On the non-viability of the endocentric–exocentric distinction: Evidence from linguistic creativity

Réka Benczes

Eötvös Loránd University, Budapest

While there is a vast number of compounds in English whose meaning (and motivation) can be traced back to conceptual metaphor and metonymy, they have often been dismissed in morphological literature as semantically opaque phenomena that are not formed on the basis of productive patterns. This bias can be traced back to the widely acknowledged and applied endocentric–exocentric distinction, which is still the dominant approach toward the semantics of compounds.

Through the analysis of recently coined English compounds, the present paper wishes to argue against the traditional endocentric–exocentric distinction by claiming that the distinction does not do justice to the creative wealth that is representative of English compounding, and which cuts across the "endocentric" and "exocentric" labels. For this reason the paper rejects the endocentric–exocentric distinction and introduces an alternative approach to the semantics of compounds, based upon the theoretical framework of cognitive linguistics.

Keywords: endocentric; exocentric; metaphor; metonymy; compounding; linguistic creativity.

1. Introduction[1]

One of the most remarkable features of linguistic creativity in English is the predominance of metaphorical and metonymical compounds in everyday language. This is immediately apparent from the vast number of examples that can be found in dictionaries. One such example is *belly button*, denoting the 'navel', coined in 1934 (*Oxford English Dictionary*; henceforth *OED*). *Belly*, however, fell from grace in the Victorian era and became a taboo word; the wonderfully apt *bread basket* and *pudding house* were coined instead for the same concept (Burridge, 2004: 42). Needless to say, both expressions are metaphor- and metonymy-based: 1) an image schematic metaphor establishes the image-based resemblance between the shape of a bread basket or pudding house (the latter of which is a round container for puddings) and the belly; and 2) a CAUSE FOR EFFECT metonymy

---

[1] I wish to thank my two anonymous reviewers for their very helpful remarks.

provides further motivation by creating a mapping between the thing that is eaten (bread and pudding, respectively) and the result (a bulging belly).

The ongoing appeal of metaphor- and metonymy-based compounds is also demonstrated by the more recently formed *muffin top*, which can be considered as one of the "success stories" of English word-formation. It was originally coined in 2003 by two Australian TV presenters to denote the spare flesh that overhangs loose-fitting jeans. In 2006, it was named as "Word of the Year" by the Australian *Macquarie Dictionary* and was also elected among the "most creative" terms the same year by the American Dialect Society. It eventually entered the online edition of the *OED* in March 2011.

Nevertheless, despite the preponderance of metaphorical and metonymical compounds in English, not much has been said about them in morphological literature on the grounds that they are not based on productive word-formation processes due to their "exocentric" nature. Apparently, in exocentric (or headless) compounds the head "falls outside" of the expression (hence the term "exocentric"), and the compound expression is not a hyponym of the head element. Such coinages are distinguished from endocentric ones, where the compound represents a subcategorization of the entity expressed by the head element (e.g., *apple tree* is a type of tree).

The present paper wishes to argue against the traditional endocentric–exocentric distinction by claiming that the distinction does not do justice to the creative wealth that is representative of English compounding, and which cuts across the "endocentric" and "exocentric" labels. For this reason the paper rejects the endocentric–exocentric distinction and introduces an alternative approach to the semantics of compounds, based upon the theoretical framework of cognitive linguistics. The point is that there are plenty of "unexpected trends" (Bauer and Renouf, 2001: 120) in English word-formation, and a full analysis or description of the English language needs to fit every type and provide a proper explanation for them. As it will be demonstrated in the forthcoming sections, cognitive linguistics is especially suitable for accommodating less prototypical compounding patterns as well, and for this reason is more capable of examining the relationship between linguistic creativity on the one hand and compounding on the other.

The paper will focus on noun-noun compounds in particular, this being the largest and most prevalent type of compounding in English. The structure of the paper will be as follows: Section 2 will highlight the problems of the traditional endocentric–exocentric distinction, while Section 3 will introduce an alternative treatment to the semantics of noun–noun compounds. The theoretical basis of Section 3 will be backed up by the linguistic data of Section 4, which will provide a semantic analysis of two, relatively recent compound formation types. The last, fifth section concludes.

2. Compounds on the periphery of linguistic analysis

One of the basic tenets of formal semantics is the compositionality of meaning (also referred to as "Frege's principle"). According to this theorem, the meaning of a sentence can be deducted from the meaning of its constituents (Kiefer, 2000: 17). Although the focus of Frege's principle is the sentence (more specifically the proposition contained in the sentence), the theory of the compositionality of meaning has been extended to lower levels of syntax as well, such as phrases and words. Compositionality has also been a heavily debated topic in relation to compounds, whose meaning is, in most cases, not predictable from the components. For this reason it has often been argued that compositionality can help to distinguish between compounds (which are not compositional, such as *blackbird*, for the common species *Turdus merula* found all over Europe) and phrases (which still preserve the notion of compositionality, such as *black bird*, for any bird with a black colouring) – see, for example, Matthews (1974). The problem of compositionality is especially acute in the case of "exocentric" compounds, where the compound expression is not a subcategorization of the entity expressed by the head element (as in the case of endocentric compounds).

There are evident difficulties in classifying compounds along the endocentric–exocentric distinction as first established by Bloomfield (1933). Quite often the reason why there is no head element in a compound is because it is considered by speakers to be superfluous and deductible from the context (this possibility is also alluded to by Marchand, 1960: 11) – for example, a quick word search on Google easily confirms the fact that both *notebook computer* and *notebook* are used interchangeably. Therefore, classifying *notebook* as "exocentric" seems to be simply counterintuitive. At the same time, the "exocentric" nature of lexicalized compounds, such as *honeymoon*, is also questionable, as the two neologisms, *babymoon* ('a special holiday taken by parents-to-be before their first baby is born') and *familymoon* ('a holiday immediately after a wedding where the bride and groom are accompanied by children from previous marriages or relationships'), testify.[2] *Honeymoon* originally referred to the first month of a marriage: the honey signifies the sweetness of new love, while the moon represents the fleeting feeling of love that will wane as quickly as the moon (*OED*). Speakers have, however, reanalyzed the meaning of *moon* as an intimate holiday following or preceding an important family event: in the case of *honeymoon*, the vacation follows the wedding, while in *babymoon* and *familymoon* it precedes the events. Therefore, even lexicalized compounds can become reanalysed and, therefore, remotivated by speakers and possess some degree of compositionality and analyzability.

---

[2] The examples are from a web-based collection of English neologisms, http://www.wordspy.com (henceforth Wordspy). For a detailed analysis, see Benczes (2010).

Despite the problematic nature of the endo- versus exocentric classification, the terms have prevailed in the compounding literature up to the present: see, for example, Spencer (1991), Haspelmath (2002), Booij (2005) or Barcelona (2008). The question of the use and applicability of these terms comes especially to the forefront within cognitive linguistics, as "endocentric" and "exocentric" are simply not compatible with the encyclopaedic view of meaning on two accounts. First, the prefixes – denoting "inside" and "outside", respectively – imply a rigid, dictionary-like approach to word meaning, where categories have firm boundaries (and, consequently, can refer to an entity that falls either "within" or "outside of" their confines). Second, it is a commonplace claim within cognitive linguistics that the fuzziness of categories does not pertain to conceptual categories only, but also to grammatical ones. It therefore follows that endo- and exocentricity should not be considered as mutually exclusive phenomena, but should more rather be regarded as endpoints on a cline, with most composites falling somewhere in-between.[3]

The endocentric–exocentric distinction has also had a profound – and rather negative – effect on the scope of morphological research into compounding in the sense that linguistic literature has a strong tendency to focus on exocentric combinations only peripherally (if they are mentioned at all). This fact is also underlined by Scalise and Guevara (2006: 185): "In fact, while there is an extensive literature on endocentric compounding, the references to the theoretical and/or typological treatment of exocentric compounds are *very rare*" (emphasis added). Although descriptivist approaches do make reference to exocentric combinations, these are typically more superficial than the detailed classifications of endocentric compounds (see, for example, Jespersen, 1954; Adams, 1973). An exception to this trend is Marchand (1960), who devotes a whole chapter to the classification of exocentric compounds. As regards to the transformational generativist account, it left the issue of metaphorical and metonymical compounds untouched, probably for the simple reason that the theoretical framework was unable to accommodate such combinations. This inadequacy was heavily criticized by Botha (1968), who made note of the fact that not only does Afrikaans contain a significant proportion of metaphor-based compounds (and which would be considered as exocentric and, therefore, would fall outside of linguistic analysis and description), but speakers have intuitions concerning the meaning of these expressions. In line with the general attitude outlined above, Kiefer (1992: 62) in his general account of Hungarian compounding considers exocentric compounds as "peripheral", and, therefore, not worthy of a proper linguistic analysis. In Kiefer's view, the

---

[3] In line with this reasoning, Dirven and Verspoor (1998) discard the traditional dichotomy of endo- and exocentric compounds and argue instead for a cline of transparency of meaning. However, they treat metaphorical and metonymical compounds as "darkened" constructions, hence semantically opaque.

productive patterns of Hungarian compounding are all endocentric – i.e., exocentric compounds cannot be formed on the basis of productive patterns.[4]

3. Creative compounds

All in all, the exclusion of exocentric compounds from a proper linguistic analysis can be attributed to the fact that such constructions have been mostly considered as 1) exceptional; 2) unanalysable; and 3) not formed on the basis of productive compound-forming patterns. Accordingly, *Table 1* sums up the main assumptions with regard to endo- and exocentric compounds, as usually provided in the relevant morphological literature. The properties listed in *Table 1* imply that endocentric compounds can be considered as the unmarked cases of English compounding, while exocentric compounds can be regarded as the marked ones.

Table 1. General assumptions about endocentric and exocentric compounds, as usually provided within traditional morphological literature.

endocentric	exocentric
productive	non-productive
typical	atypical
transparent	opaque
analyzable	non-analyzable

Nevertheless, all of the assumptions in the table have been refuted, which, therefore, call severely into question the premise that exocentric compounding is a marked morphological phenomenon. First, as pointed out by Guevara and Scalise (2009), exocentric compounds (especially those that are based upon metaphor and/or metonymy) are quite common in a vast number of the world's languages. Furthermore, in some languages – such as Turkana and Kayardild – exocentric compounding is the norm, with only very few endocentric examples (Bauer, 2008: 54). With respect to the compounding pattern referred to as bahuvrihi in the literature (i.e., "person/thing that has X", where X is the property described by the compound), Bauer (2008: 55) maintains that it seems to be near-universal (see also Barcelona, 2008). Many scholars (e.g., Bauer, 1978; Jespersen, 1954; Marchand, 1960) have noted that bahuvrihis are based on a simple PART FOR WHOLE metonymy – in fact, Bauer (2008: 59) is of the opinion that such compounds should be treated as endocentric. Needless to say, the ubiquity of metaphor and metonymy in compounding is by no means surprising if one considers

---

[4] Nevertheless, it should be mentioned that in the past couple of years there has been some research into exocentric compounds from a typological perspective. See especially Bauer (2008) and Scalise and Guevara (2006).

metaphorical and metonymical thinking as a normal, everyday ability of humans. As emphasized by Langacker (1987), Talmy (1988) and Croft and Cruse (2004) among others, both metaphor and metonymy can be considered as a type of construal operation, and as such, a certain way of interpreting/conceptualizing the world around us. What this implies, therefore, is that the use of and reliance on conceptual metaphors and metonymies in word formation must also be an absolutely natural process.

It has also been demonstrated by Benczes (2006) that such expressions can be analyzed remarkably well within a cognitive linguistic framework. The use of metaphors and metonymies in novel compound formation opens up a limitless supply of innovation and creativity in novel word-formation, as such expressions make use of the creative associations that exist between concepts; associations based on similarity, analogy or contiguity. Following Benczes, metaphorical and/or metonymical compounds will be termed here henceforth as "creative compounds".

Nevertheless, I do not wish to claim here that there is no difference with regard to semantic complexity between – for example – a metonymical or a metaphorical compound. In fact, just the opposite holds true. As Libben et al. (2003) have pointed out, the semantic complexity of a compound does affect processing times. According to the results obtained from psycholinguistic experiments, the processing of a compound with a non-transparent head, such as *jailbird* or *fleabag*, took longer than the processing of those compound expressions where the modifier was non-transparent (and the head transparent), as in *godchild* for instance. Such a result implies that there must be a connection between transparency on the one hand and the place and type of cognitive operation (metaphor or metonymy) within the compound. This brings us to the question of how can transparency of meaning and linguistic creativity (that is, the production and use of metaphorical and metonymical compounds) be reconciled and accounted for within a cognitive linguistic framework.

A possible answer is provided by applying the notion of constructional schemas, which are able to capture the commonalities of specific expressions at any linguistic level. Accordingly, endocentric and exocentric noun–noun compounds are based upon the same constructional schema ([N + N]), but, as Langacker (2000) points out, even constructional schemas are grouped around prototypes. Within this complex network, the constructional schemas represent various degrees of abstraction, and they are linked to one another through relations such as elaboration (ranging from more general to more specific constructional schemas) and extension (ranging from non-metaphorical schemas to metaphorical/metonymical schemas).

Accordingly, it can be claimed that any noun–noun compound, whether endo- or exocentric, is on the same degree of elaboration; i.e., it can be characterized by the [N + N] schema. However, [N + N] compounds can represent various degrees

of extension, depending on the cognitive operations that act upon the meaning of the expression. Therefore, the notion of degree of extension is synonymous with the concept of degree of creativity among creative compounds: the more extended a compound, the more imaginative, associative thinking is required from the listener to arrive at the compound's meaning. Consequently, creative extension can be correlated with transparency of meaning. Metaphorical and/or metonymical compounds represent various levels of semantic transparency depending on which constituent is affected by metaphor or metonymy. As mentioned before, the semantic complexity of a compound does affect processing times – in other words, the creative extension of *jailbird* or *fleabag* is greater than that of *godchild*, even though all three represent the same degree of elaboration (Libben et al. 2003). Based on the results mentioned above, it can be hypothesized that a compound with a metaphorical or metonymical head is more extended than a compound with a metaphorical or metonymical modifier. However, it should be borne in mind that even further distinctions of extension (and transparency) can be established even within one single class of creative compounds if further factors, such as lexicalisation, are also considered (cf. *honeymoon*, *babymoon* and *familymoon* as mentioned above).

The major benefit of adopting Langacker's (2000) idea of extension and elaboration in the treatment of endocentric and exocentric compounds is that it manages to capture the commonalities inherent in noun–noun compounds, regardless of their semantic makeup. Nevertheless, it also brings into focus the gradual nature of the semantic complexity that characterizes this type of English word-formation process. The following section will be devoted to highlighting this gradualness in figurative complexity by first analysing a group of recently coined metaphorical expressions where the second constituent is understood metaphorically via the first constituent. Such compounds would have fallen under the "endocentric" label in traditional approaches, even though – as it will be established below – their meanings are based upon elaborate metaphorical conceptualisations, and, consequently, fall far from the prototypical endocentric example of *apple tree*. The second group of compounds that will be examined below are further extended in the Langackerian sense, in that the target domain remains linguistically "unexpressed" within the expressions – due to which, therefore, they would be considered as prototypical cases of "exocentric" compounds from a traditional point of view.

4. Creativity in action: Recent examples from English novel compounds

Benczes (2006) devotes a whole chapter to the discussion of noun–noun compounds where the second constituent is metaphorically conceptualized by the first constituent. What this implies is that in all such creative compounds the first

constituent represents the source domain, while the second constituent represents the target domain of the metaphorical relationship. While previous accounts (see, for example, Downing 1977 and Warren 1978) have mostly relegated this type of compound formation into one large group, Benczes has demonstrated that such compounds show a remarkable variety of complexity in their analyses, depending on the metaphorical relation between the entities denoted by the participating nouns of the compound. Benczes comes to the conclusion that compounds based upon a metaphorical relation between the two participating constituents of the compound represent a natural, although highly creative process of word formation rooted in our ordinary – largely metaphorical – conceptual system.

An intriguing and highly representative example of the above statement is provided by the compound *helicopter parent* ('a parent who takes an excessive and overprotective interest in the life of his or her child, esp. with regard to education; *OED*). According to the *OED*, the first citation of the expression is from 1989; it was added to the online version of the dictionary in 2007. There are plenty of webarticles that are concerned with the (mal)practices of *helicopter parents*,[5] and one of the main characteristics that nearly all of the articles mention is that such parents "hover" over their children,[6] which indicates that the metaphor is still quite alive in people's conceptualisations. The image of a hovering helicopter implies that there is constant control over the child (although there is no direct interference in the child's life). Helicopters are generally noisy, so their constant presence can be a source of annoyance to those on the ground – this negative implication is also carried into the semantics of the compound, which is labelled as "depreciative" in the *OED*. The helicopter metaphor also insinuates that the child's life is conceptualised as a journey, where the child is travelling along a road (over which the "helicopter" parent hovers).

The ease by which we are able to create novel metaphorical compounds on the basis of already existing ones is exemplified by *lawnmower parent*, *bulldozer parent* and *snowplow parent* – all of which refer to parents who not just simply watch over their children's lives (cf. *helicopter parent*), but directly interfere in them by clearing all the obstacles out of their children's way (but by doing so they also deprive their children of learning to cope independently with challenges they might face in

---

[5] A relatively recent article that sums up the main characteristics of helicopter parents is "The seven myths of helicopter parenting", by Katie Roiphe (31 July 2012), http://www.slate.com (accessed: 20 March 2013).

[6] See, for example the following quote: "Parents of millennials have been obsessive about ensuring the safety of their children, Howe said. When the first wave was born in the early 1980s, 'Baby on Board' signs began popping up on minivans. They were buckled into child-safety seats, fitted with bike helmets, carpooled to numerous after-school activities and *hovered over* by what Howe describes as 'helicopter parents'." (Don O'Briant, "Millennials: The Next Generation", *The Atlanta Journal and Constitution*, 11 August 2003; accessed from http://www.lifecourse.com, 20 March 2013; emphasis added).

life).[7] What is fascinating about these more recent expressions is that their motivation can be traced back to the still active metaphorical basis of *helicopter parent*, i.e., parents conceptualised as vehicles. However, as parents nowadays take a more pro-active role in their children's lives, the image of a passive helicopter does not fit the bill, and, therefore, a more apt vehicle needs to be selected – hence *lawnmower*, *bulldozer* or *snowplow*. Consider the following quote from a former school principal: "Today's parents are not just 'helicopter parents' … They are a jet-powered turbo attack model."[8] The LIFE IS A JOURNEY metaphor is reinforced in all three compounds – whereby the machines cut, bull-doze or clear the obstacles (respectively) out of the way for their children. All three expressions are depreciative, similarly to *helicopter parent*; however, in these cases the pejorative sense can be traced back to our common knowledge of these machines – namely that they are big, sturdy and dangerous for those who get in their way (i.e., teachers, educators, etc.).

The compounds examined above are clear demonstrations of the fact that just because an expression is metaphorical, it does not necessarily have to be unanalyzable or opaque. On the contrary – not only are speakers capable of establishing and reinforcing the motivation for these expressions (see for example the remark of the former school principal quoted above), but are also able to create further expressions on the basis of the same general and underlying metaphor. Nevertheless, it might be argued that the reason why speakers have absolutely no trouble in understanding these compounds and exploiting their metaphorical potential is because they are all "endocentric" – after all, a *helicopter parent*, a *lawnmower parent*, a *bulldozer parent* and a *snowplow parent* are all hyponyms of the second (i.e., head) constituent. Consequently, in order to support the idea that the endocentric–exocentric distinction is not a viable approach to the study of the semantics of English compounding, we need to find an "exocentric" compound that is both analysable and transparent for speakers.

Such a case is provided by *couch potato* ('a person who spends leisure time passively or idly sitting around, esp. watching television or videotapes'; *OED*), the semantics of which is based upon a complex interplay of metaphors and metonymies. With regard to the modifier, *couch*, it can be claimed that it is in a metonymical relationship with the activity itself (watching television from the couch), via the OBJECT INVOLVED IN THE ACTION FOR THE ACTION metonymy. It is also plausible to maintain that the compound as a whole evokes the metaphorical image of an immobile, passive person sitting before the television (via the PEOPLE ARE PLANTS metaphor, which carries the notion of immobility within itself, as

---

[7] A summary of these novel coinages can be found in an article posted on the website of the American Association of College Unions International, http://www.acui.org: "Helicopters, snowplows, and bulldozers: Managing students' parents", by Mark Taylor (accessed 20 March 2013).

[8] Quoted in Elizabeth Kolbert, "Spoiled rotten: Why do kids rule the roost?", *The New Yorker*, 2 July 2012, accessed from http://www.newyorker.com, 20 March 2013.

plants are unable to move). The head element, *potato*, is quite rich in its metaphorical and metonymical utilizations. First, it can stand for the food that is consumed in front of the television (a potato-based snack, such as chips), resulting in the MATERIAL FOR OBJECT metonymy (potato for chips). This metonymical relationship, however, is the source of a further metonymy: chips can be considered as typical food consumed in front of the television, which means that chips stands for any kind of snack eaten before the television (via the MEMBER OF A CATEGORY FOR THE CATEGORY metonymy). Second, *potato* can also stand for the person who is eating it – via the OBJECT INVOLVED IN THE ACTION FOR THE AGENT OF THE ACTION metonymy. But the real beauty of the head element is that it evokes a further metonymy, namely CAUSE FOR EFFECT. Eating too much fatty food results in surplus fat, which results in the metaphorical relationship between the potato on the hand and the person on the couch – the agent of the action – on the other. The motivation behind this cognitive process is evident: an overweight person with excess fat resembles the sturdy, round shape of a potato.

The above analysis can, of course, be called into question on the grounds of it being a case of "armchair linguistics", and therefore not being relevant to the main issue at hand (i.e., discarding the endocentric vs. exocentric distinction). Nevertheless, two pieces of evidence can be put forward to indicate that *couch potato* is indeed transparent and analysable for speakers. First, if one searches for *couch potato* among Google Images, there is an abundance of cartoons and illustrations depicting the following: 1) overweight people before the television (holding or eating a variety of unhealthy snacks); and 2) human-like potatoes with a face, arms and legs, sitting and eating before the television. The images point to the fact that the metaphorical conceptualisation of passive, immobile people likened to potatoes (i.e., PEOPLE ARE PLANTS) is very much alive in our cognition, as well as the consequences of eating too much food before the television (i.e., becoming overweight). Second, the original compound *couch potato* has served as the analogical basis for a further creative extension, *cot potato* ('an infant or toddler who spends a great deal of time watching television'; Wordspy). This recent coinage is also based on the metaphorical basis of *couch potato*, inheriting some of its metaphorical and metonymical relations, but also deviating in meaning from the original expression to some extent (depending on the semantic content of the modifier constituent).

Accordingly, the meaning of *cot potato* can be accounted for with a type of blend-based analysis, a so-called "mirror network", where there is one single organising frame that structures the generic space, the inputs and the blend (Fauconnier and Turner, 2002).[9] In the case of *cot potato* one of the input spaces is a baby/toddler before the television, while the other input space is *couch potato* (see

---

[9] Blending theory has already been applied rather successfully within cognitive linguistics to account for the meaning of noun–noun combinations (see, for example, Coulson, 2000; Fauconnier and Turner,
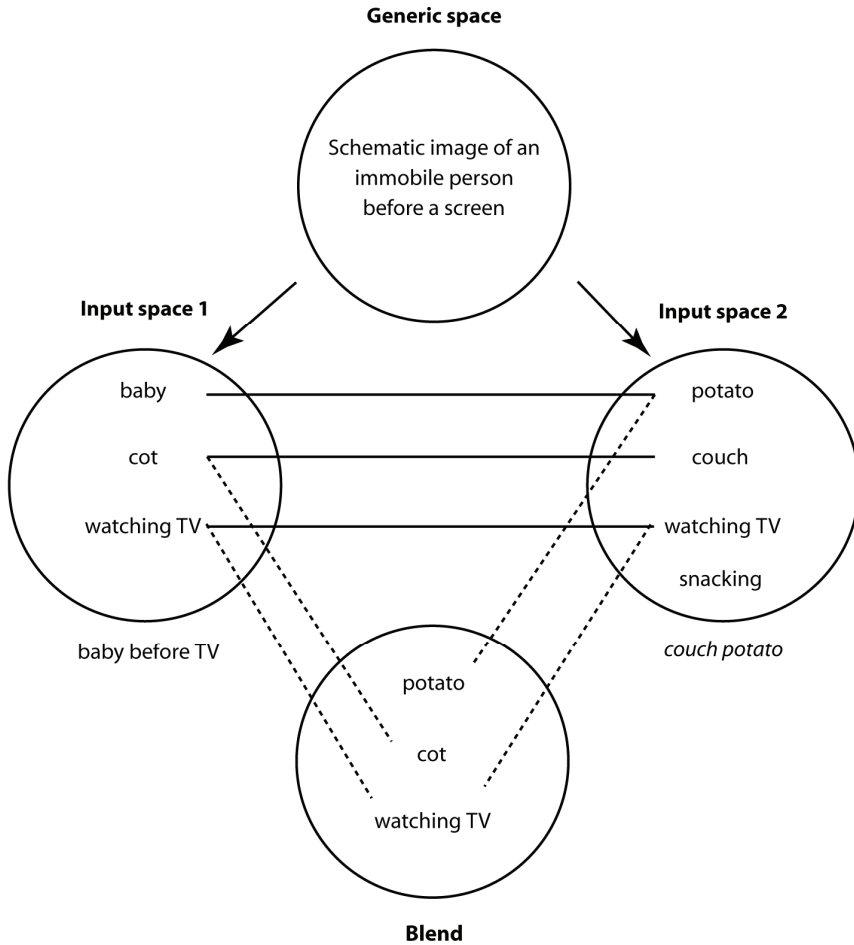
Figure 1. Blend-based analysis of *cot potato*.

Figure 1). What this more recent addition to the English language testifies is that in order to understand its meaning, one has to be familiar with the original expression of *couch potato*, but, at the same time, the hearer/reader has to adjust the meaning of the original compound as required by the first constituent of *cot potato*. At this point it needs to be emphasized that the constituents of a compound

2002; Benczes, 2006, 2011). In fact, Schmid (2011) investigates the general applicability of blending theory with regard to novel noun–noun compounds, and based on his results comes to the conclusion that blending is indeed a viable approach to such formations – and possibly to word formation in general.

do not indicate the concepts that form the inputs to the blending process: the idea that conceptual integration involves a linking of counterparts, and that the formal expression names or indicates the appropriate counterparts is flawed (Turner and Fauconnier 1995). Rather, the constituents form "prompts" (ibid.) for the hearers, thus enabling them to build the conceptual structure that the compound itself refers to. This view is reinforced by experimental evidence as well (Costello, 2002; Lynott and Keane, 2003): when a novel compound is coined, it is not the communicative precision that influences the selection of the constituent nouns, but the defining properties of the categories themselves – that is, which noun is able to evoke the most productive semantic network. Therefore, which elements of the blended structure become selected as the formally coded constituents of the compound is extremely crucial for future interpretation.

Turning back to the blend analysis, *cot potato* is analogous to *couch potato* in the sense that the first constituent is also a location, similarly to couch in *couch potato*, but at the same time *cot* metonymically taps into the domain (or frame) of babies/toddlers (the cot being a usual location of theirs). Based on the correspondences within the blend network, the blended concept "inherits" the PEOPLE ARE PLANTS metaphor (the metaphorical image of a passive, immobile potato watching TV), and the OBJECT INVOLVED IN THE ACTION FOR THE ACTION metonymy (i.e., the cot). However, the semantics of *cot potato* does not necessarily require either the OBJECT INVOLVED IN THE ACTION FOR THE AGENT OF THE ACTION metonymy (i.e., the potato-based snack standing for the person who is eating it) or the CAUSE FOR EFFECT metonymy (i.e., eating too many snacks make us overweight) – because babies/toddlers cannot feed themselves (this feature cannot be found in the Wordspy definition either). Note, however, that on the basis of the meaning of *couch potato*, these latter metonymies can be called forth anytime within the meaning of *cot potato* if required (i.e., the blend can be "run"), and imply the danger of infants becoming overweight later on (due to simply watching too much television instead of engaging in active play) – as exemplified in the following quote: "The book's author, Lucy Jackson, argues that modern children spend most of their lives strapped into buggies or sitting square-eyed and round-shouldered in front of the telly. This, she contests, leaves toddlers unfit and often overweight. … But are toddlers really in danger of becoming cot potatoes?"[10]

5. Conclusions

What the compounds in the previous section clearly demonstrate is that not only are metaphorical and metonymical compounds a staple part of our everyday language use, but they are also analyzable (to various degrees) for language users. This state of affairs necessarily brings forth the question of compositionality and

---

[10] Polly Ghazi, "Encounters: No more cot potatoes", *The Observer*, 2 May 1993. (Source: Wordspy)

analyzability.[11] It is by now quite evident that the notion of compositionality – especially within the realm of noun–noun compounds – can only be approached flexibly, as already alluded to in Section 2. This flexibility needs to be generalized over both "endocentric" and "exocentric" compounds alike, because the overall meaning of a compound is quite simply never "consistently or fully predictable" (Langacker 2000: 16). "Rather than *constituting* a composite structure, the component structures *correspond* to certain facets of it, offering some degree of *motivation* for expressing the composite conception in the manner chosen" (ibid., italics as in original).

What this means is that even seemingly "straightforward" cases require encyclopaedic and frame-based knowledge to arrive at the correct interpretation. Suffice to mention Taylor's (1989: 91) classic "shoe" example, who points out that *alligator shoes* are taken as "shoes from alligator skin" rather than "shoes worn by alligators" (cf. *horse shoes*) or "shoes for walking on alligators" (cf. *beach shoes*) or "shoes for wearing during the alligator time" (cf. *winter shoes*). However, what the compounds analysed in Section 4 have shown is that compounds based on metaphor are analyzable (and motivated) for language users, and people freely create novel metaphorical compounds based on more lexicalized examples. In other words, the basic reason why the endocentric–exocentric distinction cannot be upheld is that all endocentric compounds are exocentric to some degree and all exocentric compounds are endocentric to some degree.

From the above statement it reasonably follows that the vast majority of "exocentric" compounds must surely be analyzable – and cognitive linguistics is especially well-suited for this purpose. The use of metaphors and metonymies in novel compound formation opens up a limitless supply of innovation and creativity in novel word-formation, as such expressions make use of the creative associations that exist between concepts; associations based on similarity, analogy or contiguity. For this reason, the paper has advocated the term "creative compound" for coinages based on metaphor and metonymy.

Nevertheless, the paper does not wish to claim that all compounds are equally analyzable to language users. As discussed in Section 3, [N + N] compounds represent various degrees of extension, depending on the cognitive operations that act upon the meaning of the expression. Therefore, the more extended a compound, the more imaginative, associative thinking is required from the listener to arrive at the compound's meaning. Consequently, creative extension can be correlated with transparency of meaning. At the same time, extension corroborates with elaboration in establishing analogical patterns: *couch potato* has yielded the [N

---

[11] Compositionality should be treated distinctly from the notion of analyzability (Langacker, 1987: 459–62). The former term describes an awareness on the part of the speaker towards the complexity of the composite term. In the case of analyzability the speaker is not only aware of the expression having a composite structure, but is also capable of isolating the separate components.

+ *potato*] schema, which represents a greater degree of elaboration *and* extension than the simple [N + N] schema.

The major benefit of adopting Langacker's (2000) idea of extension and elaboration in the treatment of the semantics of noun–noun compounds is that it manages to capture the commonalities that are inherent in them, regardless of their semantic makeup. Nevertheless, it also brings into focus the gradual nature of the semantic complexity that characterizes this type of English word-formation process. Such a conclusion, needless to say, poses further challenges for linguists, especially with regard to the interplay between extension and elaboration. Nevertheless, we shouldn't be discouraged. In Langacker's (1987: 156) words, "since meaning is, in the last analysis, a matter of conceptualization (what else could it possibly be?), it strikes me as pointless to avoid the challenge of describing it in these terms, whatever the limitations on our present ability to do so."

References

Adams, Valerie (1973). *An Introduction to Modern English Word Formation*. London: Longman.

Barcelona, Antonio (2008). The interaction of metonymy and metaphor in the meaning and form of "bahuvrihi" compounds. *Annual Review of Cognitive Linguistics* 6: 208–281.

Bauer, Laurie (1978). *The Grammar of Nominal Compounding*. Odense: Odense University Press.

Bauer, Laurie. 2008. Exocentric compounds. *Morphology* 18: 51–74.

Bauer, Laurie, Antoinette Renouf (2001). A Corpus-Based Study of Compounding in English. *Journal of English Linguistics* 29.2: 101–123.

Benczes, Réka (2006). *Creative Compounding in English: The Semantics of Metaphorical and Metonymical Noun–Noun Combinations*. Amsterdam & Philadelphia: John Benjamins.

Benczes, Réka (2010). Setting limits on creativity in the production and use of metaphorical and metonymical compounds. Michel, Sascha & Alexander Onysko, eds. *Cognitive Approaches to Word Formation*. Berlin & New York: Mouton de Gruyter, 221–245.

Benczes, Réka (2011). Blending and creativity in metaphorical and metonymical compounds: A diachronic investigation. Schmid Hans-Jörg & Sandra Handl, eds. *Windows to the Mind: Metaphor, Metonymy and Conceptual Blending*. Berlin & New York: Mouton de Gruyter, 247–268.

Bloomfield, Leonard (1933). *Language*. Chicago: The University of Chicago Press.

Booij, Geert (2005). *The Grammar of Words*. Oxford: Oxford University Press.

Botha, Rudolf P. (1968). *The Function of the Lexicon in Transformational Generative Grammar*. The Hague: Mouton.

Burridge, Kate (2004). *Weeds in the Garden of Words*. Cambridge: Cambridge University Press.

Costello, Fintan J. (2002). Investigating creative language: People's choice of words in the production of novel noun–noun compounds. *Proceedings of the 24th Annual Conference of the Cognitive Science Society, 2002*. http://inismor.ucd.ie/~fintanc/postscript/Costello2002a.ps; accessed: 21 November, 2006.

Coulson, Seana (2000). *Semantic Leaps: Frame-Shifting and Conceptual Blending in Meaning Construction*. Cambridge: Cambridge University Press.

Croft, William, & D. Alan Cruse (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.

Dirven, René, & Marjolijn Verspoor (1998). *Cognitive Exploration of Language and Linguistics*. Amsterdam & Philadelphia: John Benjamins.

Downing, Pamela. (1977). On the creation and use of English compound nouns. *Language* 53.4: 810-842.

Fauconnier, Gilles, Mark Turner (2002). *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Guevara, Emiliano, Sergio Scalise (2009). Searching for universals in compounding. Scalise, Sergio, Elisabetta Magni, & Anotnietta Bisetto, eds. *Universals in Language Today*. Dordrecht: Springer, 101–128.

Haspelmath, Martin (2002). *Understanding Morphology*. London: Arnold.

Jespersen, Otto (1954). *A Modern English Grammar on Historical Principles. Part VI: Morphology*. London: Bradford and Dickens.

Kiefer Ferenc (1992). Compounding in Hungarian. *Rivista di Linguistica* 4.1: 61–78.

Kiefer, Ferenc (2000). *Jelentéselmélet*. Budapest: Corvina.

Langacker, Ronald W. (1987). *Foundations of Cognitive Grammar. Volume I: Theoretical Prerequisites*. Stanford: Stanford University Press.

Langacker, Ronald W. (2000). *Grammar and Conceptualization*. Berlin & New York: Mouton de Gruyter.

Libben, Gary, Martha Gibson, Yeo Bom Yoon, & Dominiek Sandra (2003). Compound fracture: The role of semantic transparency and morphological headedness. *Brain and Language* 84: 50–64.

Lynott, Dermot, & Mark Keane (2003). The role of knowledge support in creating noun–noun compounds. Ron L. Alterman, & David Kirsh, eds. *Proceedings of the 25th Conference of the Cognitive Science Society*. Mahwah, NJ: Erlbaum, 746–751. http://www.cs.ucd.ie/staff/mkeane/lynottkeane2003.pdf; accessed 21 November 2006.

Marchand, Hans (1960). *The Categories and Types of Present-Day English Word-Formation: A Synchronic-Diachronic Approach*. Wiesbaden: Otto Harrassowitz.

Matthews, Peter H. (1974). *Morphology*. Cambridge: Cambridge University Press.

Scalise, Sergio, & Emiliano Guevara (2006). Exocentric compounding in a typological framework. *Lingue e Linguaggio* 2: 185–206.

Schmid, Hans-Jörg (2011). Conceptual blending, relevance and novel N+N-compounds. Hans-Jörg Schmid, & Sandra Handl (eds.), *Windows to the Mind: Metaphor, Metonymy and Conceptual Blending*. Berlin & New York: Mouton de Gruyter, 219–246.

Spencer, Andrew (1991). *Morphological Theory: An Introduction to Word Structure in Generative Grammar*. Oxford: Blackwell.

Talmy, Leonard (1988). The relation of grammar to cognition. Rudzka-Ostyn, Brygida, ed. *Topics in Cognitive Linguistics*. Amsterdam & Philadelphia: John Benjamins, 165–205.

Taylor, John R. (1989). *Linguistic Categorization*. Oxford: Clarendon Press.

Turner, Mark, & Gilles Fauconnier (1995). Conceptual integration and formal expression. *Journal of Metaphor and Symbolic Activity* 10.3: 183–204.

Warren, Beatrice (1978). *Semantic Patterns of Noun–Noun Compounds*. Gothenburg: Gothenburg University Press.

17

Author's address:

Eötvös Loránd University
Department of American Studies
Rakóczi út 5
H-1088 Budapest
rbenczes@gmail.com