

# Listing between lexicon and syntax: Focus on frame-naming lists

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The goal of this paper is twofold. On the one hand, we advocate the view that ‘listing’ (Masini *et al. this issue*) is a cross-level mechanism with cognitive grounding that manifests itself in various ways along the lexicon-syntax continuum. Indeed, we claim that some linguistic objects pertaining to the morphological and lexical level (as e.g. coordinating compounds, reduplications, (ir)reversible binomials) are structurally and functionally similar to freely created syntactic lists. On the other hand, we analyze a so far underdescribed type of lists in-between lexicon and syntax. Lists are often seen as instances of “natural coordination” (Wälchli 2005) where the conjuncts are LEXICO-SEMANTICALLY related; however, there are lists where the conjuncts are, rather, FRAME-related, i.e., by virtue of occurring in a list, they either EVOKE or BUILD a frame, which may be either established or context-dependent. In this respect, we present two corpus-based case-studies from Italian concerning the  $V_1$ +AND+ $V_2$  construction (e.g. *gratta e sosta* ‘scratch and park ticket’, lit. ‘scratch and park’) and the ALL+LIST construction (e.g. *tutto casa e chiesa* ‘pious, churchy’, lit. ‘all home and church’). We discuss and analyze our data with the tools of Construction Grammar (Goldberg 1995, 2006) and Construction Morphology (Booij 2010).\*

KEYWORDS: Constructions, lists, frames, coordination, naming strategies, binomials, compounding, reduplication.

## 1. Introduction

This paper deals with ‘lists’ as understood in Bonvino *et al.* (2009) and Masini *et al. (this issue)*, with a view to broadening the empirical base of linguistic objects that fall into this class, and to contributing to the semantic characterization of lists, as well as to

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their theoretical treatment. In particular, we pursue the following two goals.

On the one hand, we advocate the theoretical claim that ‘listing’ is a cross-level mechanism with cognitive grounding that manifests itself in various ways along the “lexicon-syntax continuum” (as defined in Goldberg 2013). More specifically, we purport the view that some linguistic objects pertaining to the morphological and lexical level are structurally and functionally similar to freely created syntactic lists. Among the former we find coordinating compounds (Wälchli 2005; Arcodia *et al.* 2010), reduplications (Moravcsik 1978; Rubino 2013), and irreversible binomials (Malkiel 1959).

On the other hand, we analyze a so far under-described type of lists in-between lexicon and syntax. Lists (especially morphological ones) can easily be characterized as instances of what Wälchli (2005; see also Grandi 2011) calls “natural coordination”, in which the conjuncts are somehow LEXICO-SEMANTICALLY related, and therefore expected to occur together. However, there are lists whose conjuncts are, rather, FRAME-related, i.e. elements of a given frame: by virtue of occurring in a list, they either evoke or build the frame itself. Lists of this type are therefore FRAME-NAMING lists.

In order to illustrate this type of lists, we present two corpus-based case-studies from Italian, namely: (i) the  $V_1$ +AND+ $V_2$  construction, which consists of two verbal stems linked by the conjunction *e* ‘and’, giving rise to either nouns or adjectives (e.g. *gratta e sosta* ‘scratch and park ticket’, lit. ‘scratch and park’; cf. Masini & Thornton 2008); and (ii) what we call the ALL+LIST construction, i.e. a sequence of two or more conjuncts preceded by the indefinite adjective *tutto* ‘all’ (e.g. *tutto casa e chiesa* ‘pious, churchy’, lit. ‘all home and church’). We discuss and analyze our data using the tools of Construction Grammar (Goldberg 1995, 2006, Hoffmann & Trousdale 2013, Hilpert 2014) and Construction Morphology (Booij 2010), which are well-equipped to treat phenomena like lists, since they advocate for a non-strict division between lexicon and syntax, and rather see ‘constructions’ – conventionalized form-meaning pairings endowed with different degrees of complexity and schematicity – as the basic units of linguistic analysis.

The paper is organized as follows. Section 2 discusses listing as a cross-level phenomenon, with a focus on morphological and lexical lists. Section 3 focuses on FRAME-NAMING lists and discusses their relationship with ad-hoc-category-building (Barsalou 1983), in which a novel category is created for purposes relevant in the actual discourse situation. Section 4 is devoted to our two case studies. We conclude with some final remarks in section 5.

## 2. Listing as a cross-level phenomenon

Lists, as understood here, are patterns defined by the syntagmatic concatenation of two or more units of the same type (i.e. potentially paradigmatically connected) that are on a par with each other, thus filling one and the same slot within the larger construction they are part of (see Bonvino *et al.* 2009; Masini & Pietrandrea 2010; Masini *et al.* *this issue*). This large definition immediately recalls well-investigated syntactic phenomena such as coordination (1a), repetition (1b), and reformulation (1c).<sup>1</sup>

- (1) a. *There are eels, mackerel, salmon and trout*
- b. *[...] some people are very very very touchy*
- c. *[...] they now had lifts, or rather elevators*

Indeed, listing, piling up homogeneous linguistic objects in a given position, is primarily a syntactic operation, which however may display peculiar semantic properties that go beyond pure apposition or enumeration. Specifically, previous studies carried out on Italian and French (cf. Bonvino *et al.* 2009; Masini & Pietrandrea 2010; Kahane & Pietrandrea 2012) showed that some lists at the syntactic level have non-compositional meanings. The same observation holds for English, as the following examples illustrate (cf. also Masini *et al.* 2012, *this issue*). Take for instance the sentence in (2) (from Google):

- (2) *Chimps and dogs and bats and cockroaches and people and worms and dandelions and bacteria and galactic aliens are the stuff of biology*

In this example we have a rather long list of items, all belonging to a given category (living organisms), i.e. they are co-hyponyms. The list, however, is not exhaustive: obviously, cats and pine trees (and many other entities) are also part of biology, even though they are not explicitly mentioned in the list. Hence, the list does not have the function of enumerating the entities that are “the stuff of biology”, but rather evoking and denoting the whole category of ‘living organisms’ by mentioning a subset of its members. Let us take another couple of examples (from Google):

- (3) *[...] people cannot be able to remember things which happened four hundred, five hundred years ago, but these materials will help us have a well-researched version with supporting materials.*
- (4) *He rolls over for tummy rubs every chance he gets. He gives kisses, kisses, kisses. He goes out the doggie door by himself and comes back in by himself now.*

In (3), *four hundred, five hundred years ago* is not a proper reformulation: the speaker does not ‘replace’ his first estimate (*four hundred*) with the second one (*five hundred*). Rather, he means ‘approximately’ four or five hundred years ago, without committing to any precise estimate. In (4), instead, we have the noun *kisses* repeated three times: the repetition has the (iconic) effect of intensifying the plurality of the noun, by conveying a meaning of ‘multiplicity’. In both (3) and (4), the lists get overall meanings that are not strictly predictable from the sum of their parts.

What is interesting about these examples of syntactic lists is that the functions they perform (i.e. category/hypernym-creation, approximation, intensification) are similar to those displayed by morphological constructions such as co-compounds (5a) and reduplications (5c), as well as by multiword expressions (i.e. complex lexical units larger than a morphological word; cf. Hüning & Schlücker 2015) such as irreversible binomials (5b). More specifically, the Lezgian co-compound in (5a) (from Haspelmath 1993: 108, quoted in Wälchli 2005: 137) belongs to the “collective” type in Wälchli’s (2005) classification and denotes a larger class by listing two (salient) co-hyponyms (category/hypernym-creation); the Italian binomial *due o tre* (Masini 2006) refers to an approximate small quantity, not necessarily two or three (approximation);<sup>2</sup> finally, the reduplication in (5c), according to Botha (1988: 92), denotes a high number of the entities (intensification).

- |     |    |           |                        |                 |                                     |
|-----|----|-----------|------------------------|-----------------|-------------------------------------|
| (5) | a. | Lezgian   | <i>xeb-mal</i>         | sheep-cattle    | ‘domestic animals’                  |
|     | b. | Italian   | <i>due o tre</i>       | two or three    | ‘few, some’                         |
|     | c. | Afrikaans | <i>bottels-bottels</i> | bottles-bottles | ‘bottles and bottles, many bottles’ |

The similarity between the two sets of data is not limited to meaning. Also in terms of form, there is some sort of correspondence, because co-compounds, reduplications and binomials are basically sequences of two units of the same type that are on a par with each other: binomials are syndetic coordinating structures, co-compounds are typically asyndetic coordinating structures, and reduplication is somehow parallel to syntactic repetition (and sometimes hardly distinguishable from it, see Gil 2005). Given these parallels, one feels entitled to describe and analyze both syntactic lists and (what we term) morphological and lexical lists with the same set of parameters. Building on Bonvino *et al.* (2009), we propose the following (minimal) list of parameters, which will be used in the following discussion:

- a. presence of an overt connective (syndetic *vs* asyndetic);
- b. degree of 'fixedness' (non-interruptability, irreversibility of the constituents);
- c. (lexico-)semantic relation between the conjuncts (e.g. antonyms, co-hyponyms, etc.);
- d. degree of naturalness of lists, whose items may be more or less expected to co-occur (natural *vs* accidental lists);
- e. formal relation between the conjuncts (different conjuncts, identity or partial identity);
- f. nature of coordination relation between the conjuncts (conjunctive, disjunctive, adversative);
- g. compositionality *vs* non-compositionality (i.e. the meaning of the list is deducible or not from its parts);
- h. semantic value of the list (approximating, intensifying, etc.).

Most of these parameters and values can be applied to both syntactic and morphological/lexical lists (cf. Masini *et al.* *this issue* for more details). The most obvious (and unsurprising) difference between the two is that morphological/lexical lists tend to be more lexicalized, stored in the lexicon (or 'constructicon'), whereas syntactic lists are typically created online. However, the constructionist perspective adopted here notoriously makes no 'principled' distinction between syntax on the one hand and morphology/lexicon on the other, making use of constructions endowed with different degrees of complexity, schematicity/specificity and productivity, and thus allowing for in-between cases (see the case studies in section 4).<sup>3</sup>

Besides this, an interesting (and non-trivial) difference lies in the nature of the coordination relations that may be found at the two levels: morphological/lexical lists only marginally allow adversative coordination. One possible explanation for this is that adversative coordination presupposes contrast, which does not go together with tight constructions as compounds (Arcodia *et al.* 2010: 188). Moreover, nominal compounds, usually regarded as the largest class of compounds (see e.g. Dressler 2006), are chiefly used for reference, and the very notion of adversative coordination clashes with the referential function: in other words, you usually do not have a label meaning 'A but not B' (Caterina Mauri, p.c.). As to reduplication, the idea that repeating a word/morpheme may give rise to an adversative meaning is hard to imagine; in point of fact, adversative(-like) meanings are conspicuously absent from Kallergi's (2015: 390ff.) cross-linguistic survey of meanings expressed by (total) reduplication. The only instances of adversative coordination at the morphological/lexical level are some (relatively few) binomials (e.g. English *strange but true*, used in the predicative function); this is perhaps unsurprising, given that binomials are the type of lists which lie closer to syntax. We now turn specifically to morphological and lexical lists.

### 2.1 Lists at the morphological and lexical level

In this section we focus on morphological/lexical (henceforth **M&L**) lists: namely, co-compounds and coordinating compounds in general, binomials and reduplication. The defining feature of M&L lists is that they show at least some features which set them apart from ‘free phrases’; apart from that, there is indeed a great deal of variation among different types of constructions, and even within one and the same class, along the parameters sketched above (section 2).

Coordinating compounds may be divided into two broad classes: exocentric coordinating compounds, commonly known as *dvandva* or co-compounds (Wälchli 2005), and endocentric coordinating compounds (Bisetto & Scalise 2005; see Arcodia 2010). As compounds, they are normally asyndetic, i.e. there is no list marker present; however, in some languages (what are regarded as) endocentric coordinating compounds may have an overt marker of the coordination relation (e.g. Japanese *haiyū-ken-kantoku* ‘actor-cum-director’; see Kageyama 2009: 514). Moreover, some co-compounds may have fossilized markers of coordination (not recognizable synchronically), although they are most often bare juxtapositions (Wälchli 2005: 4).

Co-compounds are defined by Wälchli (2005: 1; his smallcaps) as “word-like units consisting of two or more parts which express NATURAL COORDINATION”. The defining characteristics of ‘natural coordination’ are that the conjuncts “express semantically closely associated concepts, such as ‘brother and sister’, ‘hands and feet’, ‘eat and drink’, ‘knife and fork’”, and “that the whole meaning (...) is more general than the meaning of the parts” (Wälchli 2005: 1). Put very simply, they instantiate natural lists, i.e. lists that involve items which are expected to co-occur, whereas in accidental lists the items are not expected to co-occur. Wälchli (2005: 138 ff.) identifies several distinct semantic subtypes of co-compounds, which partly overlap with the functions of lists we mentioned in section 2:

- (6) Additive co-compounds (i.e. canonical conjunctive coordination)
 

Georgian	<i>mšvild-isari</i>	bow-arrow	‘bow and arrows’
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- (7) Generalizing co-compounds (i.e. meaning ‘always’, ‘everywhere’, ‘all’)
 

Tagalog	<i>araw-gabi</i>	day-night	‘day and night’
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- (8) Collective co-compounds (i.e. hypernym-creation or categorization)
 

Chuvash	<i>sēt-su</i>	milk-butter	‘dairy products’
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- (9) Synonymic co-compounds (i.e. whose constituents are synonymous or near-synonymous)
 

Chinese	<i>péng-you</i>	friend-friend	‘friend’
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- (10) Figurative co-compounds (i.e. in which the meaning of the compound belongs to a different domain from that of the constituents)  
 Vietnamese *giăng hoa*                      moon-flower                      ‘flirtation’
- (11) Alternative co-compounds (i.e. canonical disjunctive coordination)  
 English                      *July-August*                      meaning ‘July or August’
- (12) Approximate co-compounds (i.e. the compound expresses an approximate value, close to the first or second constituent)  
 Chinese                      *sān-sì*                      three-four                      ‘three or four’
- (13) Scalar co-compounds (i.e. compounds which denote an abstract scale, and whose constituents represent the extreme poles of the scale)  
 Tibetan                      *srab-mthug*                      thin-thick                      ‘density’
- (14) Ornamental co-compounds (i.e. compounds in which one of the constituents contributes no meaning to the compounds)  
 Morvin                      *vel’e-sado*                      village-hundred                      ‘village’
- (15) Imitative co-compounds (i.e. compounds in which one part is a cranberry morpheme, completely devoid of meaning, but phonologically similar to the other constituent)  
 Turkish                      *çoluk çocuk*                      ø-child                      ‘wife and family’

Often, imitative compounds are actually forms of partial reduplication; we will get back to this below.

In co-compounds (except for most ornamental and imitative compounds), the constituents have a close semantic relationship (see Wälchli’s definition above) – they can be (near-)synonyms, antonyms, co-hyponyms – or (importantly, for our current purposes) even just share a FRAME, as in the figurative Vietnamese example above (10), and as we will see in greater detail in the next section. Generally speaking, co-compounds may have both compositional (additive, alternative) and non-compositional (generalizing, collective, approximate, etc.) meanings. As to the nature of the coordination relation between the conjuncts, while conjunctive coordination clearly dominates, disjunctive coordination is also attested, especially in alternative and approximate co-compounds (e.g. Udmurt *nyl-pi* ‘a single child’, lit. ‘girl-boy’; Wälchli 2005: 152); adversative coordination, as already said in section 2, is out of the picture.

In endocentric coordinating compounds, on the other hand, the meaning of the whole compound is actually more specific than the meaning of its parts, and the constituents may well be in a relation of accidental coordination, i.e. they may be conjuncts which are not expected to co-occur: see e.g. English *poet-doctor* or Italian *deputato-conduttore* ‘MP-TV host’ (Arcodia *et al.* 2010; Grandi 2011; Arcodia *forthcoming*). For this type of compounds, the constituent parts (be they

nouns or adjectives; verbs are generally excluded) express identities or properties that are simultaneously predicated of the referent of the whole compound: a *poet-doctor* is both a poet and a doctor. For this reason, synonymic constituents are generally excluded, as they would be redundant (imagine e.g. a compound like <sup>89</sup>*actor-thespian*).

A difference between co-compounds and endocentric coordinating compounds which is particularly relevant for our analysis is that the latter appear to instantiate only compositional lists, i.e. the conjuncts always exhaustively express (all) the items that concur to the list's denotation; in fact, endocentric coordinate compounds seem to instantiate only a simple additive relation: 'someone/something which is both A and B', as hinted at above. Conjunctive coordination is the only relation allowed; disjunction is not attested. This is not surprising, given that, as said above, in endocentric coordinating compounds two (or more) identities or properties are simultaneously predicated of the same referent, and hence they both have to be true at the same time, differently from disjunctive coordination, where only one of the alternatives may be true at a given time (Arcodia *et al.* 2010).

Endocentric coordinating compounds are also generally less lexicalized (Arcodia *forthcoming*). They are often reversible, and may allow internal inflection (e.g. Italian *studente lavoratore* 'student-worker' > *studenti lavoratori* 'students-workers'; see also *lavoratore studente*; Arcodia *forthcoming*); inversion of the constituents is possible also for co-compounds, but it is not very common (see Wälchli 2005: 104, 218). This is arguably related to the accidental nature of the coordination relation instantiated, and has a relevant correlate for our discussion: namely, compounds in this class are especially prone to refer to a new frame or category (as in the *deputato-conduttore* 'MP-TV host' example). Again, we defer the discussion of this point to the next section.

The second type of M&L list constructions, namely binomials, may be defined as "constructions that consist of two (or sometimes more) coordinated items that belong to the same lexical category, are linked by a conjunction and display a certain degree of conventionality and fixity" (Masini 2006: 208), as e.g. English *bow and arrow*, Italian *anima e corpo* 'body and soul'. They are thus syndetic lists, having an overt list marker, differently from (most) coordinating compounds and reduplication constructions. Under this general label, we also find  $V_1 + \text{AND} + V_2$  lexical constructions (Masini & Thornton 2008), the topic of section 4.1, which involve two verbs describing either sequential actions (e.g. *gratta e vinci* 'instant scratch lottery (ticket)') or alternatively occurring actions (*va e vieni* 'coming and going').



From the semantic point of view, binomials are tightly related to co-compounds: their constituents are often near-synonyms (*first and foremost*), meronyms (Italian *barba e baffi* ‘beard and moustache’), co-hyponyms (*knife and fork*) opposites (*dead or alive, husband and wife*; adapted from Masini 2006: 220). The specific subtypes of coordination that may be expressed in binomials also largely overlap with those of co-compounds: binomials may be additive (Italian *frutta e verdura*, ‘fruit and vegetables’), generalizing (*day and night*), collective (Italian *coltello e forchetta* ‘knife and fork, cutlery’), alternative (Italian *vero o falso* ‘true or false’), approximate (*two or three*; Masini 2006: 220). Binomials may also be synonymic, often conveying an intensifying function (cf. the above-mentioned *first and foremost* or Italian *felici e contenti* ‘happy and glad’). Although alliteration and/or rhyming may be common in binomials in individual languages – as e.g. English *kith and kin, hustle and bustle* (see Linstromberg & Boers 2008) – it is more difficult to identify binomials in which one of the constituents is semantically empty, i.e. which are comparable to imitative co-compounds; the same goes for ornamentals.<sup>4</sup> Also, the relation instantiated in the scalar subtype of co-compounds is not found in binomials, to the best of our knowledge.<sup>5</sup>

Interestingly, the notion of frame is essential also for the formation of binomials. Lambrecht (1984, quoted in Masini 2006) argues that irreversible binomials, which are completely fixed and lexicalized, refer to a CONVENTIONAL frame, whereas contextual binomials, which are motivated by context and have a relatively free order of the constituents, refer to a TEMPORARY frame. According to Masini (2006), sharing a conventionalized frame is akin to the relation defined by Wälchli (2005) as natural coordination, pointing again towards a similar semantic characterization of co-compounds and irreversible binomials; in languages with moderate or no co-compounding, such as Standard Average European languages, one often finds binomials which express the very same notions which are expressed by co-compounds in other languages (compare e.g. English *husband and wife* and Chinese *fūfū* ‘husband and wife’, lit. ‘husband-wife’; cf. Arcodia *et al.* 2010; Grandi 2011; Arcodia *forthcoming*). On the other hand, contextual binomials, which are based on a temporary, non-conventionalized frame, would fall out of this scope: they express accidental coordination. In these terms, the semantic difference between co-compounds (but, crucially, not endocentric coordinating compounds; see above) and binomials boils down to the different degree of conventionalization the latter may have, which normally translates into fixity on the formal level. In other words, usually only stable frames are lexical-

ized into a co-compound or a fixed object as an irreversible binomial; contextual binomials, on the other hand, which are more likely to be reversible, are closer to the syntax pole within the lexicon-syntax continuum, and are open to temporary, contextual frames.<sup>6</sup> We will get back to this in the next section.

One difference which sets apart binomials from other M&L lists, as said above (section 2), is that adversative coordination is marginally attested, as in *strange but true*, or Italian *pochi ma buoni* ‘few but good’ (from Masini 2006: 213; see also Grandi 2011). We said earlier that the possibility of having an adversative relation between the conjuncts might be connected to the fact that binomials are the most ‘syntax-like’ constructions among M&L lists. Another possible explanation which we want to put forward here is that conjunctive coordination is the ‘default’ (i.e. unmarked) interpretation for asyndetic combinations, whereas adversative coordination is, in a sense, less ‘basic’ and needs to be explicitly marked; since binomials contain an overt list marker by definition, they look like the most apt to allow for all types of coordination relations, with the proper marker. The ‘basic’/unmarked nature of conjunctive coordination has been pointed out e.g. by Haspelmath (2004) and Otori (2004), who stress the fact that conjunctive coordination is more prominent in language use, and that ‘and’ words are much more frequent and often shorter than e.g. ‘or’ words. This is supported by Mauri’s (2008) cross-linguistic survey of the expression of coordination relations, in which she observes that markers that express (exclusively or not) conjunctive coordination “tend to be simpler than markers used to express only contrast” (Mauri 2008: 214). Also, she shows that if it is just one type of coordination relation that receives obligatory overt marking in a language, this is counterexpectative contrast, which appears to be the hardest to infer, whereas conjunctive relations are the easiest to infer, since “the hearer is simply required to identify the two S[tates]o[f]A[ffair]s as cooccurring within a common frame” (see Mauri 2008: 211 for details). We suggest that binomials as the above-mentioned *strange but true* and Italian *pochi ma buoni* may be interpreted as expressing precisely a relation of counterexpectative contrast; hence, the requirement for an overt marker of the relation, available only for binomials among M&L lists, is not surprising.

Lastly, one formal feature which sets apart binomials from coordinating compounds, but not from reduplication constructions, is the possibility of having a construction in which the conjuncts are identical (e.g. Italian *anni e anni* ‘years and years’), or partially overlapping (e.g. Italian *vecchio e stravecchio* ‘old and super-old’; Masini 2006: 213).

The third and last type of M&L list constructions taken into consideration for the present study are reduplication constructions. Reduplication, i.e. “[t]he repetition of phonological material within a word for semantic or grammatical purposes” (Rubino 2013), may be full (i.e. the repetition of an entire word or stem/root) or partial, and has a very broad array of semantic values and functions (see the above-mentioned list in Kallergi 2015: 390-401).

From the formal point of view, the criterion of reversibility makes sense only for partial reduplication, and it appears to us that the order of constituents is generally stable in these cases. Also, there is no list marker involved, and non-identity of the conjuncts is excluded by definition.

While reduplication with an intensifying function, as e.g. English *very very*, may be said to be semantically akin to co-compounds and binomials made of (near-)synonymic constituents (e.g. Italian *felici e contenti* ‘happily-ever-after’, lit. ‘happy and glad’), the most interesting semantic subtype of reduplication for our analysis is arguably the collective or categorizing one. This is often expressed by means of partial reduplication, as e.g. Turkish so-called *m*-reduplication: *çay* ‘tea’ > *çay may* ‘tea and the like’ (Göksel & Kerslake 2005: 91), which overlaps with imitative co-compounds (see above), but may also be expressed by total reduplication, as Thai *ɲən* ‘money’ > *ɲən ɲən* ‘money and the like’ (Moravcsik 1978: 323, quoted in Kallergi 2015: 392). By this type of reduplication, new categories may be built; the ‘naturalness’ of the list may be assessed only basing on the resulting set, given that there are no real conjuncts involved. Other relevant meanings/functions of reduplication include plurality (Malay/Indonesian *orang* ‘man, person’ > *orang-orang* ‘people’), collectivity (Chinese *rén* ‘person’ > *rén-rén* ‘everybody’), ‘totality’ (akin to ‘generalizing’ co-compounds and binomials; Chinese *tiān* ‘day’ > *tiān-tiān* ‘everyday’; Kallergi 2015) and ‘approximation’ (e.g. Hindi *harii* ‘green’ > *harii-harii* ‘greenish’; Singh 2005: 268, quoted in Kallergi 2015: 393).

In Table 1, we summarize the main features of each type of M&L list, basing on the criteria introduced in section 2.

As we can see, there is a lot of variation among the different types of list constructions, which is not unexpected given that we are dealing with M&L objects (which are more subject to idiosyncratic behavior) and that the single constructions are not homogenous classes themselves (see e.g. irreversible *vs* reversible binomials, or total *vs* partial reduplication). In general, we may remark that binomials are more flexible than other types of lists, which is also quite expected, given that, as we already noticed, they are closer to syntactic patterns.

M&L list constructions		a.	b.	c.	d.	e.	f.	g.	h.
Coordinating compounds	Co-compounds	No (or fossilized)	Mostly fixed	All	Natural	Different, (partial identity in imitatives)	Conjunctive, disjunctive	Both	All
	Endocentric coordinating compounds	Rare	May be reversible	Synonyms generally excluded	Accidental	Different	Conjunctive	Compositional	Additive only
Binomials		Yes	Both	All	Both	All	All	Both	Almost all (except imitative, ornamental and scalar)
Reduplication		No	No	Does not apply	May build both natural and accidental sets	Identity (total) or partial (partial)	Conjunctive	Both	Collective, generalizing, approximating

**Table 1.** The characteristics of M&L list constructions.

In section 3, we will focus on a function of lists which has hitherto received scarce attention in the literature, namely FRAME NAMING.

### *3. The semantics of list constructions and the role of frames*

In previous sections, we introduced the parameter of the ‘naturalness’ of the list, i.e. the contrast between natural and accidental lists, depending on the presence/absence of a lexico-semantic relation among the conjuncts. However, we also noticed that, when the conjuncts are not lexico-semantic related, they may still be FRAME-related, in which case we speak of FRAME-NAMING lists.

Take, for instance, the Italian binomial *gratta e sosta* (lit. ‘scratch and park’) ‘scratch and park ticket (event)’, an example of the  $V_1+AND+V_2$  construction that we will analyze in detail in section 4.1. In this case, the conjuncts do not have a specific lexico-semantic relationship, i.e. they are neither synonyms, nor co-hyponyms, etc.: they are frame-related, i.e. they belong to the same frame, namely that of parking a car in an area where scratch cards are used. By virtue of belonging to this frame and co-occurring in a list, they EVOKE, and indeed NAME, the frame itself (or perhaps a ‘scene’, in Fillmore’s 1975 parlance, or a ‘narrative frame’ in Mauri 2017). Also, take the phrasal compound *a pipe and slipper husband* (Lieber 1992: 11): *pipe* and *slipper* are not lexico-semantically linked, but are both salient elements of a specific kind of (arguably not very thrilling) husband (see also section 4.1). Here too, we argue, a frame is hinted at by conjuring up an image of a particular type of person: in order to infer the meaning of the compound, the hearer/reader must access the right frame evoked by *pipe and slipper* in association with *husband* (a husband who likes staying peacefully at home). In the latter case, the frame is somehow accessible (cf. also the similar *meat-and-potato husband*), but it could be much more context-dependent, as in the following example:<sup>7</sup> *Today you are more likely to see a mix-and-match woman, someone wearing a Prada skirt with a Zara top*. Here, the frame would be BUILT online rather than EVOKED.

In this respect, it is worth referring back to the ‘conventionality’ of frames mentioned in section 2.1, i.e. the contrast between established/stable *vs* contextual/temporary frames, and the fact that this might be another parameter next to the ‘naturalness’ of lists (although the divide between the two seems to be more gradual than clear-cut; cf. section 4.1). These two parameters intertwine in interesting ways. On the one hand, one might expect natural lists to be

more likely to evoke established frames (e.g. *husband and wife*) with respect to accidental lists (e.g. *pipe and slipper*). On the other hand, as will also emerge in section 4, accidental lists are also used to refer to established – i.e. shared and commonly accessible – frames (cf. *gratta e sosta*).

Regardless of these differences, it is important to point out that a process of inference is involved in non-compositional lists in general: since the meaning of the whole is MORE than the meaning of the parts, the hearer/reader has to infer the ‘missing’ semantic components. Generally speaking, in coordination the meaning of the conjoined structure “is not obtained by simply adding the meanings of the conjuncts together, but rather by subsuming the co-conjuncts under a common conceptual frame”, i.e. the so-called “common integrator” (Olsen 2014: 280; see Lang 1991). For instance, in the Chinese co-compound *dāo-qīāng* ‘weapons’ (lit. ‘sword-spear’), ‘weapons’ is the ‘common conceptual frame’ which provides the ground to infer the meaning of the whole construction. In this respect, a difference between natural lists and accidental lists is that the former involve items which have a close semantic relationship INDEPENDENTLY of their co-occurrence in the list, hence the common conceptual frame is arguably easier to infer than in accidental coordination and the whole construction is more likely to become lexicalized/conventionalized (Arcodia *forthcoming*).<sup>8</sup> In accidental lists where members are frame-related, like the ones we are discussing in this section, the conjuncts will not be related INDEPENDENTLY of their co-occurrence in the list, but the degree of establishment of the frame might play a role: stable and common frames will arguably be more accessible than contextual/temporary frames, hence lists ‘naming’ the former should be more likely to become lexicalized/conventionalized (see section 4.1).

To sum up our discussion about frames and lists, we argue that both stable/established frames and more contextual frames may be ‘named’ by list constructions. When a stable/established frame is referred to, we speak of FRAME-EVOKING lists; when more context-dependent and temporary frames are constructed by means of the list we speak of FRAME-BUILDING lists.

A related issue is that of the construction of CATEGORIES. Non-compositional lists (at least those with a referential function) involve categorization, as their referent is a superordinate concept with respect to its parts; the most obvious example is that of hypernym-creating lists, viz. ‘collective’ co-compounds (cf. the Lezgian example in (5a) above) and binomials (e.g. *bra and panties* for ‘lingerie’), or still other syntactic, online created non-compositional lists, such as (2) in

section 2. Just as there are well-established frames and temporary frames, categories may also be (more or less) stable or novel, created online; the latter have been termed ‘ad hoc categories’ in the literature (Barsalou 1983, 2010). Compare the following examples:

(16) Khmer      *tok tuu*    table closet      ‘furniture’ (Antelme 2004: 163)

(17) *I need flour, milk, yeast and so on* (Mauri 2017: 302)

Whereas in the Khmer co-compound *tok tuu* the category referred to, i.e. ‘furniture’, is a stable one and is fairly easy to infer,<sup>9</sup> the category evoked by the non-compositional list in (17) requires contextual information (of different types: see Mauri 2017: 302) to be inferred correctly, and is highly context-dependent. That is, depending on the context, and on the related background frame, one may conjure different (ad hoc) categories under which the conjuncts may be subsumed: ‘ingredients for a cake’ may come to mind easily, but other options are open. It all depends on what the speaker identifies as the property (“P” in Mauri 2017) that the members in the list (and those NOT in the list) share.

Here, again, we see a cline from more lexicalized/fixed items, which typically express stable categories, and more syntactic/looser items, which are open to non-conventionalized/ad hoc categorization. Note, however, that this is to be taken as a tendency, rather than a rule. Compare, for instance:

(18) Mordvin    *ukolt-poroškat*    injection-powder    ‘each, even the most basic form of medical treatment’ (Wälchli 2005: 14)

(19) Italian    *moglie e marito*    wife and husband    ‘wife and husband’ (Masini 2006: 220)

According to Wälchli’s analysis (2005: 172-173), in example (18) the plausible additive (‘injection and powder’) and collective (‘minor forms of medical treatment’) interpretations are ruled out in favour of the generalizing and emphatic reading ‘each, even the most basic form of medical treatment’; this interpretation is determined by the context in which the co-compound is found (which we omitted here due to space constraints). Hence, even for co-compounds category-building and inference may be context-dependent (at least, for some items). In (19), on the other hand, we have a reversible binomial (*marito e moglie* being a perfectly acceptable and normal alternative order) which involves a relation of natural coordination (and, indeed, ‘husband and wife’ is a typical domain for co-compounds in co-compounding languages).

Another type of list construction which may have the function of category-building is reduplication. We have already seen the example of Turkish *m*-reduplication, as *çay* ‘tea’ > *çay may* ‘tea and the like’, in which the hearer/reader needs to infer the property of ‘tea’ which defines the set designated by the whole construction. This type of ‘echo’ reduplication is commonly used to build ad hoc categories e.g. in South Asian languages (Keane 2005). Differently from the other types of list constructions designating ad hoc categories, in the case of reduplication there is only ONE exemplar from which the set has to be inferred, possibly making the process more difficult.

What about compositional lists, such as additive co-compounds, binomials, etc.? Although in principle no inferential process should be required here, since the members of the category are all explicit, it is by no means excluded that reference is made to a category, even to a novel, contextually-determined one. See the following examples:

- (20) Georgian      *dá-dzma* sister-brother      ‘siblings’ (Wälchli 2005: 3)
- (21) English      *actor-director-producer-nightclub-performer-lecturer* (Olsen 2014: 273)
- (22) German      *Melone und Zylinder*      melon and top hat ‘melon and top hat’  
(Wälchli 2005: 14)

The co-compound in (20), *dá-dzma*, does provide a label for a category: since the exemplars of the category are exhaustively listed, and the category itself is a stable one, the inferential process may be expected to be quite straightforward. As to the endocentric coordinat-ing compound in (21), clearly a *hapax legomenon*, there is again no need to infer other members of the set; however, the label which is created with this construction is undoubtedly novel, ad hoc (here, in the sense of “constructed spontaneously to achieve goals relevant in the current situation” and not residing in long-term memory; Mauri 2017: 299), although its interpretation is not context-dependent. As to the last example in (22), it is an instance of a ‘contextual’ binomial (see section 2.1): it is obviously not established, accidental, and relies on context for interpretation: since *Melone* means both ‘melon’ and ‘bowler hat’, the less plausible interpretation ‘melon and top hat’ (as opposed to the more obvious ‘bowler hat and top hat’) is picked here due to the context in which the binomial occurs (again, omitted here due to space constraints; see Wälchli 2005: 14-15).

Thus, to sum up, both frames and categories are central elements for the creation and interpretation of list constructions, which may well be used to build non-established (i.e. contextual, temporary,



ad hoc) categories and frames. While more lexicalized items (which are ready-made to be used) tend to express established categories and frames, and constructions which are less lexicalized and closer to syntax tend to express non-established categories, exceptions do occur. Interestingly, whereas non-compositional lists are obviously more likely to be used to evoke or build categories and frames, and by their nature require some inference on the part of the speaker/hearer, compositional lists may be used as well to build ad hoc categories (cf. example (21) above), even though no inferencing is required, strictly speaking. In this respect, a crucial difference between compositional and non-compositional lists seems to be that compositional lists generally do not rely, or rely less, on context for their interpretation; non-compositional lists, on the other hand, are more prone to appeal to context-dependent meanings (see (17)-(18)), when they are not lexicalized (but not only; see (18)).

#### *4. Focus on frame-naming lists: two case-studies*

As mentioned in previous sections, lists at both the M&L and the syntactic level can be characterized as either ‘natural’ or ‘accidental’: natural lists are made of conjuncts that express semantically associated concepts, which are therefore likely to occur together, contrary to accidental lists. Whereas natural lists, where conjuncts typically entertain some kind of lexico-semantic relation with each other (e.g. co-hyponymy, opposition, synonymy, meronymy), have been more clearly identified in the (admittedly still limited) literature on lists, lists where the conjuncts are lexico-semantically unrelated are still waiting to be fully explored.

In this section we present two case-studies (mainly based on Italian data) that focus on the latter kind of lists. More specifically, we focus on lists where the conjuncts are frame-related (cf. section 3), in that they either EVOKE or BUILD a frame, by virtue of co-occurring within a list. Crucially, we maintain that lists are ‘constructions’ in the sense of Construction Grammar (Goldberg 1995, 2006, Hoffmann & Trousdale 2013, Hilpert 2014) and Construction Morphology (Booij 2010), namely conventionalized associations of a form and a function (in this case, a FRAME-NAMING function).

##### *4.1. Case-study 1: the $V_1$ +AND+ $V_2$ construction*

As mentioned in previous sections, Italian, like many other SAE languages, has (ir)reversible binomials in its lexical inventory, which

can belong to different types depending on the lexical categories involved (Masini 2006). One specific type, which was studied in detail by Masini & Thornton (2008), consists of two verbal stems (homophonous to the imperative form)<sup>10</sup> that are conjoined by *e* ‘and’ and give rise to either adjectives (23) or nouns (24):

- (23) a. *usa e getta* (lit. ‘use and throw’) ‘disposable’  
b. *produrremo solo bottiglie usa e getta*  
‘we will produce only disposable bottles’
- (24) a. *gratta e vinci* (lit. ‘scratch and win’) ‘instant scratch lottery (ticket)’  
b. *I biglietti del ‘gratta e vinci’ saranno disponibili nelle tabaccherie [...]*  
‘Instant scratch lottery tickets will be available in tobacco shops [...]

Masini & Thornton (2008) identify 66 types for this  $V_1+AND+V_2$  construction in the corpus *La Repubblica*<sup>11</sup> (Baroni *et al.* 2004), 25 of which are hapaxes, and analyze this pattern as an emerging construction whose development is due to the high token frequency of few types that perform as entrenched exemplars (leaders), in accordance with usage-based and exemplar-based constructionist models (Bybee 2006, 2013, Goldberg 2006, Tomasello 2003): *usa e getta* (cf. (23)), for instance, is one such type, which serves as a model for the formation of similar expressions, like the hapax *leggi e getta* ‘read and throw’, used as an adjective in combination with the noun *libri* ‘books’.

In their semantic analysis of the Italian  $V_1+AND+V_2$  construction, Masini & Thornton (2008) claim that  $V_1$  and  $V_2$  may entertain either a lexico-semantic relation *sensu stricto* (they may be opposites, or better ‘reversives’ in the sense of Cruse 1986: 226, synonyms, co-hyponyms, or have an intrinsic cause-effect relation), or a frame-like relationship, in that they belong to a given frame (28 types out of 66 belong to this second group), thus relying on our encyclopedic knowledge. For instance, in *gratta e sosta* (lit. ‘scratch and park’) ‘scratch and park ticket (event)’ (already mentioned in section 3), scratching and parking are not linked by a lexico-semantic relation, but rather by the fact of being part of a well-defined complex frame which is shared knowledge within a given community, i.e. the act of buying and scratching a special ticket to be authorized to park your car for a specific length of time. It is important to stress that *gratta e sosta* cannot be interpreted as the mere sum of scratching and parking, but evokes and implies a more complex situation made of a number of (implicit) subevents (e.g. buying the ticket, finding an object – typically a small coin – to scratch the ticket, put the ticket on the dashboard of your car, etc.).

A very similar construction is attested in English: think of an

expression like *kiss and fly*, which defines an outside area of airports where people are supposed to kiss their driving relative/friend goodbye and fly: *kiss* and *fly* are the explicitly mentioned elements, the constituting parts of the construction, but the meaning of the whole expression is not the mere sum of these two events. Rather, kissing and flying are the salient (or the better distinguishable) events of a more complex frame, which may include very specific knowledge. For instance, in an airport in Denmark, a sign is found which contains the string *kiss and goodbye* (equivalent to *kiss and fly*) and, right below, the following additional information: *No kisses above 3 mins.!* This addition explicitly reminds us that the frame evoked by *kiss and fly/goodbye* allows for a short kissing time, since the whole stay in that parking area has to be rather limited.

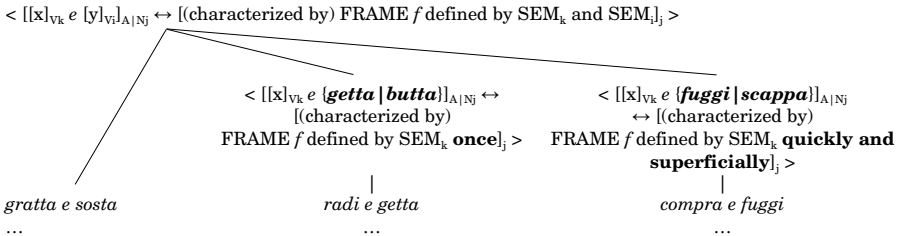
Going back to Italian, we have seen that a subset of  $V_1 + \text{AND} + V_2$  constructions have the general function of naming and evoking conventional, established frames (e.g. *gratta e sosta*), as well as less established frames (e.g. *leggi e getta*). According to Masini & Thornton (2008), these frame-naming binomials belong to three semantic subclasses: (i) sequential (where  $V_1$  and  $V_2$  are two events within the frame occurring in sequence, e.g. *gratta e vinci*, cf. (24)); (ii) aspectual (where  $V_2$  corresponds to either *getta* or *butta*, both meaning ‘throw’, and the whole binomial conveys the semelfactivity of the  $V_1$  event, e.g. *usa e getta*, cf. (23)); and (iii) manner (where  $V_2$  corresponds to either *fuggi* or *scappa*, both meaning ‘run away’, and conveys an adverb-like meaning of ‘in a hurry’ and ‘superficially’ that applies to  $V_1$ , cf. the expression *mordi e fuggi* ‘(too) quick, hasty’, lit. ‘bite and run away’, which is the entrenched exemplar of this subgroup).

As suggested by Masini (2009), we can analyze this situation in constructionist terms, since frame-naming binomials qualify as ‘constructions’, i.e. as conventionalized form-meaning pairings. Indeed, this sequence of verbs cannot be regarded as normal coordination between verbal phrases, since: (i) the order of the constituent is fixed (e.g. if we change *tira e molla* ‘see-saw, hesitation’ – lit. ‘pull and let go’ – into *molla e tira* we lose the binomial interpretation);<sup>12</sup> (ii) the string cannot be interrupted (cf. e.g. *gratta BENE e vinci*, lit. ‘scratch WELL and win’, which is no longer perceived as a binomial but as two verb phrases meaning ‘scratch well and win’); (iii) the form in which the verbs occur (homophonous to the imperative form) is fixed, which means that the verbs lost their TAM features; (iv) the whole expression is not a verb, but rather a noun or an adjective, therefore it is ‘exocentric’, which means that the syntactic category of the list is a ‘constructional property’ (Booij 2010); (v) last but not least, the whole expression is idiomatic, because

its meaning is not the sum of its parts (see above), and the fact that it relates to an evoked frame is also a constructional property, again not deducible from its constituents.

Since these features are consistently found in the expressions at issue, we can posit an abstract schema that captures all these features, by generalizing over single instances, from which the specific binomials are instantiated. In order to represent the above-mentioned semantic tripartition proposed by Masini & Thornton (2008), we can make use of an inheritance hierarchy as (25), where the abstract construction is instantiated by (established and possibly novel) sequential binomials (like *gratta e sosta*), whereas for the aspectual and the manner types a semi-specified subschema (where  $V_2$  is specified) can be posited, whose semantic properties partially override the higher-level schema. These subschemas have their own productivity and may give rise to new expressions (like *radi e getta* ‘disposable (rasor)’, lit. ‘shave and throw’, or *compra e fuggi* ‘frantic and quick buying (experience)’, lit. ‘buy and run away’)<sup>13</sup>.

(25) Inheritance hierarchy for the frame-naming  $V_1+AND+V_2$  construction



The number of items that can be traced back to the  $V_1+AND+V_2$  construction is relatively limited (66 types), as we have seen. However, Masini & Thornton (2008) note that the pattern seems to be productive to some extent, given the fairly high number of hapaxes found in the corpus. In order to assess this claim, some ten years later, we carried out a corpus-based investigation using the very large *Italian Web 2016 (itTenTen16)* corpus, searched through the SketchEngine platform (<http://www.sketchengine.co.uk/>). We chose this corpus because of its considerable size (approximately 5 billion words) as well as its nature: the language of the web is likely to be innovative and creative; also, we needed a different, larger and more recent corpus than *La Repubblica* (which contains texts from the years 1985-2000). The investigation does not qualify as exhaustive: given the purpose of the present study and the huge size of the cor-

pus, we focused only on a subset of data, obtained via an automatic search (two finite verbs conjoined by *e* ‘and’ and enclosed within double quotes, to restrict the results) followed by a manual inspection and evaluation of the results (which amount to 4973).

The search confirmed the presence of many of the verbal binomials already identified by Masini & Thornton (2008). More importantly, it allowed us to identify a high number of new  $V_1+AND+V_2$  binomials (>100), most of which are hapaxes<sup>14</sup> or have a very low token frequency, which testifies to the productivity of the pattern under examination. Some items are clearly calques from English (26a), and quite a number refer to computer commands (26b) or computer games (26c) (mostly calques from English, too); some are formed by analogy with existing high-frequency binomials (26d), some others (26e-f) are instantiations of the  $V_1+AND+\{getta \mid butta\}$  and  $V_1+AND+\{fuggi \mid scappa\}$  subschemas in (25).

- (26) a. *compra e spera* (lit. ‘buy and hope’) ‘buy and hope (trading)’ [4 tokens]  
b. *trova e sostituisci* (lit. ‘find and replace’) ‘find and replace (Word function)’ [15 tokens]  
c. *cerca e distruggi* (lit. ‘search and destroy’) ‘search and destroy’ [9 tokens]  
d. *cancella e vinci* (lit. ‘erase and win’) ‘instant scratch lottery (ticket)’ [15 tokens]  
e. *indossa e butta* (lit. ‘wear and throw’) ‘habit of wearing clothes only once’ [1 token]  
f. *bevi e fuggi* (lit. ‘drink and run away’) ‘supposed to be drunk fast’ [3 tokens]

Note that the presence of these two subschemas, in principle, does not prevent the verbs *getta \mid butta* and *fuggi \mid scappa* to occur as  $V_2$  in a *sequential* binomial, as illustrated by the following examples taken from our data, which can be analyzed as direct instantiations of the abstract construction in (25):

- (27) a. *tampona e fuggi* (lit. ‘go into the back of a car and run away’) ‘robbery technique started by going into the back of a car’ [2 tokens]  
b. *suona e scappa* (lit. ‘ring and run away’) ‘prank consisting in ringing a bell and then running away’ [1 token]  
c. *bombarda e fuggi* (lit. ‘bomb and run away’) ‘act of declaring war to / bombing a country and then not caring about the post-war consequences’ [1 token]

Overall, it seems that  $V_1+AND+V_2$  binomials are used to refer to already established frames, as well as novel, emerging frames.

Binomials with a pretty high frequency are more likely to refer to established situations, such as the already mentioned *gratta e vinci*, *mordi e fuggi*, *usa e getta*. In the *itTenTen16* data, we found 29 occurrences of *colpisci e terrorizza* (lit. ‘hit and terrorize’), which is the (bad) translation of English *Shock and Awe*, a pretty established concept in the US culture referring to a military technique consisting of

a massive aerial bombardment, which characterized the US campaign against Iraq in 2003. Sometimes,  $V_1+AND+V_2$  binomials are employed to name established frames and concepts that do not happen to have a stored, institutionalized name. *Suona e scappa* in (27b) is a case in point: everybody (in Italy) is familiar with this prank, performed typically by children, that consists in ringing one or more bells in a house and then running away not to be caught, but there is no conventional name for this (to the best of our knowledge). So, *suona e scappa* is a nonce formation that is created online to refer to this established frame. The expression *compra e spera* ‘buy and hold (trading)’ (26a), on the other hand, is in-between these two situations, since it also refers to an established situation in the relevant domain (trading) but is not so clearly institutionalized as a name (yet).

Sometimes the situations the binomials refer to are not so established but rather novel or emerging. *Indossa e butta* (26e), for instance, is a nonce formation (in our dataset) that refers to a recently emerging phenomenon, typical of celebrities. Also *clicca e ritira* ‘click and collect’ refers to a recently developed frame, consisting of buying online some goods and then collecting them directly from the store. However, despite having only 2 occurrences in our dataset, in our intuition *clicca e ritira* is spreading quickly (a Google search retrieves around 89 results).

Finally,  $V_1+AND+V_2$  binomials are sometimes used to denote frames that are not shared by a given community (be it small or vast), but are rather context-dependent, i.e. anchored to a precise situation/speaker, and not easily replicable. Observe the following examples:

- (28) a. *Le app d'incontri tra uomini hanno il problema del “mordi e fuggi”, quelle tra donne del “chatta e sparisci”. Come comportarsi?*  
‘Dating apps for men have the “hit-and-run” problem, those for women have the “chat and disappear” problem. How do you deal with it?’
- b. *C'è da dire che così mi rende più facile il “compra e dimentica”, ovvero quando compro una cosa perché sta a dieci centesimi e appena passati i quindici minuti la disinstallo perché non mi serve adesso su questo telefono [...]*  
‘I must say that this makes the “buy and forget” action easier, that is when I buy something because it costs ten cents and after fifteen minutes I remove it because I don't need it now on this phone [...].’

Example (28a) is a subtitle of a web article on dating apps, which explains that lesbian dating apps are problematic because, in general, women (among other things) tend to spend more time chatting and end up meeting less in real life than men. This very specific situation is packaged into the binomial *chatta e sparisci*, lit. ‘chat and disappear’ (a hapax in our dataset). The frame evoked by this expression heavily

relies on context to be interpreted correctly: in another context (one that does not involve dating, for instance, but ordinary chatting), we could easily attribute to it (partially) different semantic and pragmatic properties (e.g. rude behavior). In (28b) we have another hapax which refers to the apparently compulsive action of buying a very cheap app and then dismiss it immediately after. Although the general coordinates are there (buying something and then forget about it), the exact interpretation (including the fact that the event is compulsive and that we are talking about apps, not any product) is context-dependent.

In sum, we can depict the situation as in Table 2, where we have different types of frame-naming binomials according to two parameters, both of which define a cline: (i) the nature of the frame (established > emerging > context-dependent); (ii) the nature of the expression that codifies the frame (institutionalized > emerging > nonce formation). Needless to say, Table 2 should be interpreted as ‘fluid’: there is no clear-cut boundary between the individual cells (to be intended as an approximation for the sake of representation). Indeed, it is not always easy to decide when a name can be regarded as institutionalized or not (*clicca e ritira*, for instance, is a recent formation for a novel frame, but is rapidly spreading, hence leaning towards the leftmost part of the table), or when a frame is established among a given community or not. However, what we can observe is that the two dimensions (degree of establishment of the frame and degree of establishment of the name) seem to converge: if, on the one hand, nonce formations may encode all kinds of frames and established frames can be encoded by more or less established expressions, an institutionalized expression, on the other hand, is highly unlikely to encode a context-dependent frame (unless the frame spreads within a community of speakers, and hence becomes more established itself).

**Table 2.** Types of frame-naming  $V_1$ +AND+ $V_2$  expressions

		FRAME IS ESTABLISHED?		
		+	±	-
		(ESTABLISHED)	(EMERGING)	(CONTEXT-DEPENDENT)
NAME IS ESTABLISHED?	+ (INSTITUTIONALIZED)	<i>gratta e vinci</i>		
	± (EMERGING)	<i>compra e spera</i>	<i>clicca e ritira</i>	
	- (NONCE FORMATION)	<i>suona e scappa</i>	<i>indossa e butta</i>	<i>tampona e fuggi</i>
		frame-evoking <-----> frame-building		

In conclusion,  $V_1$ +AND+ $V_2$  binomials in contemporary Italian definitely qualify as a particular type of list construction,<sup>15</sup> with its

own properties and constraints, whose function is to name a frame, be it established, emerging or context-dependent. When the frame is established or emerging, the construction could be defined as FRAME-EVOKING, whereas we use FRAME-BUILDING when the frame is temporary and context-dependent.

In the following section, we explore another type of list construction that does a very similar kind of job, but involves nouns instead of verbs.

#### 4.2. Case-study 2: the ALL+LIST construction

List constructions as defined by Bonvino *et al.* (2009) and Masini *et al.* (2012, *this issue*) display a minimal structure made of two or more conjuncts, plus a number of optional elements called ‘list markers’, among which connectives (e.g. ‘and’/‘or’ items) and general extenders (e.g. English *etcetera*, or *something like that*, and *what have you*). The list pattern we explore in this section contains an extra element that does not belong to these list marker categories, i.e. the indefinite adjective *tutto* ‘all’, placed before the list.<sup>16</sup> See the following examples, all taken from *itTenTen16*:

- (29) a. *Era un giovane soldato [...], tutto nervi e muscoli e gli occhi ardentissimi ed irrequieti.*  
‘He was a young soldier [...], all muscle and sinew (lit. ‘all nerves and muscles’), with burning and troubled eyes’
- b. *Qui la vostra vacanza tutta natura e relax sarà perfetta.*  
‘Here your nature-and-relax vacation (lit. ‘vacation all nature and relax’) will be perfect’
- c. *Michele è sempre stato un uomo tutto casa e lavoro*  
‘Michele has always been a man completely devoted to home and work (lit. ‘a man all house and work’)’
- d. *se continuo a frequentare questo blog divento tutta ciccia e brufoli*  
‘if I keep on spending time in this blog I’ll become fat and full of pimples (lit. ‘all fat and pimples’)’

In these examples, *tutto* ‘all’ is followed by a list of two conjuncts and the whole construction is ‘adjectival’ in nature: either it modifies a preceding head noun, with which it agrees in gender and number (e.g. *tutta natura e relax* in (29b) is an attribute of the head *vacanza* ‘vacation’), in which case the *tutto* pattern must follow the noun (e.g. *\*tutta natura e relax vacanza*), or it appears in predicative position (cf. (29d)). The relation between the nouns occurring in the pattern is varied, it may be ‘natural’ or ‘accidental’: nerves and muscles (29a) are obviously lexico-semantically related (they are both body parts, hence co-hyponyms, or meronyms), whereas nature and relax are not. Whatever the relation between the members, the effect we obtain by putting them together in this structure is to build or evoke a frame



defined by these concepts; the frame, in turn, defines the head noun it refers to: *a vacanza tutta natura e relax* is a vacation characterized by (the presence of) nature and relaxing activities. In this case, the frame is easily accessible; in other cases, some more elaboration in terms of abstraction, use of encyclopedic knowledge and/or meaning-extension reasoning (metaphor, metonymy) is required, e.g.: ‘all nerves and muscles’ (cf. (29a)) hints to the fact that there is no fat, so the person in question must be pretty fit; ‘all home and work’ (cf. (29c)) metonymically refers to the people and activities involved at home and at work, to which the person in question is completely devoted. More in general, some expressions look more conventionalized (e.g. *tutto casa e lavoro*, *tutta ciccia e brufoli*;<sup>17</sup> see also below), others more creative (e.g. *tutta natura e relax*).

In (29) *tutto* precedes a list of two members linked by the conjunction *e* ‘and’, which seems to be obligatorily realized in these lists (at least in the written language). However, *tutto* also introduces lists made of more than two conjuncts, three (30) or even four (31):

- (30) a. *c’era di mezzo solo il suo assassino [...] un figlio della buona borghesia milanese*, tutto casa scuola e rivoltella.  
 ‘there was only his assassin [...] son of Milan’s upper middle class, (apparently) devoted to home and school but also indulging in violence (lit. ‘all home school and revolver’)’
- b. *vuol dire solo guai un tipo* tutto chiesa casa e famiglia  
 ‘a guy completely devoted to church, home and family (lit. ‘a guy all church, home and family’) will only lead to troubles’
- c. *Chris era il tipico giovanottone inglese* tutto pub, sport e fidanzata  
 ‘Chris was the typical English young man devoted to pub, sport and girlfriend (lit. ‘all pub, sport and girlfriend’)’
- d. *David Baldacci: bestsellerista* tutto pallottole intrighi e forza brutta?  
 ‘David Baldacci: bestseller author whose books are full of bullets, intrigues and brutal force? (lit. ‘bestseller author all bullets, intrigues and brutal force’)’
- (31) a. *si affida a quattordici personaggi che possono intendersi come quattordici tipi umani [...]; c’è l’attrice americana sguaiata [sic] e sgallettata*, tutta alcool, pillole, provocazione e parolacce  
 ‘(he) relies on 14 characters that can be regarded as 14 human types; there is the coarse and uncouth American actress, all (characterized by) alcohol, pills, provocation and swearwords’
- b. *è il luogo ideale per una vacanza* tutta natura, salute, sport e relax  
 ‘it’s the ideal place for a vacation characterized by nature, health, sport and relax (lit. ‘vacation all nature, health, sport and relax’)’
- c. *Da Donegal, seguendo la costa* tutta anfratti, penisole, fiordi e baie con piccoli villaggi di pescatori, *si arriva a Slieve League*  
 ‘From Donegal, following the coast characterized by ravines, little peninsulas, fjords and bays with small fishers villages (lit. ‘coast all ravines, little peninsulas, fjords and bays with small fishers villages’), you arrive at Slieve League’

The more members we add to the list, the more constrained and precise the frame becomes: in (31b) the vacation is not just ‘all nature and relax’ (compare (29b)) but also explicitly includes health and sport activities (which might well be inferred by ‘nature and relax’ only, but not necessarily). The American actress in (31a) is sketched by four elements (alcohol, pills, provocation, swearwords), that define her type like touches of an impressionist painting; the same kind of ‘impressionistic list’ is at work in (31c).

Quite often, 3/4-member lists elaborate on entrenched 2-member lists. For instance, (32) contains what appear to be conventionalized expressions, with a pretty fixed order, on which other expressions are built: the trinomial *tutto chiesa casa e famiglia* (lit. ‘all church home and family’) in (30b) seems to be a combination of (32a) and (32b); *tutto casa scuola e rivoltella* (lit. ‘all home school and revolver’) in (30a) clearly evokes the expressions in (32) but customizes them to the situation, not without a surprising effect, since a revolver obviously clashes with both home and school; also (30c) seems to be built on the same template, but the elements involved in the construction of the frame are anchored to a specific culture.

- (32) a. *tutto casa e chiesa* (lit. ‘all home and church’) ‘pious, righteous, churchy’  
b. *tutto casa e famiglia* (lit. ‘all home and family’) ‘completely devoted to family (life)’  
c. *tutto casa e lavoro* (lit. ‘all home and work’) ‘completely devoted to family and work’

In order to get a clearer picture of the use of these expressions, we explored corpus data: in particular, we checked the token frequency of ALL+LIST expressions, by searching the *itTenTen16* corpus for the relevant sequences (*tutto*+2/3/4-member noun lists with *e* ‘and’ as a conjunction) and then producing a frequency list for each.

Top results for 3- and 4-member lists with *tutto* turned out to have a very low frequency, which means that we have no high degree of conventionalization here. As for 3-member lists, apart from *tutto sesso, droga e rock ’n’ roll* ‘all sex, drug and rock ’n’ roll’, which is the top result with 10 occurrences (*sesso, droga e rock ’n’ roll* is a fixed, irreversible trinomial in its own right), other instances have a frequency  $\leq 4$  and are often variants of the same pattern (33) (or even variants of the same trinomial, cf. (33a) *vs* (33c)). The same holds for 4-member lists (cf. e.g. (*vacanza*) *tutta mare, sole, relax e divertimento*, lit. ‘(vacation) all sea, sun, relax and fun’, 3 tokens; cf. also (31b)), which are often related to 3-member lists (cf. (33)): in this case the highest frequency is 3.

*Listing between lexicon and syntax: Focus on frame-naming lists*

- |         |                             |                                       |            |
|---------|-----------------------------|---------------------------------------|------------|
| (33) a. | ( <i>weekend/vacanza</i> )  | <i>tutto/tutta sole, mare e relax</i> | [3 tokens] |
|         | weekend/vacation            | all sun, sea and relax                |            |
|         | b. ( <i>vacanza</i> )       | <i>tutta sole mare e divertimento</i> | [3 tokens] |
|         | vacation                    | all sun sea and fun                   |            |
|         | c. ( <i>vacanza</i> )       | <i>tutta mare, sole e relax</i>       | [2 tokens] |
|         | vacation                    | all sea sun and relax                 |            |
|         | d. ( <i>Costa Azzurra</i> ) | <i>tutta sole mare e felicità</i>     | [1 token]  |
|         | Côte d'Azur                 | all sun sea and happiness             |            |

These results are not unexpected, given that also the number of 'bare' irreversible trinomials (let alone quadrinomials) in Italian is extremely limited compared to irreversible binomials (Masini 2006). Therefore, we might expect token frequencies for *tutto*+2-member lists to be higher, and indeed they are. The three expressions in (32) above, for instance, have a definitely higher frequency: *tutto casa e chiesa* has 131 occurrences, *tutto casa e famiglia* has 60, and *tutto casa e lavoro* has 80.

*Tutto*-lists are reminiscent of those English 'phrasal compounds' where the non-head/modifier constituent is a coordinate phrase (Lieber 1992: 11):

- (34) *a pipe and slipper husband*

As we already noted in section 3, *pipe* and *slipper* in (34) are not lexico-semantically related, but rather frame-related and contribute to depict a specific kind of husband. As documented in Booij & Hüning (2014), a similar case is found in Dutch, where the trinomial *huis-tuin-en-keuken* 'house-garden-and-kitchen' (35) systematically takes on the meaning 'ordinary' when it occurs within a compound. The authors analyze this pattern as a "constructional idiom" (Jackendoff 1990, Booij 2002), because the overall meaning is non-compositional. Within the frame of list constructions as intended here, the idiomatic meaning can be traced back to the fact that the trinomial is a frame-naming list, where 'house', 'garden' and 'kitchen' figure as the salient elements of an 'ordinary life' frame.<sup>18</sup>

- (35) a. *huis-tuin-en-keuken* (house-garden-and-kitchen) 'run-of-the-mill, ordinary'  
 b. *huis-tuin-en-keuken-onderwerpen* 'ordinary topics'

As a matter of fact, also in Italian we do not need *tutto* to obtain a frame-naming list (of nouns): a 'bare' list of nouns (without *tutto*) may do the very same job. All expressions in (32), for instance, are perfectly fine and – most importantly – retain the very same meaning without *tutto* (see (36)). In other words, they are irreversible binomi-

als (Masini 2006). Other similar examples are given in (37), which, by the way, are all found in the top 100 results of the frequency lists with *tutto*: also in this case we have constructions, made of two coordinated nouns in a fixed order, that are used as modifiers of a head noun (e.g. *una ragazza acqua e sapone* ‘a simple/natural girl’).

- (36) a. *casa e chiesa* (lit. ‘home and church’) ‘pious, righteous, churchy’  
 b. *casa e famiglia* (lit. ‘home and family’) ‘completely devoted to family (life)’  
 c. *casa e lavoro* (lit. ‘home and work’) ‘completely devoted to family and work’
- (37) a. *acqua e sapone* (lit. ‘water and soap’) ‘not using cosmetics, natural, simple (of women)’  
 b. *pelle e ossa* (lit. ‘skin and bones’) ‘skinny’  
 c. *genio e sregolatezza* (lit. ‘genius and haphazardness’) ‘being an erratic genius’

So, some instances of the ALL+LIST construction are in fact irreversible binomials (existing in their own right) preceded by *tutto*, which seems to emphasize the binomial’s meaning. However, an interesting fact emerges at a closer look into corpus data: some of these fixed binomials appear to occur more often with *tutto* than without it when they are used as modifiers (not as nominals). For instance, *tutto casa e chiesa* occurs 131 times while *casa e chiesa* alone only 77; *tutto casa e famiglia* has 60 occurrences while *casa e famiglia* alone has 7.<sup>19</sup>

In addition, not all lists occurring after *tutto* are irreversible binomials: most, in fact, are not. Interestingly, many of these lists seem to work almost exclusively with *tutto*, again when used as adnominal modifiers. Take for instance the expressions in (38):

- (38) a. *tutto cuore e grinta* [99 tokens]  
 ‘full of spirit’ (lit. ‘all heart and grit’)  
 b. *tutto grinta e determinazione* [14 tokens]  
 ‘very gritty and determined’ (lit. ‘all grit and determination’)  
 c. *tutto zucchero e miele* [21 tokens]  
 ‘overly sentimental, mushy’ (lit. ‘all sugar and honey’)

The 2-member lists preceded by *tutto* in (38), which do not qualify as fixed expressions, show a clear preference for occurring with *tutto*: *cuore e grinta* alone occurs only 9 times as a modifier in the *itTenTen16* corpus (*vs* the 99 occurrences of *tutto cuore e grinta*, cf. (38a)). Moreover, the reverse order is also attested, a proof of its greater flexibility with respect to more fixed items: again, *tutto grinta e cuore* occurs 41 times, but *grinta e cuore* alone only 3 times.<sup>20</sup> A similar situation is found for *tutto grinta e determinazione* (14 tokens; cf. (38b)): *grinta e determinazione* alone occurs only once. *Tutto zucchero e miele* in (38c) shows a similar – although less marked – trend:

21 occurrence with *tutto*, 7 without.<sup>21</sup> Overall, also in these cases, an intensification nuance arises when *tutto* is used.

Indeed, intensification is one of the possible functions of *tutto* independently of its occurrence with lists of any sort (cf. Cimaglia 2011, Grandi 2017): when followed by either an adjective or a bare noun,<sup>22</sup> *tutto* loses its literal meaning and assumes an (unpredictable) adverb-like intensifying function, as illustrated in (39).

- (39) a. *La casa era tutta sporca*  
 'The house was completely dirty' (lit. 'all dirty')  
 b. *Quel ragazzo è tutto naso*  
 'That boy has a very big nose' (lit. 'all nose')  
 c. *La strada era tutta curve*  
 'The road was full of curves' (lit. 'all curves')

This ALL+A/N pattern has the same distribution as the ALL+LIST pattern: it occurs either in predicative position (39), or – quite expectedly – in post-nominal position if used as an attribute (e.g. *la strada TUTTA CURVE* 'a curvy road'; \**la TUTTA CURVE strada*). Also the ALL+A/N pattern gives rise to some fixed expressions that are stored in our lexicon, such as *tutto pepe* 'very lively' (lit. 'all pepper'), *tutto muscoli* 'very strong but not really clever' (lit. 'all muscles'), or *tutt'orecchi* '(be) all ears, very attentive and eager to listen' (lit. 'all ears'). However, the pattern is productively used to create new (free) formations.

This might lead us to think that the ALL+A/N pattern, given its idiosyncratic functional and structural properties, qualifies as a semi-specified 'construction' (informally represented in (40)), and that its A/N slot ('x') may be filled by lists, besides single words.

- (40) < [[*tutto*]<sub>A</sub> [x]<sub>A|Nk</sub>]<sub>Aj</sub> ↔ [greatly characterized by SEM<sub>k</sub>]<sub>j</sub> >

Under this analysis, the ALL+LIST is not an independent construction. Rather, the ALL+LIST expressions we have analyzed in this section would be the result of a process of 'unification' between the ALL+A/N intensifying construction in (40) and a list. This analysis has the advantage of doing justice to the many formal and semantic similarities between the two patterns, including the fact that all *tutto*-expressions have an adjective-like distribution; and it holds well for lists that are already stored in our lexicon (like words). What about online-created lists, which are not stored (and therefore not available for unification, technically), considering that we have to account for the frame-naming semantics of the whole construction? The latter, obviously, is not contributed by *tutto*, but rather by the list itself,

which, therefore, is not just any kind of list. We propose that these lists are instantiations of an abstract frame-naming list construction (tentatively represented in (41)), which licenses (stored and non-stored) frame-naming lists in general (with no *tutto* involved). The consequent solution amounts to claiming that ALL+LIST constructs are generated via ‘multiple inheritance’ from these two constructions: (40) and (41).

(41)  $\langle [\text{CONJUNCTIVE LIST}]_{A|Nw} \leftrightarrow [\text{characterized by FRAME } f \text{ defined by SEM}_{\text{conjuncts}}]_w \rangle$

In sum, cases where *tutto* precedes a stored binomial (e.g. *tutto acqua e sapone*, cf. (37a)) are generated by means of unification between the binomial and the ALL+A/N intensifying construction in (40); instead, cases where *tutto* precedes a non-conventionalized 2/3/4-member list (e.g. *tutto pub, sport e fidanzata*, cf. (30c)) is accounted for by recurring to multiple inheritance, i.e. to inheritance from both the ALL+A/N intensifying construction in (40) and the frame-naming list construction in (41).

Whereas this solution is probably sound, it is worth considering one last fact that calls for an explanation: many frame-naming lists with an adjective-like distribution – be they stored or not – show a clear preference for occurring with *tutto* rather than without it, as discussed above. This is not expected, given that *tutto* would merely add an intensification meaning under the present analysis. Our hypothesis is that *tutto* is more than just an intensifier, at least when it occurs with non-stored lists. More precisely, it introduces a frame-naming list in order to overtly mark it as an adjective-like element: bare lists of frame-related nouns are ambiguous in terms of syntactic function, since they may be used, in principle, both as nominals and as adjectival elements within sentences (an instance of the former is: *una partita di cuore e grinta* ‘a match (made) of heart and grit’; cf. (38a)). ALL+LIST expressions, instead, are only modifiers, and *tutto* signals precisely this fact, besides retaining (at least part of) its intensifying function. Therefore, *tutto* works as a sort of list ‘disambiguator’, making the interpretation and processing of the whole sequence much easier for the hearer, especially – but not exclusively – when lists are made of more than two members. Compare for instance the two sentences in (42), with *tutto* and without (cf. (31a)):

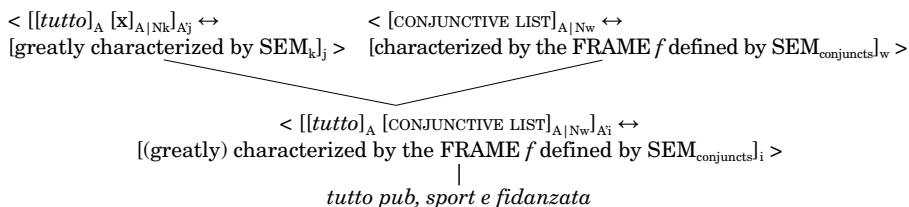
- (42) a. *c'è l'attrice americana sguaiata [sic] e sgallettata*, TUTTA alcool, pillole, provocazione e parolacce  
 ‘there is the coarse and uncouth American actress, all (characterized by) alcohol, pills, provocation and swearwords’

- b. ?c'è l'attrice americana sguaiata [sic] e sgallettata, alcool, pillole, provocazione e parolacce  
'there is the coarse and uncouth American actress, alcohol, pills, provocation and swearwords'

In our view, contrary to (42a), the sentence in (42b) (without *tutto*) would be pretty hard to produce (even with the help of intonation) and also to process/interpret, since the role of the list of nouns after the *American actress* noun phrase would not be clear.

We believe that this role as disambiguator may explain the high frequency of *tutto* within lists. In constructionist terms, this state of affairs may ultimately lead to the emergence of an independent ALL+LIST construction, arising as a result of the unification of the two (semi-)abstract constructions in (40) and (41), as schematized in (43).<sup>23</sup> This new construction, for which the intensification meaning appears to be less prominent, would have its own productivity and therefore directly license new expressions.

(43) Unification of the ALL+A/N construction and the frame-naming list construction



We conclude by observing that, at first glance, English seems to possess a similar network of constructions with *all*: on the one hand, we have stored items like (*not all beer and skittles*) (e.g. *life isn't all beer and skittles*), “used to denote that something is (not) unmixed enjoyment” (www.oed.com); on the other, we find more creative expressions like [w] *henever we meet up it's all flowers and champagne, and it's like another honeymoon*,<sup>24</sup> where flowers and champagne have the function of evoking a romantic kind of frame.

## 5. Conclusions

In this paper we purported the view of listing as a cognitively based mechanism that lies behind a number of constructions with different degrees of complexity, schematicity/specificity and productivity, i.e. as a cross-level phenomenon that cuts across traditional levels

of analysis, from syntax to morphology and the lexicon. First of all, we highlighted the similarities in structure and meaning between syntactic lists on the one hand, and morphological/lexical lists on the other, as e.g. a similar set of functions (category/hypernym-creation, approximation, intensification); parallels as these are not unexpected if we adopt a constructionist view of grammar, with no ‘principled’ distinction between syntax and morphology/lexicon. Secondly, we described in more detail the properties of morphological/lexical lists in a typological perspective, with special attention to their semantic properties, showing that they display an extremely broad range of variation, sometimes even within a single construction type. Thirdly, we discussed a specific, so far less investigated kind of lists, namely frame-naming lists, which also have interesting connections with the expression of ad hoc categories, since frames may be well-established or rather context-dependent. Finally, we focused on two types of frame-naming lists – the  $V_1+AND+V_2$  construction and the ALL+LIST construction – unveiling their properties in terms of form, function and usage, and analyzing them as lexically semi-specified constructions with a certain degree of productivity. In our view, frame-naming lists prove to be a rather flexible strategy that speakers can use to refer to a complex (stable or unstable) frame – whose full description would be quite heavy in terms of processing and communicative efficiency – by just mentioning the most salient or easily accessible (given the context) elements of the frame, with a sort of ‘impressionistic’ technique. So, lists are a handy, economic and yet powerful strategy at the speaker’s command.

### Notes

<sup>1</sup> Examples taken from the BNC – British National Corpus, searched through SketchEngine.

<sup>2</sup> The string *due o tre* may also be used in its literal, alternative meaning: ‘either two or three’. However, when used in its approximating function, it is irreversible: *tre o due* cannot mean ‘few, some’, but just ‘either three or two’.

<sup>3</sup> Under this perspective, talking about ‘syntactic lists’ and ‘morphological/lexical lists’ may be misleading. Indeed, we use these terms for the sake of convenience only. What we mean by these terms is summarized in what follows. Lists at the syntactic level are taken to be free, non-stored, online-created expressions that are phrasal/clausal in nature. By lists at the morphological level we mean expressions that have a morphological structure; they tend to be lexically fixed and stored, although new items may always be coined. Lists at the lexical level are in-between: by this term we mean multiword, fixed expressions like irreversible binomials, which are phrasal in nature but lexically fixed and stored. Hence, these different types of lists are found at different points along the lexicon-syntax continuum.



<sup>4</sup> In Italian some binomials that are similar to imitative/ornamental co-compounds may be found: for instance, *di riffa o di raffa* ‘in a way or another’, which is the union of *riffa* ‘violence (uncommon)’ and the word *raffa*, whose meaning is, at present, opaque to the average speaker.

<sup>5</sup> Note, however, that scalar co-compounds are in fact relatively uncommon, as they occur “in the languages of Eurasia only at a highly advanced stage of co-compounding” (Wälchli 2005: 157).

<sup>6</sup> A clarification is in order here: not all reversible binomials are necessarily contextual and based on a temporary frame; see e.g. *night and day / day and night*.

<sup>7</sup> Example taken from the *enTenTen13* corpus, searched through SketchEngine.

<sup>8</sup> The fact that constructions which form ‘natural’ sets, such as natural lists, are more likely to become lexicalized/conventionalized might also explain their tendency towards greater fixedness (Arcodia *forthcoming*); consider also that items that often co-occur tend to be phonologically and prosodically more integrated (Bybee 2003), and hence more tightly connected (and see Haiman’s 1985 proposed iconic relation between formal distance and conceptual distance). For this reason, a compound such as Georgian *mšvild-isari* ‘bow and arrows’ (lit. ‘bow-arrow’; cf. (6)), corresponding to an English irreversible binomial, is intuitively a better candidate for lexicalization than, say, a construction like *bow and whisk*. Conversely, endocentric coordinate compounds instantiating a relation of accidental coordination, like the above-mentioned *poet-doctor* or Italian *deputato-conduttore* ‘MP-TV host’, in which usually unrelated entities are associated to the same referent, are likely to show a lower degree of fixedness. Indeed, this subclass of compounds is generally ‘looser’ than co-compounds, and closer to ‘genuine’ syntactic structures (e.g., *doctor-poet* and *conduttore-deputato* are also acceptable).

<sup>9</sup> Needless to say, the idea of a ‘stable’ and ‘easily accessible’ category is language- and culture-specific; for instance, ‘writing instruments’ may not be an obvious category in a non-literate society.

<sup>10</sup> A number of input and output constraints apply to this construction. We cannot discuss them here due to space constraints: see Masini & Thornton (2008) for a full analysis in terms of structure, semantics and usage.

<sup>11</sup> From which examples (23) and (24) are taken.

<sup>12</sup> Of course, this criterion holds only for those  $V_1+AND+V_2$  expressions where the order in which the actions denoted by the verbs are performed is not relevant: a binomial like the already mentioned *gratta e vinci*, for instance, is necessarily fixed because the scratching event should logically come before the winning.

<sup>13</sup> As regards the representation of schemas, we follow the notation conventions introduced by Masini & Audring (*forthcoming*).

<sup>14</sup> Of course, they are hapaxes with respect to the query we performed, which, as already explained, is partial.

<sup>15</sup> It is worth mentioning that the very same mechanisms are at work in three-member lists of the  $V_1+V_2+AND+V_3$  type, which are also attested in the *itTenTen16* corpus, although to a much lesser extent. Examples would be: *metodologia passiva* “*compra, tieni e spera*” ‘passive buy-hold-and-hope methodology’ (referred to trading, like the already mentioned *compra e spera*); *scorrerie* “*rubà, ammazza e fuggi*” ‘steal-kill-and-run forays’ (i.e. forays characterized by stealing, killing and then running away); *iscrizioni* “*entra vendi e scappa*” ‘login-sell-and-flee registrations’ (referred to selling activities within a forum on the Internet).

<sup>16</sup> *Tutto* can indeed act as a pre-detailing element in some kinds of lists, where it retains its literal meaning (e.g. in *famiglia lavorano tutti uomini, donne e bambini* ‘everybody works in the family: men, women and children’). These cases should not be confused with the construction under examination.

<sup>17</sup> The expression *tutto ciccia e brufoli* was coined in an advertisement for a chocolate snack.

<sup>18</sup> Interestingly, the ‘ordinary life’ reading is also available for the quite similar Italian examples in (32).

<sup>19</sup> This is a tendency for some binomials, as said. Other binomials, such as those in (37), occur more frequently without *tutto*.

<sup>20</sup> Again, we stress the fact that these counts exclude those examples in which the binomial is used as a nominal, and not as an adjective-like element.

<sup>21</sup> Frequencies for *tutto*+3/4-member lists are too low to make any comparative claim (with *vs* without *tutto*).

<sup>22</sup> *Tutto* bears an intensifying function also in another closely related pattern, namely: *tutto* + indefinite article *un/una/uno* ‘a’ + singular noun (e.g. *La strada era tutta una curva* ‘The road was full of curves’, lit. ‘the road was all a curve’). Since this construction displays slightly different properties, we do not consider it for the present study.

<sup>23</sup> The unification of (semi-)abstract schemas is a mechanism originally proposed by Booij (2010) to account for complex words (such as *dealcoholize*) that appear to be built on possible but non-existent words (*alcoholize*).

<sup>24</sup> Examples taken from the BNC – British National Corpus, searched through SketchEngine.

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