'non elementary sentence' with a low-level operator embedded into an up-level operator: **Ono.**

2. The weight of the particle

If the particle plays the role of predicate in such a large section of Italian verb particle constructions (i.e. the grey part in the table above) it means that a new viewpoint is essential for investigating them. I have tried to demonstrate that this new viewpoint should be a particle-centred approach.

I suggest, in other words, to start, in future works, both for semi-fixed idiomatic and for compositional directional VPCs – that quantitatively include the higher section of data – from the particle requirement.

Currently, in Italian there is still a lack of lexicon and syntax studies on Italian particle requirements like *fuori* (= out), *dentro* (= in), *giù* (= down), *via* (= away), *avanti* (=forward), also called 'polysyllabic prepositions' (cf. *preposizioni improprie*) in free sentences like *Max è fuori al terrazzo* (*Max is out on the terrace*), even though some issues are pointed out by

Rizzi (1988).

For the English language the analysis of Ryckman & Gottfriends (1981) - which represents an attempt at treating the properties of English Prepositions within the harrisian operator-grammar theory – revealed that prepositions have a dual status , i.e. they serve both as argument-indicators and as operator, depending on the occurrence context.

A "Particle centred approach" on English Verb-Particle Constructions is laid out by Cappelle Bert (2005) who put forward several arguments to support the power of the particle issue. Instead, for Italian language, some suggestions come from Jansen H. (2004) who underlines the centrality of the particle into a set of related constructions within the "Radical Construction Grammar framework" (Croft W. 2001).

This work represents an attempt to follow these lines of thinking by positing that the particle is not just a small added word but the core element of the construction both from the syntactic and semantic point of view. I do not consider in fact verb-particle combinations as being composed of, first and foremost, a verb and, secondarily, an inert little word attached to it, like 'giù (= *down*), 'su' (=*up*), 'via' *(=away*). The term "*phrasal verb"* still underscores the preponderance of the verb. That is why we prefer to talk of "Verb-Particle constructions", in order to give equal credit to both the elements in the construction.

Jackendoff (1997) preferred to call phrasal verbs '*constructional idioms'* because they were constructed of an open slot for the verb and a 'pre-installed' slot for the fixed particle. One of the main findings of my work on Italian VPcs is that this structure is valid only for semi-fixed idiomatic and directional compositional VPCs, giving evidence of their syntactic similarity, and of the syntactic difference that they display with respect to fixed VPCs, where both of the slots (verb and particle) are fixed or 'frozen'.

3. Syntactic cohesion vs. variation

All the studies on Italian focus their attention on the syntactic cohesion of the pattern verb+particle and use this as an argument to support the difference with free construction (V+ PPp), dealing with the existence of an independent class of verb. Here we suggest, on the contrary, that there is an important class of VPCs – semi-fixed VPCs - which share several properties with free construction and exhibit a large pattern of variation. If semi-fixed are

more flexible and can be split (decomposable) into two parts via a decomposition process, it means that the construction does not have a high cohesion. It is made up with a free slot for the verb and a fixed slot for the particle. They seem to be more similar to support verb constructions - for the flexibility they display – than to the other types of MWEs like *frozen sentences.*

4. The gradience in VPCs analysis.

The syntactic-semantic categories used to classify VPCs – redundant- fixed- semifixed- are adjacent and not discrete. A syntactic *gradience* exists between them, as pointed out by Aarts in his theory of grammar (Aarts 2004). In fact, my analysis of Italian VPCs gives some important evidence of this grammar 'indeterminacy'. There are VPCs that are prototypical members of a specific type and others which seem to be at the boundary between different types.

5. Lexicon-Grammar implications

Even though I was fascinated in my work by different approaches on grammar, showing that there could be a convergence between them in the descriptive analysis of VPC patterns, the Lexicon-Grammar as developed by Gross M. (1975) remains my mainstream theoretical framework. This is because together within the support of the operator-arguments Grammar, as pointed out by Harris (1976), it allows for an empirical method in the treatment of Italian verb-particle constructions, based on data and on the exhaustive classification of them into matrix tables. These tables cross syntactic properties with lexical and semantic properties, providing evidence of the Syntax-Semantic-Lexicon interface in the Grammar.

Lexicon Grammar furthermore allows for the automatic analysis of large corpora of spoken and written Italian texts, by implementing the matrix tables in software. In particular, using lexical resources (electronic dictionaries derived from the tables) *in tandem* with syntactic resources (local grammar or finite state automata built manually with software) it is possible to locate verb-particle constructions and increase an initial database of them.

Following, I illustrate in more details the theoretical and applicative lexicon-grammar implications derived from the analysis put forward in this thesis.

5.1. Theoretical

Focusing on semi-fixed VPCs, since they underscore the predicative value of the particle and for this reason assume importance for the goal of this work, I have demonstrated that semi-fixed VPCs appear in two main forms: causative and resultative. Resultative in turn can be "support verb constructions" or "verbless constructions".

The harrisian transformational and distributional analysis applied on these sets of VPCs demonstrates that they are not independent but are "related sentences" via a synonymic relationship that forms a "paraphrastic constellation", that is a sort of star networking system including all the verb-particle sentences with the same meaning and the particle as operator. The particle is, in other words, the syntactic and semantic centre of the constellation.

5.2 Applicative

In order to parse VPCs, it is essential to identify the characteristic component that is the element - or the sequence of elements – that cause the automatic locating process to start. The characteristic component in the parsing stage (*Natural Language Processing*, i.e. NLP) corresponds with the element that in the theoretical stage of the analysis we identified as "predicate" or "operator" of the sentence and which in classification stage we listed as a "lexical entry":

Theoretical stage → Classification stage → Parsing stage

(predicate) = (lexical entry) = (characteristic component)

As I have demonstrated above, for redundant VPCs the predicate is just the verb; for fixed VPCs the predicate is the entire sequence verb plus particle as a whole, while for semi-fixed VPCs it is just the particle (because the head verb, both in causative and in support verb construction, can also be missed).

Because of the difference in predication and in pattern of variation involving redundant, fixed and semi-fixed VPCs, a parallel treatment is necessary for each type.

The element identified as predicate in the theoretical stage provided here will be in future encoded into the lexicon-grammar matrix tables as a "lexical entry" (and/or in the electronic

dictionary as a "dictionary entry") in order to be applied – in the parsing stage – to texts *in tandem* with local grammars (or finite state automata).

For semi-fixed VPCs the "characteristic component" is just the particle. With respect to the main harrisian hypothesis suggested in my theoretical analysis, the causative sentences like *mettere dentro il ladro* (*put the thief inside*) are analysed just as 'complex structures'. That is, made up of a causative verb with its causative subject applied on the basic verbless construction *Il ladro dentro* (*The thief inside*) having *N Part* syntactic structure.

In other words, I considered this last structure to be the "underlying form" to store in the lexicon-grammar tables, and from which to start the transformational process. I applied a 'minimum expansion principle' – as formulated by D'Agostino, Guglielmo et al (2007) - unlike other lexicon-grammar classification methodologies that prefer to apply a 'maximum expansion principle' (Boon, Guillet, Leclere 1976). Machonis (2009) with regards to English phrasal verb lexicon-grammar classification, for instance, preferred to apply a 'maximum expansion principle' listing the transitive constructions in the tables as entries. In other words he considered the underlying structure of them the sentence *N0 V Part N1*, without analysing the form and sense relationship that this maintains with the resultative support verb structure N_1 *essere Part* (for instance between *Max cheer up Mary* ←→ *Mary is ip*)

Instead, in my work, which is clearly particle-based, I suggest to start from the minimum sentence with the minimum expansion of the argument, i.e. the syntactic structure *N Part* or *Part N*.

In the future tables, built on the basis of these new assumptions, I will not list as entry the transitive or causative structure but the minimal verbless structure.

All the causative verb variants, like *mettere*, *portare, buttare, sbattere* (*put, carry, throw, slam*) etc. as well as all the possible support verb variants like *venire, andare, trovarsi, sentirsi* (*come, go, meet, feel*) will be situated in columns because they work as transformational properties. In semi-fixed VPC tables there will be in fact a plus sign ('+') if a given variant is accepted by a given entry and a minus sign ('-') if it is not accepted by the same entry.

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Future work

The semantic mechanism which shifts compositional meanings of verb-particle constructions into semi-transparent or completely idiomatic meanings, i.e. *semantic change*, is an issue which has not yet been settled, in particular with regards to the Italian language. Nevertheless, recently, linguists, with respect to English *phrasal verbs* do agree on these three main issues, i.e. (i) such shifts exist, (ii) the boundaries between these shades or levels of meanings are not clear-cut, (iii) particles are crucial in these shifts.

In a future work I aim at highlighting this last issue, providing evidence for the claim that the particle semantically modifies the base verb of Italian VPCs: it plays the role of key element to understand such semantic patterns, i.e. constructions usually made up with a semantically powerful particle and a semantically weak verbal base.
In particular I will semantically decompose the combination Verb plus particle in order to focus on the semantic of the particle which allows one to choose between a finite range of meanings.
The underlying assumption to address is the following: Italian VPCs show a particle-centred semantic. In exactly the same manner as English VPCs (cf. Bolinger, Grew, 2005), the meaning of the combination is carried by the particle, both in compositional – where the particle retains its original directional value – and in idiomatic combinations, where the particle loses its original spatial meaning and acquires an aspectual one, and usually many metaphorical or figurative meanings, termed so far 'lexical uses'. Within a syntactic-semantic analysis on Italian VPCs provided during the thesis, I tested whether such a semantic intuition is supported by *transformational* facts, i.e. by replacing the verbal base with synonymic forms. As I outlined so far in my work, a relevant property of Italian VPCs is that the meaning of the combination as a whole does not change by modifying (or omitting) the base, which allows us to claim that the core meaning of the construction is rooted in the particle. But in a future work I will try to put aside syntactic facts like small clause, transitive and intransitive constructions, argument requirement, and typology of operators, in order to demonstrate the *essential verb-like quality of particles* (cf. Bolinger) of Italian VPCs, from the more specifically semantic point of view. To do that I believe it is necessary to improve my knowledge on Italian VPC semantics by referring to the Conceptual Metaphor Theory, i.e. Lakoff and Johnson's proposals (1980, 1987) and related theories, as well as to the recent Cognitive Linguistic approaches to English phrasal verbs

(Dirven R. 2001).

This dissertation shows that different and traditionally 'competing' linguistic approaches on VPCs can work together in the analysis of syntax, semantic and lexicon involving Italian verb-particle patterns. Each approach, by itself, is unquestionably partial and needs to be integrated with issues provided by others.

*

Final Conclusion

In this dissertation I accounted for a particle-centred approach on Italian VPCs by analysing *in tandem* syntax, lexicon and semantic properties involving these constructions.

I tried to demonstrate that a global view of Italian VPCs can be provided only by considering syntax, semantic and lexicon not as modular or autonomous components of the Grammar – as suggested by the generative approach which raises the question of syntactic versus morphological nature (i.e. phrase-like or word-like status), of VPCs - but as gradual and interacting in some way. A similar vision has been offered by the Lexicon-Grammar main theories, as well as by Zellig Harris' theoretical approach on Grammar.

A recent approach to grammar as scalar language faculty-based, where there is not a clear-cut division between syntax, morphology and lexicon, is also put forward by Construction Grammar (cf. Fillmore, Kay & O' Connor 1988; Goldberg 1995) which analyses VPCs as constructional idioms (cf. Goldberg 1995; Jackendoff, 1997, 2002), i.e. semi-specified syntactic structures with a (partially) non-compositional meaning that are stored in the lexicon and that display a certain degree of productivity. Constructions are called 'semi-specified' because they have a free slot for the verb and a specified slot for the particle.

The Construction Grammar assumes that the whole construction is associated with a meaning and the transposition from the spatial domain to the event structure domain can be explained by postulating systematic semantic connections, i.e. polysemy link, metaphorical extension link (Goldberg 1995). This approach has been applied to Italian VPCs as well, by Iacobini & Masini (2006) who postulated the existence of a metonymic link too, in order to account for the emerging of actional meanings from the basic directional ones. By reading my thesis, in fact, it is clear that under this and other related aspects, Construction Grammar affected my background and contributed to some theoretical claims put forward in my work, as well as to some formalism I adopted. But what I tried to test was if it is always possible to associate the whole construction V+Part with a basic directional or more metaphorical meaning, as suggested by the Construction Grammar - and the answer was 'not always'. It is important to analyse VPCs in sentence contexts in order to capture the different meanings. I verified by empirical facts that a large set of Italian VPCs accept a syntactic and semantic decomposition procedure, which provided evidence for the claim that for idiomatic semi-fixed and compositional-directional classes, the meaning is embedded only into the particle slot and not into the construction as a whole. The 'free' slot for the verb, in fact, is

optional in the sense that it can be not filled at all – as in the case of verbless constructions – or it can be filled by support verbs, which are, by definition, semantically weak verbs.

One of the main goals of this thesis was the investigation of the relation between VPCs and the larger domain of MWEs which, as is well-known, is heterogeneous because it includes different linguistic objects which range from more flexible combinations, like support verb constructions, to more fixed and constrained combinations, like frozen sentences.

The questions that I have tried to answer were the following:

a) Can we consider Italian VPCs a 'unique-lexical item' and for this reason a sub-set of the larger family of Italian MWEs? Which relationship do VPCs have with the other MWEs like support verb constructions and frozen sentences?

b) Do VPCs define a homogeneous lexical class of 'compound verbs' in terms of syntactic and semantic properties? Which patterns of variation do they exhibit? Can we identify different VPCs patterns?

c) Are semantic and syntactic fact concerning Italian VPCs perfectly aligned?

In order to answer the first question let's remember that within the Lexicon-Grammar Framework a Support-Verb Construction (cf. SVC) is considered a combination of (i) a verb plus a predicative noun, (ii) a verb plus a predicative adjective; (iii) a verb plus a predicative preposition (or particle):

SVCs

(i) V + N (pred) *Ugo fa un sogno (Ugo has a dream)*

(ii) V+ Agg (pred) *Ugo è triste (Ugo is sad)*

(iii) V+ Part (pred) *Ugo è giù (Ugo is down)*

What the corpus-based investigation provided in this work revealed, was that Italian VPCs share a configuration similar to (iii), as they are made up with a support verb (like *essere* (*to be*) in the example above and its aspectual variants like *stare, rimanere, trovarsi (stay, remain, meet*)) and a predicative particle which play the role of syntactic and semantic 'centre'. The particle 'pivot' status emerges both in compositional constructions like the type in (1) that I called *compositional-directional* - and in idiomatic constructions like the type in (2) that I called *idiomatic semi-fixed*:

(1) La palla è giù [+ compositional; - idiomatic]

The ball is down

(2) Ugo è giù [+ idiomatic ; - compositional]

Ugo is down

This provides evidence that the two opposite semantic classes of VPCs, i.e. compositional and idiomatic, share the same syntactic structure. That is, in LG terms:

N_0 Vsup Part

This structure has been formalized in my thesis as follows:

N_0 V [Part]$_{PRED}$

with the head verb as an empty verb and the particle as a predicate.

I pointed out that the different meanings of the same lemma, like *essere giù*, i.e. the polysemy of VPCs, can be reviewed as the result of a semantic shift which involves only the particle meaning and not the verb-particle as a whole. In other words, I argued that with regard to "predicative particle constructions" like types (1) and (2), the polysemy belongs only to the particle which acquired aspectual meanings from the original directional ones, as well as one or more metaphorical meanings.

I will investigate the semantics of particles in more detail in a future work by referring to the Conceptual Metaphor Theory as suggested by Lakoff and Johnson's proposal as well as by the application of it to English phrasal verbs (Bolinger 1971, Renè Dirven, 2001, Philip Grew, 2005, Mariana Neagu, 2007). I assumed that a large set of Italian VPCs are "*decomposable idioms*", the semantic of which can be inferred by the parts. Additionally, since the verb is "empty", the semantic of the idiom is associated only with the particle. The central claim of this particle-centred approach is that particles like *SU* (up), *GIU'* (down), *AVANTI* (onwards) are meaningful in VPCs and their meanings move from one (typically concrete) domain of experience to another (typically abstract) domain of experience.

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APPENDIX 1.a:

LIST OF 711 VPCs "LEMMATA" SORTED BY PART

Avere	accanto	Tenere	addosso
Essere	accanto	Tirare	addosso
Mettere	accanto	Tirarsi	addosso
Porre	accanto	Trovarsi	addosso
Restare	accanto	Venire	addosso
Stare	accanto	Versarsi	addosso
Venir	accanto	Guardare	alto
Venire	accanto	Mirare	alto
Restare	addietro	Salire	alto
Tirarsi	addietro	Sparare	alto
Andare	addosso	Tenersi	alto
Appiccicare	addosso	Volare	alto
Appiccicarsi	addosso	Volerci	altro
Avere	addosso	Vivere	altrove
Buttare	addosso	Volgere	altrove
Cadere	addosso	Volgersi	altrove
Calare	addosso	Fare	apposta
Cascare	addosso	Venir	apposta
Dare	addosso	Andar	appresso
Farsela	addosso	Avere	appresso
Gettare	addosso	Correre	appresso
Gettarsi	addosso	Dire	appresso
Infilarsi	addosso	Portarsi	appresso
Lanciare	addosso	Restare	appresso
Lanciarsi	addosso	Spedire	appresso
Mettere	addosso	Stare	appresso
Mettersi	addosso	Tenere	appresso
Parlarsi	addosso	Tirare	appresso
Piombare	addosso	Venir	appresso
Porre	addosso	Rimettere	assieme
Portare	addosso	Andare	attorno
Rovesciare	addosso	Avere	attorno
Rovesciarsi	addosso	Farsi	attorno
Saltare	addosso	Girare	attorno
Scagliarsi	addosso	Guardare	attorno
Scivolare	addosso	Guardarsi	attorno
Scriversi	addosso	Ronzare	attorno
Sentire	addosso	Spargere	attorno
Sentirsi	addosso	Stare	attorno
Spargersi	addosso	Stringersi	attorno
Sputare	addosso	Tenersi	attorno
Stare	addosso	Volgersi	attorno
Stare	addosso	Andare	avanti
Stringersi	addosso	Avere	avanti
Tenere	addosso	Balzare	avanti

Buttare	avanti	Andare	dentro
Cacciare	avanti	Avere	dentro
Camminare	avanti	Buttare	dentro
Correre	avanti	Chiudere	dentro
Essere	avanti	Chiudersi	dentro
Farsi	avanti	Correre	dentro
Gettare	avanti	Covare	dentro
Girarsi	avanti	Darci	dentro
Guardare	avanti	Dare	dentro
Mandare	avanti	Entrare	dentro
Marciare	avanti	Esserci	dentro
Mettere	avanti	Essere	dentro
Passare	avanti	Ficcare	dentro
Porre	avanti	Gettare	dentro
Portare	avanti	Infilare	dentro
Portarsi	avanti	Lasciare	dentro
Spingere	avanti	Mandare	dentro
Sporgere	avanti	Mettere	dentro
Stare	avanti	Portare	dentro
Tendere	avanti	Restare	dentro
Tirare	avanti	Rientrare	dentro
Tirarsi	avanti	Rimanere	dentro
Tornare	avanti	Rimettere	dentro
Trarre	avanti	Riportar	dentro
Trarsi	avanti	Ritornar	dentro
Venire	avanti	Riversare	dentro
Andare	contro	Rotolare	dentro
Avere	contro	Saltare	dentro
Buttarsi	contro	Sbattere	dentro
Correre	contro	Schizzare	dentro
Essere	contro	Sentire	dentro
Gettare	contro	Sentirsi	dentro
Lanciarsi	contro	Spedire	dentro
Mettere	contro	Spingere	dentro
Mettersi	contro	Starci	dentro
Porre	contro	Stare	dentro
Porsi	contro	Tenere	dentro
Remare	contro	Tenersi	dentro
Riversarsi	contro	Tirare	dentro
Rivoltarsi	contro	Togliere	dentro
Saltare	contro	Tornare	dentro
Scagliarsi	contro	Trarre	dentro
Stare	contro	Trascinare	dentro
Tenere	contro	Trovare	dentro
Venir	contro	Venire	dentro
Gettare	davanti	Volare	dentro
Mettere	davanti	Andare	dietro
Parlare	davanti	Avere	dietro
Passare	davanti	Buttarsi	dietro
Trovarsi	davanti	Correre	dietro
Vedere	davanti	Girarsi	dietro
Vedersi	davanti	Guardare	dietro

Lasciare	dietro	Lasciare	fuori
Mandare	dietro	Mandare	fuori
Mettere	dietro	Mangiare	fuori
Mettersi	dietro	Mettere	fuori
Parlare	dietro	Mostrare	fuori
Passare	dietro	Passare	fuori
Porre	dietro	Piangere	fuori
Portarsi	dietro	Porre	fuori
Restare	dietro	Portare	fuori
Ridere	dietro	Prendere	fuori
Ronzare	dietro	Restare	fuori
Sbavare	dietro	Ricacciare	fuori
Starci	dietro	Ridare	fuori
Stare	dietro	Rimandar	fuori
Tenere	dietro	Rimanere	fuori
Tirare	dietro	Rimettere	fuori
Tirarsi	dietro	Riportar	fuori
Trarre	dietro	Risucchiare	fuori
Trarsi	dietro	Riversare	fuori
Trascinarsi	dietro	Saltare	fuori
Urlare	dietro	Sbalzare	fuori
Venire	dietro	Sbattere	fuori
Volar	dietro	Sbucare	fuori
Volgersi	dietro	Scacciare	fuori
Filare	diritto	Scagliare	fuori
Mirare	diritto	Scappare	fuori
Tagliare	diritto	Scattare	fuori
Tirare	diritto	Scavare	fuori
Andare	dritto	Schizzare	fuori
Camminare	dritto	Scivolare	fuori
Filare	dritto	Scoppiare	fuori
Mirare	dritto	Scorrere	fuori
Rigare	dritto	Slanciarsi	fuori
Tagliare	dritto	Spedire	fuori
Tirare	dritto	Spingere	fuori
Abitare	fuori	Sporgere	fuori
Appoggiare	fuori	Sprizzare	fuori
Avere	fuori	Sputare	fuori
Balzare	fuori	Stare	fuori
Buttare	fuori	Stendere	fuori
Cacciare	fuori	Strappare	fuori
Cavare	fuori	Strisciare	fuori
Cenare	fuori	Tagliar	fuori
Chiamare	fuori	Tagliarsi	fuori
Chiamarsi	fuori	Tenere	fuori
Chiudere	fuori	Tenersi	fuori
Correre	fuori	Tirare	fuori
Dare	fuori	Tirarsi	fuori
Essere	fuori	Tornare	fuori
Fare	fuori	Trarre	fuori
Gettare	fuori	Trarsi	fuori
Guizzare	fuori	Trascorrere	fuori

Trattenere	fuori	Venire	giù
Uscire	fuori	Volar	giù
Uscirsene	fuori	Andare	indietro
Venire	fuori	Appoggiare	indietro
Venirne	fuori	Avere	indietro
Venirsene	fuori	Balzare	indietro
Vivere	fuori	Buttare	indietro
Volare	fuori	Camminare	indietro
Andare	giù	Chiedere	indietro
Balzare	giù	Dare	indietro
Buttare	giù	Farsi	indietro
Buttarsi	giù	Gettare	indietro
Cadere	giù	Girare	indietro
Calare	giù	Girarsi	indietro
Calarsi	giù	Lasciare	indietro
Cascare	giù	Lasciarsi	indietro
Correre	giù	Mandare	indietro
Discendere	giù	Mettere	indietro
Essere	giù	Mettersi	indietro
Gettare	giù	Ottenere	indietro
Lasciare	giù	Passare	indietro
Mandare	giù	Porre	indietro
Mettere	giù	Portare	indietro
Porre	giù	Pretendere	indietro
Portare	giù	Respingere	indietro
Portarsi	giù	Restare	indietro
Restare	giù	Riavere	indietro
Ributtarsi	giù	Riavere	indietro
Ricadere	giù	Ricacciare	indietro
Ridare	giù	Ricacciarsi	indietro
Rimandare	giù	Richiamare	indietro
Rimandarla	giù	Richiedere	indietro
Rimanere	giù	Ridare	indietro
Riportare	giù	Rigettare	indietro
Rotolare	giù	Rimandare	indietro
Ruzzolare	giù	Rimanere	indietro
Saltare	giù	Rimettere	indietro
Sbarcare	giù	Ripiegare	indietro
Scaraventarsi	giù	Riportare	indietro
Scendere	giù	Riprendere	indietro
Scivolare	giù	Risaltare	indietro
Scorrere	giù	Risucchiare	indietro
Sdrucciolare	giù	Ritornare	indietro
Sentirsi	giù	Ritrarsi	indietro
Smontare	giù	Rivolere	indietro
Stare	giù	Rivolgere	indietro
Tenere	giù	Rivolgersi	indietro
Tirar	giù	Rotolare	indietro
Tirare	giù	Rovesciare	indietro
Tirarsi	giù	Saltare	indietro
Tornare	giù	Slanciare	indietro
Trarre	giù	Spedire	indietro

Spingere	indietro	Avere	intorno
Spostare	indietro	Avvinghiarsi	intorno
Spostarsi	indietro	Avvolgere	intorno
Stare	indietro	Collocare	intorno
Tenere	indietro	Condurre	intorno
Tenersi	indietro	Coprire	intorno
Tirare	indietro	Correre	intorno
Tirarsi	indietro	Costruire	intorno
Tornare	indietro	Diguazzare	intorno
Trascinare	indietro	Disporre	intorno
Venire	indietro	Farsi	intorno
Volare	indietro	Gettare	intorno
Volere	indietro	Girare	intorno
Volgere	indietro	Gridare	intorno
Volgersi	indietro	Guardare	intorno
Voltare	indietro	Guardarsi	intorno
Voltarsi	indietro	Guizzare	intorno
Avere	indosso	Mandare	intorno
Andare	innanzi	Navigare	intorno
Gettare	innanzi	Porre	intorno
Mettere	innanzi	Portare	intorno
Porre	innanzi	Portarsi	intorno
Portare	innanzi	Risuonare	intorno
Recare	innanzi	Riversare	intorno
Spingere	innanzi	Ronzare	intorno
Spingersi	innanzi	Ruotare	intorno
Tendere	innanzi	Scorrere	intorno
Tenere	innanzi	Spargere	intorno
Tirare	innanzi	Stare	intorno
Tornare	innanzi	Stendere	intorno
Trapassare	innanzi	Stringere	intorno
Trarsi	innanzi	Stringersi	intorno
Riferire	inoltre	Tagliare	intorno
Andare	insieme	Tenersi	intorno
Correre	insieme	Tracciare	intorno
Dormire	insieme	Volgere	intorno
Incollare	insieme	Volgersi	intorno
Legare	insieme	Arrivare	là
Mettere	insieme	Buttare	là
Mettersi	insieme	Correre	là
Porre	insieme	Passare	là
Portare	insieme	Arrivare	lì
Restare	insieme	Buttare	lì
Stare	insieme	Restare	lì
Stringere	insieme	Rimanere	lì
Tenere	insieme	Andare	lontano
Tornare	insieme	Buttare	lontano
Trovarsi	insieme	Essere	lontano
Unire	insieme	Finire	lontano
Uscire	insieme	Gettare	lontano
Venire	insieme	Guardare	lontano
Vivere	insieme	Lanciare	lontano

Porre	lontano	Venire	sopra
Portare	lontano	Andare	sotto
Sbattere	lontano	Attaccare	sotto
Scagliare	lontano	Avere	sotto
Spedire	lontano	Esserci	sotto
Spingere	lontano	Essere	sotto
Stare	lontano	Farsela	sotto
Tenere	lontano	Farsi	sotto
Tenersi	lontano	Finire	sotto
Vedere	lontano	Mettere	sotto
Andare	oltre	Mettersi	sotto
Dare	oltre	Passare	sotto
Passare	oltre	Piegarsi	sotto
Spingere	oltre	Porre	sotto
Spingersi	oltre	Portare	sotto
Trarsi	oltre	Restare	sotto
Arrivare	presto	Starci	sotto
Fare	presto	Stare	sotto
Arrivare	prima	Tenere	sotto
Fare	prima	Tirare	sotto
Venir	prima	Vedere	sotto
Andare	qui	Venire	sotto
Correre	qui	Ridere	sotto sotto
Essere	qui	Venire	sottobordo
Venire	qui	Stare	sottosopra
Finire	qui	Volgere	sottosopra
Essere	senza	Voltare	sottosopra
Fare	senza	Andare	su
Restare	senza	Berci	su
Rimanere	senza	Depositare	su
Stare	senza	Dire	su
Vivere	senza	Essere	su
Andare	sopra	Fare	su
Appiccicare	sopra	Gettarsi	su
Avere	sopra	Guardare	su
Berci	sopra	Mandare	su
Dormirci	sopra	Mettere	su
Mettere	sopra	Montare	su
Parlare	sopra	Passare	su
Passarci	sopra	Pensarci	su
Passare	sopra	Pensare	su
Pensarci	sopra	Porre	su
Pensare	sopra	Portare	su
Porre	sopra	Recarsi	su
Riderci	sopra	Restare	su
Riflettterci	sopra	Riderci	su
Salire	sopra	Riflettterci	su
Spargere	sopra	Rimettere	su
Stare	sopra	Riportare	su
Stendere	sopra	Risalire	su
Studiarci	sopra	Rizzare	su
Vedere	sopra	Salire	su

Saltare	su
Saltare	su
Scagliarsi	su
Scappare	su
Scattare	su
Spingere	su
Starci	su
Stare	su
Starsi	su
Studiarci	su
Tenere	su
Tenersi	su
Tirare	su
Tirarsi	su
Tornarci	su
Tornare	su
Trarre	su
Trascorrere	su
Uscire	su
Venir	su
Venire	su
Volar	su
Fare	tardi
Tirare	tardi
Sputare	tondo
Andare	via
Andarsene	via
Balzare	via
Buttare	via
Buttarsi	via
Cacciare	via
Correre	via
Dare	via
Essere	via
Filare	via
Gettare	via
Gettarsi	via
Grattare	via
Guizzare	via
Lanciare	via
Lavare	via
Levare	via
Mandare	via
Mettere	via
Partire	via
Passare	via
Perdersi	via
Porre	via
Portare	via
Radere	via
Raschiare	via
Raspare	via
Rastrellare	via
Respingere	via
Riportare	via
Rotolare	via
Saltare	via
Sbalzare	via
Sbattere	via
Scacciare	via
Scagliare	via
Scappare	via
Schizzare	via
Scivolare	via
Scorrere	via
Sfuggire	via
Spargere	via
Spazzare	via
Spingere	via
Stare	via
Starsene	via
Strappare	via
Strisciare	via
Tagliare	via
Tirare	via
Togliere	via
Togliersi	via
Trarre	via
Trascinar	via
Trascinare	via
Venir	via
Venire	via
Venirsene	via
Volare	via
Volarsene	via
Volgere	via
Volgersi	via
Voltare	via
Andarci	vicino
Andare	vicino
Avere	vicino
Farsi	vicino
Finire	vicino
Mettere	vicino
Portare	vicino
Restare	vicino
Stare	vicino
Tenere	vicino
Tenersi	vicino
Trarsi	vicino
Venire	vicino

APPENDIX 2.b

LIST OF 711 VPCs "LEMMATA"

SORTED BY VERB

Abitare	fuori
Andar	appresso
Andarci	vicino
Andare	addosso
Andare	attorno
Andare	avanti
Andare	contro
Andare	dentro
Andare	dietro
Andare	dritto
Andare	giù
Andare	indietro
Andare	innanzi
Andare	insieme
Andare	lontano
Andare	oltre
Andare	qui
Andare	sopra
Andare	sotto
Andare	su
Andare	via
Andare	vicino
Andarsene	via
Appiccicare	addosso
Appiccicare	sopra
Appiccicarsi	addosso
Appoggiare	fuori
Appoggiare	indietro
Arrivare	là
Arrivare	lì
Arrivare	presto
Arrivare	prima
Attaccare	sotto
Avere	accanto
Avere	addosso
Avere	appresso
Avere	attorno
Avere	avanti
Avere	contro
Avere	dentro
Avere	dietro
Avere	fuori
Avere	indietro
Avere	indosso
Avere	intorno
Avere	sopra
Avere	sotto
Avere	vicino
Avvinghiarsi	intorno
Avvolgere	intorno
Balzare	avanti
Balzare	fuori
Balzare	giù
Balzare	indietro
Balzare	via
Berci	sopra
Berci	su
Buttare	addosso
Buttare	avanti
Buttare	dentro
Buttare	fuori
Buttare	giù
Buttare	indietro
Buttare	là
Buttare	lì
Buttare	lontano
Buttare	via
Buttarsi	contro
Buttarsi	dietro
Buttarsi	giù
Buttarsi	via
Cacciare	avanti
Cacciare	fuori
Cacciare	via
Cadere	addosso
Cadere	giù
Calare	addosso
Calare	giù

Calarsi	giù
Camminare	avanti
Camminare	dritto
Camminare	indietro
Cascare	addosso
Cascare	giù
Cavare	fuori
Cenare	fuori
Chiamare	fuori
Chiamarsi	fuori
Chiedere	indietro
Chiudere	dentro
Chiudere	fuori
Chiudersi	dentro
Collocare	intorno
Condurre	intorno
Coprire	intorno
Correre	appresso
Correre	avanti
Correre	contro
Correre	dentro
Correre	dietro
Correre	fuori
Correre	giù
Correre	insieme
Correre	intorno
Correre	là
Correre	qui
Correre	via
Costruire	intorno
Covare	dentro
Darci	dentro
Dare	addosso
Dare	dentro
Dare	fuori
Dare	indietro
Dare	oltre
Dare	via
Depositare	su
Diguazzare	intorno
Dire	appresso
Dire	su
Discendere	giù
Disporre	intorno
Dormirci	sopra
Dormire	insieme
Entrare	dentro
Esserci	dentro
Esserci	sotto
Essere	accanto
Essere	avanti
Essere	contro
Essere	dentro
Essere	fuori
Essere	giù
Essere	lontano
Essere	qui
Essere	senza
Essere	sotto
Essere	su
Essere	via
Fare	apposta
Fare	fuori
Fare	presto
Fare	prima
Fare	senza
Fare	su
Fare	tardi
Farsela	addosso
Farsela	sotto
Farsi	attorno
Farsi	avanti
Farsi	indietro
Farsi	intorno
Farsi	sotto
Farsi	vicino
Ficcare	dentro
Filare	diritto
Filare	dritto
Filare	via
Finire	lontano
Finire	qui
Finire	sotto
Finire	vicino
Gettare	addosso
Gettare	avanti
Gettare	contro
Gettare	davanti
Gettare	dentro
Gettare	fuori
Gettare	giù
Gettare	indietro
Gettare	innanzi
Gettare	intorno
Gettare	lontano
Gettare	via
Gettarsi	addosso
Gettarsi	su
Gettarsi	via
Girare	attorno
Girare	indietro
Girare	intorno
Girarsi	avanti
Girarsi	dietro
Girarsi	indietro
Grattare	via

Gridare	intorno
Guardare	alto
Guardare	attorno
Guardare	avanti
Guardare	dietro
Guardare	intorno
Guardare	lontano
Guardare	su
Guardarsi	attorno
Guardarsi	intorno
Guizzare	fuori
Guizzare	intorno
Guizzare	via
Incollare	insieme
Infilare	dentro
Infilarsi	addosso
Lanciare	addosso
Lanciare	lontano
Lanciare	via
Lanciarsi	addosso
Lanciarsi	contro
Lasciare	dentro
Lasciare	dietro
Lasciare	fuori
Lasciare	giù
Lasciare	indietro
Lasciarsi	indietro
Lavare	via
Legare	insieme
Levare	via
Mandare	avanti
Mandare	dentro
Mandare	dietro
Mandare	fuori
Mandare	giù
Mandare	indietro
Mandare	intorno
Mandare	su
Mandare	via
Mangiare	fuori
Marciare	avanti
Mettere	accanto
Mettere	addosso
Mettere	avanti
Mettere	contro
Mettere	davanti
Mettere	dentro
Mettere	dietro
Mettere	fuori
Mettere	giù
Mettere	indietro
Mettere	innanzi
Mettere	insieme
Mettere	sopra
Mettere	sotto
Mettere	su
Mettere	via
Mettere	vicino
Mettersi	addosso
Mettersi	contro
Mettersi	dietro
Mettersi	indietro
Mettersi	insieme
Mettersi	sotto
Mirare	alto
Mirare	diritto
Mirare	dritto
Montare	su
Mostrare	fuori
Navigare	intorno
Ottenere	indietro
Parlare	davanti
Parlare	dietro
Parlare	sopra
Parlarsi	addosso
Partire	via
Passarci	sopra
Passare	avanti
Passare	davanti
Passare	dietro
Passare	fuori
Passare	indietro
Passare	là
Passare	oltre
Passare	sopra
Passare	sotto
Passare	su
Passare	via
Pensarci	sopra
Pensarci	su
Pensare	sopra
Pensare	su
Perdersi	via
Piangere	fuori
Piegarsi	sotto
Piombare	addosso
Porre	accanto
Porre	addosso
Porre	avanti
Porre	contro
Porre	dietro
Porre	fuori
Porre	giù
Porre	indietro
Porre	innanzi
Porre	insieme

Porre	intorno
Porre	lontano
Porre	sopra
Porre	sotto
Porre	su
Porre	via
Porsi	contro
Portare	addosso
Portare	avanti
Portare	dentro
Portare	fuori
Portare	giù
Portare	indietro
Portare	innanzi
Portare	insieme
Portare	intorno
Portare	lontano
Portare	sotto
Portare	su
Portare	via
Portare	vicino
Portarsi	appresso
Portarsi	avanti
Portarsi	dietro
Portarsi	giù
Portarsi	intorno
Prendere	fuori
Pretendere	indietro
Radere	via
Raschiare	via
Raspare	via
Rastrellare	via
Recare	innanzi
Recarsi	su
Remare	contro
Respingere	indietro
Respingere	via
Restare	accanto
Restare	addietro
Restare	appresso
Restare	dentro
Restare	dietro
Restare	fuori
Restare	giù
Restare	indietro
Restare	insieme
Restare	lì
Restare	senza
Restare	sotto
Restare	su
Restare	vicino
Riavere	indietro
Riavere	indietro
Ributtarsi	giù
Ricacciare	fuori
Ricacciare	indietro
Ricacciarsi	indietro
Ricadere	giù
Richiamare	indietro
Richiedere	indietro
Ridare	fuori
Ridare	giù
Ridare	indietro
Riderci	sopra
Riderci	su
Ridere	dietro
Ridere	sotto sotto
Rientrare	dentro
Riferire	inoltre
Rifletterci	sopra
Rifletterci	su
Rigare	dritto
Rigettare	indietro
Rimandar	fuori
Rimandare	giù
Rimandare	indietro
Rimandarla	giù
Rimanere	dentro
Rimanere	fuori
Rimanere	giù
Rimanere	indietro
Rimanere	lì
Rimanere	senza
Rimettere	assieme
Rimettere	dentro
Rimettere	fuori
Rimettere	indietro
Rimettere	su
Ripiegare	indietro
Riportar	dentro
Riportar	fuori
Riportare	giù
Riportare	indietro
Riportare	su
Riportare	via
Riprendere	indietro
Risalire	su
Risaltare	indietro
Risucchiare	fuori
Risucchiare	indietro
Risuonare	intorno
Ritornar	dentro
Ritornare	indietro
Ritrarsi	indietro
Riversare	dentro
Riversare	fuori

Riversare	intorno
Riversarsi	contro
Rivolere	indietro
Rivolgere	indietro
Rivolgersi	indietro
Rivoltarsi	contro
Rizzare	su
Ronzare	attorno
Ronzare	dietro
Ronzare	intorno
Rotolare	dentro
Rotolare	giù
Rotolare	indietro
Rotolare	via
Rovesciare	addosso
Rovesciare	indietro
Rovesciarsi	addosso
Ruotare	intorno
Ruzzolare	giù
Salire	alto
Salire	sopra
Salire	su
Saltare	addosso
Saltare	contro
Saltare	dentro
Saltare	fuori
Saltare	giù
Saltare	indietro
Saltare	su
Saltare	su
Saltare	via
Sbalzare	fuori
Sbalzare	via
Sbarcare	giù
Sbattere	dentro
Sbattere	fuori
Sbattere	lontano
Sbattere	via
Sbavare	dietro
Sbucare	fuori
Scacciare	fuori
Scacciare	via
Scagliare	fuori
Scagliare	lontano
Scagliare	via
Scagliarsi	addosso
Scagliarsi	contro
Scagliarsi	su
Scappare	fuori
Scappare	su
Scappare	via
Scaraventarsi	giù
Scattare	fuori
Scattare	su
Scavare	fuori
Scendere	giù
Schizzare	dentro
Schizzare	fuori
Schizzare	via
Scivolare	addosso
Scivolare	fuori
Scivolare	giù
Scivolare	via
Scoppiare	fuori
Scorrere	fuori
Scorrere	giù
Scorrere	intorno
Scorrere	via
Scriversi	addosso
Sdrucciolare	giù
Sentire	addosso
Sentire	dentro
Sentirsi	addosso
Sentirsi	dentro
Sentirsi	giù
Sfuggire	via
Slanciare	indietro
Slanciarsi	fuori
Smontare	giù
Sparare	alto
Spargere	attorno
Spargere	intorno
Spargere	sopra
Spargere	via
Spargersi	addosso
Spazzare	via
Spedire	appresso
Spedire	dentro
Spedire	fuori
Spedire	indietro
Spedire	lontano
Spingere	avanti
Spingere	dentro
Spingere	fuori
Spingere	indietro
Spingere	innanzi
Spingere	lontano
Spingere	oltre
Spingere	su
Spingere	via
Spingersi	innanzi
Spingersi	oltre
Sporgere	avanti
Sporgere	fuori
Spostare	indietro
Spostarsi	indietro

Sprizzare	fuori
Sputare	addosso
Sputare	fuori
Sputare	tondo
Starci	dentro
Starci	dietro
Starci	sotto
Starci	su
Stare	accanto
Stare	addosso
Stare	addosso
Stare	appresso
Stare	attorno
Stare	avanti
Stare	contro
Stare	dentro
Stare	dietro
Stare	fuori
Stare	giù
Stare	indietro
Stare	insieme
Stare	intorno
Stare	lontano
Stare	senza
Stare	sopra
Stare	sotto
Stare	sottosopra
Stare	su
Stare	via
Stare	vicino
Starsene	via
Starsi	su
Stendere	fuori
Stendere	intorno
Stendere	sopra
Strappare	fuori
Strappare	via
Stringere	insieme
Stringere	intorno
Stringersi	addosso
Stringersi	attorno
Stringersi	intorno
Strisciare	fuori
Strisciare	via
Studiarci	sopra
Studiarci	su
Tagliar	fuori
Tagliare	diritto
Tagliare	dritto
Tagliare	intorno
Tagliare	via
Tagliarsi	fuori
Tendere	avanti
Tendere	innanzi
Tenere	addosso
Tenere	addosso
Tenere	appresso
Tenere	contro
Tenere	dentro
Tenere	dietro
Tenere	fuori
Tenere	giù
Tenere	indietro
Tenere	innanzi
Tenere	insieme
Tenere	lontano
Tenere	sotto
Tenere	su
Tenere	vicino
Tenersi	alto
Tenersi	attorno
Tenersi	dentro
Tenersi	fuori
Tenersi	indietro
Tenersi	intorno
Tenersi	lontano
Tenersi	su
Tenersi	vicino
Tirar	giù
Tirare	addosso
Tirare	appresso
Tirare	avanti
Tirare	dentro
Tirare	dietro
Tirare	diritto
Tirare	dritto
Tirare	fuori
Tirare	giù
Tirare	indietro
Tirare	innanzi
Tirare	sotto
Tirare	su
Tirare	tardi
Tirare	via
Tirarsi	addietro
Tirarsi	addosso
Tirarsi	avanti
Tirarsi	dietro
Tirarsi	fuori
Tirarsi	giù
Tirarsi	indietro
Tirarsi	su
Togliere	dentro
Togliere	via
Togliersi	via
Tornarci	su

Tornare	avanti
Tornare	dentro
Tornare	fuori
Tornare	giù
Tornare	indietro
Tornare	innanzi
Tornare	insieme
Tornare	su
Tracciare	intorno
Trapassare	innanzi
Trarre	avanti
Trarre	dentro
Trarre	dietro
Trarre	fuori
Trarre	giù
Trarre	su
Trarre	via
Trarsi	avanti
Trarsi	dietro
Trarsi	fuori
Trarsi	innanzi
Trarsi	oltre
Trarsi	vicino
Trascinar	via
Trascinare	dentro
Trascinare	indietro
Trascinare	via
Trascinarsi	dietro
Trascorrere	fuori
Trascorrere	su
Trattenere	fuori
Trovare	dentro
Trovarsi	addosso
Trovarsi	davanti
Trovarsi	insieme
Unire	insieme
Urlare	dietro
Uscire	fuori
Uscire	insieme
Uscire	su
Uscirsene	fuori
Vedere	davanti
Vedere	lontano
Vedere	sopra
Vedere	sotto
Vedersi	davanti
Venir	accanto
Venir	apposta
Venir	appresso
Venir	contro
Venir	prima
Venir	su
Venir	via
Venire	accanto
Venire	addosso
Venire	avanti
Venire	dentro
Venire	dietro
Venire	fuori
Venire	giù
Venire	indietro
Venire	insieme
Venire	qui
Venire	sopra
Venire	sotto
Venire	sottobordo
Venire	su
Venire	via
Venire	vicino
Venirne	fuori
Venirsene	fuori
Venirsene	via
Versarsi	addosso
Vivere	altrove
Vivere	fuori
Vivere	insieme
Vivere	senza
Volar	dietro
Volar	giù
Volar	su
Volare	alto
Volare	dentro
Volare	fuori
Volare	indietro
Volare	via
Volarsene	via
Volerci	altro
Volere	indietro
Volgere	altrove
Volgere	indietro
Volgere	intorno
Volgere	sottosopra
Volgere	via
Volgersi	altrove
Volgersi	attorno
Volgersi	dietro
Volgersi	indietro
Volgersi	intorno
Volgersi	via
Voltare	indietro
Voltare	sottosopra
Voltare	via
Voltarsi	indietro

APPENDIX 2:

LEXICON-GRAMMAR TABLES OF IDIOMATIC

TRANSITIVE VPCs

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “giù”															Usi assoluti												
N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	senza N_1	Senza particella	senza verbo	uso neutro (N_1 V Part)	uso supporto (V part = Vsup-ext)	N0 V Part N1 ⇔ N1 essere Part	Ppv=: Io	object shift	Passiva$_1$	Passiva$_2$	inserzione di Avverbio fra V e Part	Parafrasi	Phrasal verb
+	+	+	Buttare	giù	un palazzo \ una porta	-	-	+	+	-	+	-	-	-	+	-	-	+	+	-	+	+	+	Demolire \ sfondare	To beat down, to knock down, to tear down, to pull down
+	-	-	buttare	giù	La cornetta	-	-	+	+	-	+	-	+	-	-	-	-	-	-	-	-	+	+	riagganciare	To ring off, hang up
+	-	-	buttare	giù	una lettera, un poema	-	-	+	+	-	+	+	-	-	-	-	-	-	+	-	-	+	-	Abbozzare,scrivere frettolosamente	To jot down, to write down, to toss off
-	-	+	buttare	giù	Il malato	-	+	-	-	-	-	-	+	-	-	-	-	+	+	-	-	-	+	Stremare (N_0= la febbre)	To wear down, to tire out, to tucker out, to do in
+	-	+	buttare	giù	Max , il morale di Max	-	+	-	-	-	-	-	-	-	-	+	-	+	+	-	-	+	+	deprimere	To drag down, to bring down, to get down, to pull down, to cast down, to bum out
+	-	+	buttare	giù	la proposta	-	+	-	+	+	-	-	-	-	-	-	-	-	+	-	+	+	+	criticare,sminuire, bocciare	To disparage, to run down, to knock down, to shoot down, to dump on, to take apart
+	-	+	buttare	giù	Il governo	-	+	-	-	-	-	-	-	-	+	-	-	+	+	-	+	+	+	far cadere	To drop down, to bring down= to topple
+	+	-	buttare	giù	due chili,peso	-	-	+	+	-	+	-	-	-	-	-	+	-	+	-	-	+	+	Perdere\dimagrire	To take off weight

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “giù”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	buttare	giù	I prezzi	Del 20%	-	+	-	+	+	-	-	-	+	-	-	+	+	-	-	+	+	ridurre	To drive down, to cut off, to bring down
+	-	-	buttare	giù	La notizia	-	+	+	-	+	-	+	-	-	-	-	-	-	+	-	-	+	+	accettare	to put up with, to endure
+	+	-	buttare	giù	Un boccone	-	-	+	+	-	+	-	+	-	+	-	-	+	+	+	-	+	+	ingerire	To throw down, to gulp down
+	-	-	buttare	(giù)	La pasta	-	-	+	+	-	+	-	-	+	-	-	-	-	-	-	-	+	-	mettere a cuocere	To begin cooking
+	-	-	buttare	(giù)	La carta	-	-	+	+	-	+	-	+	+	+	-	-	+	+	-	-	+	-	giocare	to throw down, to throw away
+	-	-	buttare	giù	Il sistema operativo, l’interfaccia	-	-	+	-	-	+	-	-	-	-	-	-	-	+	-	-	+	+	compiere l’azione di spegnimento	To shut down
+	-	-	buttare	giù	il driver	-	-	+	-	-	+	-	+	-	-	-	-	-	+	-	-	+	+	scaricare,fare un download	To do a download
+	-	-	dare	(giù)	L’asso	-	-	+	+	-	+	-	+	+	+	-	-	+	+	-	-	+	+	giocare	To play a card
+	+	-	gettare	giù	La pillola	-	-	+	+	-	+	-	+	-	+	-	-	+	+	-	-	+	+	ingerire	To throw down, to swallow down
+	-	-	gettare	giù	Un appunto	-	-	+	+	-	+	+	-	-	-	-	-	-	+	-	-	+	+	scrivere di getto	To jot down
-	-	+	lasciare	giù	Il rosso	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	-	-	+	scolorire	To leach out, to wash out
+	-	-	mandare	giù	I costi azionari	Del 10%	-	+	-	+	+	-	-	-	+	-	-	+	+	-	+	+	+	far diminuire	To send down, to take off

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “giù”																									
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**esempio di N_1**	**Prep N_1**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	+	-	mandare	giù	Un sorso, un hamburger	-	-	+	+	-	+	-	+	-	+	-	-	+	+	+	+	+	+	ingoiare	To send down,to drink down, to stuff down,to throw down, to gulp down
+	-	-	mandare	giù	Eva, La notizia	-	+	+	-	+	-	+	-	-	-	-	-	-	+	-	-	+	+	sopportare	To get down, to stand for, to stuff down
+	+	+	mettere	giù	La porta	-	-	+	+	-	+	-	-	-	+	-	-	+	+	+	+	+	+	abbattere	To knock down
+	-	-	mettere	giù	Un progetto	-	-	+	-	+	-	+	-	-	-	-	-	-	+	-	+	+	+	abbozzare	To put down, to jot down
+	-	-	mettere	giù	La pasta	-	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-	+	-	mettere a cuocere	To begin cooking
+	-	-	mettere	giù	Il telefono, il cellulare	-	-	+	+	-	+	-	+	-	+	-	-	-	+	-	-	+	+	riagganciare	To put down, to hang up, to ring off
+	+	-	mettere	giù	tre chili	-	-	+	-	+	+	-	-	-	-	-	+	-	+	-	-	+	+	dimagrire	To take off weight
+	-	?	mettere	giù	Il partito	-	+	-	-	-	-	-	-	-	+	-	-	+	+	-	+	+	+	far cadere[1]	To drop down, to do away with

[1] Tutto cià che penso di Berlusconi di Umberto Bossi: […] *Se lui vuole sapere la storia della caduta del suo governo, venga da me che gliela spiego io: sono stato io a* ***metter giù*** *il partito del mafioso. Lui comprava i nostri parlamentari e io l'ho abbattuto*. (www. Polis blog.it)

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “giù”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**esempio di N_1**	**Prep N_1**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: Io**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	mettere	giù	Le armi	-	-	+	+	-	-	-	-	-	+	-	-	+	+	-	-	+	+	Deporre,arrendersi	To lay down, to throw down one’s arms
+	-	-	portare	giù	I prezzi,i costi bancari	del 50%	-	+	-	+	+	-	-	-	+	+	-	+	+	-	+	+	+	ridurre	To get down, to bring down, to knock down
+	-	-	rimandare	giù	Un’insolenza	-	-	+	-	+	-	+	-	-	-	-	-	-	+	-	-	+	+	trattenersi dal dire,reprimere	To bite back
+	-	-	sbattere	giù	Il telefono		-	+	+	-	+	-	-	+	-	-	-	-	-	-	-	+	+	mettere giù, riagganciare	To bang down,to thump down
+	+	-	tirare	giù	Un boccone	-	-	+	+	-	+	-	-	-	+	-	-	+	+	+	-	+	+	Ingoiare	To chow down, to snack down
+	+	+	tirare	giù	Un edificio	-	-	+	+	-	+	-	-	-	+	-	-	+	+	+	+	+	+	demolire	To tear down
+	-	-	tirare	giù	Un lavoro	-	-	+	-	+	-	-	-	-	-	-	+	-	+	-	-	+	+	Eseguir in fretta, male	To rush through
+	-	+	tirare	giù	L’ultima versione di Firefox	-	-	+	-	-	+	-	+	-	-	-	-	-	+	-	+	+	+	prelevare un file da un sistema remoto,scaricare	To do a download
+	-	-	tirare	giù	due righe	-	-	+	+	-	+	+	-	-	-	-	-	-	+	-	-	+	-	prendere nota	To take down, to knock off
+	-	+	tirare	giù	Il sistema operativo	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	+	+	compiere l’azione di spegnimento	To shut down

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “su”

N_0=: N um	N_0= N anim	N_0=: N-um	Verbo	Particella	esempio di N_1	Prep N_2	N_1=: Num	N_1=: N -um	N_1= :N concreto	N_1=: N astratto	N_1= : N ristretto	N_1=: Che F	senza N_1	Senza particella	senza verbo	uso neutro: N_1 V Part\ N_1 si V Part	uso supporto (V part = Vsup-ext)	N0 V Part N1 ⇔ N1 essere Part	Ppv=: lo	object shift	Passiva$_1$	Passiva$_2$	inserzione di Avv fra V e Part	Parafrasi	Phrasal verb
+	-	-	buttare	su	Un video, Linux, un blog, delle foto	nel sito	-	+	+	-	+	-	+	-	-	-	-	-	+	-	+	+	-	proiettare,far girare su piattaforma	To throw up
+	-	-	buttare	su	una nota,un articolo	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	-	buttare nero su bianco,	To get down, to put down
+	-	-	buttare	su	Un team, un’alleanza	-	+	+	+	-	-	-	-	-	-	-	-	-	+	-	-	+	+	mettere su,allestire	To put on
+	+	-	buttare	su	due chili	-	-	+	-	+	+	-	-	-	-	-	+	-	+	-	-	+	+	mettere,ingrassare	to put on weight, kilos;
+	+	-	buttare	su	del cibo	-	-	+	+	-	+	-	+	-	-	-	-	+	+	-	-	+	+	vomitare	To throw up, to bring up
+	-	-	dire	su	(Il fatto che)	Agli amici	-	+	-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	rimproverare (reg.)	To tell off
+	-	-	fare	su	Un bel pulmino,una squadra	-	-	+	+	+	-	-	-	+	-	-	-	-	+	-	-	+	-	organizzare	To put on, to take up
+	-	-	fare	su	soldi,un po’ di soldi	-	-	+	+	-	-	-	-	+	-	-	-	-	+	-	-	+	-	raccimolare	to scrape up\together
+	-	-	fare	su	Le sigarette	Nell’aggeggio																		Raccogliere,avvolgere (N_2VPart N_1)	To take up
+	-	-	mettere	su	Casa	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	andar a vivere da soli	to set up house
+	-	-	mettere	su	famiglia	-	+	-	-	+	+	-	-	-	-	-	-	-	+	-	-	+	+	sposarsi	To start a family

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “su”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avverbio fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	mettere	su	Il caffè	-	-	-	+	-	+	-	-	-	-	-	-	-	+	-	+	+	-	mettere sul fuoco	To put on
+	-	-	mettere	su	Ugo	contro il fratello	+	-	-	-	-	-	-	+	-	-	-	+	+	-	+	+	-	aizzare,istigare	to play sb. off against sb, to set against
+	-	-	mettere	su	superbia, rabbia	-	-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	assumere	To take on
+	+	-	mettere	(su)	peso, carne, pancia,chili	-	-	+	-	-	+	-	-	+	-	-	+	-	+	-	-	+	+	ingrassare	to put on weight, kilos;
+	-	-	mettere	su	Un negozio,uno spettacolo	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	+	+	+	Avviare,organizzare, allestire,iniziare	To set up, to start up, to put together , build up
+	-	-	mettere	(su)	Un abito	-	-	+	+	-	+	-	-	+	-	-	-	-	+	-	-	+	+	indossare	To put on
+	-	-	mettere	su	Un articolo		-	+	+	-	+	-	-	-	-	-	-	-	+	-	-	+	+	Metter nero su bianco	To put down
+	-	-	mettere	su	una parete	-	-	+	+	-	+	-	-	-	+	-	-	+	+	-	+	+	+	costruire	To build (up)
+	-	-	mettere	su	La lavatrice	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	-	mettere in funzione	To put on
+	-	-	portare	su	I prezzi, i costi	Di molto	-	+	-	+	+	-	-	-	+	-	-	+	+	-	+	+	+	aumentare	To drive up, to force up,to run up,to bring up
+	-	+	prendere	su	Eva	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	dare un passaggio	To pick up, to take on, to take aboard, drop off
+	-	-	prendere	(su)	La propria roba	-	+	-	+	-	-	-	+	+	-	-	-	-	+	-	-	+	+	prendere	To pick up

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “su”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: Io**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	+	tenere	su	I prezzi	Del 50%	-	+	-	+	+	-	-	-	+	+	-	+	?	-	-	+	+	tenere alti	To keep up, to keep high
+	-	+	tenere	su	I calzoni	con la cintura	-	+	+	-	+	-	-	-	+	+	-	+	+	+	+	+	+	mantenere	To keep up
+	-	+	tenere	su	I figli	(Fino a tardi)	+	-	-	-	-	-	+	-	-	+	-	+	+	-	+	+	+	tenere svegli	To keep up
+	-	+	tenere	su	Eva	-	+	-	-	-	-	-	+	-	-	+	-	+	+	-	-	+	+	confortare	To cheer up
+	-	+	tirare	su	Un edificio una parete	-	-	+	+	-	+	-	-	-	+	-	-	+	+	-	+	+	+	costruire	To put up
+	-	-	tirare	su	Un numero	-	-	+	-	-	+	-	+	-	-	-	-	-	+	-	-	+	+	Estrarre, tirare a sorte	To toss up, to pull out
+	-	-	tirare	su	I figli,la famiglia \alcuni calciatori promettenti	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	Crescere,mantenere\ addestrare	To bring up,to drag up \to bring along,to provide for
+	+	-	tirare	su	Il cibo	-	-	+	+	-	+	-	+	-	-	-	-	+	+	-	-	+	+	vomitare	To throw up
+	-	-	tirare	su	La donna anziana	-	+	-	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	aiutare a sollevarsi	To pick up
+	+	+	tirare	su	Max, il morale di Max	-	+	-	-	-	-	-	-	-	-	+	-	+	+	-	-	+	+	Risollevare, ricaricare	To pep up,to cheer up,to buck up
+	-	-	tirare	su	gli ascolti	Di molto	-	+	-	+	+	-	-	-	+	-	-	+	+	-	-	+	+	aumentare	To put up, to raise, to push up
+	-	-	tirare	su	Un nuovo business, una band,una radio	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	avviare,allestire	To build up (a business)

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “su”																									
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto**	**N0 V Part N1⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Av fra V e Part**	**Parafrasi**	**Phrasal verb**
+	+	-	tirare	(su)	La cocaina	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	+	+	sniffare [2]	To sniff (up)
+	-	-	tirare	su	soldi, un po’ di soldi	-	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-	+	-	guadagnare[3]	To pick up, to scrape up, to scrape together
+	-	+	tirare	su	Il server, il firewell	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	+	+	Di un sistema telematico: farlo ripartire	To start up
+	-	+	tirare	su	una questione,una critica,una polemica, una messa in scena	-	-	+	-	+	+	+	-	-	-	-	+	-	-	-	+	+	+	Sollevare,portare all’attenzione o alla discussione,tirare in ballo	To take *up, to bring up to raise (a issue)
+	-	+	tirare	su	Un pesce enorme,un’orata	-	-	+	+	-	+	-	-	-	-	-	+	-	+	+	+	+	+	pescare	to reel in
+	-	-	tirarsi	su	I capelli	-	-	+	-	-	+	-	-	+	+	+	-	-	+	+	+	+	+	Avvolgerli	to pin up, to put up
+	-	-	tirarsi	su	La lampo,la gonna,i pantaloni	-	-	+	+	-	+	-	-	-	+	-	-	+	+	+	+	+	+	alzarsi	To zip up\to hitch up,to hike up

[2] . *Di **tirar su** roba buona che quella sì che fa dimenticare tutto.(.....) Si buttò a capofitto in quella operazione. **Tirò su**. Passò la banconota arrotolata alla ragazza che imitò quasi alla perfezione le gesta del ragazzo. Prima una narice, poi l’altra. Finito il rito poggiò la testa sul sedile reclinandola verso il finestrino alla sua destra. Giacomo tirò anche l’ultima striscia. Si passò il pollice e l’indice vicino le narici per levare qualche residuo di polvere bianca ed iniziò a **tirare su**, com’era suo solito…“Hey! Non dici più niente? Ti dovrebbe **tirare su** e invece…(www.anonimiscrittori.it)*

[3] *Un caposquadra edile **tira su** 500 sterline alla settimana, a building overseer **picks up** £ 500 a week* (Hoepli, 2004); *Come si può **tirare su** soldi legalmente senza chiederli ai genitori e senza chiedere prestiti*? (www.it.answers.yahoo.com)

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “fuori”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	avere	fuori	Del denaro	-	-	+	-	-	+	-	-	-	-	-	-	-	+	+	-	-	-	averlo impegnato	To put to work
+	+	-	buttare	fuori	L’aria	-	-	+	-	-	+	-	+	-	+	-	-	-	+	+	-	+	+	espirare	To breathe out
+	+	-	buttare	fuori	Il cibo	-	-	+	+	-	+	-	-	-	-	-	-	+	+	-	-	+	+	vomitare	To throw up
+	-	-	buttare	fuori	La rabbia,lo stress	-	-	+	-	+	+	-	-	-	+	-	+	+	+	+	-	+	+	liberarsi	To shake off, to throw off
+	-	-	buttare	fuori	La verità, Che F	-	-	+	-	-	-	+	+	-	+	-	-	-	+	-	-	+	+	confessare,dire	To spill out, to spit out
+	-	-	buttare	fuori	Il dipendente	-	+	-	-	-	-	-	-	-	+	-	-	+	+	-	+	+	+	licenziare	to throw out, to push out, to kick out
+	-	-	cacciare	(fuori)	una teoria, una moda	-	-	+	-	+	-	-	-	+	+	-	-	-	+	-	-	+	+	scoprire	To throw up, to discover
+	-	-	cacciare	(fuori)	I soldi	-	-	+	+	-	+	-	-	+	+	-	-	+	+	-	+	+	+	sborsare	To pay out, to shell out, to cough up
+	-	-	chiamare	fuori	La coppia avversaria	-	+	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	-	far raggiungere i punti	←→the player is out

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “fuori”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**Inserzione di AVV tra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	dare	fuori	uno snack	-	-	+	+	-	+	-	+	-	-	-	-	-	+	-	-	+	+	vomitare	To throw up
+	-	-	dare	fuori	Un romanzo	-	-	+	+	-	+	-	-	-	-	-	-	+	+	-	-	+	+	pubblicare	←→ the book is out
-	-	+	dare	fuori	Le rose,la muffa	-	-	+	+	-	+	-	-	+	-	+	-	-	+	-	-	+	+	produrre	To come out
+	+	-	dare	(fuori)	Un grido di gioia	-	-	+	-	+	-	-	-	+	+	-	+	-	+	-	-	+	-	dare, emettere	To give off
+	-	-	dare	fuori	Un processo econom	-	-	+	-	+	-	-	+	-	-	-	-	-	+	-	-	+	-	esternalizzare	To outsource
+	-	-	dare	fuori	I soldi	-	-	+	-	-	+	-	-	-	+	-	-	+	+	-	-	+	+	sborsare	To pay up, to shell out, to cough up
-	-	+	dare	fuori	Il rosso	-	-	+	-	-	+	-	-	-	-	-	-	-	+	-	-	+	+	scolorire	To leach out, to wash out
+	+	+	fare	fuori	Il nemico	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-	+	+	+	Uccidere\ farsi fuori=suicidarsi	To gun down, to blow away, to take out,to bump off, to rub out, to wipe out
+	-	-	fare	fuori	tutto il patrimonio	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	+	dilapidare	To take out, =to squander
+	+	-	fare	fuori	La pasta,il vino	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	+	divorare	To eat up,to drink up
+	-	-	fare	fuori	una poltrona	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	+	+	+	disfarsi, buttare	To do away with, to do for
+	-	-	fare	fuori	Prodi	Dal governo	+	-	-	-	-	-	-	-	+	+	-	+	+	-	+	+	+	estromettere	To kick out, to weed out

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “fuori”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avverbio fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	fare	fuori	una donna	-	+	-	-	-	+	-	-	-	-	-	-	-	+	-	+	+	+	Sedurre, possedere (sett.)	To knock off (slang), to tear off a bit
+	-	-	fare	fuori	Il romanzo	(In un’ora)	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	+	Finire di leggere	To to finish off,to read quickly
+	+	-	gettare	fuori	la pietanza	-	-	+	+	-	+	-	-	-	-	-	-	+	+	-	+	+	+	vomitare	To throw* up
+	-	+	lasciare	fuori	Eva	Dal discorso	+	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	+	escludere	To crowd out
+	-	-	mandare	fuori	Un libro	-	-	+	+	-	+	-	-	-	-	-	-	+	+	-	-	+	+	pubblicare	To get out, to bring out
+	+	-	mandare	fuori	del cibo	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	-	+	-	vomitare	To throw up
+	-	-	mangiare	fuori	Un panino	-	-	+	+	-	+	-	+	-	-	-	-	-	+	+	-	+	-	fuori casa, es. al ristororante	To eat out
+	-	-	mettere	fuori	I soldi	-	-	+	+	-	+	-	-	-	+	-	-	+	+	-	-	+	+	sborsare	To get out
-	-	+	mettere	fuori	Le foglie	-	-	+	+	-	+	-	-	+	-	-	-	+	+	-	-	+	+	fare fiorire	To get out, to bring out
+	-	-	mettere	fuori	una notizia,un articolo,un’idea	-	-	+	-	-	+	+	-	-	+	-	-	+	+	-	-	+	+	Diffondere,pubblicare, manifestare	To get out, to bring out
+	-	+	portare	fuori	Il meglio di me	-	-	+	-	+	-	-	-	-	-	-	+	+	+	-	-	+	+	rivelare,mettere in evidenza	To bring out
+	-	-	portare	fuori	La fidanzata	-	+	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	Far uscire	To take out

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “fuori”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: Io**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di AVverbio tra V e Part**	**Parafrasi**	**Phrasal verb**
+	+	-	ricacciare	fuori	gli ingredienti	-	-	+	+	-	+	-	-	-	-	-	-	-	+	+	+	+	+	vomitare	To spew out
+	-	-	ricacciare	fuori	Un ciao	-	-	+	-	+	-	+	-	-	+	-	-	-	+	-	-	+	+	emettere,dire	To call out, to sing out
+	-	-	sputare	fuori	La verità,un insulto	-	-	+	-	-	-	+	+	+	+	-	-	-	+	-	-	+	+	dire	To spit out
+	-	-	tagliare	fuori	Il reparto	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-	separarlo dal corpo di appartenenza	To cut *out
+	-	-	tagliare	fuori	La concorrenza	Dal mercato	+	-	-	-	-	-	-	-	-	+	-	+	+	-	+	+	-	escludere	To cut out, to cut off, to freeze out
+	-	-	tenere	fuori	La madre I problemi	Dalla propria vita	+	+	-	+	-	-	-	-	+	+	-	+	+	+	+	+	+	escludere	To keep* out of
+	-	-	tirare	fuori	scuse,pretesti, un argomento	-	-	+	-	+	-	+	-	-	+	-	+	-	+	-	-	+	+	Addurre come giustificazione,trovare	To throw up,to bring up (a topic)
+	-	+	tirare	fuori	La verità	A Eva	-	+	-	-	-	+	-	-	+	+	-	-	+	-	-	+	+	far Confessare, cavare,estorcere ←→confessare,dire (= N_2V Par tN_1)	To prise out, to get *out of sb.\ to drag *out of ←→to get *out, To come out with, to drag up,to throw out, to put up

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “fuori”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	tirare	fuori	La grinta, l’entusiasmo,il meglio di sé	-	-	+	-	+	-	-	-	-	+	-	+	-	+	-	-	+	+	mostrare	To get out, to stick out
+	-	-	tirare	fuori	I soldi	-	-	+	+	-	+	-	-	-	+	-	-	-	+	-	-	+	+	Sborsare, sganciare	To pull out, to fork out, to ante up, to put up money
+	-	-	tirare	fuori	una moda	-	-	+	-	+	-	-	-	-	-	-	-	-	+	-	-	+	+	scoprire	To find out, to discover, To start a fashion
+	-	-	tirare	fuori	Un amico	Dai guai,dalla situazione,dai pasticci	+	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	+	Cavare,far uscire	To get *out of, to bail out
+	-	-	tirare	fuori	gli attributi, le palle	-	-	+	-	-	+	-	-	-	+	-	-	-	+	-	-	+	+	mostrare coraggio	To show off
+	-	-	vomitare	(fuori)	disprezzo	Per la società	-	+	-	+	+	-	-	+	-	-	+	-	+	-	-	-	+	mostrare	To bring* up,to vomit out

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “avanti"																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	buttare	avanti	Le proprie idee,la richiesta L’accusa di brogli	-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	+	+	+	Fare,proporre[4]	To put forward
+	-	-	mandare	avanti	La famiglia,l’azienda,la casa,la baracca	-	+	-	-	-	+	-	-	-	-	-	-	-	+	+	+	+	-	mantenere	To carry on, to keep up
+	-	-	mettere	avanti	scuse, pretesti, interessi Personali,il fatto che, il Candidato	-	+	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	+	+	addurre,proporre, presentare	To put forward, To hold up
+	-	-	mettere	avanti	La lavatrice	-	-	+	+	-	+	-	-	-	-	+	-	+	+	+	+	+	+	far funzionare	To put on,
+	-	-	mettere	avanti	L’orologio,le lancette	Di due ore	-	+	+	-	+	-	-	-	-	-	-	+	+	+	-	+	+	spostare	to put* forward,
+	-	-	portare	avanti	Un discorso,un’idea,la gravidanza,un’indagine	-	-	+	-	+	-	+	-	-	-	+	+	-	+	+	+	+	+	Sostenere,far procedere	to follow through, to pursue, to carry out ,to push ahead\forward\on
+	-	-	portare	avanti	La famiglia,l’azienda	-	+	-	-	-	+	-	-	-	-	-	-	-	+	-	+	+	+	mantenere	To keep up
+	-	-	spingere	avanti	La storia,l’idea	-	-	+	-	+	-	-	-	-	-	+	-	-	+	+	-	+	-	Protrarre,sostenere	To keep on
+	-	-	tirare	avanti	Le trattative	-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	-	+	-	far procedere	To keep on, to spin out
+	-	-	tirare	avanti	La famiglia,la baracca	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	+	mantenere	To keep up

[4] E’ naturale che a una persona così venga in mente di **buttare avanti** in anticipo l’accusa di brogli, opera di comunisti abilissimi, capaci di estrarre e riporre ... www.ulivo.it/, La cosa sconvolgente è che il nostro amico Bush continua a **buttare avanti** lo spauracchio degli attentatori suicidi www.luogocomune.net/

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “dentro”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto (V part = Vsup-ext)**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: Io**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	avere	dentro	Un fermento politico	-	-	+	-	+	-	-	-	+	-	-	+	+	+	+	-	-	+	avere nell’animo	To have, to possess
+	-	-	buttare	dentro	La palla	-	-	+	+	-	+	-	-	-	+	-	-	+	+	+	+	+	+	fare goal	To get in, to score
+	-	-	buttare	dentro	L’aria	-	-	+	-	-	+	-	-	-	-	-	-	-	+	+	-	+	+	inspirare	To breathe in
+	-	-	buttare	dentro	La seconda	-	-	+	-	-	+	-	-	-	-	-	-	+	-	-	-	+	-	inserire	to shift into second gear
+	-	-	buttare	dentro	Il ladro	-	+	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	+	arrestare	to fetch in, to put inside
+	-	-	covare	dentro	propositi di vendetta	-	-	+	-	+	-	-	-	-	-	-	+	+	+	+	-	+	+	covare	to have in the heart
+	-	-	dare	dentro	L’usato	alla Fiat	-	+	+	-	-	-	+	-	-	-	-	-	+	+	-	+	+	restituire	To give back
+	-	-	mettere	dentro	La palla	-	-	+	+	-	+	-	-	-	-	-	-	+	+	+	-	+	+	fare goal	To get in, to score
+	-	-	mettere	dentro	La seconda	-	-	+	-	-	+	-	-	-	-	-	-	+	-	-	-	+	-	inserire	to shift into second gear
+	-	-	mettere	dentro	Il colpevole	-	+	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	+	arrestare	send down, put inside
+	-	-	portare	dentro	Ugo	-	+	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	+	arrestare	to bring inside,to take in,
+	-	-	ricacciare	dentro	Il dolore,le lacrime	-	-	+	-	+	-	-	-	-	-	-	-	+	+	+	-	+	+	Trattenere	to hold back, to keep in
+	-	-	sbattere	dentro	Il criminale	-	+	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	+	arrestare	To bang up
+	-	-	tenere	dentro	Un segreto	-	-	+	-	+	-	-	-	+	-	-	+	-	+	+	-	+	+	nascondere	To cork up\down
+	-	-	tirare	dentro	L’amica	In un piano	+	-	-	-	-	-	-	-	-	+	-	+	+	-	+	+	+	coinvolgere	to bring into, to drag into

Verbo+Particella ---Usi transitivi e neutri seguiti da particella “dietro”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto : V part = Vsup-ext**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: Io**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	buttare	dietro	L’abito	Ai clienti	-	+	+	-	-	-	-	-	-	-	-	-	-	+	+	-	+	+	svendere	To sell off
+	-	-	buttarsi	dietro	I ricordi	-	-	+	-	+	-	+	-	-	-	-	-	-	-	+	+	-	+	+	dimenticare,superare	To get over, to get past
+	-	-	dare	dietro	L’auto	A Ugo	-	+	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	restituire	To give back
+	-	-	dire	dietro	cattiverie	Agli amici	-	-	-	-	-	+	+	-	-	-	-	-	-	+	-	-	-	+	dietro le spalle	To talk behind someone's back
+	-	-	gettarsi	dietro	Il passato	-	-	+	-	+	-	+	-	-	-	-	-	-	-	+	+	-	+	+	dimenticare	To to put behind
+	-	-	lasciare	dietro	tutti gli altri	-	+	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	superare per meriti	To leave behind
+	-	-	lasciarsi	dietro	gli anni più belli		-	+	-	+	-	-	-	-	-	-	+	-	+	-	-	+	+	dietro le spalle	To leave behind
+	-	-	portarsi	(dietro)	quell’abitudine	-	+	+	+	+	-	+	-	+	-	-	-	-	+	+	+	-	+	+	portare con sè	To bring* along;
+	-	-	tirare	dietro	Insulti	A Max	-	+	-	+	-	-	-	-	-	-	+	-	+	+	+	+	+	+	Fare,lanciare	To hurl
-	-	+	tirarsi	dietro	conseguenze	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	Comportare ($N_{0=}$ la crisi)	To involve
+	-	-	tirarsi	dietro	Il figlio	In ogni dove	+	+	+	+	-	+	-	-	-	-	-	-	+	+	+	-	+	+	portarsi	To drag along, to car away
+	-	-	tirarsi	dietro	gli insulti di tutti	-	-	+	-	+	-	-	-	-	-	-	-	-	+	+	+	-	+	+	attirarsi	To attract/draw
+	-	-	trascinarsi	(dietro)	I problemi	-	-	+	-	+	-	+	-	+	-	-	+	-	+	+	+	-	+	+	Prolungare	To drag out
+	-	-	trascinarsi	(dietro)	Il fratellino	-	+	-	-	-	-	-	-	+	-	-	-	-	+	+	+	-	+	+	portarsi	To bring along, to drag along

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “indietro”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto : V part = Vsup-**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	avere	indietro	L’anello	Da Eva	+	+	+	+	-	-	-	-	-	-	-	-	+	-	-	-	+	riavere	To get back
+	-	-	buttare	indietro	I capelli,la testa	-	-	+	+	-	+	-	-	-	-	+	-	+	+	+	-	+	+	acconciarli	To fling back
+	-	-	chiedere	indietro	denaro	Alla banca	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	+	+	richiedere	To ask again
+	-	-	dare	indietro	Il libro	Alla biblioteca	-	+	+	-	-	-	-	-	-	-	-	-	+	+	-	-	+	ridare	To give back
+	-	-	lasciare	indietro	I colleghi	-	+	-	-	-	-	-	-	-	-	-	-	+	+	+	-	+	+	superare per meriti	To leave behind,
+	-	-	lasciarsi	indietro	La fanciullezza	-	-	+	-	+	-	-	-	-	-	-	+	-	+	+	-	+	+	non avere più	To get over, to leave behind
+	-	-	mettere	indietro	L’orologio	Di due ore	-	+	+	-	+	-	-	-	-	-	-	+	+	+	-	+	+	spostare	To put back,to turn back
+	-	-	portare	indietro	L’oggetto	A Max	+	+	+	-	-	-	-	-	-	-	-	-	+	+	+	+	+	riportare	To take back,to bring back
+	-	+	portare	indietro	Giovanni	All’infanzia	-	+	-	+	-	+	+	-	-	+	-	-	+	+	+	+	-	riportare,far rivivere	To bring back, to carry back
+	-	-	prendere	indietro	I regali	Dal marito	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	+	-	riprendersi	To get back, to take back
+	-	-	ricevere	indietro	La lettera	Da Bob	-	+	+	-	-	-	-	-	-	-	-	-	+	+	-	+	-	ricevere di nuovo	To get back
+	-	-	spedire	indietro	Il pacco	Al mittente	-	+	+	-	-	-	-	-	-	-	-	-	+	+	+	+	+	rispedire	To send back
+	-	-	tirare	indietro	I capelli	Alla figlia	-	+	+	-	+	-	-	-	-	+	-	+	+	-	-	+	+	pettinare	To push back
+	-	-	volere	indietro	Il libro	Da Anne	-	+	+	+	-	-	-	-	-	-	-	-	+	+	-	+	+	rivolere	To want back, to take back

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “sotto”																										
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto : V part = Vsup-**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	+	buttare	sotto	una bici	-	+	+	+	-	-	-	-	-	-	+	-	+	+	+	+	+	+	travolgere	To run down
+	+	-	fare	sotto	Un pedone	-	+	-	-	-	-	-	-	-	+	-	-	+	+	-	-	+	-	investire	To run down, to run over
+	-	-	fare	Sotto-sotto	qualcosa	-	-	+	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-	Di nascosto	To keep hush
+	-	+	mettere	sotto	Un cane	-	+	+	+	-	-	-	-	-	-	-	-	+	+	+	+	+	+	investire	To run into, to run down,to run over
+	-	-	mettere	sotto	Lo studente	A lavorare	+	-	-	-	-	-	-	-	-	+	-	-	+	+	-	+	+	pressare	To work sb. hard ←→to knuckle down
+	-	-	prendere	sotto	una questione	-	-	+	-	+	-	+	-	-	-	-	-	-	+	-	-	+	+	affrontare	To deal with, to go about, to square up
+	-	+	ricacciare	sotto	La squadra	A meno 2	+	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	+	far retrocedere Di X punti	To beat by
+	-	-	tenere	sotto	I popoli	-	+	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	+	dominare	To put down, To walk over, to hold down
+	-	-	tenere	sotto	Lo studente	Ad un esame	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+	pressare (per es. per un’ora)	To put under pressure
+	-	+	tirare	sotto	una gallina	-	+	+	+	-	-	-	-	-	-	-	-	+	+	+	+	+	+	investire	To run down

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “via”																											
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto : V part = Vsup-**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
+	-	-	buttare	(via)	Un’occasione, tempo,denaro	dietro cose inutili	-	+	+	+	-	-	-	+	-	-	-	-	+	-	-	+	+	sprecare	To lash out, to throw* away
+	-	-	buttare	via	una persona[5]	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	disprezzare	To sniff at, to sneer at
+	-	-	buttare	(via)	L’abito vecchio	-	-	-	+	-	-	-	-	+	+	-	-	-	+	-	+	+	+	buttare,disfarsi	To throw away or out
+	-	-	cacciare	(via)	I cattivi pensieri	-	-	+	-	+	-	-	-	+	+	-	+	-	+	-	-	+	+	accantonare,liberarsi	To set aside, to wash out
+	-	-	dare	via	gli abiti vecchi	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	+	+	sbarazzarsi,regalare	To give away
+	-	-	gettare	(via)	La propria vita	in sogni impossibili	-	+	-	+	-	-	-	+	-	-	-	-	+	-	-	+	+	sprecare	To throw away
+	-	-	gettare	(via)	I giornali vecchi	-	-	+	+	-	-	-	-	+	+	-	-	-	+	+	-	+	+	gettare	To fling \throw out
+	-	-	mandare	via	Il dipendente	-	+	-	-	-	-	-	-	-	+	-	-	+	+	-	+	+	+	licenziare	To boot out
+	-	-	mettere	via	un po’ di soldi	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	+	+	mettere da parte, risparmiare	To tuck away,to put aside,to put by
+	-	-	mettere	via	I giocattoli,la stufa,i pregiudizi	-	-	+	+	+	-	-	-	-	+	-	-	-	+	+	+	+	+	togliere di mezzo, riporre, accantonare	To tidy away,to lay aside,to pack away

Verbo+Particella ---Usi transitivi e neutri seguiti dalla particella “via”																									
N_0=: N um	**N_0= N anim**	**N_0=: N-um**	**Verbo**	**Particella**	**Esempio di N_1**	**Prep N_2**	**N_1=: Num**	**N_1=: N -um**	**N_1= :N concreto**	**N_1=: N astratto**	**N_1= : N ristretto**	**N_1=: Che F**	**senza N_1**	**Senza particella**	**senza verbo**	**uso neutro (N_1 V Part)**	**uso supporto : V part = Vsup-**	**N0 V Part N1 ⇔ N1 essere Part**	**Ppv=: lo**	**object shift**	**Passiva$_1$**	**Passiva$_2$**	**inserzione di Avv fra V e Part**	**Parafrasi**	**Phrasal verb**
-	-	+	portare	via	Il nonno	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	Far morire (N_0=lafebbre)	To carry off
+	-	+	portare	via	molto tempo	A Eva	-	+	-	+	+	-	-	-	-	-	-	-	+	-	-	-	+	Assorbire,richiedere (N_0=il lavoro)	To take* (up)
+	-	-	portare	via	due hamburger	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	+	+	+	Comprare,portare con sé	To take away
+	-	-	portare	via	I gioielli,i figli	Alla madre	+	+	+	+	-	-	-	-	+	-	-	-	+	-	+	+	+	Rubare,sottrarre	To walk off with
+	-	+	scacciare	(via)	L’angoscia	-	-	+	-	+	-	-	-	+	+	-	+	-	+	-	+	+	+	liberarsi	To get rid of
+	-	+	spazzare	via	I pregiudizi,la corruzione	dalla società	-	+	-	+	-	-	-	-	+	-	-	-	+	-	+	+	+	Eliminare,fare piazza pulita	To carry away, to sweep away
+	+	-	spazzare	via	Il dolce	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	+	+	divorare	To mop up, to polish off
+	-	+	spazzolare	via	Il candidato	dal partito	+	-	-	-	-	-	-	-	+	-	-	-	+	+	+	+	+	epurare	To brush off
+	-	-	spazzolare	via	Le tagliatelle	-	-	+	+	-	+	-	-	-	-	-	-	-	+	-	+	-	+	divorare,finire	To polish off, to mop up,to whip off
+	-	-	spazzolare	via	I file, i miei pensieri	-	-	+	+	+	-	-	-	-	+	-	-	-	+	-	+	+	+	Cancellare	To clean out
+	-	-	strappare	via	Il figlio	alla madre	+	+	+	+	-	-	-	+	+	-	-	-	+	-	+	+	+	strappare	To take away
+	-	-	tirare	via	Un lavoro	-	-	+	-	+	+	-	-	-	-	-	-	-	+	-	-	+	+	raffazzonare	To botch (up)