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COORDINATIVE COMPOUNDS IN GREEK: LEXICAL ACCESS AND REPRESENTATION

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ABSTRACT: Two lexical decision tasks, one with overt and one with masked priming, were carried out in order to explore lexical access and mental representation of coordinative compounds in Modern Greek. Results of both experiments showed strong priming effects in both first and second constituent recognition when primed by the whole compound, pointing to lexical access through robust decomposition and, consequently, a structured mental representation where both constituents contribute equally. The study provides some initial insights about coordination at the lexical level and also discusses the role of different relational information between constituents during lexical access of compounds.

KEYWORDS: compounds, headedness, lexical access, mental lexicon, priming.

1. INTRODUCTION*

While coordination is one of the most studied fields in theoretical syntax and the psycholinguistics of coordination has advanced our knowledge of sentence processing, its study in word formation has not been as widespread, and thus far, there is no psycholinguistic evidence about how the human processor handles coordination as a word property in IE languages. The present paper is meant as a contribution towards this direction providing psycholinguistic evidence for the lexical access and mental representation of coordinative compounds in Modern Greek (MG).[1]

The formation of compounds whose components are in a coordinative relation is particularly productive in MG (Ralli, 2009a, 2012). A coordinative compound displays the following characteristics:

* The research presented here represents the initial stage of an on-going investigation regarding the lexical access and representation of coordinative compounds in Modern Greek. We are grateful to an anonymous reviewer, the editors of the special volume and the audiences of the 1st NetWords Workshop (Pisa, Italy), the 33rd Annual Meeting of the Department of Linguistics (Aristotle University of Thessaloniki) and the 1st Psycholinguistics Workshop of Patras for useful comments and suggestions.

[1] Psycholinguistic evidence about coordinative compounds only exists from non-Indo-European languages, such as Chinese (e.g. Chung *et al.*, 2010).

a. In the uncompounded condition its members are connected by the conjunction *and* (rarely *or*) (Whitney, 1889: paragraph 1247).
b. Its meaning is the sum of the meanings of the two constituents.

Apart from nouns and adjectives (which are commonly used in other European languages), MG also exhibits coordination of verbs as well, resulting in three categories of coordinative compounds, as illustrated below:

(1) N N

avγolémono	<	*avγ(ó)*	*lemón(i)*
egg-lemon		egg	lemon

'sauce with egg and lemon'

(2) A A

mavróaspros	<	*mávr(os)*	*áspr(os)*
black-white		black	white

(3) V V

aniγoklíno	<	*aníγ(o)*	*klíno*
open-close		open	close

Like other MG compounds, coordinative compounds are one-word units and single phonological words, containing a stem on their left-hand side (as in (1) and (2) above), and either a stem or a word as their 2nd constituent (as in (3)). As such, they constitute morphological formations, and on the basis of two criteria, the type of their right-hand inflection and the position of stress, are assigned to [stem stem] or [stem word] structures.

As opposed to MG endocentric compounds, which are generally right-headed, it is not clear whether the 2nd constituent of coordinative compounds assumes the role of the head,[2] because the two coordinated constituents are of the same grammatical category and the meaning of the compound as a whole cannot be interpreted as "type of X" as is the case with subordinative compounds.[3] Moreover, the VV formations display

[2] A constituent is considered the head of a compound, when the following two requirements are fullfilled: 1) it determines the meaning of the compounds (semantic superiority), i.e. the whole compound should be interpreted as "type of X" where X stands for the meaning of the head, e.g. *tomatosalad* is a type of *salad* and not a type of *tomato* neither *tomato* + *salad*; 2) it determines the morphosyntactic properties (i.e., grammatical class and gender) of the whole compound. These two requirements give rise to two separate kinds of heads, i.e. "semantic head" *vs.* "morphosyntactic head". Although, in principle, the semantic head could differ for the morphosyntactic head in a given compound, in MG these two always coincide. Thus, when we talk about heads in MG compounds, we refer to the constituent that determines both the morphosyntactic properties of the compound as well as its meaning.

[3] For the classification of compounds and the distinction between "coordinative" and "subordinative" we follow Bisetto & Scalise (2005) and Ralli (2007) for MG.

parallel argument structures in that they do not denote a single event, but a combination of the events expressed by their members. Since neither of the two compound members dominates the other on both categorial and semantic grounds, one could suggest that coordinative compounds are headless, or adopt Kageyama's (2009) position about Japanese similar constructions that they are double-headed. According to Ralli (2009b, 2012), one may conventionally opt for the 2nd constituent as the head of the construction. Her main argument in favour of this position is drawn from VV compounds, which always display the inflection of the 2nd member, as in (4):

(4)

compound	V1	V2
vrodoastráfto.IC1	*vrod(ó)*.IC2	*astráfto*.IC1
thunder-lighten	thunder	lighten

where IC = inflection class

Closely associated to headedness is also the question of the order of the compound components. If coordinative compounds are not subject to headedness considerations, the order according to which the constituents are combined together should be interchangeable. In fact, an alternating order is attested as far as the AA formations are concerned, as in (5).

(5) A A

a.	*kitrinoprásinos*	<	*kítrin(os)*	*prásinos*
	yellow-green		yellow	green
b.	*prasinokítrinos*	<	*prásin(os)*	*kítrinos*
	green-yellow		green	yellow

Only few cases of AA constructions show a fixed order, which is due either to phonology or to lexicalization: first, native speakers show a preference for an order where the shorter element precedes the longer (6a), although the opposite order (6b) is not entirely rejected, as illustrated by the following example:

(6)

a.	*γaloitalós*	<	*γál(os)*	*italós*
	French-Italian		French	Italian
b.	*italoγálos(?)*	<	*ital(ós)*	*γálos*
	Italian-French		Italian	French

Second, a fixed order is shown in certain AA coordinative compounds with a special, lexicalized meaning, not fully predicted by the meanings of the two constituents. *γlikanálatos* 'insipid, namby-pamby' is such an example, which combines the constituents *γlik(ós)* 'sweet' and *análatos* 'unsalted'. This compound never appears as **analatóγlikos*.

Contrary to AA coordinative compounds, NN and VV formations have a fixed constituent order, as outlined in (7):

(7) a. V V
aniγoklíno
open-close

vs.

**klinaníγo*
close-open

b. N N
γinekópeδa
women-children

**peδoγíneka*
children-women

The fixed order of NN and VV coordinative compounds contrasts with the free word-order that usually occurs in syntactic constructions bearing a coordinative relation. For an illustration, consider the following cases, containing two nouns (8a) or two verbs (8b), joined by the conjunctions *ke* 'and' or *i* 'or' in syntax:

(8) a. N CONJ N
lemóni ke/i avγó / avγó ke/i lemóni
lemon and/or egg / egg and/or lemon
'sauce with egg and lemon'

vs. N N
*avγolémono / *lemónavγo*
egg-lemon / lemon-egg

b. V CONJ V
píno ke/i tróo / tróo ke/i píno
drink and/or eat / eat and/or drink

vs. V V
*troγopíno / *pinotróγo*
eat-drink / drink-eat

Thus far, we have no behavioural evidence regarding the processing and representation of coordinative compounds. Therefore, it remains an open issue whether the semantic/conceptual relationship between the two constituents affects their processing, resulting in different patterns of lexical access when compared to subordinative compounds, in the way coordination and subordination processing differ in syntax. In other words, the main question is whether we are dealing with two autonomous constituents which co-exist in the same word formation or if there is a relationship of priority of one constituent towards the other, especially given the prominence of the 2nd constituent in morphosyntactic terms. If the latter, then coordination in compounding is different than coordination in syntax and it is subject to the same mechanisms of processing as subordinative compounds.

2. PSYCHOLINGUISTIC BACKGROUND

There is a variety of "traditional" issues pertaining to structural and semantic properties of compounds, among which morphological parsing and constituent activation during lexical access, the role of semantic transparency

as well as the issue of the representation of headedness. Furthermore, the semantic/conceptual relation between the constituents has been the focus of recent research, mainly for the processing of novel compounds but also for established ones. This issue is of particular interest to our study.

When it comes to morphological parsing, previous priming experiments have shown morphological decomposition (*tomato* + *salad*) for both transparent and opaque compounds, e.g. *deadline* (e.g. Libben *et al*., 2003), suggesting processing of morphological structure during lexical access and pointing to structured abstract representations of compounds in the Mental Lexicon (ML), while other studies report priming effects only of transparent compounds (e.g. Marslen-Wilson *et al.*, 1994). Early decomposition has recently been confirmed by masked priming experiments, a technique which is considered to tap into early stages of word recognition (Forster & Davies, 1984). For instance, robust decomposition has been observed for English (Shoolman & Andrews, 2003; Fiorentino & Fund-Reznicek, 2009) and for Basque (Duñabeitia *et al.*, 2009). However, despite the above evidence, decomposition should not be taken for granted in compound processing. Juhasz *et al.* (2008) found no processing differences between compound and monomorphemic words during reading, whereas Drieghe *et al.* (2010) found an advantage for compound words over monomorphemic ones.

The effect of *headedness* has proven less straightforward. Although Libben (2006: 18) states that "compound processing might offer our best opportunity to explore the hierarchy phenomenon" suggesting an expectation for a more prominent role for heads, a variety of results have been reported in the literature using stimuli from a mixture of languages. For instance, a positional advantage of the 1st, non-head constituent was observed for English (Libben, 1998), Greek and Polish (Kehayia *et al.*, 1999), while in other cases both the 1st and the 2nd constituent were equally activated (Jarema *et al.*, 1999 for French and Polish). Moreover, head constituent activation has been observed depending on the transparency of the compound for German (Isel, Gunter & Friederici, 2003), English (Libben, 1998), Dutch (Sandra, 1990; Zwitserlood, 1994) and independently of the position of the head (Marelli, Crepaldi & Luzzatti, 2009; Marelli & Luzzati, 2012 for Italian).

Recently, the semantic relationship between the two constituents has been reported to affect their processing in relation priming. For instance, Spalding & Gagné (2011) have shown that earlier exposure to a specific conceptual combination of the two constituents (noun-FOR-modifier *teacup vs.* noun-MADE OF-modifier *snowball*) strongly affects the processing of compounds, concluding that the interpretation of a compound includes the relation as well as the meanings of the constituents. The role of the

relation between constituents is particularly important for our investigation given that the two types of compounds under investigation clearly differ in terms of relation between their constituents, i.e. coordinative (A+B) *vs.* subordinative (type of B) and not necessarily in terms of headedness, a term which requires both semantic and morphosyntactic prominence of a constituent.

In MG, while earlier experiments showed stronger 1st constituent activation, more recent studies on transparent deverbal participial compounds, e.g. *kaloxtenisménos* 'nicely combed' (Kehayia, Manouilidou & Ralli, 2004) and on deverbal compounds of the N-N form, e.g. *vivliokritís* 'book reviewer' (Manouilidou *et al.*, 2009), have shown stronger 2nd constituent activation suggesting that the grammatical information associated with the second constituent might play a crucial role. These two previous priming studies where headedness effects were found for MG shared some common characteristics in terms of "task effect" (the compound acted as prime and the constituents as targets), "linguistic effect" (in all cases the head constituents carried an increased amount of grammatical information, i.e. being deverbal) and "compound effect" (the head was clearly defined to the right of the compound, as subordinative compounds were used).

Following this line of research, the present study looks for psycholinguistic evidence on lexical access and mental representation of MG coordinative compounds with no dependency relation such as *maxeropíruna* 'knives and forks', by contrasting them with subordinative compounds (e.g. *domatosaláta,* 'tomato salad') which conversely exhibit a dependency relation between constituents. Results are expected to provide initial insights into the role of coordination at the lexical level, complement the theoretical description of coordinative compounds and possibly shed light on theoretical issues (i.e. non-dependency relation, compositional meaning, headedness) affecting behavioural evidence. Finally, they can also enrich psycholinguistic theories and models of lexical access by providing evidence from a type of compounds not previously studied in IE languages.

3. THE PRESENT STUDY: EXPERIMENTS

Two lexical decision tasks with priming were carried out in order to investigate the lexical access of coordinative compounds. The first experiment was a lexical decision task with unmasked priming task while the second with masked priming, a technique which is mainly used for tapping into unconscious processes of lexical access. The rationale for choosing these procedures was that they could potentially help us distinguish between semantic (unmasked priming) and morphological (masked priming) effects

and shed light into issues of lexical access and representation of coordinative compounds. In both tasks, the compounds acted as primes and participants had to make a lexical decision to the constituents. This is considered a more direct way to study compound lexical access, since any priming effects could only be attributed to compound processing and decomposition (Myers, Derwing & Libben, 2004) which becomes especially powerful in masked priming. Since primes are briefly presented, any priming effects are taken to provide evidence for automatic and unconscious processing of the compound.

1.1 Experiment 1

An overt priming experiment where the compound acted as prime and the constituents as targets was carried out.[4] If the different semantic/conceptual relationship between the constituents of the two types of compounds plays a role in their lexical access, then distinct patterns of facilitation should be observed for each type (coordinative *vs.* subordinative). Specifically, for both types of compounds, facilitation for constituent recognition is expected, which would be in accordance with a decompositional view of compound processing as demonstrated widely in the literature. In other words, priming for both constituents is expected. However, we also expect a difference in the magnitude of the priming for the 2nd constituent between the two types of compounds. Specifically, for subordinative compounds, given that in MG the head constituent carries increased grammatical and semantic/conceptual load, stronger priming for the 2nd constituent is expected (Kehayia, Manouilidou & Ralli, 2004; Manouilidou *et al.*, 2009; Zwitserlood, 1994), since its effect could arise while accessing both the morphological structure as well as the meaning of a compound, as overt priming allows.

Coordinative compounds are also expected to be easily decomposed into their constituents given their high degree of transparency and lack of a dependency relation between the two constituents. Similarly, since coordination is indicative of equal contribution of both constituents to the meaning of the compound and the absence of dependency relation, their mental representation should be well-structured and balanced in a way that access to the compound would necessarily require access to both constituents. In this case, equal priming effects for both constituents should be expected. However, the possibility for stronger priming for the second constituent should not be excluded, by analogy to subordinative

[4] Experiment 1 was originally performed as part of Konstantina Kordouli's BA thesis at the University of Patras and it is considered for publication (in Greek) for the *Proceedings of the 33rd Annual Meeting of the Department of Linguistics*, Aristotle University of Thessaloniki.

compounds, since it still carries the morpho-syntactic properties of the whole compound, albeit not necessarily the semantic ones. Thus, the issue of processing coordination in compounding remains open. If one of the constituents plays a more prominent role in coordinative compounds, then we expect this constituent to yield stronger priming and the lexical access patterns for coordinative compounds to be similar to those of subordinative ones. In this case, we would have evidence that coordination in compounding is different from coordination in syntactic structures. In the opposite case, if no constituent plays a more prominent role and there is equal contribution of both constituents in the lexical access of the compound, then equal priming for both constituents should be observed. In this case, we would have a stronger similarity between coordination in syntax and in compounding.

3.1.1 Participants

25 native speakers of MG (21 female, 4 male) with mean age 21.36 years old and with a mean of 14.71 years of education participated in the study. The experiment ran approximately for 20 minutes.

3.1.2 Materials and design

The stimulus material comprised: i) 16 subordinative compounds, e.g. *domatosaláta* 'tomato salad'; ii) 16 coordinative compounds, e.g. *maxeropíruna* 'knives & forks"; iii) 32 control words for the 1st constituent; iv) 32 control words for the 2nd constituent; v) 64 pairs of fillers; vi) 64 pairs of non-words. Hence overall, the stimuli comprised 192 prime-targets pairs.[5] All stimulus materials were matched and counterbalanced for familiarity (whole word and constituent), grammatical class (the sample included N, A and V compounds), gender, morphological complexity of first and second constituent. Each of the 16 items per compound type where further divided into two sets of 8 items whose whole form and constituents were matched orthogonally. The pairs "compound > constituents" and "compound > controls of constituents" were counterbalanced across two presentation lists so that each compound appeared only twice in each list as prime either to its first or to its second constituent and their respective controls. In this way we minimised any possible effect of repetition priming since each participant saw only two instantiations of a particular compound instead of four. Table

[5] Part of the stimulus set were also novel words of both the subordinative and the coordinative type. Since we do not discuss them further due to space limitations, we do not mention them in detail in the present section.

1 shows examples of experimental trials across conditions and order of presentation.

PRIME	TARGET
psarósupa 'fish soup'	*psári* 'fish' *xalí* 'carpet'
domatosaláta 'tomato salad'	*saláta* 'salad' *karékla* 'chair'
maxeropíruna 'knives and forks'	*maxérja* 'knives' *korítsia* 'girls'
ginekópeda 'women and children'	*pedjá* 'children' *vunά* 'mountains'

TABLE 1. EXAMPLES OF EXPERIMENTAL TRIALS ACROSS CONDITIONS.

3.1.3 Procedure

The task was administered on a PC using the E-Prime Professional (version 2.0.8.74) program for stimulus presentation. Participants first saw a fixation cross in the middle of the screen for 2000ms. Then the prime appeared for a period of 250ms, followed by a pause of 100ms, which was in turn followed by the target (for 10000ms). Participants were instructed to press, as quickly and as accurately as possible, either the YES or the NO button on the keyboard to indicate whether or not the target was a legitimate word in their language. Trial presentation was randomised across participants.

3.1.4 Analysis and results

Prior to data analysis, three participants were removed for excessive RTs. Erroneous responses and outliers were also removed. This data did not exceed 9% of each participant's responses. For each participant and each item mean RTs were calculated in each condition after error removal. Table 2 shows mean RTs in milliseconds and error rates for each item as well as priming effects. Equal priming for 1st and 2nd constituent was observed for both types of compounds (coordinative *vs.* subordinative). However, the priming for the coordinative compounds (either on first or on second constituent) was of a greater magnitude (51ms and 57ms respectively).

RTs were submitted to a 2 x 2 x 2 Repeated Measures ANOVAs with "PrimeType" (subordinative *vs.* coordinative), "Constituency" (1st or 2nd) and "ConstituencyControl" (Control *vs.* NonControl) as factors. Results showed a significant main effect of ConstituencyControl by participants [*F1 (1,22) = 18.97, p = 0.0001*] and by items [*F2(1,63) = 6.19, p = 0.02*] suggesting that lexical decisions were faster when the target was

a constituent rather than a control word, a significant main effect of PrimeType only by participants *[F1(1, 22)= 6.52, p = 0.02]* but not by items *[F2 (1,63) = 1.48, p = 0.23]* suggesting that the type of compound (subordinative *vs.* coordinative) could have influenced the results and no main effect of Constituency *[F1 (1,22) = 3.19, p = 0.09; F2 (1, 63) = 1.53, p = 0.22]* suggesting that there is no difference between the first or the second constituent. Finally, there is a tendency for a significant interaction between PrimeType and Constituency (*F1=3,671, p = 0.07*).

PRIME	1st CONST	1st CONTROL	*PRIMING*	2nd CONST	2nd CONTROL	*PRIMING*
Subordinative *domatosaláta* 'tomato salad'	617 (.07)	642 (.06)	25	639 (.03)	666 (.06)	27
Coordinative *maxeropíruna* 'knives and forks'	597 (.05)	648 (.06)	51	598 (.06)	654 (.04)	56

TABLE 2A. MEAN RTS (WITH ERROR RATES) FOR 1ST AND 2ND CONSTITUENT, THEIR CONTROLS AND PRIMING EFFECTS.

3.1.5 Discussion

For both types of compounds, equal priming for 1st and 2nd constituent was observed. However, although there was facilitation for subordinative compounds, this did not reach significance neither by items nor by participants.[6] In contrast, the strong and robust priming observed for coordinative compounds points to a view of lexical access through decomposition where both constituents are evenly accessed. Furthermore, it suggests constituent-sized representations which are activated across-the-board without any constraints. The equal activation of 1st and 2nd constituent could be interpreted as an indication that no constituent plays a more prominent role and there is equal contribution of both constituents, bringing coordination in compounding closer to coordination in syntax.

3.2 Experiment 2

A masked priming experiment with the same materials, the same design and the same order of prime (compound) > target (constituent) was carried out. Based on the outcome of Experiment 1, the aim of this study was to examine whether coordinative compounds would also be subject to rapid

[6] A confounder here could be the relatively small number of participants. However, Cohen's effect size value (d = 0.3) suggests a small to moderate effect, which does not negate the results of the current experiments but make us interpret our data in a cautious way.

morphological decomposition during early stages of lexical access. If this is the case, then we would have robust evidence for morpheme-based access and structured mental representations where both constituents contribute equally. Given that headedness effects were not observed in Experiment 1, we do not expect them to surface in the masked priming either.

3.2.1 Participants

21 native speakers of MG (13 female, 8 male), (mean age 21.1 years old and mean education 15.3 years) participated in the study.

3.2.2 Procedure

The task was administered on the same PC as Experiment 1. Participants first saw a forward mask consisting of hash marks (#'s) for 500ms. Then the prime appeared for a period of 50ms, followed by the target in capital letters which remained on the screen for 2500ms. Participants were not aware of the presence of a prime and they were instructed to press, as quickly and as accurately as possible, either the YES or the NO button on the keyboard to indicate whether or not the target was a legitimate word in their language.

3.2.3 Analysis and results

Prior to data analysis, two participants, erroneous responses and outliers were removed. This data did not exceed 9% of each participant's responses. For each participant and each item mean RTs were calculated in each condition after error removal. Table 3 shows mean RTs in milliseconds (with error rate) for each item as well as priming effects. Once again, there was facilitation for both constituents in both types of compounds.

RTs were submitted to a 2 x 2 x 2 Repeated Measures ANOVA with the same factors as Experiment 1. There was a significant effect of ConstituencyControl both by participants and by items *[F1(1, 19)= 18.69, p < .0001; F2 (1, 63)= 6.24, p = 0.01]*: participants were faster when they had to make a lexical decision on the constituents than on their controls. On the other hand, effects of PrimeType and of Constituency were significant only by participants *[F1 (1, 19)= 10,35, p = 0.005* and *F1(1, 19) = 7,31, p = 0.01]* respectively, suggesting that facilitation was greater for coordinative compounds.[7] No significant interactions were found neither by participants

[7] The occasional lack of significant effects in by item analysis in both experiments suggests some degree of variability within the stimulus set, which could be attributed to factors such as grammatical class and gender which varied within each category of compounds.

nor by items. Similarly to Experiment 1 a power analysis was conducted and it revealed a small to moderate effect size (Cohen's d = 0.39).

PRIME	1st CONST	1st CONTROL	PRIMING	2nd CONST	2nd CONTROL	PRIMING
Subordinative *domatosaláta* 'tomato salad'	621 (.04)	634 (.06)	13	632 (.06)	654 (.07)	22
Coordinative *maxeropíruna* 'knives and forks'	593 (.05)	632 (.05)	39	603 (.05)	637 (.05)	34

TABLE 3A. MEAN RTS (WITH ERROR RATES) FOR 1ST AND 2ND CONSTITUENT, THEIR CONTROLS AND PRIMING EFFECTS.

3.2.4 Discussion

The results obtained from Experiment 2 pattern with the ones from Experiment 1. While the lack of significant priming effects for subordinative compounds was expected given the results of Experiment 1, the still strong priming effects for coordinative compounds indicate a strictly constituent-based lexical access which is achieved through robust decomposition.

4. GENERAL DISCUSSION AND CONCLUSIONS

The present paper is meant as a first psycholinguistic investigation of coordinative compounds in MG. The aim of the study was to examine their lexical access and representation and, by extension, coordination in compounding, that is coordination at the lexical level. To this end, unmasked and masked priming experiments were carried out to compare lexical access of transparent coordinative and transparent subordinative compounds.

Results from both experiments suggest a difference between the two types of compounds. More specifically, in Experiment 1 (overt priming) strong priming effects were reported in connection with coordinative compounds, supporting a view of lexical access through decomposition and constituent activation and further indicating the existence of a well-structured and easily segmentable mental representation in which both constituents contribute equally. Facilitation for subordinative compounds did not reach significance, pointing to a more holistic (one-word) access resembling monomorphemic words, along the lines of Juhasz *et al.* (2008) and Drieghe *et al.* (2010). The difference between subordinative and coordinative compounds in their lexical access and representation is confirmed in a robust way by the results of Experiment 2 where masked priming was used, which

allows us to investigate earlier stages of lexical access. Results confirmed morphological parsing for coordinative compounds even in masked conditions (along the lines of Fiorentino & Fund-Reznik, 2009), stressing the contribution of each constituent in accessing the whole compound and suggesting a structured representation in the ML.

As for the psycholinguistic implications of the present work, our results provide further support to the idea that relational information (Gagné & Spalding, 2006; Spalding & Gagné, 2011) is an important determinant of compound's representation and processing. As mentioned in section 2, there is growing evidence that semantic transparency plays an important role in the processing of compounds (Libben, 1998; Libben *et al.*, 2003; Zwitserlood, 1994), as it appears to determine whether and to what extent compound constituents are linked to the whole compound. All compounds used in the present study are fairly familiar and established words of the MG lexicon and they are all transparent, with the same morphological structure. Thus, the only way we could interpret the difference between the coordinative and subordinative type is by appealing to their difference in semantic/conceptual structure. That is, compounds that convey a coordinative relation between the two constituents such that both concepts are supported equally by the same referent (i.e. coordinative compounds) are more easily decomposable. If this is the case, then we have an indication that the degree of meaning compositionality of a compound contributes to the degree of their decomposability when processed. A compound whose meaning is a compositional function of the meaning of its constituents is more likely to trigger facilitation and faster activation of its constituents when acting as prime. However, this issue is open to further investigation.

From a theoretical point of view, our data suggests that in coordinative compounds the two constituents are represented on a par, as theoretical descriptions postulate (Ralli, 2009a, 2012), since they both appear to play a comparable role in accessing meaning and structure of the compound. This is in contrast with the results we offered for subordinative compounds, which support a more lexicalized representation where the contribution of each constituent is not as easily distinguishable. Finally, the present paper gave us the opportunity to gain preliminary insights into coordination at a lexical level. Coordinative compounds appeared to be subject to robust decomposition, a pattern that the current study did not show for subordinative compounds. If this is confirmed, we will have an indication that coordination in compounding might resemble coordination in syntax.

In conclusion, the present study has touched upon issues not previously investigated in psycholinguistics. The promising and insightful results notwithstanding, the limitations of this small scale investigation call for further research.

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