List constructions: Towards a unified account

Francesca Masini[1], Caterina Mauri[1], Paola Pietrandrea[2]

[1] University of Bologna, Bologna, Italy <francesca.masini@unibo.it>, <caterina.mauri@unibo.it>
[2] University of Lille, Lille, France <paola.pietrandrea@univ-lille.fr>

This paper identifies an abstract linguistic pattern named 'list' and discusses its theoretical status and manifestations. The object 'list' is defined as a 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. This highly abstract pattern is claimed to be responsible for a number of linguistic phenomena (endowed with different degrees of complexity, cohesion and conventionalization) that are normally ascribed to different levels of analysis, from morphology to syntax and discourse. We put forward a macro-distinction between denotation lists and formulation lists, pertaining to the conceptual and the metalinguistic level, respectively. More importantly, we show that certain formal features of denotation lists are conventionally associated with certain types of (non-compositional) meanings. We analyze the denotation lists characterized by this form-function match as 'constructions' in the Construction Grammar sense and we claim that these are instantiations of a maximally abstract List Construction. Finally, we discuss the status of formulation lists and the advantages of a constructional approach to do justice to both the diversity and the unity of lists.[*]

KEYWORDS: list, list marker, coordination, repetition, reduplication, reformulation, co-compounding, approximation, generalization, categorization, intensification, non-compositionality, denotation vs formulation, Construction Grammar.

Francesca Masini, Caterina Mauri, Paola Pietrandrea

1. The case for lists

This paper aims at identifying and analyzing the mechanism of 'listing' in natural language, and hence the concept of 'list'. By 'list' we mean 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. Our underlying hypothesis is that this highly abstract structure might encompass – and possibly be ultimately responsible for – a number of linguistic phenomena that are normally ascribed to different traditions and domains, and thus treated separately.

Since the 1980s, two parallel traditions highlighted the existence of list structures in language, and in particular in spoken language. On the one hand, Conversation Analysis (cf. Jefferson 1990, Lerner 1994, Selting 2007, among others) drew the attention on the existence of lists in conversations by showing that, through the dialogic co-construction of lists, speakers accomplish a range of "interactional businesses" (such as turn taking, topic shift, expression of surprise, etc.). In this perspective, lists have been regarded mostly as (joint) conversational tasks and ideally embrace a wide range of phenomena, from repetition (e.g. Bazzanella (ed.) 1996, 1999; Tannen 2007) to correction/completion/self-repair (Lerner 1994, Levelt 1983) to dialogic resonance (e.g. Dubois & Giora 2014).

On the other hand, within the framework of the syntactic analysis of spoken language (French), Claire Blanche-Benveniste and colleagues (cf. e.g. Blanche-Benveniste *et al.* 1979, Blanche-Benveniste 1990) identified a (neglected up to that point) syntactic object defined as the multiple realization of one and the same syntactic position in a dependency structure, i.e. a list structure. Blanche-Benveniste (1990) claims that lists express, on the syntagmatic dimension, the cognitive exploration of the paradigmatic dimension that speakers perform during the production of an utterance. According to Blanche-Benveniste, such an exploration of the paradigmatic dimension (which is thus linearized in the syntagmatic dimension) is at play in disfluency, lexical search, as well as in coordination.

Beside disfluency, lexical search and coordination, we would like to add another dimension – building on previous (partially unpublished) work (Bonvino *et al.* 2009, Masini & Pietrandrea 2010, Kahane & Pietrandrea 2012, Masini *et al.* 2012) – that attempts at identifying a number of functions fulfilled by lists. Indeed, lists were found to convey a number of non-compositional meanings in addition

to the more literal ones. The latter property of lists is especially relevant, as we will see, since it allows us to connect lists at the syntactic or discourse level (which are the object of study of both Conversation Analysis and Blanche-Benveniste's approach) with morphological and lexical phenomena with similar structural and semantic features, such as coordinate compounds, irreversible binomials, and reduplication.

For sure, lists are not something we can simply relegate to the periphery of language. In 2012, the *Rhapsodie* corpus of spoken French was released (Lacheret *et al.* 2018), which provides a syntactic annotation of about 30.000 words (2240 utterances) of spoken French, including a thorough annotation of all types of lists (http://projet-rhapsodie.fr). In the *Rhapsodie* corpus, 1492 lists were identified out of 2240 utterances (Kahane *et al.* 2018), which proves the pervasiveness of lists in (spoken) language and their relevance for both theoretical and descriptive linguistics. Even more interestingly, the exploration of the *Rhapsodie* corpus has showed a systematic association between some formal properties of lists (e.g. number of conjuncts, presence or absence of a syndesis, semantic relation between the conjuncts) and their semantic and interactional functions (Kahane *et al.* 2018). This evidence leads us to hypothesize that lists – as already proposed by Masini & Pietrandrea (2010) and Bonvino *et al.* (2009) – might be regarded as conventional associations of complex aggregates of formal features and semantico-interactional functions, i.e. as 'constructions' in the sense of Construction Grammar (Goldberg 1995, 2006, Hoffmann & Trousdale (eds.) 2013).

Beside offering a first bird's-eye-view characterization of listing as a unified phenomenon, in terms of both form and function, this article aims precisely at assessing the theoretical possibility to analyze lists as constructions. In doing so, we aim at setting the scene for a more systematic study of lists, from both a qualitative and a quantitative point of view. The discussion is mainly based on data from English,[1] but most observations and analyses are deemed valid for and can be extended to other languages such as French and Italian.

The article is structured as follows. Section 2 provides some preliminary data and exemplifications in order to give a glimpse of what might fall under the realm of 'lists'. Section 3 focuses on the structural side of lists, by providing their building blocks as well as ten parameters of variation that are deemed to play a role in distinguishing different types of lists. Section 4 addresses the semantics and pragmatics of lists: on the one hand, we distinguish between denotation and formulation lists; on the other, we illustrate the vari-

ous meanings they may carry, some of which are non-compositional. A first functional typology of lists is then proposed. In Section 5 we illustrate a number of form-meaning correspondences that emerge from a closer observation of lists, focusing on (non-compositional) denotation lists. We propose to analyze denotation lists as 'constructions' and propose a possible constructional network. We then discuss the status of formulation lists and other relevant open questions. Section 6 contains some concluding remarks.

2. A first glimpse of list variation across levels of analysis

Since the goal of the present study is to provide (good) reasons to support a unified account of different phenomena under the label of 'listing', we first offer a general overview of the kind of phenomena we are going to deal with, or at least some of them.

Syntactic coordination (Haspelmath 2004, 2007; Godard & Abeillé 2005; Mauri 2008) is probably the most obvious kind of list we may think of. Despite differences in the exact definition of coordination provided by formal and functional approaches (cf. Johannessen 1998, Camacho 2003, and Rebuschi 2005 for formal definitions; Dik 1968, Haspelmath 2004 and 2007, and Mauri 2008 for functional ones), at the basis of any definition of coordination lies some idea of structural and semantic symmetry, which is what distinguishes it from dependency relations. The set of relations that may be expressed through syntactic coordination is language-specific, with languages that make extensive use of syntactic coordination and parataxis for a wide range of situations (cf. Mithun 1988 on the grammaticization of coordination), and languages characterized by the systematic use of chaining strategies, whereby non-finite verbal forms typically follow each other and syntactically depend on a final, finite form for the expression of categorial distinctions such as tense, aspect and mood (cf. Longacre 1985).

Syntactic coordination typically includes conjunctive (1) and disjunctive relations ((1a), (2)), which may link words, phrases and clauses, and do not have subordinate counterparts, i.e. coordination is the only strategy available to express 'and' and 'or' relations. As can be observed in (2), the presence of an overt connective is not necessary.[2]

(1)   a. *We inspect for* buyers or sellers *of* resale homes, new homes, and homes under construction (enTenTen15)

  b. *A recent UN report defines youth development as the ongoing process in which all young people are* engaged and invested (enTenTen15)

(2) *Note* any environmental, food, or drug allergies, *as well as the specific type of reaction*, *e.g.* anaphylaxis, rash, itching (enTenTen15)

In addition to conjunction and disjunction, there are also a number of further interclausal relations that are frequently expressed by syntactic coordination across languages, for which a subordination strategy is also available. Concessivity and causality exemplify the case in point: in (3a) and (4a) the coordinate constructions with *but* and *for* are compared to their subordinate counterparts with *although* (3b) and *since* (4b). Crucially, only conjunction and disjunction may link more than two items in a list, while interclausal relations such as concessivity and causality are typically limited to linking two states of affairs:

(3) a. [*He certainly made a good contact but his direction was poor*] (enTenTen15)
     b. *Although his direction was poor, he certainly made a good contact*

(4) a. *He reminds me that* [*we should not fear for He is with us*]. (enTenTen15)
     b. *He reminds me that, since He is with us, we should not fear*

In examples (1)-(4) we observe the syntagmatic concatenation of two or more units of the same type (be it words, phrases or clauses) that are on a par with each other, either as arguments in the predicate structure (in (1) and (2)), or as clauses within the same utterance (in (3) and (4)).

Syntactic coordination is a sentence-level fact that may concern phrases or clauses. However, coordination – and hence, to some extent, listing – also acts at the morphological and lexical level (cf. Masini & Arcodia *this issue*). More specifically, there are at least three structures that appear to conform to our general definition of list:[3]

i)   coordinate compounds (cf. Wälchli 2005; Arcodia *et al.* 2010):

(5) a. Mordvin   *t'et'a.t-ava.t*   'parents' (lit. father.PL-mother.PL)
     b. Chuvash   *sĕt-śu*   'dairy products' (lit. milk-butter)
     c. English   *singer-songwriter*

ii) irreversible binomials (cf. Malkiel 1959; Lambrecht 1984; Masini 2006, 2012):

(6) a. English   *sooner or later*
     b. German   *Messer und Gabel*   'knife and fork'
     c. Italian   *vivo e vegeto*   'alive and kicking' (lit. alive and vigorous)

iii)   full reduplication (cf. a.m.o. Moravcsik 1978; Wierzbicka 1986; Botha 1988; Gomeshi *et al.* 2004; Hurch (ed.) 2005; Stolz 2009; Stolz *et al.* (eds.) 2011):

(7)   a. Italian   *nero nero* 'very black' (lit. black black)
      b. Mokilese   *roarroar* 'to be shuddering' (lit. give_a_shudder give_a_shudder)

Including morphological objects and multiword expressions in our picture is motivated not only by structural resemblance, but also by semantic similarity, as we will see in more detail in Section 4.

As noted by Gil (2005), among others, full reduplication is closely related to repetition, the former being the iteration of linguistic material at the word level, whereas the latter applies at the syntactic and discourse level. Therefore, reduplication and repetition are viewed as two poles of a continuum, as two instantiations of the same kind of mechanism, rather than two separate phenomena. In the current picture, both would fall within listing or, better, a specific kind of listing where the units being concatenated are not just of the same type but also phonologically identical.

Lists also operate at the discourse level. Let us examine the text in (8):

(8)   *Simply put, you want the best of everything. You want security and freedom. You want passion and harmony. You want friendship and wild romance. You want surprises and predictability. You want it all.* (Google)

We first identify a list of iterated clauses. *You want* is repetead six times: the first and the last occurrences are followed by universal quantifiers (*everything* and *all*), while the intermediate occurrences are followed by couples of items. Each of these couples is a list in itself, but if we consider all couples of items occupying the object position of *want*, we may identify a further, embedded list, formed by *security*, *freedom*, *passion*, *harmony*, *friendship*, *wild romance*, *surprises*, *predictability*. Not all these elements can be claimed to be syntactically coordinated: indeed, they realize the object position of four different occurrences of the verb *want*. Still, they are somehow related to one another. How they are related becomes more evident if we represent the text in (8) with the aid of the so-called 'grid' system developed by the GARS equipe in Aix en Provence (see (9)). Grids help defining a 'discourse configuration', i.e. a discourse level unit that is formed by the sequence of elements that instantiate or repeat a given dependency structure (cf. Blanche-Benveniste *et al.* 1979, Duvallon 2006, Bonvino 2005; see also Pietrandrea 2008, Masini & Pietrandrea 2010). Looking at (9), we do recognize a list, since all objects of *want* realize one and the same syntactic position (not within a sentence but) within a discourse configu-

ration. Indeed, discourse configurations define a domain where many phenomena of listing can be detected, even when they are scattered throughout the text, rather than being contiguous.

(9)   Grid representation of (8)

1	you	want	*the best of everything*
2	you	want	*security*
3			*and freedom*
4	you	want	*passion*
5			*and harmony*
6	you	want	*friendship*
7			*and wild romance*
8	you	want	*surprises*
9			*and predictability*
10	you	want	*it all*
	SBJ	PRED	OBJ

In this respect, it is worth to mention that lists can also be co-constructed by two or more speakers in dialogues and conversations (see Section 4.3). An example is given in (10), taken from the Santa Barbara Corpus (SBC), where the main referent in object position is realized four times through the intervention of two speakers. Again, a list can be recognized, despite hesitations and insertions (*u=m*, *like um*).

(10) KEN: *And I got all these great*, *u=m*, *photographs of*, *.. of like um*,
      JOANNE: *posters*, *and demos*.
      KEN: *election posters*, *you know*,   (SBC015)

Ken	1	And	I	got		all these great				
	2						u=m	*photographs*	of	
	3								of	like um
	4							*posters*		
	5			and				*demos*		
Joanne	6							*election posters*		you know
			SBJ	PRED	OBJ					

In conclusion, it seems possible to detect the kind of item concatenation that we are calling here 'listing' at different levels of analysis, and at different levels of complexity, from lexicon/morphology to syntax and discourse. The aim of this paper is to identify differences and commonalities between listing phenomena, starting from the hypoth-

esis that all these patterns share a core set of structural features and show a certain degree of functional and formal variation, which can be accounted for on the basis of a limited number of parameters. In the next section, we will focus on the structural side of lists, starting from the common core that can be argued to define listing phenomena *per se* (Section 3.1), then continuing with the detailed discussion of the parameters that allow to classify lists on the basis of their structural variation. A functional typology of lists will be then described in Section 4.

3. The structural side of lists

3.1. List structure
We mentioned in previous sections that the phenomenon of listing encompasses a wide variety of linguistic phenomena and expressions. In spite of this variation, we argue that it is nonetheless possible to identify and define a common basic architecture of lists, working as a scheleton on which the observed variation is grafted.

Formally speaking, lists can be described as linguistic patterns defined by a minimal structure made of two list members or conjuncts – X_1 and X_{LAST} – that have the same categorial properties and are on a par with each other, occupying the same position within the larger construction they are part of.

In addition to X_1 and X_{LAST}, a number of optional elements concur to structure a list. First of all, more conjuncts, i.e. more Xs: indeed, (some kinds of) lists are often made of three conjuncts, as noted for instance in the Conversation Analysis tradition (e.g. Jefferson 1990).[4] Second, we may find other types of elements – here dubbed 'list markers' (**LM**) – that may contribute to construct a list, namely:

i)   COORDINATORS or CONNECTIVES of various kinds that link the conjuncts (e.g. *and*, *or*);
ii) LIST COMPLETERS, such as so-called 'general extenders' (e.g. *and the like*, *etcetera*), which indicate "additional members of a list, set, or category [and combine] with a named exemplar (or exemplars)" (Overstreet 1999: 11), among other functions;

Third, following Selting (2007), we identify what we may call the 'list surroundings' (**LS**):

iii) a PROJECTION COMPONENT, i.e. a 'more-to-come' element that is then detailed or expanded by the list (e.g. *the best of everything* in (9)): it can be either a 'pre-detailing component' (cataphoric expressions) or a 'general formulation';[5]
iv) a POST-DETAILING COMPONENT, "completing the structure around the list and at the same time tying the list back to the ongoing topic or activity" (an example being *you want it all* in (9)).

In addition, especially in the presence of a projection component, we may find LIST INTRODUCERS, which appear at the beginning of certain types of lists (e.g. *for instance*, *such as*, *like*).

Finally, lists can be interrupted – at various points along the list itself, especially in spoken language – by insertions that express metalinguistic, modal, or other types of procedural comments about the semantic content of the conjuncts, as well as hesitations (cf. *like*, *u=m* in (10)).

Figure 1 illustrates the abstract structure of a list. In order to create a list, the only mandatory feature is the presence of at least two conjuncts (in bold), whereas all other elements are optional.

	PRO-C	projection component
	LI	list introducer
	X_1	**conjunct 1**
	CO	coordinator / connective
	X_2	conjunct 2
INSERTIONS	CO	coordinator / connective
	X_3	conjunct 3
	…	…
	CO	coordinator / connective
	X_{LAST}	**conjunct last**
	LC	list completer
	POST-C	post-detailing component

Figure 1. List skeleton (vertical).

The very same structure can also be represented horizontally as in Figure 2, where: braces '{ }' delimit the list; the pipe sign '|' separates the conjuncts; round brackets '( )' indicate optionality; the circumflex accent '^' marks list markers, namely coordinators/connectives and list completers; and finally square brackets [ ] enclose the list surroundings, namely projection components (including list introducers) and post-detailing components. In addition, as already mentioned, we may have insertions at virtually any point of the list structure.

([PRO-C]) ([LI]) {**X_1** | (^CO) (X_2) | (^CO) (X_3) | … | (^CO) **X_{LAST}** | (LC)} ([POST-C])

Figure 2. List skeleton (horizontal).

As a way of illustration, see the example in (11), rewritten in (12) using the notation described in Figure 2: *seasonal bounties* is the projec-

tion component followed by the list introducer *that may include*, while the list has four conjuncts (here in roman) and a list completer (*and the like*).

(11) *it's great to fill up on seasonal bounties that may include fresh peaches*, *melons*, *apples*, *pears and the like* (enTenTen15)

(12) *it's great to fill up on* [*seasonal bounties that may include*] {fresh peaches, | melons, | apples, | pears | ^*and the like*}

Throughout the paper, we make use of this notation (in full or in simplified version) whenever necessary to better illustrate the structure of the list and its elements.

3.2. Structural parameters for list classification

The very schematic structure defined in Figures 1 and 2 lends itself to the instantiation of actual expressions of quite different shapes. In this section we identify a set of ten parameters which, in our view, may prove to be relevant to capture the structural variation of lists and by consequence to provide a formal classification of them, namely:

- PARAMETER 1.   Number of conjuncts
- PARAMETER 2.   Presence *vs* absence of syndesis
- PARAMETER 3.   Nature of syndesis
- PARAMETER 4.   Complexity
- PARAMETER 5.   Category of the conjuncts
- PARAMETER 6.   Determination (for nominal conjuncts)
- PARAMETER 7.   Semantic relation between the conjuncts
- PARAMETER 8.   Distribution of the conjuncts across illocutionary units and/ or speech-turns
- PARAMETER 9.   Prosody of the list (closure *vs* openness)
- PARAMETER 10.   Presence and type of other list markers and list surroundings

According to PARAMETER 1, lists may display a variable number of elements. As already said, lists can be composed of (minimum) two conjuncts (13), but often display three (14) or even more (15) elements. On this base we distinguish between binary lists, ternary lists and lists with more than three conjuncts:

(13) BINARY LIST: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) $\mathbf{X_2}$} ([POST-C])
You may not find {a knife | ^*and* a fork} *on the table unless you are in a decent restaurant.* (Google)

(14) TERNARY LIST: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) $\mathbf{X_2}$ | (^CO) $\mathbf{X_3}$} ([POST-C])
All he had was {a knife | ^*and* a fork | ^*and* a spoon} *that he carried inside his coat pocket* (Google)

(15) LIST WITH MORE THAN THREE CONJUNCTS (see Figure 2)
At school, teachers aren't just in charge of what you learn, but also when you {sit, | stand, | talk, | go to the loo}. (ukWaC)

As for PARAMETER 2, lists can be syndetic or asyndetic. In the former case, at least one of the conjuncts (or the POST-C) is introduced by a coordinator (16), whereas in the latter no coordinator shows up (17).

(16) SYNDETIC LIST: ([PRO-C]) ([LI]) {X_1 | ... | ^CO X_{LAST} | (LC)} ([POST-C])
Is there {a mailing list | ^or forum, | ^whatever,} *I don't care the medium that the Arberesh in Italy actually use?* (Google)

(17) ASYNDETIC LIST: ([PRO-C]) ([LI]) {X_1 | ... | X_{LAST} | (LC)} ([POST-C])
[…] *she still had this baby side that loved* [any kind of animal] {dogs | cats | fishes | horses} [it didn't matter] (Google)

In the case of syndetic lists we may further distinguish between different types of syndesis (PARAMETER 3), mainly depending on the semantic properties of connectives. As briefly noted in Section 2, this parameter identifies two main types of lists, namely conjunctive (18) and disjunctive (19) lists, together with possible further types, such as adversative lists (20), depending on the presence of the corresponding coordinator. The three types of list typically convey an additive ('and'), an alternative ('or') and a contrastive ('but') meaning, respectively, although this may not always be the case.[6]

(18) CONJUNCTIVE SYNDETIC LIST: CO_AND
We spent 8 days together, {night | ^and day}, *building this thing.* (Google)

(19) DISJUNCTIVE SYNDETIC LIST: CO_OR
You won't be able to detect {the bread | ^or the milk} *in the burger* […] (Google)

(20) ADVERSATIVE SYNDETIC LIST: CO_BUT
What Alter Nativas proposes is a good way to improve life conditions in {poor | ^but beautiful} *countries*. (Google)

According to PARAMETER 4, the conjuncts of a list (Xs) may be realized by linguistic expressions of different complexity: single words (21), phrases (22) or entire clauses (23). In addition, we may want to include lists of bound morphemes, as in *intra- and inter-linguistic*.

(21) LIST OF WORDS: X=WORD
The {Stars | ^and Stripes} *are flying over the U.S. embassy in Havana, Cuba for the first time in 54 years.* (Google)

(22) LIST OF PHRASES: X=PHRASE
However, it has to be considered that English is not the same if it used by {an American, | an Italian, | a Greek, | a Norwegian, | an Estonian | ^*or others*}. (Google)

(23) LIST OF CLAUSES: X=CLAUSE
{I waited | ^*and* she never brought the subject up}. (Google)

In addition, conjuncts can be realized by words and phrases of any category (PARAMETER 5), especially major categories, such as nouns (24), verbs (25), adjectives (26), and adverbs (27), but also minor categories, such as prepositions (28), determiners (29), auxiliaries (30).

(24) LIST OF NOUNS: X=N
It WILL acquire {different words, | pronunciation | ^*and* grammar}. (ukWaC)

(25) LIST OF VERBS: X=V
The intention is to {identify, | reveal, | develop | ^*and* record} *vocabularies that might be useful.* (ukWaC)

(26) LIST OF ADJECTIVES: X=ADJ
But we might know what it is like to be {obscure | ^*or* poor | ^*or* lonely}. (ukWaC)

(27) LIST OF ADVERBS: X=ADV
Europeans did not, {then | ^*or* now}, *constitute all mankind.* (ukWaC)

(28) LIST OF PREPOSITIONS: X=P
[…] *I know that he often has to take a lot of crap from people* {on | ^*and* off} *the set.* (ukWaC)

(29) LIST OF DETERMINERS: X=DET
[…] *the building of burial pyramids in Pharaonic Egypt itself became* {a | ^*or* the} *substantial motor of that ancient economy.* (ukWaC)

(30) LIST OF AUXILIARIES: X=AUX
The matter {is | ^*or* has been} *the subject of court proceedings.* (ukWaC)

PARAMETER 6 has to do with the fact that, when we have lists of nouns and noun phrases, we may find different kinds of determination. Since this might have a role in identifying different kinds of lists, we distinguish, accordingly, between lists with definite (31) or indefinite (32) determiner, and lists with bare nouns (33).

(31) LIST OF NOUNS WITH DEFINITE DETERMINER
We might see {the cat | ^*and* the dog} *as symbolizing masculine and feminine characteristics* […] (Google)

(32) LIST OF NOUNS WITH INDEFINITE DETERMINER
Once upon a time in a fairy tale land {a cat | ^*and* a dog} *were friends.* (Google)

60

(33) LIST OF BARE NOUNS
They fight like {cat | ^*and* dog} *but they're still together after 30 years.* (Google)

A crucial parameter for our analysis (PARAMETER 7) is the semantic relation holding between the listed items. We consider this as a structural parameter, despite its inherent semantic nature, because what is here considered is the type of relation that characterizes the internal composition of the list set: in this sense, the semantic relation among the conjuncts functions as a structural constraint. We apply the basic distinction proposed by Wälchli (2005) between natural coordination, when the conjuncts convey "semantically closely associated concepts" (2005: 1), and accidental coordination. As a result, we obtain lists of semantically unrelated (34) and semantically related (35) elements.

(34) ACCIDENTAL LIST
{books | ^*and* rats}

(35) NATURAL LIST
{teachers | ^*and* pupils}

The conjuncts in natural lists are very often related from a lexico-semantic viewpoint. Typically, we find opposites (36), co-hyponyms (37) and synonyms (38).[7]

(36) LIST OF OPPOSITES
You see all kinds from {ugly | ^*and* beautiful} *to* {fat | ^*and* skinny} *to* {tall | ^*and* short} *to* {old | ^*and* young} (Google)

(37) LIST OF CO-HYPONYMS
That isn't to say that he's all {roses | ^*and* daisies} *now.* (ukWaC)

(38) LIST OF SYNONYMS
[…] *that is why they had such a* {quick | ^*and* swift} *answer to this matter.* (ukWaC)

In addition, we may argue that an extreme case is constituted by lists with identical conjuncts, which expand our typology to repetition and/or full reduplication (see (39)).

(39) LIST OF IDENTICAL ELEMENTS
a. *This album is* {really | really | really | really | really} *good.* (ukWaC)
b. *I'm a* {bad | bad} *boy.* (ukWaC)
c. *We cannot go on for* {years | ^*and* years} *waiting for Godot.* (ukWaC)
d. MARY: {That's right.|}
{|… That's right.} (SBC007)

According to PARAMETER 8, the conjuncts of a list can be uttered within one and the same illocutionary unit, like examples (36)-(38) above, or they can spread across several illocutionary units (40). Sometimes, the conjuncts of a list can be realized in different speech turns, either uttered by one and the same speaker (41), or by different speakers (42). In the latter case the list is 'co-constructed'.

(40) LIST UTTERED ACROSS TWO OR MORE ILLOCUTIONARY UNITS
    LAJUAN: {*I've always had to go ba=ck and forth,* | *I've always traveled on my own,* | *I've always flown everywhere by myself,* | *(H) .. uh, .. I've always done everything.* | *I've had to deal with my fa=ther*} (SBC044)

(41) LIST UTTERED ACROSS DIFFERENT SPEECH TURNS (SAME SPEAKER)
    LAJUAN: *.. I've always been very indepe=ndent, .. and a lot of it had to do* {*with like me growing up the way I did,* | *with my .. my um, .. my mother dying,#*
    (CAM: *... Mhm,*)
    LAJUAN: *#younger,* | *and then living with my one aunt,* |} //*and then my I- aunt died when I was twelve,* // {| *and then moving to another aunt, which was moving up he=re*} (SBC044)

(42) LIST UTTERED ACROSS DIFFERENT SPEECH TURNS (DIFFERENT SPEAKERS)
    EVELYN: *... And uh, because* {*she was very pleased when he asked her.* |}
    JANICE: *... ([Ha-] --)*
    LINDA: {| *^and she admired him*} (SBC023)

Still another criterion (PARAMETER 9), and a quite important one, is the prosodic marking of the list, which, according to Selting (2007) and Matalon (2017), applies to spoken discourse. According to Selting (2007) and Matalon (2017) (who work on German and Modern Hebrew, respectively), it is possible to distinguish between prosodically open and prosodically closed lists. A prosodically open lists is constructed by a concatenation of intonation units (Chafe 1994) that share two essential features: they end with a relatively high rise-and-fall pitch movement, and their last syllables are lengthened compared to the usual final lengthening of intonation units (43). A prosodically closed list, instead, presents a final falling pitch on the tonal syllable of the last listed element (44).

(43) PROSODICALLY CLOSED LIST
    a. *People will always prefer* {*black- |and-white*} *over shades of grey* […] (Google)
    b. *This is a story about* {*a man,* | *a dog,* | *a cat* | *^and a mouse*}. (Google)

(44) PROSODICALLY OPEN LIST
    a. *The boat speeds up and you can see how she* {*runs,* | *runs,* | *runs*}. (Google)
    b. *I don't know* {*who he is,* | *what he stands for,* | *where he wants to go,* | *^etc.*} (Google)

The last important parameter that should be considered (PARAMETER 10) is the presence and type of other list markers (beyond coordinators) and of elements filling the list surroundings (i.e. projection component, list introducer, post-detailing component), as well as insertion positions. The elements filling these positions can be of various nature: for instance, we may have conjunctive (45) or disjunctive ((46)-(47)) general extenders in post-detailing position (cf. Overstreet 2005), which may operate at a conceptual, denotational level (45)-(46) or at a metalinguistic, formulation level (47), with important effects on the interpretation of lists (see also Section 3). We may also have indicators of reformulation (Bazzanella 1994) and other kinds of discourse markers as insertions (48).

(45) LIST WITH DENOTATION-LEVEL CONJUNCTIVE GENERAL EXTENDER IN POST-DETAILING POSITION
How do I draw [*polygons*] {(*triangles*, | *pentagons*, | *hexagons*, | *octagons*, ^and so on)}*?* (Google)

(46) LIST WITH DENOTATION-LEVEL DISJUNCTIVE GENERAL EXTENDER IN POST-DETAILING POSITION
Whether, *then*, {*you eat* | ^*or drink* | ^or whatever you do}, *do all to the glory of God.* (Google)

(47) LIST WITH FORMULATION-LEVEL DISJUNCTIVE GENERAL EXTENDER IN POST-DETAILING POSITION
Landlord, *said I*, *tell him to stash his* {*tomahawk* |} *there*, {| ^*or pipe*, | ^or whatever you call it}. (Google)

(48) LIST WITH FORMULATION-LEVEL INSERTION
   a. *Another important tree service is* {*tree cutting* | ^*or* in other words *tree pruning*} (enTenTen15)
   b. *I would love to just* {*go draw portraits in Times Square* | ^*or* you know *go fishing* | ^*or have a garden*} (enTenTen15)

List markers, list surroundings and insertions, as we know, may well lack in a list. When all these elements lack, we speak of 'bare lists':

(49) BARE LIST
How might different payment and reward schemes be used to motivate: {*managers* | *teachers* | *sales people*}*?* (ukWaC)

This overview of the parameters involved in the construction of lists allow us to catch a glimpse of the important variation lists are subject to: lists, indeed, may assume very different forms and configurations. However, the structural side of lists is not the only element of variation that needs to be described, since their functional side is quite as rich and complex.

4. The functional side of lists

Semantically speaking, a list can be regarded as a 'semantic operator', because it takes a number of conjuncts as input and provides as output an expression that specifies the connection existing between the conjuncts.

As argued by Barotto & Mauri (*this issue*), every list construction – independently of the semantic operation performed – triggers the presupposition of some underlying category subsuming the list members. This becomes evident when the search for the underlying category leads to compare items that are usually not conceived as having something in common, as in (50), where a clear derogatory effect is achieved: the list construction activates the presupposition that dogs and Chinese people share some common property P, which makes them exemplars of the same category.

(50) *No entry for* {*dogs*$_P$ | ^*and Chinese people*$_P$} (Lang 1984: 35)

The existence of some underlying common category lies at the presupposition level. If we move to the asserted content, i.e. what is directly communicated by the speaker, we can identify different types of list, depending on the type of semantic operation performed by the list on the conjuncts. In this section we provide a functional taxonomy of such list types, starting from a superordinate distinction between (what we call here) DENOTATION LISTS (Section 4.1) and FORMULATION LISTS (Section 4.2).[8] As we will see, the former operate at a conceptual or referential level, whereas the latter operate at a metalinguistic level.

4.1. Denotation lists

Denotation lists build new, complex denotations (i.e. references, properties, predications) by merging or exploiting the denotations of the conjuncts.

The construction of the new denotation is often quite predictable from the meanings of the conjuncts and of list markers, especially connectives, if present. These lists basically correspond to canonical coordination, which may convey three main kinds of meaning: additive ('and'), contrastive ('but') and alternative ('or') (Haspelmath 2007, Mauri 2008).

In 'additive' denotation lists, the denotation of the list corresponds to the combination of the denotations of the conjuncts. The list has therefore an enumerative function. As the examples in (51) show, the additive function of the list is not necessarily encoded by a conjunctive coordinator, which may well be missing.

(51) ADDITIVE DENOTATION LIST
    a. *Empire Records is packaged in the {old | ^and useless} snapper case.* (ukWaC)
    b. *Far too may people claimed that they wanted to retain {old | useless} buildings.* (ukWaC)

'Contrastive' denotation lists are a particular case of additive coordination. The denotation of the list corresponds to the combination of the denotations of the conjuncts, but this union is put forward as unexpected (52). Again, the contrastive function is not necessarily encoded by an adversative coordinator.

(52) CONTRASTIVE DENOTATION LIST
    a. *Other issues concern restoration of {old | ^but useful} buildings* [...] (ukWaC)
    b. *Ten years of love, hate, fights, bickering, love-making, kisses.* [...] *{It was ugly, | it was beautiful.}* (Google)

'Alternative' denotation lists are lists that mark the denotations of the conjuncts as potentially replaceable with one another (53a). Once again, the alternative function is not necessarily encoded by a disjunctive coordinator: in (53b), for example, it is the adverb *maybe* that marks the conjuncts as potentially substitutable with one another.

(53) ALTERNATIVE DENOTATION LIST
    a. [...] *no one seemed {either to notice | ^or care}.* (ukWaC)
    b. *Another thing is that yes they used it in the Vietnam war but {maybe the docs prepared it a bit first, | maybe they filtered it, | maybe they... who knows ...}* (Google)

In some cases the meaning of lists is unexpected. Let us take for instance the English expression *alive and kicking*, meaning 'prevalent and very active': this meaning does not follow from the meaning of the conjuncts, i.e. it is not strictly compositional. One may be tempted to ascribe the non-compositional nature of the meaning of this construction to the fact that *alive and kicking* is an irreversible binomial, hence a fixed, multiword expression listed in our mental lexicon. However, the same mechanism, yielding non-compositional constructs, is at play with lists that are not stored lexical items, but created online, like those in (54).

(54) a. *Wide range of pet-related products and gifts for {dogs, | cats, | ^and birds}.* (ukWaC)
     b. [...] *the seat post is very long to allow for {tall | ^and short} riders alike.* (ukWaC)

Indeed, we tend to interpret more naturally the list in (54a) as denoting the hypernym *pet* rather than a logical conjunction of dogs, cats and birds:[9] the products and gifts are *pet-related*, not just for dogs, cats and birds. In the same vein, we tend to interpret more

naturally the list in (54b) as a universal quantification over the class of sizes (something corresponding to *for riders of all sizes*) rather than as the logical union of tall riders and short riders, especially given the fact that *tall* and *short* are gradual adjectives (which implies that average-height riders also exist, and are also captured by the formulation in (54b)).

At this point we might wonder what kind of non-compositional meanings are found in lists, a question we address in the following section.

4.1.1. Non-compositional lists between morphology and syntax/discourse
Quite interestingly, syntactic and discourse-level (denotation) lists may convey some of the non-compositional meanings expressed by so-called 'co-compounds' in the languages of the world. Wälchli (2005: 137ff.) offers a typologically informed classification of these meanings (cf. also Haspelmath 1993), including the following categories: additive, generalizing, collective, alternative, approximate, synonymic, ornamental, imitative, figurative, and scalar. Many of these meanings are also shared by irreversible binomials, as showed by Masini (2006, 2012) for Italian (but the results can be extended to English, too).

Taking Wälchli's classification as a starting point, we could distinguish four types of non-compositional meanings conveyed by list structures above the word level, and hence of (denotation) lists in general:[10]

- GENERALIZING
- CATEGORIZING (cf. 'collective' in Wälchli's terminology)
- APPROXIMATING
- INTENSIFYING[11]

GENERALIZING DENOTATION LISTS are lists whose semantic function is to create a reference to a class out of the conjuncts and to denote a universal quantification over that class. This is what happens in certain co-compounds (55) as well as in binomials (56).

(55) Khalkh   *ödör šönö.güj* (day night.without) 'day and night' (Wälchli 2005: 138)

(56) English   *day and night* (= all the time), *high and low* (= in all directions)
      a. *The poor mother wept* day and night (ukWaC)
      b. *They searched the house* high and low, *but could not find Norman anywhere* (ukWaC)

However, the same semantic mechanism can be at work with freely created syntactic lists, as examples (57-59) illustrate. Also in

this case, the listing of the conjuncts does not serve the function of denoting their logical union, rather: (i) it creates a reference to a class – the class of ages in (57), the class of sizes in (58), the class of the aspects of cosplay in (59); and (ii) it encodes a universal quantification over this class (i.e. a logical constant which is interpreted as 'given *any*' or 'for *all*'). So, for example, the Generalizing Denotation List in (57) can be paraphrased by 'for all ages', the one in (58) by 'men of all sizes' and the one in (59) by 'all aspects of cosplay', precisely as we paraphrase *day and night* by 'all the time' (universal quantification over the class of time) and *high and low* by 'in all directions' (universal quantification over the class of space).

(57) *Her second book*, *The Adventures of Grobje and the Crew of Pirates is a book for* {*children* | ^*and adults*} *that discusses the importance of safety in the work place*. (Google)

(58) *Here are our fashion tips for* {*skinny* | ^*and fat*} *men*. (Google)

(59) {*I have seen the beautiful side of cosplay* | ^*and I have seen the ugly side of cosplay*.} (Google)

The same generalizing effect can be obtained at a more discursive level, as exemplified in (60) (from the Santa Barbara Corpus), where, by mentioning *England in nineteen ten* and *America in nineteen ninety-three*, reference is actually made to *any time* (which actually occurs as a projection component).

(60) PATTY: (H)*It can be read at any time*,
                .. {*it can apply to England in nineteen ten*, |
                ... ^*or it can apply to America in nineteen ninety-three*} (SBC023)

CATEGORIZING DENOTATION LISTS have the function of denoting the category to which the conjuncts belong to. The conjuncts are generally co-hyponyms and concur to create a new reference that concides with a possible hypernym.

(61) Chuvash *sĕt-śu* (milk-butter) 'dairy products' (Wälchli 2005: 138)

(62) English *knife and fork* 'cutlery'[12], *bra and panties* 'lingerie'
      a. *Even young children are expected to eat properly with* knife and fork. (ukWaC)
      b. *Don't leave pictures of yourself in* bra and panties […] *on your work PC.* (ukWaC)

This mechanism of category-creation or hypernym-creation is found in co-compounds (61) and binomials (62), as well as in syntactic

or discourse-level lists created online. Indeed, in examples (63-66), the extension of each of these lists goes beyond the compositional union of the referents of the conjuncts. In other words, the following lists are inherently non-exhaustive, and further items could be added without changing the meaning of the list construction.

(63) {*Chimps | ^and dogs | ^and bats | ^and cockroaches | ^and people | ^and worms | ^and dandelions | ^and bacteria | ^and galactic aliens} are the stuff of biology* (Google)

(64) *he was wondering how and when he would get back home to his family, no {buses, | trains | ^etc.} being available.* (ukWaC)

(65) {*I campaigned for Obama. | I voted for Obama.} Now why shouldn't I celebrate with Obama?* (Google)

(66) *Everything in his life is boring. {He does not want to go to school. | He does not want to wear clean clothes. | He does not want to sleep in a soft bed every night.}* (Google)

Example (63), for instance, contains a list of bare nouns denoting living organisms, however these are not truly referential: the list does not refer to a set formed exactly by the mentioned living beings, but it rather refers to the mentioned living beings as pure exemplars, thus allowing for the existence of other similar entities; in other words, it refers to the larger class of living beings. Obviously, cats or viruses are also part of biology, even though they are not explicitly mentioned in the list. So, the listing of the conjuncts in this kind of lists is used to denote the whole category the conjuncts refer to. The same applies to the other three examples, where the list refers to, respectively, public transports (64), supporting Obama events (65), depression-related situations (66).

This category-creating function is closely related to so-called 'ad hoc categories' (Barsalou 1983, 1991, 2010), namely categories that are constructed online by the speaker(s), for specific and context-dependent purposes, and are not stored in our long-term memory (e.g. 'activities to do on a rainy Sunday afternoon'). Lists are a typical means for the expression of ad hoc categories (Mauri 2017, Barotto & Mauri *this issue*), since they allow to identify some exemplars which are then used as a starting point for further inferential reasoning. While every list construction presupposes some underlying category to which the listed items can be traced back, in Categorizing Denotation Lists the construction of a category is not limited to the presupposition level, but is directly communicated by the speaker. The category is indeed a discourse referent in all respects. A crucial

characteristic of this type of lists is context-dependency: in order to correctly abstract the category being referred to, the semantic properties of the list members have to be anchored to context. Indeed, the category being communicated does not necessarily coincide with the hypernym of the linked items, but may be defined by a highly specific context-relevant property that the list members share. And even when the category does coincide with the hypernym, the latter might be a direct or indirect hypernym (a list like *dogs*, *cats and birds* might refer, for instance, to a mid-level hypernym like 'domestic animals' or to an upper-level hypernym like 'animals'), to be indentified with the help of context.

APPROXIMATING DENOTATION LISTS are lists whose semantic function is to evoke a class out of the conjuncts and to denote a referent that might be close to that class, or to one of its members (possibly the one that is explicitly mentioned), without committing too much. In this sense, the work done by these lists is functionally similar to that done by so-called approximators (*sort of*, *kind of*), that are used to denote not "a normal member of the class […] but […] a possible member, or perhaps an arguable member, or a peripheral member, or a near-member" (Denison 2002).[13]

In the realm of co-compounds and binomials, this type of list is often built out of numerals, as exemplified below:

(67) White Hmong *ob peb* (two three) 'some' (Wälchli 2005: 138)

(68) English *two or three* (= some, few), *a day or two* (= some, few days)
    a. […] *it was reputed that the film was shot in just* two or three *days* […] (ukWaC)
    b. *You should then probably wait* a day or two *for the address to be registered* (ukWaC)

Approximation is also conveyed by the lists below. In (69) we have numbers again, but not conventionalized ones like those above. In (70), the listing of the conjuncts plus the post-detailing element (*something like that*) serves to evoke a class of 'quick meals' and to identify an arguable member (or quasi-member) of this class. In (71), the class is that of 'seats': the referent at hand somehow belongs to it, but the speaker does not commit to a particular kind (perhaps because the object does not lend itself to a clear-cut categorization, or because the speaker's perception is not clear-cut). Finally, (72) contains an approximation about reverence-related events which is conveyed by clause-level conjuncts.

(69) *The trees are {four hundred, | five hundred} years old* (enTenTen13)

Francesca Masini, Caterina Mauri, Paola Pietrandrea

(70) *her mum always cooks a meal in the evening so I, I do something like {toasted cheese sandwiches | ^or beans on toast | ^or something like that} at lunch time* (Google)

(71) *I saw a figure sitting on a {huge chair, | ^or throne} i don't know exactly.* (Google)

(72) *"When the saints appeared to you {did you bow, | did you make reverence, | did you kneel?}" "Yes; I did them the most honor and reverence that I could."* (ukWaC)

The last type of list we are going to examine, the INTENSIFYING DENOTATION LIST, is a complex one. Its overall semantic function is to intensify the meaning of the conjuncts. However, the exact type of intensifying effect we obtain depends on the type of listed elements, as we will see.

The intensifying meaning is related to different types of co-compounds in Wälchli's classification: some synonymic (73a-b), some imitative (73c), some ornamental (73d).[14]

(73) a. Chuvash   *uj-xir* (field-field) 'fields'
     b. Georgian   *mt'a-gor.iani* (mountain-hill.ADJ) 'mountains and hills [emphasis]'
     c. White Hmong   *xyoob ntoo* (bamboo tree) '(bamboo) tree [emphasis]'
     d. Mewahang   *che-choŋwa do-choŋwa* (Px-bird Px-bird)[15] 'birds'

These examples of co-compounding remind us of a variety of conventionalized irreversible binomials with strengthening function identified by Masini (2006) for Italian (74), some of which are found in English too (75):

(74) a. *decine e decine* (tens and tens) 'several tens'
     b. *vecchio e* stra-*vecchio* (old and super-old) 'very old / obsolete'
     c. *patta e* stra-*patta* (draw and super-draw) 'absolute draw (in chess)'
     d. *commenti e* contro-*commenti* (comments and counter-comments) 'endless comments'

(75) a. *years and years* (= many years)
     b. *thousands and thousands* (= several thousands)

These types of co-compounds and binomials are obviously closely related to full reduplication (76) (examples from Moravcsik 1978: 305, 319), for both semantic and formal reasons.

(76) a. Mandarin *jang* 'sheet' > *jangjang* 'every sheet'
     b. Tzeltal   *-pik* 'touch it lightly' > *-pikpik* 'touch it lightly repeatedly'

We can thus observe a cline that goes from conjuncts being different but synonymic words, to conjuncts being partially identical conjuncts (e.g. due to the use of meaningless or meaningful prefixes, see

(73d) and (74b-d) respectively), to identical conjuncts. All these fall within Intensifying Denotation Lists.

The full repetition of a string occurs not only at the morphological level (reduplication proper), but also in syntax and discourse (as already mentioned), where the repeated element may assume different category and size, which also determines the different types of intensification effects we may get. For example, an Intensifying Denotation List of adverbs such as (77) may denote a superlative meaning, an Intensifying Denotation List of nouns may denote plurality / multiplicity (78), an Intensifying Denotation List of verbs may denote iterative (79) or continuous (80) aspect.

(77) *My phone had no reception and just from looking down at the city, I was {FAR | FAR | FAR} away from the starting point.* (Google)

(78) *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.* (Google)

(79) *And as he {knocked, | knocked, | knocked, | knocked}, what did she do?* (Google)

(80) *hope you make a good recovery but make sure you {rest, | rest | ^and rest} some more.* (Google)

Continuous aspect can also be detected in (81): here the continuous aspect meaning ('she kept on sleeping') is scattered throughout the whole discourse configuration made up of a sequence of sentences (*she slept […] she slept […] and she slept*).

(81) {*she* slept *past the cock-crow*, | *^and she* slept *past the dove-song*, | *^and she* slept *past the soft rays of sunlight creeping across her pillow*}. (Google)

Finally, beside repetition proper, at the syntactic level we may form an Intensifying Denotation List with partially identical (82) or synonymic (83) conjuncts, thus mirroring – again – what happens at the morphological level (see above).

(82) *Only when everything has been {checked | ^and rechecked} again does it go to the printers.* (ukWac)

(83) *Ezra and Lexi were {talking | ^and chatting | ^and talking} about things that couples would.* (Google)

4.2. Formulation lists
Formulation lists are lists that operate over formulations rather than denotations. More precisely, they take the formulations real-

ized through the conjuncts as input and produce a formulation as output. Therefore, the conjuncts here describe multiple attempts of formulations for one and the same referent. As suggested by Kahane & Pietrandrea (2012), speakers can do two types of operations with formulations: they may substitute a formulation with another, or they may add a formulation to another. In the former case they use alternative formulation lists, in the latter case additive formulation lists. Let us begin with the former.

Quite frequently in spoken spontaneous speech, after proposing a first formulation for a denotation in a given syntactic position, the speaker lists a number of (near)synonyms or co-hyponyms in the same position. The function of this pattern is to scan a (lexical) paradigm of possible alternatives in order to choose a better formulation for denoting a referent or describing a situation. Such a pattern is commonly known as REFORMULATION (cf. Blanche-Benveniste *et al*. 1979, 1990, Blanche-Benveniste 1995).

Generally, the last formulation put forward substitutes the formulation proposed in the previous layers of the list. Two examples of this pattern are found in (84).

(84) a. *A new cast of* {*thirty*, | *(oops) I mean seventeen*} *year olds*. (enTenTen13)
    b. {*This is going back* | *I mean my memories are going back*} *to about 1933-34 that sort of time*. (ukWaC)

In some other cases, the speaker proposes different formulations and does not pick one as the most suitable, but rather leaves the question open, marking a lack of commitment to any of the alternatives, as exemplified in the following sentences:

(85) a. *A good friend of mine* […] *insisted that the salesman can only be successful* […] *if he thinks his* {*patter* | *^or spiel* | *^or whatever it is called*} *is honest*. (ukWaC)
    b. *Once you're done*, *click the button that says* {*post* | *^or publish* | *^or something like that*} (ukWaC)

It is worth noting that these kinds of reformulations are close to the Approximating Denotation Lists described in Section 4.1.1, the crucial difference being that reformulations pertain to the formulation level only, whereas Approximating Denotation Lists operate on denotations.[16]

A special case of alternative formulation lists is constituted by DISFLUENCY. Disfluencies are made up of either grammatical words (auxiliaries, determiners, prepositions), or fragments of (lexical) words, thus units lacking a proper denotation (cf. Blanche-

Benveniste 1990, 1995, 1997, Blanche-Benveniste *et al.* 1990). Examples of disfluency are found in (86-87), both from the Santa Barbara Corpus.

(86) LANCE: *... Okay. I was thinking that for my rundowns,... you know {that would, | .. that's | ... that would have been} a help, but, on {the other s- | the other hand}* (SBC022)

(87) PATTY: *and {she didn't care,.. {the- | to b- -- | to --} | she didn't care about emancipation}.* (SBC023)

As for additive formulation lists, as mentioned above, they do not substitute a formulation with another, but rather serve to cumulate several formulations for one and the same denotation, thus producing what we may call 'double (or multiple) formulation'. Some examples follow.

(88) *One day Jill returns from work to find {her older sister | Molly} missing* (enTenTen13)

(89) *They were also influenced by {their neighbours, | the Bantu} [...].* (enTenTen13)

A couple of formal clues may help distinguishing compositional denotation lists from formulation lists. Although virtually any category can be found in compositional denotation lists (cf. PARAMETER 5), the conjuncts of compositional denotation lists more often belong to major lexical categories. When conjuncts belong to minor lexical categories, such as determiners, prepositions or auxiliaries, the list that hosts them is more likely to be a formulation list, often a disfluency (see above). However, this is not necessarily so, since simple coordination may also take place between words belonging to minor lexical categories:

(90) *Our research aims to investigate […] the wide variations in health {between | ^and within} populations.* (ukWaC)

(91) *[…] it is an open question whether any natural property is {the | ^or a} property of moral goodness.* (ukWaC)

The elements found in the list surroundings (projection component, post-detailing component) and insertions (if present) may also help distinguishing between a compositional denotation list and a formulation list, since in the latter we will find metalinguistic expressions, such as *whatever it is called* in (85a).

In conclusion, the functional properties of lists identified so far allow us to put forward a first functional typology, which sees denotation lists on one side, and formulation lists on the other side. Each of these macro-types are organized into different subtypes of lists, as illustrated in Figure 3.
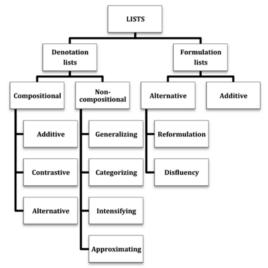
Figure 3. A functional typology of lists: denotation *vs* formulation.

4.3. The interactional dimension

The typology proposed in Figure 3 can be further enriched by taking into account the interactional dimension. Given their structure, lists are a privileged pattern for discourse co-construction. Indeed, in interactional speech, speakers tend to use lists to co-operate in the co-construction of a common discourse.

Overall, the co-construction of a list may respond to two major dialogic functions: either COMPLETING the list put forward by the interlocutor (cf. (92)), or NEGOTIATING it.

(92) COMPLETION

JUDGE:	*... Was it {a l- --uh month to month,* | *^or a uh,* |*}*
ROSE:	*{*| *A year.}*
JUDGE:	*.. {*| *A one-year lease* |*}.*
ROSE:	*{*| *One year lease}.* (SBC053)

Negotiation can be realized by four operations (cf. Kahane &

Pietrandrea 2012): checking (93), confirming (94), refuting (95), or correcting (96).

(93) CHECK
    MARY: (TSK) *I don't know if !{Tammy |} would be too happy with that though.*
                   (SWALLOW) *Seems to me that she's trying to straighten herself out*, *and*,
                   pursue a family.
    ALICE: {| *Tammy*}? (SBC007)

(94) CONFIRMATION
    JANICE: *... I think {they lived in the big house |},*
    KIM: {| *they did live in the big house*}, (SBC023)

(95) REFUTATION
    A: With a touch of Irish flavour, *the fight will take place on St. Paddy's Day {at the*
       Garden |}. This will undoubtedly be among the most boisterous crowds I have ever
       been in front of
    B: St. Paddy's Day in New York, {| *at the Garden*}, *are you kidding me??!!!* (Google)

(96) CORRECTION
    Q. So you are saying now that there were three teeth with open margins, *three crowns?*
    A. On the front, *yeah*, {{one | ^or two} | *I mean*, {two | ^or three}}. (Google)

It should be noticed that, as is the case for non-interactional lists, interactional lists may concern either denotation or formulation. Examples (92) through (96) show the interactional dimension at work in a denotation list, whereas the English example in (10), repeated here as (95), illustrates the interplay of interaction and formulation lists.

(97) KEN: *And I got all these great*, *u=m*, {photographs of, .. of like um, |}
       JOANNE: {| *posters*, | ^*and demos.* |}
       KEN: {| *election posters*, *you know*,}   (SBC015)

5. Mapping form and function: towards list 'constructions'

So far we offered an overview of the properties that characterize both the structural side and the functional side of lists. This section is an attempt at bridging these two dimensions together, in order to unveil possible relevant correspondences between form and function, with a focus on denotation lists. Whereas compositional denotation lists appear to show quite some liberty and versatility with respect to the set of properties illustrated in Section 3, non-compositional denotation lists have more constraints. Hence, we will focus primarily on the latter, without losing sight of compositional denotation lists and also of formulation lists, to which we return later.

One of the main characterisics of non-compositional denotation lists is the relation among the conjuncts: non-compositional meanings typically emerge when the conjuncts are in some kind of semantic relation among each other, i.e. when we are in front of 'natural coordination' rather than 'accidental coordination' (cf. Wälchli 2005). This general requirement may become more specific within particular types of lists. However, as we will see, other properties drive our interpretation of lists.

In what follows we discuss some of the parameters[17] (among those discussed in Section 3) that seem to characterize the different types of non-compositional lists introduced in 4.1.1. Needless to say, this is a preliminary characterization, which should be interpreted as a starting point for a more systematic analysis of lists and should be checked and validated against a wider dataset.

5.1. Features of non-compositional lists: in search for correlations

Generalizing Denotation Lists create a reference to a class and perform a universal quantification over that class. Here follow some of the examples (adapted) from Section 4.1.1, repeated as (98):

(98) a. *day and night* (= all the time)
  b. […] *a book for children and adults* […] (=people of all ages)
  c. […] *for skinny and fat men* […] (=men of all sizes)
  d. […] *I have seen the beautiful side of cosplay and I have seen the ugly side of cosplay.* (=I have see all sides of cosplay)

Data like these seem to suggest that Generalizing Denotation Lists tend to be formed by two conjuncts: this keeps them apart from other non-compositional lists, which may (and often do) admit more than two conjuncts. This property may be related to the fact that the semantic relation holding between the conjuncts in Generalizing Denotation Lists is one of opposition, i.e. the two list members are opposites. This is indeed one of the defining properties of this kind of list.[18]

The conjuncts are usually linked by a syndetic element of the conjunctive type, but also asyndetic expressions are possible (99). In addition, the disjunctive connective may also occur in this type of list, as illustrated by example (60) (Section 4.1.1) and by (100), where *day or night* is equivalent to *any time* (which is found as a projection component, like in (60)). At first sight, the presence of *or* seems to trigger a 'free choice' ('any') reading, while the presence of *and* is associated with an 'all' interpretation. However, the relation between the list members is logically conjunctive and the use of disjunctive connectives looks like a consequence of downward entailing contexts.

(99) *We must respect the impact this has on everyone*, those coming, those going […] (Google)

(100) *a single call at any time*, day or night, *will get numerous Verizon teams engaged* (enTenTen15)

As we can see from the above-mentioned examples, conjuncts may vary in complexity (bare words, full phrases, clauses) and tend to belong to major lexical categories. Nouns are typically bare (no determiner). List markers are generally limited to the connective, whereas we often find the corresponding universal quantifier (e.g. *everyone*) in the list surroundings (projection/post-detailing component).

CATEGORIZING DENOTATION LISTS denote the category (hypernym) to which the conjuncts belong. Here follow some examples (adapted) from Section 4.1.1, repeated as (101):

(101) a. *knife and fork* (=cutlery)
    b. *Chimps and dogs and bats and cockroaches and people and worms and dandelions and bacteria and galactic aliens are the stuff of biology* (=forms of life)
    c. […] *no buses*, *trains etc. being available*. (=public means of transport)
    d. *I campaigned for Obama. I voted for Obama.* (=supporting Obama)

Categorizing Denotation Lists may comprise two or (many) more conjuncts, which work as pointers to some higher-level category and are interpreted as exemplars. As argued in Mauri (2017) and in Barotto & Mauri (*this issue*), in lists of exemplars the items can be linked syndetically or asyndetically, both by conjunctive (101) and disjunctive (102) connectives, although there seems to be a preference for the former. This is due to the fact that exemplars are at the same time co-occurrent as members within a set (*and*) and potential alternatives to each other (*or*). Consider the following example, in which the connective *or* is employed:

(102)   NORA: *Wonder who was the ruler.*
           LINDA: (H)
           NORA: *in nineteen ten.*
           DIANE: *Who was the {king | ^or queen}?*
           NORA: *Mhm.*
           LORI: *I don't know.* (SBC: 023)

Here, the speaker denotes a single entity, namely 'the nonpolitical ruler, the monarch', which constitutes the hypernym of the two exemplars supplied in the list.

Conjuncts belong to major lexical categories and may vary in complexity: we may have bare words, full phrases or clauses. Nouns

are usually bare (no determiner). One important feature that distinguishes this kind of list from the Generalizing Denotation List seen above is the semantic relation among the conjuncts, which are normally co-hyponyms. List markers (if any) are of the denotation type. The corresponding hypernym may occur as a projection or post-detailing component. In post-detailing position one may also find (especially conjunctive) general extenders, e.g.: *and what have you*, *and things like this/that*, *and the like*, *etcetera/etc.*, and so on. Example (103) displays both the hypernym (*all my tests*) and a conjunctive general extender in post-detailing position (*and what have you*).

(103) *I have had* [*all my tests*] *in one go* – {*a full ECG*, | *a blood test*, | *heart test* | ^*and what have you*} (ukWaC)

APPROXIMATING DENOTATION LISTS evoke a class or paradigm to identify an arguable (intentionally vague) member of that class, as illustrated by the examples in Section 4.1.1, some of which are repeated (adapted) below in (104).

(104) a. *two or three* (=some, few)
     b. […] *four hundred*, *five hundred years old* (=a number of years close to – or in-between – 400-500)
     c. […] *something like toasted cheese sandwiches or beans on toast or something like that* (=a quick meal of some sort)
     d. […] *did you bow*, *did you make reverence*, *did you kneel?* (=some act of reverence)

Approximating Denotation Lists may comprise two or more conjuncts, with or without a disjunctive syndetic element. Conjuncts mostly belong to major lexical categories, although we should note that numerals often occur within this construction. As for complexity, we may have bare words, phrases or clauses. Nouns are not necessarily bare:

(105) *By using something like* {*a turtle* | ^*or a bear* | ^*or something like that*}, *and tracking that toy's feelings as they go on the journey*, *children* […] *will find it easier to talk about feelings* (ukWaC)

The relation among the conjuncts is the same we find in the Categorizing Denotation List – co-hyponymy – whereas the nature of the syndesis is a feature that often contributes to keep apart Approximating Denotation Lists from Categorizing Denotation Lists: the latter are primarily conjunctive but may also be disjunctive (as a consequence of the nature of exemplification), whereas the former are

necessarily disjunctive (as a consequence of the nature of approxima-
tion). List markers (if any) are of the denotation type: we often find
disjunctive general extenders in the list surroundings, e.g.: *something
like*, *things like*, (*or*) *something like this/that*, (*or*) *whatever it is*, (*or*)
things like this/that, (*or*) *things of this sort*.

Finally, INTENSIFYING DENOTATION LISTS have a general function of
intensification over the conjunct(s), which may be realized in differ-
ent ways according to the kind of lexical category involved. We repeat
here, in (106), some examples (adapted) from Section 4.1.1.

(106) a. *years and years* (=many years)
    b. […] *He gives kisses, kisses, kisses.* (=many kisses)
    c. […] *everything has been checked and rechecked again* (=checked repeatedly)
    d. *Ezra and Lexi were talking and chatting and talking* […] (=talking/chatting
       repeatedly)

Intensifying Denotation Lists belong to the conjunctive type of
lists and are often – but not necessarily – asyndetic. They may host
two or more conjuncts, which are either (near-)synonyms or (near-)
identical elements belonging to major lexical categories. List members
are very often single words (nouns are generally bare), but we may
find also full phrases (107)[19] and clauses (108).

(107) *I think there is a new atmosphere of hope there, but it is* {{*very,* | *very*} *fragile,* | *very
fragile*}*.* (ukWaC)

(108) *The stuff she makes is the same type of stuff I learned how to sew in 4-H back in the
80s.* {*I don't get it!!!* | *I don't get it!!!* | *I don't get it!!!*} *She doesn't deserve to be there.*
(Google)

List markers other than coordinators are basically absent, like
list surroundings, although intensifying adverbs such as (*and*) *again*
or *very* often co-occur with this type of list.

At this point, we are ready for comparing the four non-composi-
tional denotation lists just analyzed: Generalizing Denotation Lists,
Categorizing Denotation Lists, Approximating Denotation Lists and
Intensifying Denotation Lists. Overall, they look constrained in differ-
ent ways, i.e. each of them displays a set of properties that seem to be
primarily associated with that kind of list. We summarize these prop-
erties in Table 1.

Type of list	(1) number of Xs	(2) presence of syndesis	(3) nature of syndesis	(4) complexity of Xs	(5) category of Xs	(6) determination (for nominals)	(7) semantic relation	(10) other list markers (LM) and list surroundings (LS)
Generalizing Denotation List	2	±	conjunctive	words phrases clauses	mostly major	mostly -	opposites	universal quantifier (LS)
Categorizing Denotation List	2 or more	±	conjunctive/ disjunctive	words phrases clauses	major	mostly -	co-hyponyms	conjunctive/ disjunctive general extender (LM) + hypernym (LS)
Approximating Denotation List	2 or more	±	disjunctive	words phrases clauses	mostly major	±	co-hyponyms	disjunctive general extender (LM)
Intensifying Denotation List	2 or more	±	conjunctive	words phrases clauses	major	mostly -	(near) synonyms (near)identical	-

Table 1. Comparing features of non-compositional denotation lists.

As already mentioned, a crucial role in distiguishing different types of lists seems to be played by the semantic relation among the conjuncts (PARAMETER 7), but other parameters are also relevant and drive the interpretation, such as the number of conjuncts (which sets Generalizing Denotation Lists apart from the rest), the nature of syndesis (conjunctive and/or disjunctive), determination for nominals (which seems to differentiate Categorizing Denotation Lists and Approximating Denotation Lists), and list markers and surroundings, since each list displays a certain array of those (if present at all).

This preliminary picture points to a situation where each type of list is typically associated with a unique and relatively stable set of formal features, which lead us to explore a possible analysis of lists as 'constructions'.

5.2. Lists as constructions?

In this section we discuss the possibility to analyze lists as 'constructions' in the sense of Constructions Grammar (cf. a.o. Fillmore, Kay & O'Connor 1988, Goldberg 1995, Croft 2001, Östman & Fried (eds.) 2005, Hoffmann & Trousdale 2013), by virtue of the form-meaning correspondences emerged in the previous section. As is well known, in Construction Grammar (henceforth CxG), the "construction" (Cxn) is defined as a conventionalized association of a form and a meaning. Cxns may range from lexicon to syntax, namely from fully specified objects like words to very abstract structures like argument structure patterns (Croft 2001, Goldberg 2006). In the middle of this

continuum we find a variety of patterns that may display different degrees of lexical specificity and structural complexity. Moreover, Cxns, far from being simply listed in our grammar, are organized into a hierarchical network called 'constructicon', where Cxns are linked to one another by (instantiation) links of various sorts (Goldberg 1995).

Masini & Pietrandrea (2010) already proposed to consider lists as Cxns in the technical sense of CxG. According to them, "[t]he abstract […] pattern 'list' has the very general meaning of 'relation among the conjuncts', and may assume more specific meanings according to the exact way in which it is instantiated" (Masini & Pietrandrea 2010: 85). Their analysis, however, revolved more around the role of list patterns within larger discourse configurations featuring the Italian adverb *magari* 'maybe, possibly'.

In this section, we focus on lists *per se*, by positing the existence of a maximally abstract List Construction (henceforth LCxn) and by defining (a portion of) the constructional network it generates, especially (but possibly not exclusively) with reference to denotation lists.

Let us begin with non-compositional denotation lists. As we saw in previous sections, non-compositional denotation lists are subject to a number of constraints that help to identify the specific kind of non-compositional denotation list we are dealing with, i.e. that drive their interpretation. Indeed, each of them conveys a specific meaning (not strictly predictable from its parts) and presents a unique set of formal features. Given these form-meaning correspondences, we can analyze non-compositional denotation lists as (very schematic) LCxns, whose defining properties are those described in Table 1 (Section 5.1).

At the same time, however, these lists are brought together by the fact of sharing (or being instantiations of) the same highly schematic structure that characterizes all lists, but also the same highly schematic function.

The shared structure obviously coincides with the list skeleton given in Figure 2 (Section 3.1), repeated here for convenience:

(109) ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) (X_2) | (^CO) (X_3) | … | (^CO) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])

Note that everything this pattern says is that we should have (at least) two structurally and functionally parallel elements (Xs), all other elements are encoded but optional. At this level, we do not have information about the category of X, nor about the complexity of X: it may be a word, a phrase or a clause, what matters is its position and relation with the other Xs in the list. This also entails that there is no commitment as to the level of analysis the list belongs to: ideally, an

81

underspecified and flexible object such as (109) could be realized as a morphological pattern, a syntactic pattern, or even a discourse-level pattern, depending on the nature of X and on its behavior in terms of constraints and distribution (see also below).

As for meaning, in Section 4 we mentioned that a list can be regarded as a 'semantic operator': indeed, we claim that lists have an underspecified function f that operates over the set of conjuncts by virtue of their semantic relatedness, thus activating the presupposition of some underlying common categorization. In other words, the conjuncts are used as a channel towards a more complex denotation, in a way reminiscent of (but, apparently, conceptually wider than) Lang's 1991 "common integrator". The function f may become more specific in specific kinds of lists, thus encompassing semantic values such as generalization, categorization, approximation, intensification, but also addition, alternativity or contrast (cf. Section 4.1).

If we combine these two dimensions together (structure and function), what we obtain is a maximally abstract List Construction, that can be (informally) represented as follows:[20]

(110) LIST CONSTRUCTION (MAXIMALLY ABSTRACT)
       Form: ([PRO-C]) ([LI]) {**X₁** | (^CO) (X₂) | (^CO) (X₃) | … | (^CO) **X_LAST** | (LC)} ([POST-C])
       Meaning: 'function f over the set of Xs + presupposition p = common categorization underlying Xs'

Non-compositional denotation LCxns are therefore instantiations of this maximally abstract LCxn, i.e. are independent Cxns which are related to the maximally abstract LCxn in (110) via Instantiation Inheritance Links (I_I, cf. Goldberg 1995). Non-compositional denotation LCxns inherit the core properties from the upper-level LCxn, but at the same time they encode more specific features and constraints in terms of both form and meaning, in accordance with 'default inheritance' (Goldberg 1995). Non-compositional denotation LCxns can be sketchily represented as follows:[21]

(111) GENERALIZING DENOTATION LIST CONSTRUCTION
       Form: ([PRO-C]) ([LI]) {**X₁** | (^CO_AND) **X₂**} ([POST-C])
                 where   X₁ and X₂ = **opposites**
                           X₁ and X₂ = (mostly) **major** lexical categories; (mostly) **bare**
                           PRO-C / POST-C = **universal quantifier** related to X
       Meaning: 'function f over the set of Xs'
                 where f = **universal quantification** over Xs
                           (all/any possible values between / in the conceptual space
                           defined by X₁ and X₂)

(112)   CATEGORIZING DENOTATION LIST CONSTRUCTION
Form: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO_AND/OR) (X$_2$) | … | (^CO_AND/OR) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])
    where   X$_1$ and X$_n$ = **co-hyponyms**
        X$_1$ and X$_n$ = **major** lexical categories; (mostly) **bare**
        LC = **conjunctive/disjunctive general extender**
        PRO-C / POST-C = **hypernym** of X
Meaning: 'function *f* over the set of Xs'
    where   *f* = **hypernym / higher-level category** of Xs

(113)   APPROXIMATING DENOTATION LIST CONSTRUCTION
Form: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO_OR) (X$_2$) | … | (^CO_OR) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])
    where   X$_1$ and X$_n$ = **co-hyponyms**
        X$_1$ and X$_n$ = mostly **major** lexical categories
        LC = **disjunctive general extender**
Meaning: 'function *f* over the set of Xs'
    where   *f* = **approximation of** (the category defined by) Xs
        (possible member of the category defined by Xs, something
        similar to Xs)'

(114)   INTENSIFYING DENOTATION LIST CONSTRUCTION
Form: {$\mathbf{X_1}$ | (^CO_AND) (X$_2$) | … | (^CO_AND) $\mathbf{X_{LAST}}$ | (LC)}
    where   X$_1$ and X$_n$ = (near-)**synonyms**, (near-)**identical**
        X$_1$ and X$_n$ = **major** lexical categories; (mostly) **bare**
Meaning: 'function *f* over the set of Xs'
    where   *f* = **intensification** of the meaning of Xs

As a matter of fact, the maximally abstract LCxn in (110) is schematic enough to account for (i.e. to be the mother of) not just non-compositional denotation LCxns, but all denotation lists: also what we called compositional denotation lists (additive, contrastive, alternative; cf. Section 4.1) might be regarded as specific types of LCxns, as conventionalized form-meaning pairings, despite their more predictable semantics. Here follow a sketchy representantion of these lists patterns as Cxns:

(115) ADDITIVE DENOTATION LIST CONSTRUCTION
Form: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) (X$_2$) | (^CO) (X$_3$) | … | (^CO) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])
Meaning: 'function *f* over the set of Xs'
    where   *f* = **enumerative combination of** Xs

(116) CONTRASTIVE DENOTATION LIST CONSTRUCTION
Form: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) (X$_2$) | (^CO) (X$_3$) | … | (^CO) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])
Meaning: 'function *f* over the set of Xs'
    where   *f* = **unexpected combination of** Xs

(117) ALTERNATIVE DENOTATION LIST CONSTRUCTION
Form: ([PRO-C]) ([LI]) {$\mathbf{X_1}$ | (^CO) (X$_2$) | (^CO) (X$_3$) | … | (^CO) $\mathbf{X_{LAST}}$ | (LC)} ([POST-C])
Meaning: 'function *f* over the set of Xs'
    where   *f* = **combination of replaceable** Xs

As already mentioned, these lists have more liberty and versatility with respect to non-compositional denotation lists, which is why the structure of these lists is left quite unconstrained; even the type of connective is not specified, since there is no biunivocal correspondence between 'and' connectives and additive lists, 'or' connectives and alternative lists, 'but' connectives and contrastive lists (cf. Section 4.1 and footnote 6).

To sum up, all denotation LCxns can be inserted into an inheritance hierarchy where they are co-daughters of the maximally abstract LCxn, as pictured in Figure 4 (the notation is simplified).
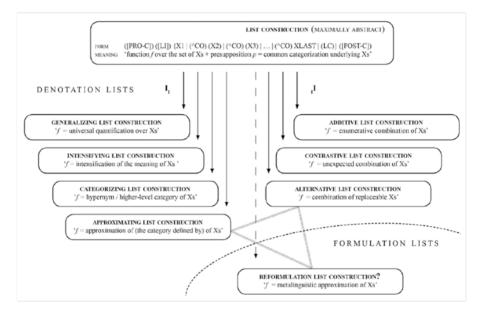

Figure 4. A network of List Constructions.

What about formulation lists? Can formulation lists (Section 4.2) be regarded as LCxns, too? This is a difficult question that requires more investigation and thought to be answered fully. However, we would like to offer some provisional reflections, which are already pictured in Figure 4.

It seems to us that, whereas phenomena such as disfluencies appear to be hardly analyzable as Cxns in the proper sense, other formulations lists, viz. reformulation, can actually turn out to be Cxns. In Section 4.2, we noted that reformulation lists have the function of exploring a paradigm of possible alternatives in order to find the

correct formulation; they seem to contain primarily disjunctive connectives and (formulation-level) general extenders. In this sense, they are close to both Approximating Denotation Lists and Alternative Denotation Lists, the difference being that reformulation works at the formulation (not denotation) level. Overall, there seems to be ground to hypothesize that also reformulation lists are Cxns (see Figure 4). Bonvino *et al.* (*this issue*) reach precisely this conclusion: they analyze lists expressing approximation in Italian (L1 and L2) and manage to identify some form-meaning correspondences, which lead them to regard some types of (denotation and formulation) approximating lists as Cxns. Also Kahane & Pietrandrea (2012), who analyze the form and function of formulation lists in spoken spontaneous French, seem to point in this direction. In this respect, it is important to note that within CxG, attempts at extending Cxns beyond syntax and into discourse and/or spoken interaction are not missing (see, e.g., Östman 2005, Fischer 2010, Masini & Pietrandrea 2010).

Finally, we would like to emphasize that, although not all lists might gain the status of Cxn, this does not mean that we need to discard them: they might not be LCxns, but are still lists, i.e. linguistic objects that structurally conform to the 'list skeleton' identified in Figure 2. Moreover, lists that are more typically found in spoken speech (such as repairs, reformulations, disfluencies, etc.) may turn out to play a role in explaining the 'emergence' of LCxns, in compliance with usage-based approaches that speak for a fluid interaction between usage and grammar (Bybee 2006, 2010).

5.3. Not the whole story

What is represented in Figure 4 (previous section) is obviously not the whole story, in more than one way.

First and foremost, new or different LCxns may be identified and posited, including formulation LCxns, whose status has been briefly discussed at the end of the previous section. Besides, some of the constructions included in Figure 4 may themselves generate a network of more specified constructions: the Intensifying List Construction, for instance, may be instantiated by daughter constructions in which the category of X is specified and the meaning is consequently more specialized (cf. Section 4.1.1).

More importantly, even within this picture, we need to accommodate different kinds of lists which are characterized by (partially) different properties and constraints. As mentioned above, at its maximal level of schematicity, the LCxn (cf. (110) and Figure 4) is to be intended as a 'flexible' object: we might define it as a 'cross-level construc-

tion', i.e. a construction that is transversal to the "lexicon-syntax continuum" (Masini & Pietrandrea 2010 speak of "topological pattern"). Indeed, it can potentially licence very different linguistic objects: lists with few or many conjuncts; lists endowed with different degrees of fixedness or conventionalization; contiguous or non-contiguous lists, since we know that lists can be 'stretched' under certain conditions (especially in spoken language).

It is therefore important to stress that the current attempt to propose a unified account of lists does not mean that all these phenomena are (regarded as) equal. For instance, a list operating at the morphological/lexical level (e.g., a co-compound or an irreversible binomial), despite sharing structural and semantic features with syntactic lists of the same type, will obviously have distinct properties. First, it will be lexically fixed, with X_1 and X_2 corresponding to specific word-level lexical items, with no more room for other Xs (e.g. the binomial *high and low*). Second, the list will be internally cohesive and fixed, as we would expect from a stored, lexicalized expression: we cannot interrupt it, we cannot swap the conjuncts, and so on. These properties are not shared by 'syntactic', online-created lists such as *dogs*, *cats*, *and birds* (intended reading: 'pets'; cf. (54a). This list is not lexically fixed: we could use other pet names, such us *turtles*, *bunnies* and *goldfish* (although prototype effects probably play a role here: dogs and cats are prototypical exemplars of pets). And the composition of the list is not fixed: any of the three nouns could be dropped without destroying the collective list (*dogs and birds*), and at the same time more nouns could be added (*dogs*, *cats*, *turtles*, *and birds*). The order of the conjuncts of this list could be altered without changing the overall meaning. And full phrases and clauses can be used, too, as we have seen. Table 2 sketchily illustrates (some of) the different contraints that seem to be at work in morphological/lexical lists on the one hand and in more syntactic, discourse-level lists on the other (for further discussion on morphological/lexical lists see Masini & Arcodia *this issue*).

	Number of conjuncts	Overt markers	Full XPs	Fixed order	Fixed items
Co-compounds	2 (sometimes 3)	-	-	+	+
Irreversible binomials	2 (sometimes 3)	+ (coordinator)	-	+[22]	+
Syntactic and discourse-level lists	2 or more	± (list makers)	+	-	-

Table 2. Constraints at work in lists between lexicon and syntax.

Needless to say, these different properties must be accounted for within the constructional representation of lists. Although, due

to space reasons, we cannot go into the details of this issue here, three hypotheses can be proposed for future testing: (i) both free syntactic lists and lexically fixed lists (e.g. compounds and binomials) are instantiations of the LCxns represented in Figure 4; (ii) free syntactic lists are instantiations of the LCxns in Figure 4, whereas fixed lists are totally independent constructions; (iii) free syntactic lists are instantiations of the LCxns in Figure 4, whereas fixed lists are instantiations of other intermediate (still abstract but more constrained) Cxns that are licenced by the maximally abstract LCxn and constitute a generalization over the set of fixed lists stored in our lexicon. The latter hypothesis obviously depends on the plausibility of positing intermediate LCxns in the specific language at issue.

6. Concluding remarks

In this paper, we offered a first large-scale description of the phenomenon of listing and discussed its theoretical status. By *list* we intend a 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. This very abstract pattern has been claimed to unify a number of linguistic phenomena (such as co-compounds, irreversible binomials, reduplication, repetition, syntactic coordination, reformulation, etc.) that are normally not treated together, since they are normally ascribed to different levels of analysis – from morphology to syntax and discourse – and studied within different traditions and frameworks.

After proposing a macro-distinction between denotation (conceptual-level) lists and formulation (metalinguistic-level) lists, we focused more specifically on denotation lists, which are showed to convey both compositional (additive, contrastive, alternative) and non-compositional (generalization, categorization, approximation, intensification) meanings.

A detailed study of non-compositional denotation lists revealed interesting form-meaning correspondences: lists with certain formal features are showed to convey certain types of meanings, independently of their exact instantiation (i.e. degree of complexity, cohesion and conventionalization). This ultimately led us to analyze the list patterns corresponding to both non-compositional and compositional denotation lists as 'constructions' in the Construction Grammar sense. The intrinsic, deep similarities between denotation List

Constructions – in terms of both structure and function – persuaded us to posit a maximally abstract 'List Construction' that licenses and motivates all denotation lists, thus generating an inheritance-based constructional network.

We then turned to formulation lists and their uncertain status: we hypothesized that at least some of these lists (namely, reformulations) might be regarded as 'constructions' and be licenced by the maximally abstract List Construction, at the same time stressing that even those that do not turn out to be 'constructions' are still part of the picture and might have a role in the 'emergence' of more conventionalized lists.

Finally, we emphasized that talking of a maximally abstract List Construction that licences a highly varied set of linguistic objects does not amount to saying that all these objects are equal. We propose to view the maximally abstract List Construction as a flexible, cross-level construction that motivates different kinds of List Constructions, each characterized by its properties and constraints: the specificities of the latter need to be encoded within this constructional network in order to do justice to the diversity of lists as well as to their unity.

Notes

[1]   The vast majority of examples throughout the articles are taken from: (i) the following large web corpora of English, searched through the SketchEngine interface (www.sketchengine.co.uk): ukWaC, enTenTen13, enTenTen15; (ii) Google (each Google example was accessed on 23.03.2016 and checked for reliability); and (iii) the Santa Barbara Corpus (SBC) for spoken language (www.linguistics.ucsb.edu/research/santa-barbara-corpus). The exact source is given for each example.

[2]   The presence *vs* absence of an overt connective leads to distinguish between 'syndetic' and 'asyndetic coordination', respectively (cf. Haspelmath 2007).

[3]   Examples are taken from the following sources: (5) from Wälchli (2005: 137-138); (6a) from Malkiel (1959: 124), (6b) from Lambrecht (1984: 774), (6c) from Masini (2006: 207); (7a) from Dressler & Merlini Barbaresi (1994: 516, 518), (7b) from Moravcsik (1978: 312).

[4]   According to Jefferson (1990), lists in natural conversation tend to occur as three-part units:

(i)   *I think if you exercise it an' work at it 'n studied it you do become clairvoyant*

The three-partedness of lists is implicated by the 'poetics' of natural talk, which includes activities like punning and 'acoustic consonance' (e.g. rhyming and alliteration, etc.):

(ii) *Is there any close to you friend family or so forth that you could uh kind of be in contact with.*

(iii) *My idea at least in terms of talking about normality or talking about health or anything else*

The third element of the list is used to accomplish a range of tasks such as turn taking, topic shift, expression of surprise, etc.

[5]   Barotto & Mauri (*this issue*) distinguish between different types of general formulations, including category labels for those cases in which listing is employed as a tool to refer to some higher-level concept (cf. Section 4.1.1).

[6]   The conjunctive connective *and* is also attested in contrastive lists ({*I am working* | *^and he is sleeping*} *every day till 11am, rarely cleaning up at home* – enTenTen15) and lists of alternatives (*The fate of man in the new dimension of existence* […] *will follow* [*three possibilities*]: {*heaven,* | *purgatory* | *^and hell*} – enTenTen15). In such cases, the relations of contrast and alternative, respectively, are inferable from context or from the pre-detailing element (cf. *possibilities*). It must be noted, however, that 'or' and 'but' connectives are not employed to convey an additive meaning. This asymmetry is in line with cross-linguistic variation, which shows that 'or' and 'but' connectives are frequently built on a morpheme meaning 'and', but the reverse is not true (Mauri 2008).

[7]   In some cases, the conjuncts are not lexico-semantic related, strictly speaking, but their relation is not totally accidental either, because they are part of, and evoke, the same 'frame'. Examples can be found in so-called phrasal compounds like *a pipe and slipper husband* (Lieber 1992: 11) and in binomial expressions like *park-and-ride* (cf. Masini & Thornton 2008, for Italian): pipe and slippers are emblematic parts of a frame that defines a specific kind of husband, whereas parking and riding are the key parts of a more complex frame. Cf. Masini & Arcodia (*this issue*) on this kind of lists.

[8]   This classification builds on Bilger (1999), Masini & Pietrandrea (2010), Kahane & Pietrandrea (2012).

[9]   Contrast (54a) with a sentence like: *I have a dog, a cat and a bird* (ukWac).

[10]   What we are offering here is probably not an exhaustive inventory of possible non-compositional meanings conveyed by lists. There may well be other, still unidentified, functions, which will be hopefully unveiled by future research. However, we believe the functions discussed here are among the most common ones.

[11]   Like 'categorizing', also this term is not used in Wälchli's classification, but is somehow related to other types he mentions (see below).

[12]   Not all occurrences of *knife and fork* or *bra and panties* are necessarily 'collective'; sometimes expressions like these simply denote the union of the two referents, e.g.: *He seized a knife and fork from the nearby table and mercilessly assaulted the cake* (ukWaC), *He came back with a bra and panties, though they didn't match* (enTenTen13).

[13]   However, whereas approximators apply to an item denoting the class itself (*a sort of meal*), approximating lists are normally formed by exemplars (cf. (70) below).

[14]   All examples are from Wälchli (2005: 143-148).

[15]   *Choŋwa* is the normal word for 'bird' in Mewahang, while the "prefixed syllables *che-* and *do-* have no identifiable meaning" (Wälchli 2005: 143-148).

[16]   On approximating lists in general, see Bonvino *et al.* (*this issue*).

[17]   Some features, like the distribution of the conjuncts across illocutionary units and/or speech-turns (n. 8) or the prosody of the list (n. 9), are not discussed here, despite their importance, because, being typical of spoken language, require knowledge that is not available to us at the present stage. This is one direction of

research on lists that is definitely worth pursuing.
[18]   There are examples with three conjuncts that seem to have a generalizing reading too, and that deserve more investigation. See for instance (i):

(i)   *YOUR FARO AIRPORT TRANSFERS is not able to change any client details in the* beginning, middle and end *of the booking process*. (enTenTen13)

Beside the two opposing poles *beginning* and *end*, a third element is introduced (*middle*) that defines an intermediate point of the continuum and that seems to produce a strengthening effect on the universal quantification.
[19]   As illustrated by the notation, in this example we have an embedded intensifying list (*very*, *very*) within the larger intensifying list (*very*, *very fragile*, *very fragile*).
[20]   As known, the functional side of constructions may contain a wide array of information (semantic, pragmatic, discourse-contextual), including presuppositions. In Sign-Based Construction Grammar, for instance, the "the set of presuppositions associated with a construction type" are contained within "cntxt", and more precisely "background" (Michaelis 2013: 139).
[21]   Only more relevant features are represented for the sake of simplicity. Overriding features with respect to the maximally abstract LCxn are in bold.
[22]   In fact, reversible binomials also exist along with irreversible ones (e.g. *night and day*, *day and night*). These may be regarded as less fixed than irreversible binomials, but still more constrained than free syntactic lists.

Bibliographical References

Arcodia, Giorgio Francesco; Grandi, Nicola & Wälchli, Bernard 2010. Coordination in compounding. In Scalise, Sergio & Vogel, Irene (eds.), *Cross-disciplinary issues in compounding*. Amsterdam / Philadelphia: John Benjamins. 177-197.

Barotto, Alessandra & Mauri, Caterina *this issue*. Constructing lists to construct categories. *Italian Journal of Linguistics* 30,1.

Barsalou, Lawrence W. 1983. Ad hoc categories. *Memory and Cognition* 11,3. 211-227.

Barsalou, Lawrence W. 1991. Deriving categories to achieve goals. In Bower, Gordon H. (ed.), *The psychology of learning and motivation: Advances in research and theory*. *Vol. 27*. San Diego, CA: Academic Press. 1-64. [Reprinted in Ram, Ashwin & Leake, David B. (eds.) 1995. *Goal-driven learning*. Cambridge, MA: MIT Press / Bradford Books. 121-176.]

Barsalou, Lawrence W. 2010. Ad hoc categories. In Hogan, Patrick (ed.), *The Cambridge encyclopedia of the language sciences*. New York: Cambridge University Press. 87-88.

Bazzanella, Carla 1994. *Le facce del parlare. Un approccio pragmatico all'italiano parlato*. Florence: La Nuova Italia.

Bazzanella, Carla (ed.) 1996. *Repetition in dialogue*. Tübingen: Niemeyer.

Bazzanella, Carla 1999. Forme di ripetizione e processi di comprensione nella conversazione. In Galatolo, Renata & Pallotti, Gabriele (eds.), *La con-*

versazione. Un'introduzione allo studio dell'interazione verbale. Milan: Cortina. 205-225.

Bilger, Mireille 1999. Coordination: analyses syntaxiques et annotations. *Recherches sur le français parlé* 15. 255-272.

Blanche-Benveniste, Claire 1990. Un modèle d'analyse syntaxique "en grilles" pour les productions orales. *Anuario de Psicología* 47. 11-28.

Blanche-Benveniste, Claire 1995. Le semblable et le dissemblable en syntaxe. *Recherches sur le français parlé* 13. 7-33.

Blanche-Benveniste, Claire 1997. *Approches de la langue parlée en français*. Paris: Ophrys.

Blanche-Benveniste, Claire; Borel, Bernard; Deulofeu, José; Durand, Jacky; Giacomi, Alain; Loufrani, Claude; Meziane, Boudjema & Pazery, Nelly 1979. Des grilles pour le français parlé. *Recherches sur le français parlé* 2. 163-205.

Blanche-Benveniste, Claire; Bilger, Mireille; Rouget, Christine & van den Eynde, Karel 1990. *Le français parlé. Etudes grammaticales*. Paris: Editions du Centre National de la Recherche Scientifique.

Botha, Rudolph P. 1988. *Form and meaning in word formation: A study of Afrikaans reduplication*. Cambridge: Cambridge University Press.

Bonvino, Elisabetta 2005. *Le sujet postverbal. Une étude sur l'italien parlé*. Paris: Ophrys.

Bonvino, Elisabetta; Masini, Francesca & Pietrandrea, Paola 2009. *List Constructions: a semantic network*. Paper presented at "Grammar in Construction(s) – 3rd International AFLiCo Conference", University Paris Ouest, Nanterre-La Défense, 27-29 May 2009.

Bonvino, Elisabetta; Cortés Velásquez, Diego & Fiorenza, Elisa *this issue*. "Sopratavola soprammobile come dite voi": Lists in L1 and L2. *Italian Journal of Linguistics* 30,1.

Bybee, Joan 2006. From usage to grammar: the mind's response to repetition. *Language* 82,4. 711-733.

Bybee, Joan 2010. *Language, usage and cognition*. Cambridge: Cambridge University Press.

Camacho, José 2003. *The structure of coordination: Conjunction and agreement phenomena in Spanish and other languages*. Dordrecht: Kluwer.

Chafe, Wallace L. 1994. *Discourse, consciousness, and time*. Chicago: The University of Chicago Press.

Croft, William 2001. *Radical Construction Grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.

Denison, David 2002. *History of the* sort of *construction family*. Paper presented at "ICCG2: Second International Conference on Construction Grammar", Helsinki, 6-8 September 2002.

Dik, Simon 1968. *Coordination. Its implications for the theory of general linguistic*. Amsterdam: North-Holland Publishing Company.

Dressler, Wolfgang U. & Merlini Barbaresi, Lavinia 1994. *Morphopragmatics: Diminutives and intensifiers in Italian, German, and other languages*. Berlin / New York: Mouton de Gruyter.

Dubois, John W. & Giora, Rachel 2014. From cognitive-functional linguistics to dialogic syntax. *Cognitive Linguistics* 25,3. 351-357.

Duvallon, Outi 2006. *Le pronom anaphorique et l'architecture de l'oral en finnois et en français*. Paris: L'Harmattan.

Fillmore, Charles J.; Kay, Paul & O'Connor, Mary Catherine 1988. Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language* 64,3. 501-538.

Fischer, Kerstin 2010. Beyond the sentence: Constructions, frames and spoken interaction. *Constructions and Frames* 2,2. 185-207.

Gil, David 2005. From repetition to reduplication in Riau Indonesian. In Hurch, Bernhard (ed.), *Studies on reduplication*. Berlin / New York: Mouton de Gruyter. 31-64.

Godard, Danièle & Abeillé, Anne (eds.) 2005. La syntaxe de la coordination. *Langages* 39. 160.

Goldberg, Adele 1995. *Constructions. A Construction Grammar approach to argument structures*. Chicago: The University of Chicago Press.

Goldberg, Adele 2006. *Constructions at work*. Oxford: Oxford University Press.

Ghomeshi, Jila; Jackendoff, Ray; Rosen, Nicole & Russell, Kevin 2004. Contrastive focus reduplication in English (the salad-salad paper). *Natural Language & Linguistic Theory* 22. 307-357.

Haspelmath, Martin 1993. *A grammar of Lezgian*. Berlin / New York: Mouton de Gruyter.

Haspelmath, Martin 2004. *Coordinating constructions*. Amsterdam / Philadelphia: John Benjamins.

Haspelmath, Martin 2007. *Coordination*. In Shopen, Timothy (ed.), *Language typology and syntactic description. Vol. II: Complex constructions*. Cambridge: Cambridge University Press. 1-51.

Hoffmann, Thomas & Trousdale, Graeme (eds.) 2013. *The Oxford handbook of Construction Grammar*. Oxford: Oxford University Press.

Hurch, Bernhard (ed.) 2005. *Studies on reduplication*. Berlin / New York: Mouton de Gruyter.

Jefferson, Gail 1990. *List construction as a task and resource*. In Psathas, George (ed.), *Interactional competence*. New York: Irvington Publishers. 63-92.

Johannessen, Janne B. 1998. *Coordination*. Oxford: Oxford University Press.

Kahane, Sylvain & Pietrandrea, Paola 2012. Types d'entassement en français. In *Actes du 3e Congrès Mondial de Linguistique Française*. *SHS Web of Conferences* 1, 1809-1828 [DOI: http://dx.doi.org/10.1051/shsconf/20120100238].

Kahane, Sylvain; Pietrandrea, Paola & Gerdes, Kim 2018. *The annotation of list structures*. In Lacheret, Anne; Kahane, Sylvain & Pietrandrea, Paola (eds.), *Rhapsodie: A prosodic syntactic treebank of spoken French*. Amsterdam / Philadelphia: John Benjamins.

Lacheret, Anne; Kahane, Sylvain & Pietrandrea, Paola (eds.) 2018. *Rhapsodie: A prosodic syntactic treebank of spoken French*. Amsterdam / Philadelphia: John Benjamins.

Lambrecht, Knud 1984. Formulaicity, frame semantics, and pragmatics in German binomial expressions. *Language* 60,4. 753-796.

Lang, Ewald 1984. *The semantics of coordination*. Amsterdam / New York: John Benjamins.

Lang, Ewald 1991. Koordinierende Konjunktionen. In von Stechow, Arnim & Wunderlich, Dieter (eds.), *Semantics: An international handbook of contemporary research*. Berlin / New York: Mouton de Gruyter. 597-623.

Lerner, Gene H. 1994. Responsive list construction: A conversational resource for accomplishing multifaceted social action. *Journal of Language and Social Psychology* 13. 20-33.

Levelt, Willem J. M. 1983. Monitoring and self-repair in speech. *Cognition* 14. 41-104.

Lieber, Rochelle 1992. *Deconstructing morphology: Word formation in syntactic theory*. Chicago / London: The University of Chicago Press.

Longacre, Robert E. 1985. Sentences as combinations of clauses. In Shopen, Timothy (ed.), *Language typology and syntactic description. Vol. II: Complex constructions*. Cambridge: Cambridge University Press. 235-286.

Malkiel, Yakov 1959. Studies in irreversible binomials. *Lingua* 8. 113-160.

Masini, Francesca 2006. Binomial constructions: Inheritance, specification and subregularities. *Lingue e Linguaggio* 5,2. 207-232.

Masini, Francesca 2012. *Parole sintagmatiche in italiano*. Roma: Caissa Italia.

Masini, Francesca & Arcodia, Giorgio Francesco *this issue*. Listing between lexicon and syntax: Focus on frame-naming lists. *Italian Journal of Linguistics* 30,1.

Masini, Francesca; Mauri, Caterina & Pietrandrea, Paola 2012. *The role of lists and list markers in the coding of vagueness: A crosslinguistic analysis*. Paper presented at the workshop "Meaning and form of vagueness: a cross-linguistic perspective", 45th Annual Meeting of the Societas Linguistica Europaea (SLE), Stockholm, 29 August - 1 September 2012.

Masini, Francesca & Pietrandrea, Paola 2010. Magari. *Cognitive Linguistics* 21,1. 75-121.

Masini, Francesca & Thornton, Anna M. 2008. Italian VeV lexical constructions. In Ralli, Angela; Booij, Geert; Scalise, Sergio & Karasimos, Athanasios (eds.), *On-line Proceedings of the 6th Mediterranean Morphology Meeting (MMM6) (Ithaca, 27-30 September 2007)*. University of Bologna / University of Patras. 146-186.

Matalon, Nadav 2017. *The "camel humps" intonation contour in spoken Hebrew*. Paper presented at the International Workshop "Building categories in interaction. Multidisciplinary approaches to categorization", University of Bologna, 19-20 October 2017.

Mauri, Caterina 2008. *Coordination relations in the languages of Europe and beyond*. Berlin / New York: Mouton de Gruyter.

Mauri, Caterina 2017. Building and interpreting ad hoc categories: a linguistic analysis. In Blochowiak, Joanna; Grisot, Cristina; Durrleman, Stephanie & Laenzlinger, Christopher (eds.), *Formal models in the study of language*. Berlin: Springer. 297-326.

Michaelis, Laura A. 2013. Sign-Based Construction Grammar. In Hoffmann, Thomas & Trousdale, Graeme (eds.), *The Oxford handbook of Construction Grammar*. Oxford: Oxford University Press. 133-152.

Mithun, Marianne 1988. The grammaticization of coordination. In Haiman, John & Thompson, Sandra (eds.), *Clause combining in grammar and discourse*. Amsterdam: John Benjamins. 331-360.

Moravcsik, Edith 1978. Reduplicative constructions. In Greenberg, Joseph H. (ed.), *Universals of human language. Vol. III*. Stanford, CA: Stanford University Press. 297-334.

Östman, Jan-Ola 2005. Construction Discourse: A prolegomenon. In Östman, Jan-Ola & Fried, Mirjam (eds.), *Construction Grammars. Cognitive grounding and theoretical extensions*. Amsterdam / Philadelphia: John Benjamins. 121-144.

Östman, Jan-Ola & Fried, Mirjam (eds.) 2005. *Construction Grammars. Cognitive grounding and theoretical extensions*. Amsterdam / Philadelphia: John Benjamins.

Overstreet, Maryann 1999. *Whales, candlelight, and stuff like that: General extenders in English discourse*. New York: Oxford University Press.

Overstreet, Maryann 2005. And stuff *und so*: Investigating pragmatic expressions in English and German. *Journal of Pragmatics* 37,11. 1845-1864.

Pietrandrea, Paola 2008. *Certamente* and *sicuramente*: Encoding dynamic and discursive aspects of commitment in Italian. *Belgian Journal of Linguistics* 22. 221-246. [Special issue on *Commitment* edited by Philippe de Brabanter and Patrick Dendale.]

Rebuschi, Georges 2005. Generalizing the antisymmetric analysis of coordination to nominal modification. *Lingua* 115. 445-459.

Selting, Margret 2007. Lists as embedded structures and the prosody of list construction as an interactional resource. *Journal of Pragmatics* 39. 483-526.

Stolz, Thomas 2009. Total reduplication: Syndetic vs. asyndetic patterns in Europe. *Grazer Linguistische Studien* 71. 99-113.

Stolz, Thomas; Stroh, Cornelia & Urdze, Aina (eds.) 2011. *Total reduplication: The areal linguistics of a potential universal*. Berlin: Akademie Verlag.

Tannen, Deborah 2007. *Talking voices: Repetition, dialogue, and imagery in conversational discourse*. 2nd ed. Cambridge: Cambridge University Press.

Wälchli, Bernard 2005. *Co-compounds and natural coordination*. Oxford: Oxford University Press.

Wierzbicka, Anna 1986. Italian reduplication: Cross cultural pragmatics and illocutionary semantics. *Linguistics* 24. 287-315.