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ΚΕΝΤΡΟΝ ΕΡΕΥΝΗΣ ΕΠΙΣΤΗΜΟΝΙΚΩΝ ΟΡΩΝ ΚΑΙ ΝΕΟΛΟΓΙΣΜΩΝ

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Μελέτες με δεδομένα από την Ελληνική και άλλες γλώσσες

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EVALUATIVE HEADS IN ENGLISH AND MODERN GREEK COMPOUNDING[1]

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ABSTRACT

This study aims at the validation of the linking patterns of grammatical and evaluative heads in English and Modern Greek compounding, proposed in Charitonidis (2014). For the validation of English patterns, the valence (emotional positivity) ratings in Warriner, Kuperman & Brysbaert (2013) are used. For the validation of Modern Greek patterns are used the positivity ratings elicited by means of 30 online interviews with native Greek speakers. The results show that the classes of compounds presented in Charitonidis (2014) hold for the most part. An attribute-listing task conducted during the Greek interviews suggests that the evaluative head of a pejorative compound always bears a higher number of negative attributes than the evaluative nonhead.

Keywords: questionnaire-based survey; attitudinal compounds; evaluative heads; valence; pejoration

1. Introduction

This study reports the findings of the (for the most part) self-funded project *Evaluative Operations in Compounding* (EOC), conducted in two parts at the University of Cologne between July 2014 and January 2016. EOC aimed at the validation of the head-linking patterns of English (EN) and Modern Greek (MG) attitudinal compounds, proposed in Charitonidis (2014).

Before I deal with the head-linking patterns in Charitonidis (2014), I would like to present the most relevant classifications of EN and MG compounds proposed in previous literature.

1 This paper draws on author's previous research on attitudinal compounds, see Charitonidis (2014, 2015a, 2017a, 2017b).

S. Markantonatou & A. Christofidou (Eds.), Multiword expressions: Drawing on data from Modern Greek and other languages, Bulletin of Scientific Terminology and Neologisms, 15, 105-132 © Academy of Athens

Scalise & Bisetto (2009), hereafter abbreviated as "S&B (2009)" provide a cross-linguistic classificatory system of compounds, while placing special focus on EN, see Figure 1.[2]

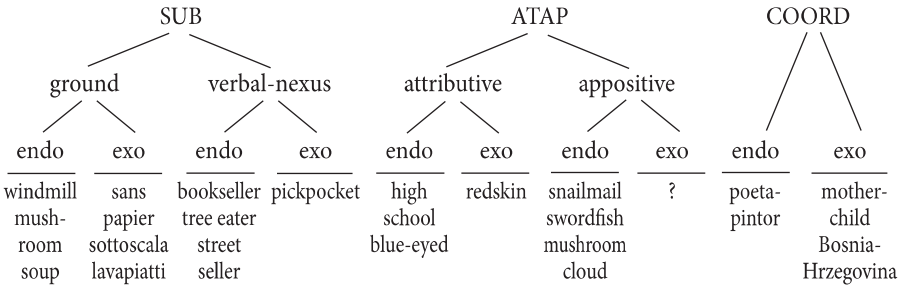

Figure 1: Scalise & Bisetto (2009: 50).

In Figure 1, SUB refers to *subordinate* compounds, i.e. compounds with two constituents sharing a – broadly construed – head-complement/adjunct relation, e.g. *apron string* 'string of an apron', 'string resting on an apron', 'string threaded into an apron', etc. Subordinate compounds are divided into *ground* and *verbal-nexus* compounds. Ground compounds are "formations that are traditionally defined as *root,* i.e. lexemes that can be both simple and complex" (S&B, 2009: 51).[3] The semantic relation between the two constituents is actually determined by the semantico-encyclopedic information associated with the component lexemes (the "semantic/pragmatic body" in Lieber's 2004, 2007 terms).[4] Verbal-nexus compounds contain a base verb in the derived second constituent that defines the argumental status of the first constituent, cf. *bookseller* 'someone selling books' (*books:* object/complement), *tree eater* 'someone eating on a tree' (*tree:* location/adjunct), etc. Ground and verbal-nexus compounds are further divided into *endocentric* (presence of a head constituent) and *exocentric* (absence of a head constitu-

2 This system is an elaborate version of the compounding classes in Bisetto & Scalise (2005). In the presentation of the classes SUB, ATAP, and COORD, I largely follow S&B's (2009) description, with minor changes in wording, addition of examples, etc.

3 Cf. the two-word compound *apron string* ([apron] first constituent, [string] second constituent), the three-word compound *university teaching award* ([university] first constituent, [teaching award] second constituent), etc.

4 In Lieber (2009) a further division of the pragmatic component into "pragmatic body" and "encyclopedia" is made.

ent). An endocentric ground compound is *windmill,* etc., and an exocentric ground compound is the Italian *lavapiatti*, Lit. wash dishes, 'dishwasher' etc. An endocentric verbal-nexus compound is *tree eater,* etc., and an exocentric verbal-nexus compound is *pickpocket,* etc.

ATAP refers to *attributive* and *appositive* compounds.[5] Attributive compounds are formations in which the non-head constituent, usually an adjective or a verb, expresses a property or quality of the head constituent, cf. *high school* (A–N), *shriek alarm* (V–N), etc. Appositives, such as *snail mail, swordfish,* etc., are "compounds in which the nonhead element expresses a property of the head constituent by means of a noun, an apposition, acting as an attribute" (S&B, 2009: 51). In the appositives the nonhead always has a metaphorical interpretation. As in the SUB category, there is a distinction between *endocentric* and *exocentric* formations. An endocentric attributive compound is *high school,* etc., and an exocentric attributive compound is *redskin,* etc. An endocentric appositive compound is *swordfish,* etc., and an exocentric appositive compound is *egg head,* etc. Exocentric appositive compounds are very rare.

COORD refers to coordinate compounds (also labelled as 'copulative' in the present paper). According to S&B (2009: 46), coordinates are formations whose constituents are syntactically identical and can be connected with the conjunction "and" (N+N, A+A, V+V, Adv+Adv, etc.). Semantically/pragmatically, coordinates contain highly similar constituents. As in the SUB and ATAP compounds they are divided into endocentric, cf. *author-actor*, etc., and exocentric, cf. *mother-child,* etc.

In what follows, I would like to present the classification of MG compounds, proposed by Ralli (2013). Compounding is a very productive word-formation process in MG. One-word compounds in MG belong to the major grammatical categories, noun, adjective, and verb, and have a binary structure.[6] In Table 1, the categorial status of compound constituents is given, together with examples.[7]

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5 As Lieber (2009: 97) argues, ATAP compounds cannot be interpreted in the same way as subordinates or coordinates and thus constitute "a kind of default semantic type". Attributive compounds occur "when the skeletons (the referential/grammatical part, CC) and bodies (the pragmatic part, CC) of compounding elements are too disparate to be interpreted as coordinates and lack the sort of argument structure that gives rise to subordinates".

6 Adverbial compounds are secondary formations (Ralli, 2013: 37).

7 For secondary combinations see Ralli (2013: 29–44).

Nouns	[N N]	αλατοπίπερ(ο) *(alatopipero)* 'salt-pepper'	<	αλάτ(ι) *(alati)* 'salt'	πιπέρ(ι) *(piperi)* 'pepper'
	[A N]	στενοσόκακ(ο) *(stenosokako)* 'narrow street'	<	στεν(ό) *(steno)* 'narrow'	σοκάκ(ι) *(sokaki)* 'street'
Adjectives	[A A]	ασπροκόκκιν(ος) *(asprokokinos)* 'white-red'	<	άσπρ(ος) *(aspros)* 'white'	κόκκιν(ος) *(kokinos)* 'red'
	[N A]	ηλιοκαμέν(ος) *(iliokamenos)* 'sunburnt'	<	ήλι(ος) *(ilios)* 'sun'	καμέν(ος) *(kamenos)* 'burnt'
	[Adv A]	κακοντυμέν(ος) *(kakontymenos)* 'badly dressed'	<	κακ(ά) *(kaka)* 'badly'	ντυμέν(ος) *(ntymenos)* 'dressed'
Verbs	[V V]	ανοιγοκλείν(ω) *(anigoklino)* 'open-close'	<	ανοίγ(ω) *(anigo)* 'open'	κλείν(ω) *(klino)* 'close'
	[N V]	χαρτοπαίζ(ω) *(chartopezo)* 'play cards'	<	χαρτ(ιά) *(chartia)* 'cards'	παίζ(ω) *(pezo)* 'play'
	[Adv V]	αργοπεθαίν(ω) *(argopetheno)* 'die slowly'	<	αργ(ά) *(arga)* 'slowly'	πεθαίν(ω) *(petheno)* 'die'

Table 1: The main categories of one-word compounds in MG.

Under a stem-word view (Ράλλη, 2007; Ralli, 2013), four morphological structures are possible in MG compounding, i.e. [stem-stem], [stem-word], [word-stem] and [word-word], whereby a stem is defined as a word stripped off its inflectional ending. Standardly, the right-hand element is the *denotational* (DE, i.e. grammatical and/or categorial) head and carries the inflectional ending. In most cases, a linking vowel -o- shows up between the two constituents.

Regular compounds, like the ones that have been presented so far, are phonological words and bear one stress. From this crucial property are excluded two-word NPs with a compound-like behaviour. Following the terminology in Ralli (2013), these NPs are (a) phrasal compounds, (b) phrasal compound-like phrases, and (c) constructs – see Table 2.

Phrasal Compounds	[A N]	εθνικ(ή) οδ(ός) *(ethniki odos)* 'national road'
	[N NGEN]	αγορ(ά) εργασί(ας) *(agora ergasias)* Lit. market.NOM.SG job.GEN.SG 'job market'
Phrasal-Compound-Like Phrases	[N N] attributive	νόμ(ος) πλαίσι(ο) *(nomos plesio)* 'law-frame'
	[N N] appositive	μεταφραστ(ής)-διερμηνέα(ς) *(metafrastis-diermineas)* 'translator-interpreter'
Constructs	[A N]	θεατρικ(ή) κριτικ(ή) *(theatriki kritiki)* Lit. theatrical criticism 'drama review'
	[N NGEN]	παραγωγ(ή) καπν(ού) *(paragogi kapnoy)* Lit. production tobacco.GEN 'tobacco production'
	[N NACC]	χυμ(ός) πορτοκάλι *(chymos portokali)* Lit. juice orange.ACC 'orange juice'

Table 2: MG NPs with a compound-like behaviour.

According to Ralli (2013: 250) only phrasal compounds belong to compounding since they are "semi-visible to syntax".[8] Similarly, some of the attributive phrasal-compound-like phrases are in a process of desyntacticization. Among others, they respond negatively to tests regarding the change of inflection of the non-head, cf. the nonhead πλαίσιο (*plesio*) in νόμος πλαίσιο (*nomos.*NOM *plesio.*NOM), Lit. law frame, 'outline law' with νόμου πλαίσιο (*nomoy.*GEN *plesio.*NOM) for Genitive, etc.

Appositive phrasal-compound-like phrases and constructs are products of syntax. They are examined in Ralli (2013: 255–256) and Ralli (2013: 258–261), respectively. For the semantics of NN combinations in MG, see Gavriilidou (2016).

8 According to Ralli (2013: 250), the semantics of phrasal compounds may be non-compositional, but "their structure is derived in syntax, in that, it is not based on morphologically proper units and is not the product of a morphological process".

2. Linking denotational (DE) with socio-expressive (SE) heads in compounding

To address the semantics of attitudinal compounds, Charitonidis (2012a, 2012b, 2013, 2014, 2015a, 2015b) introduced an evaluative (pragmatic) level of meaning, i.e. the "socio-expressive (SE) tier", that shows up parallel to the grammatical and/or categorial level, i.e. the "denotational (DE) tier".

The DE tier emerges according to the interplay of grammatical/categorial heads with grammatical/categorial nonheads. The grammatical/categorial head is the constituent that defines the grammatical category of a complex word. For instance, in the compound noun *psychological warfare, psychological* is an adjective and *warfare* is a noun. Accordingly, *warfare* is the grammatical/categorial head of the compound.

The SE tier emerges according to the interplay of three SE features, i.e. {measure}, {stance}, and {interpersonal}, in head or nonhead position.[9] The SE tier is crucial in the description of compound meaning, because compounds are coined according to pressing pragmatic needs. Caffi & Janney (1994: 328) use the term *emotive communication* to capture the essentials of these pragmatic needs:

"*Emotive communication:* the intentional, strategic signalling of affective information in speech and writing (e.g., evaluative dispositions, evidential commitments, volitional stances, relational orientations, degrees of emphasis, etc.) in order to influence partners' interpretations of situations and reach different goals." (Caffi & Janney, 1994: 328).

Pragmatic needs necessitate an extra level of meaning that shows up parallel to basic semantic operations. Consider, for instance, the EN compounds *dog house* and *jewel heist,* discussed in Weiskopf (2007). These [N+N] compounds are mainly pragmatically (contextually) motivated, while their reference shifts to extremely counterfactual conditions when it is interpreted literally by means of set intersection: *dog house* does not denote an x that is both a dog and a house, *jewel heist* does not denote an x that is both a jewel and a heist, etc. (Weiskopf, 2007: 162).

In this paper, I will refer to the SE tier by focusing on {stance}. {stance} is the only SE feature that, through its +/– changing head-operations (+/–HO), sufficiently defines the compounding classes in EN and MG (Charitonidis, 2014; Charitonidis, 2015a).[10] As regards the meaning of this feature, {+s}

9 SE features are indicated with curly brackets.

10 The workings of a +/–HO operation are presented later in this section by means of the examples *brain drain* and *idiot girl*.

refers to positive {stance}, and {–s} refers to negative {stance} towards a situation or entity.[11] {stance} may also be underspecified, i.e. merely {s}.

In (1) I rephrase the properties of the SE tier in relation to compounding (Charitonidis, 2014; Charitonidis, 2015a) by narrowing their scope to {stance}.

(1) The properties of the SE tier in relation to compounding

a. Both constituents in the compounds refer to a {stance} value, i.e. {+s}, {–s}, or {s}.
b. SE (evaluative) heads can be right-hand (RH) or left-hand (LH).[12] Valued features in the SE (evaluative) heads are also heads.
c. Underspecified features in the first or second constituent are merged regardless of their head role.
d. The SE arguments – linked to the single compound referent – are addressed by the features throughout the derivation, i.e. the SE arguments are evaluated anew in every derivational step including output.

In the following, I will describe the properties of the SE tier in detail. All {stance} values assigned to the compound constituents are independently confirmed by the valence ratings in Warriner, Kuperman & Brysbaert (2013).

(1a) defines that every compound constituent (a major lexical category) bears an evaluative content that can be positive ({+s}), negative ({–s}), or underspecified ({s}). For instance, in *brain drain, brain* is {+s}, and *drain* is {–s}. In *automania, auto* is {s}, and *mania* is {–s}. In *shadow factory* both constituents are {s}, etc.

(1b) suggests that compounds such as *brain drain,* etc., have a RH SE (evaluative) head and compounds such as *idiot girl,* etc., have a LH SE (evaluative) head. The position of the SE (evaluative) head emerges most clearly in +/–HO compounds. For instance, in the R{SE} compound *brain drain,* {–s} in *drain* reverts {+s} in *brain,* and in the L{SE} compound *idiot girl,* {–s} in *idiot* reverts {+s} in *girl,* etc.[13]

(1c) defines that, when a compound constituent is underspecified, the position of the SE (evaluative) head is irrelevant and the output is computed by means of a simple merging. For instance, in the compound *psychological warfare,* {s} in *psychological* is merged with {–s} in *warfare* yielding {–s} in the output, by disregarding the fact that *psychological* is the SE (evaluative) head of the compound, etc.

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11 In simple terms, {+s} refers to lexemes with a positive meaning, and {–s} refers to lexemes with a negative meaning.

12 In this paper, the terms "socio-expressive (SE) heads" and "evaluative heads" are interchanged.

13 "R{SE}" and "L{SE}" are abbreviations of "RH SE head" and "LH SE head" respectively.

The three-fold evaluation of the single compound referent referred to in (1d) calls for the application of the SE operations in a syntactic way. For instance, in *brain drain* three evaluations are necessary: the compound referent is first evaluated in the SE (evaluative) nonhead *brain* as {+s}, in a second step the same referent is evaluated in the SE (evaluative) head *drain* as {–s}, and in a third step the same referent is evaluated in the SE output *brain drain* as {–s}, etc.

Linking patterns	EN class	Examples	MG class	Examples
1. R[DE] ~ R{SE}	A_{EN}	brain drain	A_{MG}	κοσμοχαλασμ(ός) (*kosmochalasmos*) Lit. people uproar 'uproar of people'
2. R[DE] ~ L{SE}	B_{EN}	idiot girl	$D1_{MG}$ B_{MG} (exocentric)	μαύρ(η) αγορ(ά) (*mavri agora*) 'black market' ελαφρόμυαλ(ος) (*elafromyalos*) 'light-minded'
3. [DE][DE] ~ R{SE} <u>v</u> L {SE}	C_{EN}	boy toy / toy boy	C_{MG}	γλυκόπικρ(ος) (*glykopikros* / *pikroglykos*) 'bitter sweet'
4. L[DE] ~ R{SE}	Ø Ø	Ø Ø	$D2_{MG}$ E_{MG}	οίκ(ος) ανοχ(ής) (*ikos anochis*) Lit. house tolerance 'brothel' εταιρεί(α) μαϊμού (*eteria maimoy*) Lit. company monkey 'dummy corporation'

R: right-hand, L: left-hand, [DE]: denotational head,
{SE}: socio-expressive (evaluative) head

Table 3: The head-linking patterns of EN and MG attitudinal compounds (Charitonidis, 2014).

Charitonidis (2014) proposed that the linking of DE and SE (evaluative) heads defines classes A_{EN}, B_{EN}, and C_{EN} of EN attitudinal compounds, and classes A_{MG}, B_{MG}, C_{MG}, $D1_{MG}$, $D2_{MG}$, and E_{MG} of MG attitudinal compounds, see Table 3. In the +/–HO compounds of Table 3, the SE (evaluative) head always bears negative {stance}. In classes C_{EN} and C_{MG} with two DE heads, the alternating order L{SE} <u>v</u> R{SE} indicates that the SE (evaluative) head may be in LH or RH position,

cf. EN *toy boy* and MG πικρόγλυκ(ος) (*pikroglykos*) 'bitter-sweet' vs. EN *boy toy* and MG γλυκόπικρ(ος) (*glykopikros*), Lit. sweet-bitter, 'bitter-sweet' respectively.

3. Validation of English (EN) attitudinal compounds

This section refers to the validation of head-linking patterns A_{EN}, B_{EN}, and C_{EN} in EN compounding, proposed in Charitonidis (2014), see Table 3. For this task, a set of 103 EN attitudinal compounds are examined by using the valence ratings in Warriner, Kuperman & Brysbaert (2013). All compounds are neologisms of the 20th century, taken from Algeo (1991). Only compounds with an explicitly positive or negative meaning were taken into account. This criterion considered the following issues: (a) not all neologisms are well-known words, and (b) a process of lexicalization may have altered the meaning of these words in contemporary language.

In visual recognition tasks (Warriner, Kuperman & Brysbaert, 2013; Kuperman, 2013 among others) *valence* is a semantic variable gauging the amount of pleasantness or discomfort that a person feels when reading a word. The participants are asked to give a rating for presented words by referring to a scale from 1 (happy) to 9 (sad, unhappy). For technical reasons, the reverted ratings enter the analysis, whereby 1 refers to the most negative, and 9 to the most positive value. Words with extreme average valence ratings are *pedophile* (1.26) and *vacation* (8.53).

The categorical mappings of valence onto {stance} used in the validation task are shown in (2). These mappings consider the valence rating "5" as directly corresponding to {s} while rounding the proximate ratings.

(2)

Valence	{Stance}
1 – 4.4	{–s}
4.5 – 5.4	{s}
5.5 – 9	{+s}

The linking of DE and SE (evaluative) heads validates classes A_{EN} and B_{EN}. These classes correspond to the classes of subordinate endocentric compounds (SUB compounds) and attributive/appositive compounds (ATAP compounds) in S&B's (2009) classification, respectively, see Figure 1. Class C_{EN} containing the compound *boy toy* / *toy boy* alone cannot be validated. This is because *boy* has positive (5.84) and *toy* a strongly positive valence (7.29). Accordingly, the alternating constituent order cannot be explained according to a possible negative reading of *toy* in LH or RH position yielding a negative output (see Section 2).

In both the A_{EN} and B_{EN} classes, the RH constituent is the DE head. In A_{EN} compounds, such as *brain drain, computer virus,* etc., the RH constituent is also the SE (evaluative) head. In B_{EN} compounds, such as *idiot girl, trash television,* etc., the SE (evaluative) head is the LH constituent.

Table 4 exemplifies these patterns. DE heads are indicated with "[HEAD]" and SE (evaluative) heads are indicated with bold face. The competition of {+s} with {–s} delineates both classes, whereby {–s} survives in the output by being within the SE (evaluative) head.

A_{EN}	[NONHEAD]		[HEAD]		[OUTPUT]
	brain	+	drain	→	brain drain
	{+s}		**{–s}**		{–s}
B_{EN}	[NONHEAD]		[HEAD]		[OUTPUT]
	idiot	+	girl	→	idiot girl
	{–s}		{+s}		{–s}

Table 4: Validated classes of EN attitudinal compounds.

By being unexceptionally subject to the properties of the SE tier in (2), 77.67% of the examined EN compounds are assigned to these two classes alone.

The remaining 22.33% of the compounds, i.e. 12 R[DE] ~ R{SE} and 11 R[DE] ~ L{SE} compounds with an unexpected negative and/or pejorative meaning, do not address the properties of the SE tier in (1). Tables 5 and 6 display these patterns, respectively.[14] Each table contains the following information: In the first row, the respective compounds are given. In the second row, the mean valence-values for each compound constituent show up. ">" indicates that the first compound constituent has a higher mean-value than the second one and "<" indicates the opposite. In the parentheses, the standard-deviation (SD) values for each constituent are given. In the third row, the difference rate between the lower and the higher mean-value of the compound constituents shows up. In the same row "BL" (balanced) indicates that the difference rate between the mean valence-values of constituents is below 1. In the fourth row, the mean valence-values from the second row are displayed as {stance} values (see (3)). In each instance, the first {stance} value refers to the LH constituent and the second {stance} value refers to the RH constituent. In the fifth row, SD1 refers to the SD value of the first constituent, and SD2 refers to the SD value of the second constituent (as already mentioned, both SD values are given in pa-

14 It should be noted that *police state* in Table 6 was originally a positive concept (Tipton, 2012: 14–16).

rentheses in the second row of both tables).[15] As regards *name dropper* in Table 5, "OR" refers to the object reading of *dropper,* i.e. 'a short glass tube fitted with a rubber bulb and used to measure liquids by drops' (www.merriam-webster.com), and "AR" refers to the agent reading of the same noun, i.e. someone who drops. Accordingly, in the AR of *dropper,* the valence and SD values of the verb *drop* are considered. These special references were necessary because, in its common use, *dropper* refers to an artifact only remotely associated with the action reading of the same word in *name dropper*. The sixth row contains a general evaluation of the results: "Valid" indicates that the examined linking pattern is validated, and "Non-valid" indicates the opposite (the number of compounds examined in each column shows up in parentheses). In both tables, the combinations of BL rates and negative SD shifts are indicated with bold face.

1	brain wash couch potato name calling	dollar gap notch baby soap opera sofa spud	name dropper	gender gap	domino theory spud suit	notch year
2	6.22 > 6 (1.63|2.07) 6.52 > 6.4 (1.44|2.21) 5.62 < 6.18 (1.56|1.84)	7.39 > 4.91 (1.51|1.54) 5.32 < 6.67 (1.57|2.36) 7.1 > 5.68 (1.41|1.59) 6.26 > 5.05 (1.69|2.16)	5.62 > 5.05 (OR) or 4.23 (AR) (1.56|2.12 (OR) or 1.57 (AR))	5.05 > 4.91 (1.35|1.54)	5 < 5.65 (1.52|1.3) 5.05 < 5.89 (2.16|1.97)	5.32 < 5.75 (1.57|1.29)
3	**0.22 (BL),** **0.12 (BL),** **0.56 (BL)**	2.48, 1.35, 1.42, 1.21	**0.57 (BL)** or 1.39	**0.14 (BL)**	**0.84 (BL),** **0.65 (BL)**	**0.43 (BL)**
4	{+s}{+s} {+s}{+s} {+s}{+s}	{+s}{s} {s}{+s} {+s}{+s} {+s}{s}	{+s}{s} or {+s}{−s}	{s}{s}	{s}{+s} {s}{+s}	{s}{+s}
5	**−SD2: {−s}**	−SD2: {−s}	**−SD2: {−s}** or AR2 {−s}	**−SD2: {−s}**	**−SD2: {−s}**	−SD1: {−s} AND **−SD2: {s}**
6	Valid (3)	Valid (4)	Valid (1)	Valid (1)	Valid (2)	Non-valid (1)

Table 5: 12 R[DE] ~ R{SE} compounds with a non-compositional negative meaning.

15 It should be noted that in the compounds *creative accounting* and *egg head* in Table 6, the −SD1 shift corresponds to a slightly lower value (see the indication "forced assignment" under Table 6).

1	big lie	black spot	creative accounting	defensive medicine, spin doctor	eager beaver	yellow market, baseball diplomacy	police state	sand-wich generation	egg head
2	5.64 > 2.39 (1.73|1.43)	5.4 >5.12 (2.14|1.54)	7.06 >4.42 (1.55|.09)	4.65< 5.9 (1.81| 2.39) 4.9 < 5.93 (0.89|1.89)	6.37 >5 (1.38| 1.84)	6.09 < 6.21 (1.82| 1.68) 5.79 > 5.53 (1.93|2.48)	4.59 < 5.73 (2.4| 1.32)	7.18 >6.08 (1.33|1.77)	5.95 >5.86 (1.43|1.32)
3	3.25	**0.28 (BL)**	2.64	1.25, 1.03	1.37	**0.12 (BL), 0.26 (BL)**	1.14	1.1	**0.09 (BL)**
4	{+s}{–s}	{s}{s}	{+s}{–s}	{s}{+s} {s}{+s}	{+s}{s}	{+s}{+s} {+s}{+s}	{s}{+s}	{+s}{+s}	{+s} {+s}
5	–SD1: {–s}	**–SD1: {–s}**	–SD1: {s} (5.51)	–SD1:{–s}	–SD1: {s}, –SD2: {–s}	**–SD1:{–s}**	–SD1:{–s}	no resort	**–SD1:{–s} (4.52)**
6	Valid (1)	Valid (1)	Valid (1)	Valid (2)	Non- valid (1)	Valid (2)	Valid (1)	Non-valid(1)	Valid (1)

creative accounting –SD1: {s} (forced assignment, 5.51 = {+s})
egg head –SD1: {–s} (forced assignment, 4.52 = {s})

Table 6: 11 R[DE] ~ L{SE} compounds with a non-compositional negative meaning.

The comparison of the patterns of 12 R[DE] ~ R{SE} compounds with the patterns of 11 R[DE] ~ L{SE} compounds yields two distinct patterns. For almost all (11/12) R[DE] ~ R{SE} compounds (Table 5), it suffices to assume a negative SD shift in the second constituent, i.e. the SE (evaluative) head, to obtain a negative output. Most notably, this negative SD2 shift is often (7/11) accompanied by BL mean-values, i.e. proximate-value combinations of positive/positive, positive/underspecified or underspecified/underspecified constituents.

These levelled patterns do not show up in the R[DE] ~ L{SE} compounds (Table 6). On the one hand, for 9 out of 11 compounds, it suffices to assume a negative SD shift in the first constituent, i.e. the SE (evaluative) head, to obtain a negative output (the –SD1:{–s} assignment in *egg* of *egg head* is forced). On the other hand, this negative SD1 shift is randomly (4/9) accompanied by BL mean-values (actually 3/9 – consider again the exceptional case of *egg head*).

I do not have a ready-made explanation for these two distinct patterns. I would only like to make the following assumptions by referring to both the DE

and SE tier. Since in the R[DE] ~ R{SE} compounds the DE and SE (evaluative) heads coincide, a combined strategy is necessary for triggering output shifts. In contrast, in the R[DE] ~ L{SE} compounds, the SE (evaluative) head, by being uniquely mapped onto the LH constituent, allows for a stronger SD shift.

sandwich generation (Table 6) is the only compound in which a negative SD shift in the first (*sandwich*; Valence: 7.18, SD: 1.33) and/or second constituent (*generation*; Valence: 6.08, SD: 1.77) cannot yield the attested negative output. This is obviously due to the high mean-value of the SE (evaluative) head *sandwich*.[16]

4. The validation of Modern Greek (MG) attitudinal compounds

This section refers to the validation of head-linking patterns A_{MG}, B_{MG}, C_{MG}, $D1_{MG}$, $D2_{MG}$, and E_{MG} in MG compounding, proposed in Charitonidis (2014), see Table 3. For this task 30 online interviews with native Greek speakers were conducted between January and April 2015.

4.1 Interview design

The interviews were designed by using the Open-Source Software LimeSurvey that is provided by the University of Cologne. The participants were (mostly postgraduate) students of the University of Thessaloniki. Interview collaborators and/or recruiters were Christiane Bongartz (University of Cologne), Elvira Masoura (University of Thessaloniki), and Eleni Agathopoulou (University of Thessaloniki).

As regards the procedure prior to the interviews, an Information Sheet containing the survey's terms and conditions was sent by email to the volunteers. The Information Sheet was accompanied by a sample questionnaire containing the evaluation of the concept *palto* 'coat'.

After expressing their agreement with the terms and conditions described in the Information Sheet, the volunteers entered a group of 10 persons. In particular, three groups of ten persons were defined, i.e. G1, G2, and G3. Six "concepts" (compounds or compound constituents) were presented to each participant in random order. It was made sure that in each group no participant had examined a compound together with its constituents.

Table 7 displays the concepts assigned to each group by considering the (assumed) positivity or negativity of each concept.

16 To which extent such a pattern can call for ironic readings is an open issue.

The participants received an invitation email containing a personalized link. After providing personal information about age, gender, occupation, education, language, and place of origin, they were asked to evaluate the concepts. In particular, the participants were asked (a) to list 6-10 characteristic properties (attributes) for each concept in the form of words or very small phrases (2-4 words) within a time-limit of 90 seconds, (b) to give a definition for each concept by using the characteristic properties they have already listed, (c) to declare whether the concepts have a positive or negative meaning for them, and (d) to make comments about their evaluation.

Each interview took approximately 50 minutes. Participation was completely voluntary; the participants could withdraw at any time.[17]

In the following, I report on the survey results starting from the third part of the interviews. I do this because the obtained numerical values address the examined head-linking patterns directly.

	(negative)	(positive)	(negative)
G1	κοσμοχαλασμ(ός) (*kosmochalasmos*) 'uproar of people'	γλυκ(ός) (*glykos*) 'sweet'	ελαφρ(ός) (*elafros*) 'light'
	μαύρ(η) αγορ(ά) (*mavri agora*) 'black market'	οίκ(ος) (*ikos*) 'house'	μαϊμού (*maimoy*) 'monkey'
G2	ελαφρόμυαλ(ος) (*elafromyalos*) 'light-minded'	κόσμ(ος) (*kosmos*) 'world'	πικρ(ός) (*pikros*) 'bitter'
	οίκ(ος) ανοχ(ής) (*ikos anochis*) 'brothel'	εταιρεί(α) (*eteria*) 'company'	μαύρ(ος) (*mavros*) 'black'
G3	πικρόγλυκ(ος) (*pikroglykos*) 'bitter-sweet'	μυαλ(ό) (*myalo*) 'brain'	χαλασμ(ός) (*chalasmos*) 'uproar'
	εταιρεί(α) μαϊμού (*eteria maimoy*) 'dummy corporation'	αγορ(ά) (*agora*) 'market'	ανοχ(ή) (*anochi*) 'tolerance'

Table 7: Examined concepts in groups G1, G2, and G3.

17 After each interview, the application LimeSurvey anonymized the obtained data. No internet footprints were recorded. The full dataset is published on the internet (see dataset supplementing Charitonidis, 2017a), with only a number attached to each participant; therefore, it is not possible to link any set of data with any individual. The personal data will be kept by the author for five years after EOC's completion and then will be destroyed

4.2 Results from positivity ratings

In the third part of the interviews, the participants were asked to declare whether the presented concepts had a positive or negative meaning for them. The participants had to use a five-point scale in their evaluation, the five points being: "very positive", "positive", "neutral", "negative", "very negative".

In the analysis, "very negative" was mapped onto "1", "negative" onto "2", "neutral" onto "3", "positive" onto "4", and "very positive" onto "5". The categorical mappings of positivity ratings onto {stance} are shown in (4). These mappings are defined by considering each scale point as covering 20% of the five-point scale. The middle 20% scale-space corresponds to {s}.

(4)

Positivity ratings	{Stance}
1 – 2.6	{–s}
2.7 – 3.3	{s}
3.4 – 5	{+s}

Table 8 contains the results from the analysis of one-word compounds, and Table 9 contains the results from the analysis of two-word compounds. In the first row of each table, the examined head-linking patterns are given. In the second row, the positivity ratings for the compounds show up (output), together with SD values in parentheses. In the third row, the positivity ratings for each compound constituent are given. ">" indicates that the first compound constituent has a higher mean-value than the second one, and "<" indicates the opposite. In the parentheses, an SD value for each compound constituent is given. The difference rate between the lower and the higher mean-value of compound constituents shows up in the fourth row. In the same row, "BL" (balanced) indicates that the difference rate between the mean values is below 1. In the fifth row, the mean values from the second and third row are displayed as {stance} values. The first {stance} value refers to the whole compound (output). After the colon, the first {stance} value refers to the first compound constituent, and the second {stance} value refers to the second compound constituent. The sixth row contains a general evaluation of the results: "Valid" indicates that the examined linking pattern is validated, and "Non-valid" indicates the opposite. "–SD1 shift" indicates the subtraction of the SD value from the mean value of the first constituent, and "–SD2 shift" indicates the subtraction of the SD value from the mean value of the second constituent. Both shifts occur in the SE (evaluative) heads of the compounds.

1	R[DE] ~ R{SE} (A_{MG})	R[DE] ~ L{SE} (B_{MG})	[DE][DE] ~ L{SE} $\underline{\vee}$ R{SE} (C_{MG})
2	κοσμοχαλασμ(ός) (*kosmochalasmos*) 'uproar of people' 1.8 (0.63)	ελαφρόμυαλ(ος) (*elafromyalos*) 'light-minded' 2 (0.47)	πικρόγλυκ(ος) (*pikroglykos*) 'bitter-sweet' 3.3 (0.82)
3	κόσμ(ος) (*kosmos*) 'world' & χαλασμ(ός) (*chalasmos*) 'uproar' 3.7 (0.67) > 1.3 (0.48)	ελαφρ(ός) (*elafros*) 'light' & μυαλ(ό) (*myalo*) 'brain' 3.9 (0.57) < 4.4 (0.52)	πικρ(ός) (*pikros*) 'bitter' & γλυκ(ός) (*glykos*) 'sweet' 1.9 (0.57) < 4.9 (0.32)
4	2.4	0.5 (BL)	3
5	{–s}: {+s}{–s}	{–s}: {+s}{+s}	{s}: {–s}{+s}
6	Valid	Non-valid (–SD1 shift not possible)	Non-valid (underspecified output)

Table 8: Results from positivity ratings: One-word compounds.

As becomes apparent from the results, the linking patterns R[DE] ~ R{SE} (A_{MG}) and L[DE] ~ R{SE} ($D2_{MG}$) are immediately validated without reference to SD shifts in the SE (evaluative) heads. In contrast, patterns R[DE] ~ L{SE} ($D1_{MG}$) and L[DE] ~ R{SE} (E_{MG}) are validated only with reference to SD shifts in the SE (evaluative) heads.

In the one-word compounds (Table 8), the linking patterns R[DE] ~ L{SE} (B_{MG}) and [DE][DE] ~ L{SE} $\underline{\vee}$ R{SE} (C_{MG}) are not valid. On the one hand, a negative SD shift in the LH SE (evaluative) head of ελαφρόμυαλ(ος) (*elafromyal(os)*) 'light-minded' is not capable of yielding the attested negative output (3.9 – 0.57 = 3.33 ({s})). On the other hand, the underspecified output in πικρόγλυκ(ος) (*pikroglykos*) 'bitter-sweet' precludes a ±HO pattern between the constituents. Concomitantly, the alternating constituent order πικρόγλυκ(ος) (*pikroglykos*) / γλυκόπικρ(ος) (*glykopikros)* cannot be explained according to a negative head operation of πικρ(ός) (*pikros*) in LH or RH position (see Section 2). It should be noted that, in accord with these results, the analysis in Section 3 shows that the corresponding class of EN attitudinal compounds, i.e. the coordinative (copulative) class C_{EN}, is not valid.

On top of this, the {stance} values for πικρόγλυκ(ος) (*pikroglykos*) and its constituents suggest that both constituents contribute equally to the computation of the output by neutralizing each other ({–s} (first constituent) + {+s} (second constituent) = {s} (output)). This pattern is in accord with the well-established

consideration of coordinative compounds as consisting of two constituents that equally contribute to compound meaning (Ralli, 2013: 157–158).

In the two-word compounds μαύρ(η) αγορ(ά) (*mavri agora*) 'black market' and εταιρεί(α) μαϊμού (*eteria maimoy*) 'dummy corporation' (Table 9), the valid –SD shifts are in accord with the operations in EN attitudinal compounds described in Section 3. In these compounds, the subtraction of the SD value from the mean value of the SE (evaluative) head normally results in negative interpretations.[18]

1	R[DE] ~ L{SE} ($D1_{MG}$)	L[DE] ~ R{SE} ($D2_{MG}$)	L[DE] ~ R{SE} (E_{MG})
2	μαύρ(η) αγορ(ά) (*mavri agora*) 'black market' 1.7 (0.95)	οίκ(ος) ανοχ(ής) (*ikos anochis*) 'brothel' 1.8 (0.63)	εταιρεί(α) μαϊμού (*eteria maimoy*) 'dummy corporation' 1.5 (0.53)
3	μαύρ(ος) (*mavros*) 'black' & αγορ(ά) (*agora*) 'market' 2.8 (0.63) < 3.6 (0.84)	οίκ(ος) (*ikos*) 'house' & ανοχ(ή) (*anochi*) 'tolerance' 4.3 (0.67) > 2.3 (0.95)	εταιρεί(α) (*eteria*) 'company' & μαϊμού (*maimoy*) 'monkey' 3.2 (0.79) = 3.2 (0.79)
4	0.8 (BL)	2	0 (BL)
5	{–s}: {s}{+s}	{–s}: {+s}{–s}	{–s}: {s}{s}
6	Valid (–SD1 shift)	Valid	Valid (–SD2 shift)

Table 9: Results from positivity ratings: Two-word compounds.

A_{MG}	[NONHEAD]			[HEAD]			[OUTPUT]	
	κόσμ(ος) (*kosmos*)	'people'	+	χαλασμ(ός) (*chalasmos*)	'uproar'	→	κοσμοχα- λασμ(ός) (*kosmocha- lasmos*)	'uproar of people'
	{+s}			**{–s}**			{–s}	
$D1_{MG}$	[NONHEAD]			[HEAD]			[OUTPUT]	
	μαύρ(η) (*mavri*)	'black'	+	αγορ(ά) (*agora*)	'market'	→	μαύρ(η) αγορ(ά) (*mavri agora*)	'black market'
	{–s}			{+s}			{–s}	

18 It should be noted that in εταιρεί(α) μαϊμού *(eteria maimoy)* a ±HO pattern does not show up because the SE nonhead *eteri(a)* is underspecified. However, the value of this constituent, i.e. 3.2, is adjacent to the {+s} spectrum (see (4)).

$D2_{MG}$	[HEAD]			[NONHEAD]			[OUTPUT]	
	οίκ(ος) (*ikos*)	'house'	+	ανοχ(ής) (*anochis*)	'tolerance'	→	οίκ(ος) ανοχ(ής) (*ikos anochis*)	'brothel'
	{+s}			**{–s}**			{–s}	
E_{MG}	[HEAD]			[NONHEAD]			[OUTPUT]	
	εταιρεί(α) (*eteria*)	'company'	+	μαϊμού (*maimoy*)	'monkey'	→	εταιρεί(α) μαϊμού (*eteria maimoy*)	'dummy corporation'
	{s}			**{–s}**			{–s}	

Table 10: Validated classes of MG attitudinal compounds.

For the sake of clarity, Table 10 contains the validated head-linking patterns A_{MG}, $D1_{MG}$, $D2_{MG}$, and E_{MG}. DE heads are indicated with '[HEAD]', and SE (evaluative) heads are indicated with bold face. Class A_{MG} refers to one-word endocentric compounds. Classes $D1_{MG}$, $D2_{MG}$, and E_{MG} correspond to [A N] phrasal compounds, [N N_{GEN}] phrasal compounds, and [N N] attributive phrasal-compound-like phrases in Table 2, respectively.

Concluding, the small number of compounds examined in this paper does not permit the assessment of extra evaluative strategies associated with specific head-linking patterns, such as the co-occurrence of BL mean-values with negative SD shifts in the SE (evaluative) heads, etc. (see Section 3).

4.3 Results from attribute listing

In the first part of the interviews, the participants were asked to list characteristic properties (attributes) for six concepts (compounds and compound constituents). In the second part of the interviews, the participants were asked to give a definition for each concept by selecting as many attributes as possible from those already given. In the analysis, the definitions given in the second part were used to disambiguate the attributes given in the first part. The elicited attributes were thought of as indirectly representing parts of mental concepts (Ungerer & Schmid, 1998; Ungerer & Schmid, 2006). The focus of the analysis was on the explicitly negative attributes given for *compound constituents*.

As regards data processing, all attributes for a concept in each group of 10 participants were alphabetically ordered. (Near-)synonyms were put togeth-

er. Repeated or synonymous attributes *given by the same participant* were ignored. Ignored, as well, were groups of two attributes and all nonce attributes. In the extraction of percentages, repeated or synonymous attributes given by the same participant did not count as population members.

The results show that a higher number of negative attributes in one of the two constituents directly points to the negative SE (evaluative) head of the compounds. Table 11 contains the percentages of negative attributes in the constituents of validated compounds (classes A_{MG}, $D1_{MG}$, $D2_{MG}$, E_{MG}). The highest percentage in one of the two constituents is indicated with bold face. Tables 12-15 contain the negative attributes assigned to compound constituents. Participant numbers are included in parentheses next to the attributes.

Linking pattern	Compound	First constituent	Second constituent
R[DE] ~ R{SE} (A_{MG})	κοσμοχαλασμ(ός) (*kosmochalasmos*) 'uproar of people'	κόσμ(ος) (*kosmos*) 'people'	χαλασμ(ός) (*chalasmos*) 'uproar'
	Negative attributes:	∅/52 [0%]	29/37 **[78.38%]**
R[DE] ~ L{SE} ($D1_{MG}$)	μαύρ(η) αγορ(ά) (*mavri agora*) 'black market'	μαύρ(ος) (*mavros*) 'black'	αγορ(ά) (*agora*) 'market'
	Negative attributes:	11/46 **[23.91%]**	5/50 [10%]
L[DE] ~ R{SE} ($D2_{MG}$)	οίκ(ος) ανοχ(ής) (*ikos anochis*) 'brothel'	οίκ(ος) (*ikos*) 'house'	ανοχ(ή) (*anochi*) 'tolerance'
	Negative attributes:	1/64 [1.56%]	6/34 **[17.65%]**
L[DE] ~ R{SE} (E_{MG})	εταιρεί(α) μαϊμού (*eteria maimoy*) 'dummy corporation'	εταιρεί(α) (*eteria*) 'company'	μαϊμού (*maimoy*) 'monkey'
	Negative attributes:	1/49 [2.04%]	7/71 **[9.86%]**

R: right-hand, L: left-hand, [DE]: DE head, {SE}: SE (evaluative) head

Table 11: Negative attributes in the constituents of validated compounds.

κοσμοχαλασμ(ός) (*kosmochalasmos*) 'uproar of people'	MEAN VALUE: 1.8 ({–s})
κόσμ(ος) (*kosmos*) 'world'	NEGATIVE ATTRIBUTES: 0 out of 52 (0%)
χαλασμ(ός) (*chalasmos*) 'chaos', 'uproar'	NEGATIVE ATTRIBUTES: 29 out of 37 (78.38%)
καταστροφές 'damage' (22), καταστροφή 'disaster' (23), (24), (25), (28), (29), (30), καταστροφικές συνέπειες 'devastating effects' (27), καταιγίδα 'storm' (28), κατακλυσμός 'flood' (29), σπάσιμο 'destruction' (21), συντρίμμια 'rubble' (26), (28), (24), καταρρέω 'collapse' (30), δράμα 'tragedy' (26), απόγνωση 'despair' (30), πανικός 'panic' (22), (25), δυσκολία 'difficulty' (25), δυσμενείς συνθήκες 'adverse circumstances' (27), ανατροπή σχεδίων 'foiling of plans' (21), ματαίωση 'foiling' (23), αρνητική 'negative' (23), αρνητικό φαινόμενο 'negative phenomenon' (29), αρνητικό 'negative' (21), αναμπουμπούλα 'mess' (28), μαρασμός 'decline' (21), μη λειτουργικό 'not functional' (21)	

Table 12: Negative attributes in the constituents of the compound κοσμοχαλασμ(ός) (kosmochalasmos) *'uproar of people' (class A_{MG}).*

μαύρ(η) αγορ(ά) (*mavri agora*) 'black market'	MEAN VALUE: 1.7 ({–s})
μαύρ(ος) (*mavros*) 'black'	NEGATIVE ATTRIBUTES: 11 out of 46 (23.91%)
εκφράζει πένθος 'expresses bereavement' (19), κηδεία 'funeral' (18), θάνατος 'death' (16), απαισιόδοξος 'pessimistic' (16), καταθλιπτικό 'depressing' (20), διακρίσεις 'discrimination' (11), αφορμή για ρατσισμό από πολλούς 'a reason for many people's racism' (19), βρώμικο 'dirty' (12), ζοφερό 'murky' (12), μαύρη ζωή 'miserable life' (18), φόβος 'fear' (19)	
αγορ(ά) (*agora*) 'market'	NEGATIVE ATTRIBUTES: 5 out of 50 (10%)
κίνηση 'bustle' (27), (28), κόσμος 'crowd' (23), κυκλοφοριακό 'traffic problems' (27), υπερκατανάλωση 'overconsumption' (30)	

Table 13: Negative attributes in the constituents of the compound μαύρ(η) αγορ(ά) (mavri agora) *'black market' (class $D1_{MG}$).*

οίκ(ος) ανοχ(ής) (*ikos anochis*) 'brothel'	MEAN VALUE: 1.8 ({–s})
οίκ(ος) (*ikos*) 'house'	NEGATIVE ATTRIBUTES: 1 out of 64 (1.56%)
ανοχής 'tolerance', 'sufferance' (genitive, CC) (8)	
ανοχ(ή) (*anochi*) 'tolerance', 'sufferance'	NEGATIVE ATTRIBUTES: 6 out of 34 (17.65%)
αρνητική κατάσταση 'negative situation' (23), αρνητική 'negative' (fem., CC) (24), αρνητικό 'negative' (neuter, CC) (21), ενοχλητική, προσβλητική, βλαβερή ενέργεια 'embarrassing, offending, harmful action' (27), δεν το θέλουμε 'undesirable' (29), μειονέκτημα 'drawback' (30)	

Table 14: Negative attributes in the constituents of the compound οίκ(ος) ανοχ(ής) (ikos anochis) *'brothel' (class $D2_{MG}$).*

εταιρεί(α) μαϊμού (*eteria maimoy*) 'dummy corporation'	MEAN VALUE: 1.5 (0.53) ({–s})
εταιρεί(α) (*eteria*) 'company'	NEGATIVE ATTRIBUTES: 1 out of 49 (2.04%)
χρεωκοπία 'insolvency' (12)	
μαϊμού (*maimoy*) 'monkey'	NEGATIVE ATTRIBUTES: 7 out of 71 (9.86%)
εκνευριστικό 'irritating' (2), κάνει χαζούς ήχους 'makes silly noise' (2), πονηρή 'sly' (fem., CC) (10), πονηρός 'sly' (masc., CC) (8), χαζό 'silly' (2), απομίμηση 'fake' (10), ψεύτικο 'cheap', 'worthless' (8)	

Table 15: Negative attributes in the constituents of the compound εταιρεί(α) μαϊμού (eteria maimoy) *'dummy corporation' (class E_{MG}).*

5. *Theoretical implications*

The implementation of SE (evaluative) heads that work together with DE (grammatical/categorial) heads adds a powerful device in compound formation. An SE (evaluative) head does not strictly adhere to the syntactic category of the respective constituent. As mentioned in Charitonidis (2014: 10), cross-linguistic work on the *combination of categories* suggests a restricted semantic account of compounding. For instance, by examining the attested combinations of constituents in ~60% of their sample, Guevara and Scalise (2009: 120) state that "the privileged structure is [N+N]. The remaining combinations (i.e. [A+N], [N+A], [A+A], [V+N], [N+V], [V+V], [Adv+A],

[Adv+N], and [A+V], CC) have a much lower incidence, and cluster quite closely, making it extremely difficult to draw any conclusions." (Guevara & Scalise, 2009: 122).

The assessment of evaluative heads is in accord with *psycholinguistic research* on compounding. In visual recognition tasks, a more emotionally negative compound or constituent leads to slower responses (Estes & Adelman, 2008; Kuperman, 2013). Similarly, as shown in Tables 4 and 10, {–s} within the SE (evaluative) head of the compounds survives in the output.

As Prato and John (1991) and Estes and Adelman (2008) have shown, automatic vigilance (attention to negative or positive information) is categorical and not linear. This means that "slightly negative and extremely negative words elicit equally slow responding, and that slightly positive and extremely positive words elicit equally fast responding." (Estes & Adelman, 2008: 456). In accord with these findings, the mappings of valence (positivity) onto {stance} defined in the present paper are categorical (see (3) and (4), respectively).

As mentioned in Charitonidis (2014: 26), the negative SD shifts in the evaluative heads are in accord with *pragmatic accounts,* such as that in Recanati (1993, 2004), Weiskopf (2007), among others. The pragmatic context can change the value of the SE features in the SE (evaluative) head of a compound, prior to the semantic composition between the constituents. For instance, in the case of μαύρ(η) αγορ(ά) (*mavri agora*) 'black market' in Table 10, the SE (evaluative) head μαύρ(ος) (*mavros*) 'black' does not enter the construction with the meaning '(of colour) black' i.e. as an {s} entity, but referring to an activity outside of government-sanctioned channels, i.e. as a {–s} entity (SD shift: 2.8 (positivity mean) – 0.63 (SD) = 2.17 ({–s}). In combination with the SE (evaluative) nonhead αγορ(ά) (*agora*) 'market', this SE (evaluative) head determines the meaning of the whole construction. The recurrence of a specific context establishes this construction as a compound.

6. Brief presentation / Περίληψη

Αυτή η μελέτη παρουσιάζει τα αποτελέσματα του ερευνητικού προγράμματος *Αξιολογικές Λειτουργίες στη Σύνθεση* το οποίο διεξάχθηκε στο Πανεπιστήμιο της Κολωνίας μεταξύ Ιουλίου 2014 και Ιανουαρίου 2016. Το πρόγραμμα αυτό στόχευε στην επαλήθευση των τάξεων σύνδεσης γραμματικών/κατηγοριακών και αξιολογικών κεφαλών στα αγγλικά και ελληνικά σύνθετα που εκφράζουν θετική ή αρνητική στάση (Charitonidis, 2014).

Το πρώτο μέρος της μελέτης αναφέρεται στην εμπειρική επαλήθευση των τάξεων A_{EN}, B_{EN} και C_{EN} των αγγλικών συνθέτων. Το αντικείμενο της έρευνας αποτελούν 103 σύνθετα τα οποία προέρχονται από το λεξικό νεολογισμών Algeo (1991). Η διαδικασία επαλήθευσης βασίστηκε στις τιμές συναισθηματικής θετικότητας/αρνητικότητας (valence) φυσικών ομιλητών της Αγγλικής για αγγλικά λεξήματα (Warriner, Kuperman & Brysbaert, 2013). Στο παράδειγμα (1) δίνονται οι αντιστοιχίες μεταξύ των τιμών valence και στάσης οι οποίες υιοθετήθηκαν προς επαλήθευση των αξιολογικών λειτουργιών.

(1) Valence Στάση
1 – 4.4 {–στάση}
4.5 – 5.4 {στάση} (υποχαρακτηρισμένη)
5.5 – 9 {+στάση}

Η ανάλυση επαλήθευσε τις τάξεις A_{EN} και B_{EN}, βλ. Πίνακα 1. Οι γραμματικές κεφαλές παρατίθενται με την ένδειξη «[ΚΕΦΑΛΗ]» και οι αξιολογικές κεφαλές με έντονους χαρακτήρες στην ένδειξη στάσης. Χαρακτηριστικό και των δύο τάξεων είναι ότι η αρνητική στάση επιβιώνει στο [ΑΠΟΤΕΛΕΣΜΑ] επειδή βρίσκεται μέσα στην αξιολογική κεφαλή.

A_{EN}	[ΜΗ ΚΕΦΑΛΗ]		[ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	brain	+	drain	→	brain drain
	{+στάση}		**{–στάση}**		{–στάση}
B_{EN}	[ΜΗ ΚΕΦΑΛΗ]		[ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	idiot	+	girl	→	idiot girl
	{–στάση}		{+στάση}		{–στάση}

Πίνακας 1: Οι επαληθευμένες τάξεις των αξιολογικών συνθέτων της Αγγλικής.

Οι μη συνθετικοί συνδυασμοί (22.33%) εξηγούνται κατά κύριο λόγο με αναφορά στο μέγεθος διαφοράς των μέσων όρων των συστατικών των συνθέτων και/ή στις αρνητικές τυπικές αποκλίσεις των μέσων όρων των αξιολογικών κεφαλών.

Παραδείγματος χάριν, σε σύνθετα της τάξης A_{EN}, όπως *brain wash, couch potato,* κτλ., και τα δύο συστατικά έχουν {+στάση}. Η αφαίρεση της τιμής τυπικής απόκλισης από τον μέσο όρο θετικότητας στην αξιολογική κεφαλή (δεύτερο συστατικό) έχει ως αποτέλεσμα {–στάση} και επομένως την αρνητική ερμηνεία αυτών των συνθέτων. Στο (2) αυτές οι λειτουργίες καταδεικνύονται.

(2) *brain wash* *wash:* 6 (μέσος όρος θετικότητας) – 2.07 (τυπική απόκλιση) = 3.93 ({–στάση })
couch potato *potato:* 6.4 (μέσος όρος θετικότητας) – 2.21 (τυπική απόκλιση) = 4.19 ({–στάση })

Το δεύτερο μέρος της μελέτης έχει στόχο την εμπειρική επαλήθευση των τάξεων σύνδεσης A_{MG}, B_{MG}, C_{MG}, $D1_{MG}$, $D2_{MG}$ και E_{MG} των ελληνικών συνθέτων. Το αντικείμενο της έρευνας αποτελούν έξι σύνθετα τα οποία αντλήθηκαν από τις δημοσιεύσεις Ράλλη (2007) και Ralli (2013). Για την πραγματοποίηση του στόχου της έρευνας διεξάχθηκαν 30 συνεντεύξεις μέσω διαδικτύου με φυσικούς ομιλητές της Νέας Ελληνικής σχετικά με τα σύνθετα και τα συστατικά τους. Οι συνεντεύξεις απέφεραν τιμές συναισθηματικής θετικότητας πάνω σε μία πενταβάθμια κλίμακα καθώς και λίστες χαρακτηριστικών, δηλ. λεξήματα ή φράσεις που χαρακτηρίζουν τα σύνθετα και τα συστατικά τους. Στο (3) δίνονται οι αντιστοιχίες μεταξύ τιμών θετικότητας και στάσης οι οποίες υιοθετήθηκαν προς επαλήθευση των αξιολογικών λειτουργιών.

(3)

Τιμές θετικότητας	Στάση
1 – 2.6	{–στάση}
2.7 – 3.3	{στάση} (υποχαρακτηρισμένη)
3.4 – 5	{+στάση}

Η ανάλυση επαλήθευσε τις τάξεις A_{MG}, $D1_{MG}$, $D2_{MG}$ και E_{MG}, βλ. Πίνακα 2. Οι τάξεις A_{MG} και $D2_{MG}$ επαληθεύτηκαν άμεσα σύμφωνα με τους μέσους όρους τιμών θετικότητας και οι τάξεις $D1_{MG}$ και E_{MG} επαληθεύτηκαν σύμφωνα με αρνητικές τυπικές αποκλίσεις στις αντίστοιχες αξιολογικές κεφαλές (πρβ. (2)).

A_{MG}	[ΜΗ ΚΕΦΑΛΗ]		[ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	κόσμος	+	χαλασμός	→	κοσμοχαλασμός
	{+στάση}		**{–στάση}**		{–στάση}
$D1_{MG}$	[ΜΗ ΚΕΦΑΛΗ]		[ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	μαύρη	+	αγορά	→	μαύρη αγορά
	{–στάση}		{+στάση}		{–στάση}
$D2_{MG}$	[ΚΕΦΑΛΗ]		[ΜΗ ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	οίκος	+	ανοχής	→	οίκος ανοχής
	{+στάση}		**{–στάση}**		{–στάση}
E_{MG}	[ΚΕΦΑΛΗ]		[ΜΗ ΚΕΦΑΛΗ]		[ΑΠΟΤΕΛΕΣΜΑ]
	εταιρεία	+	μαϊμού	→	εταιρεία μαϊμού
	{στάση}		**{–στάση}**		{–στάση}

Πίνακας 2: Οι επαληθευμένες τάξεις των αξιολογικών συνθέτων της Νέας Ελληνικής.

Και στις τέσσερις τάξεις του Πίνακα 2, το συστατικό με τον υψηλότερο αριθμό αρνητικών χαρακτηριστικών αντιστοιχεί άμεσα στην αξιολογική κεφαλή του συνθέτου, βλ. ως παράδειγμα τα αρνητικά χαρακτηριστικά που δόθηκαν για το σύνθετο *οίκος ανοχής* στον Πίνακα 3.

οίκος ανοχής	ΜΕΣΟΣ ΟΡΟΣ: 1.8 ({–στάση})
οίκος	ΑΡΝΗΤΙΚΑ ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ: 1 από 64 (1.56%)
ανοχής	
ανοχή	ΑΡΝΗΤΙΚΑ ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ: 6 από 34 (17.65%)
αρνητική κατάσταση, αρνητική, αρνητικό, ενοχλητική/προσβλητική/βλαβερή ενέργεια, δεν το θέλουμε, μειονέκτημα	

Πίνακας 3: Αρνητικά χαρακτηριστικά για τα συστατικά του συνθέτου οίκ(ος) ανοχ(ής).

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Abbreviations

Abbreviated Form	Full Form
AR	Agent Reading
ATAP	Attributive/Appositive Compounds
BL	Balanced Difference Rate
CC	Author's Comment
COORD	Coordinate Compounds
DE	Denotational
EN	English

endo	Endocentric Compounds
EOC	Evaluative Operations in Compounding
exo	Exocentric Compounds
G	Group
HO	Head operation
L{SE}	Left-hand Socio-expressive Head
LH	Left-hand
MG	Modern Greek
OR	Object Reading
R{SE}	Right-hand Socio-expressive Head
RH	Right-hand
S&B	Scalise & Bisetto
SD	Standard Deviation
SE	Socio-expressive
SUB	Subordinate Compounds

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