

# The place of metaphor in a devolved cognitive linguistics

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## Abstract

The article tackles the problem of the role of metaphor, both linguistic and conceptual, in a devolving paradigm of cognitive linguistics. It is argued that while the notion of metaphor proposed by standard Conceptual Metaphor Theory is hard to defend in the web of functionally-oriented alternatives, the exact status of two-domain mappings in a revised cognitive enterprise remains elusive. It is thus further maintained that in order to resolve the quandary precise phenomenological and methodologies declarations should be made so that specific dimensions of devolution could be juxtaposed. The split definitions of metaphor hence obtained could serve as converging/diverging evidence of its status within a functional cognitive linguistics. The overall message is therefore optimistic since a devolution in cognitive linguistics means exciting avenues of research which will need to be pursued in order to re-define the old, monolithic terms against the new, multifactorial background.

Dieser Artikel behandelt die Rolle sprachlicher und konzeptueller Metaphern innerhalb eines Paradigmenwechsels der kognitiven Linguistik. Da eine Rechtfertigung des Metaphernbegriffs nach der konzeptuellen Metapherntheorie im Rahmen funktionalistischer Ansätze nur schwer möglich ist, bleibt der genaue Status der Projektion von Quell- auf Zielbereich nur schwer fassbar. Zur Lösung dieser Problematik müssen die phänomenologischen und methodischen Vorgehensweisen eine Gegenüberstellung der spezifischen Dimensionen des Paradigmenwechsels möglich machen. So erhaltene Definitionsversuche könnten dazu beitragen den Metaphernbegriff innerhalb einer funktionsorientierten, kognitiven Linguistik zu stützen oder ggf. zu widerlegen. Dieser Paradigmenwechsel in der kognitiven Linguistik bedeutet den Abschied von alten, starren Begrifflichkeiten und eröffnet somit spannende Perspektiven für die zukünftige Forschung im Hinblick auf einen zeitgemäßen und vielschichtigen Hintergrund.

## 1. Introduction

Recent years have seen two concurrent trends within the second generation cognitive linguistics (henceforth also CL). On the one hand, there has been a tendency towards a dialogical interaction among the many conceptual approaches within, as well as outside, the paradigm, which has resulted in the emergence of both converging and diverging evidence for the claims which many cognitive linguists seem to have taken for granted in that a number of notions have been deductively assumed rather than inductively derived. Two interrelated declarations in particular – the conceptualist commitment and the usage-based orientation, which were proclaimed at the onset of the cognitive enterprise (see, for instance, Langacker 1987: 46) – have undergone a thorough re-appraisal from an integrated perspective and the role of local, multifactorial

contexts has been emphasized. As a result of this re-evaluation, the second development within cognitive linguistics, i.e., an assertion that the paradigm needs internal diversification, has become prominent and thus, formal and functional schools of cognitive linguistics have been recognized (cf. Evans and Green 2006).

An important corollary of these refinements is the fact that the heuristic apparatus which conformed to the sweepings statements of the early cognitive linguistics could not be maintained if local contexts were systematically considered in theory construction and description. Thus, we can, on the one hand, observe a shift towards redefining and/or splitting the monolithic meta-constructs of formal linguistics in order to make them fit functional methodologies (see, for instance, Ariel 2002). On the other hand, though, many cognitive linguists, among them Croft and Cruse (2004), Dobrovolskij and Piirainen (2005) and Glynn (2011), have articulated a need for a thoroughly revised met-language, which would be emergent, data-driven and contextually-bound.

In accordance with the two tendencies outlined above, Section 2 describes the functional shift within cognitive linguistics – a propensity to replace the idealized statements of the early formulations of the paradigm with more precise phenomenological and methodological declarations. This proclivity, which I choose to call a devolution, is discussed through its two inter-related manifestations: integration and optimization. Consequently, the cognitive pledge and the usage-based orientation of the paradigm are seen as complex notions, whose particular dimensions can be traced within particular methodologies of cognitive linguistics.

One of these approaches, which is metaphor-oriented research, is discussed in Section 3. Both linguistic and psycholinguistic studies into the nature of metaphoricity are evaluated and it is concluded that the role of metaphor in a devolved cognitive linguistics remains undecided since, although a number of functional dimensions, or relevant contexts, can be discerned among the methodologies discussed, they do not seem to be defined in a compatible manner.

## **2. Devolution in cognitive linguistics**

The need for a devolution, or decentralization, in cognitive linguistics has been

expressed by a number of researchers (see, for instance, Evans and Green 2006; Langacker 2008; Geeraerts 2010 or Glynn 2011). A major reason for this concern has been a discrepancy between the observed diversity within the paradigm and its “great tolerance...towards internal variety and towards external interaction with major linguistic disciplines and subdisciplines” (Ruiz de Mendoza Ibáñez and Peña Cervel 2005: 1). Indeed, this detachment has prompted the question of the extent to which the many ramifications within CL abide by its two central claims: the conceptual pledge and the usage-based commitment.

A bottom-up perspective upon both conceptualization and usage has shown that these need to be approached as complex categories and hence, each methodology within CL can be evaluated on the integration-isolation continuum (cf. Geeraerts 2003). To be more specific, isolating are those paradigms which tend to constrain the number of possible contexts influencing linguistic theorizing, while integrating approaches allow the researcher to “describe the entirety of language from discourse through lexis and culture to syntax and cognition” (Glynn 2004: 198). Similarly, depending on the scope each perspective is granted, a particular dimension can be understood in a narrow or broad sense, i.e., it can be evaluated along the maximum-minimum parameter (cf. Langacker 2008: 164).

Devolution-as-integration has resulted in either introducing previously neglected perspectives into linguistic theories (cf. Evans and Green 2006; Geeraerts 2006) or in actually accommodating merely declared, or assumed, contexts into proposed models (see Sandra and Rice 1995 for a discussion), while devolution-as-optimization has led to the emergence of extended definitions of numerous meta-concepts.

One of the most important of these descriptions is a comprehensive definition of cognition, based on the extended embodiment postulate (cf. Zlatev 1997), which has led to further refinements, including a broader catalog of basic concepts (see Hampe and Gibbs 2005 for a discussion) and their linguistic manifestations (see, for instance, Tyler and Evans 2001; Navarro 2006). Simultaneously, much attention has been paid to the fact that the semantic values of isolated words do not correspond to their contextual realizations. Instead, it appears to be the complex unit which facilitates the understanding of its components (cf. Hampe 2005)

An important corollary of adopting a whole-to-parts, distributed semantics in cognitive linguistics is the need to abandon one of its key meta-concepts, which is the profile determinant, i.e., “[a] component structure that ‘bequeaths’ its profile to the composite structure” (Langacker 2008: 192). A gradual relegation of the profile determinant from the heuristic apparatus of a devolved CL can be observed at many levels. In lexical semantics, for instance, Evans (2006) argues for the unique role of nouns in the process of conceptual integration, but he simultaneously admits that “the nature of the information accessed must be ‘calibrated’ with respect to the contribution of the other lexical concepts in the composite lexical conceptual structure” (2006: 526). Likewise, in construction grammar, Boas (2008: 128) postulates the redundancy of abstract constructions “à la Goldberg”, which constitute one group of profile determinants in CL, in the production of novel utterances. Instead, he claims that existing conventionalized knowledge and contextual background information need to be retrieved. Ultimately, then, it could be concluded that devolution at the level of meta-concepts is signaled by a shift from the construct of a profile determinant to that of a profile itself, i.e., a syntagmatic context where certain structures can be regarded as more salient than others. This tendency is illustrated by a number of constructs alternative to the profile determinant, including lexical profiles (Evans 2006), co-occurrence patterns (Svanlund 2007), behavioral profiles (Gries and Divjak’s 2009), constructional profiles (Janda and Solovyev 2009) or multidimensional patterns of usage (Glynn 2011).

Expanding the context(s) within which a linguistic analysis is to be situated has resulted in the emergence of a functional cognitive linguistics, characterized by its particular phenomenological declarations and methodological routes. This much needed pluralism inside the paradigm has, concurrently, constituted a challenge for cognitive linguists since a number of “well-established” concepts must now be tested against the new perspectives. One of them is metaphor.

### **3. Devolution in the cognitive theory of metaphor**

Conceptual Metaphor Theory, proposed by Lakoff and Johnson in 1980, is one of the most vehemently discussed methodologies within cognitive linguistics – on the one hand, CMT is credited with highlighting the importance of meta-

phor as a cognitive process; on the other hand, though, the standard version of the theory is criticized since its central tenets fail to conform to the conceptual and usage-based commitments of cognitive linguistics, if these are defined through the prism of integration and maximalism (cf. Section 2). A number of concerns expressed by the critics of CMT are discussed in detail by, for instance, Haser (2005), Evans and Green (2006: 779-780), Nerlich (2007) or Kertész and Csilla (2009), and thus, only selected arguments, relevant for the present exposition, i.e., concerning the isolating nature of the standard metaphor model and highlighting its aspects which should be, or have been, subjected to devolution, are outlined below.

The first manifestation of the lack of integration in CMT is its ahistorical character. As Steen (2000: 261) observes, CMT creates an impression that “in the beginning was Aristotle. Then there were the Dark Ages, which lasted until 1980. And then there was Lakoff. And there was a Johnson too”. However, if CMT is assessed in the context of metaphor tradition, it is a far less revolutionary enterprise than maintained by some of its proponents (for a detailed discussion, see Cameron 2003 and Geeraerts 2010, among others).

Importantly, re-discovering the historical perspective has led to the revival of the elements of the heuristic apparatus which have been disregarded by standard CMT. For instance, Deignan (2005: 41) re-introduces the concept of dead metaphors onto the research scene and argues that a number of Lakoff and Johnson’s conventional, i.e., active, links between source and target concepts are in fact highly conventionalized mappings. Similar observations have been made by Evans and Zinken (2005), who emphasize that CMT fails to account for the role of conventionalization in the process of conceptual integration – an argument which also echoes in Hanks’ (2006) notion of gradable metaphoricality.

As indicated in Section 2, human cognition can be defined in a more or less comprehensive manner, and Conceptual Metaphor Theory seems to have adopted a rather limited view upon conceptualization, i.e., such that reflects the competence of an idealized native speaker (Givón 2005). This definition has been criticized as static, i.e., impervious to the impact of broadly understood contexts, including the ontogenetic constraint (cf. Cameron 2003: 21), the culture-induced variation (cf. Goatly 2007: 256–280) or the linguistic/discourse factor (cf. Deignan 2005, 2006; Hanks 2006 and Glynn 2011).

These criticisms have resulted in the emergence of usage-based approaches to metaphoricity, which have begun to question the relation between linguistic metaphors and conceptual mappings and challenge the fixed asymmetry between source and target concepts. In fact, research has shown that target categories may well be conceptually independent of the mental scaffolding provided by two-domain mappings and related to numerous other concepts instead (cf. Ritchie 2003; Haser 2005). Moreover, it has been argued that these networks of categories are related via a variety of attributes, among which the functional aspect is particularly prominent.

Focusing on the functional features of categories, i.e., those which are relevant from the human perspective (cf. Ungerer and Schmid 1996), has had important implications for the mechanics of categorization upon which metaphors are built. To begin with, let us recall that, in CMT, the topological/geometrical aspects of the source domain are either transferred from the vehicle concept upon the unstructured topic category, which is known as the strong version of the Invariance Hypothesis (Murphy 1996), or the elements of the abstract concept are highlighted by means of source-to-target correspondences. Simultaneously, it should be noted that the exact nature of aspects, including such notions as their centrality in the context of a particular category (Jäkel 2002) or level of generality (Cameron 2003: 252), has not been the focus of investigation in CMT. Consequently, standard Conceptual Metaphor Theory has proposed that categories be linked via topological, e.g., CONTAINER, and functional e.g., HARM, attributes (Kövecses 2000: 47), both of which have, rather arbitrarily, been taken as constituting the main meaning focus of the source concept (cf. Kövecses 2000: 112).

A lack of criteria by which to distinguish between functional and topological aspects means that CMT has indeed provided no consistent basis which could serve as a demarcation line between abstract and concrete categories. In other words, since functional aspects can be attributed to either source or target concepts, the nature of correspondences between and among domains may be more complex than proposed by CMT. Along these lines, Szwedek (2011) argues for four types of relations between source and target concepts, all of which are subsumed under the mechanism of metaphor. On the other hand, Strugielska (2012) claims that Szwedek's (2011) data can be interpreted as non-metaphorical if the semantic contributions of their syntagmatic contexts are

taken into account. As a result, metaphoricity may well be a far less ubiquitous phenomenon than envisaged by researchers working within a standard CMT framework.

To conclude the current section, an important corollary of a devolution with the cognitive theory of metaphor is a heteroglossia, which results in a non-rigorous and thus, perhaps, non-scholarly, character of metaphor-related methodologies. Therefore, there is an urgent need to make precise declarations as to which aspects of the functional commitment of CL are being addressed by means of a particular methodology. Consequently, in the following section, specific approaches to the study of metaphorical language and thought, which define themselves as alternatives to standard CMT, are presented. First, linguistic analyses are described and then the findings of psychological studies are discussed, both of which are evaluated with reference to the role of metaphor in explaining the meaning of abstract concepts.

### **3.1. Metaphor: the linguistic approach**

The bulk of the criticism directed at CMT seems to have been motivated by the incongruity between its theoretical declarations, often functional in orientation, and their implementation at the level of data analysis. According to Evans and Green (2006: 779–782), this dissonance between what is declared and that which is performed has led to the detachment, simplification and vagueness of the theory. In an attempt to overcome the idealization commitment of CMT, alternatives have developed in two directions. The first one aimed at modifying CMT in order to make the paradigm conform to the functional commitment of the cognitive linguistics of the 21<sup>st</sup> century, while the other sought to develop new theoretical models in order to capture the complexities of language in use. Both developments are present in the linguistically-oriented studies of metaphoricity.

The former trend, which Deignan (2006: 121) calls a (metaphor) theory-driven approach, assumes the cognitive validity of two-domain mappings and concentrates on providing more empirical and methodological rigor to the enterprise. Steen's attempts (2002, et al. 2010) to build a principled model of linguistic metaphor identification or Stefanowitsch's (2006) endeavor to distinguish between metaphorical patterns and other types of metaphorical language are definitely worth mentioning in this context. The other tendency,

which is an advancement towards establishing a usage-based description of abstract concepts, has been pursued by, for instance, Hampe (2005) and Janda and Solovyev (2009). However, as already stipulated in Section 2, the functional commitment is not uniformly implemented by the various functional methodologies within CL and thus, the specific elements of a usage-based, cognitive approach should be carefully traced in each and grouped with a view to building sets of converging evidence.

Table 1 offers an overview of selected, though representative, studies within linguistically-driven research into metaphoricity. The analyses are discussed with reference to four shared aspects of the functional commitment. First, two dominant contexts, i.e., cognitive and usage-based, have been distinguished and next, each has been evaluated with reference to its scope. In other words, elements of devolution as both integration and optimization have been highlighted (cf. Section 2). Importantly, the four criteria discussed do not correspond to the full functional pledge declared by a particular researcher. For instance, Evans and Zinken's (2005) usage-based postulates include, among others, supporting evidence from evolutionary studies, Haser's (2005) arguments are related to psychological and philosophical research and Szwedek's (2011) approach draws from neuroembryological examinations. Still, though potentially influential in skewing the results, factors acknowledged only randomly are not considered in the current survey due to difficulties engendered by a lack of *tertium comparationis*. Instead, views upon category structure as well as sources and types of data analyzed are systematically juxtaposed in Table 1.

With reference to categorization, the dominant tendency in CMT has been to derive the meaning of the target concept from the central aspect(s) of the source. Simultaneously, the status of the donor category as the unique profile determinant has led to positing radical and often cognitively implausible solutions, such as the activation of etymological connections between senses – an ability which Barcelona (2001) attributes to untrained speakers of a language, and which is forcefully criticized by McGlone (2007). Moreover, placing too much emphasis on the topological attributes of the source domain has resulted in a limited view upon category structure, whereby either monosemy or unmotivated polysemy have been advocated (see Strugielska 2012 for details).

Alternative approaches, presented in Table 1, have tried either to pro-

vide a highly abstract, superordinate interpretation of the source domain, which has led to positing generic level metaphors, e.g., THE SUN IS A PERSON and A NEED IS A THING Steen (2002: 30–31), EMOTIONS ARE FORCES (Kövecses 2008: 395), A THOUGHT IS AN OBJECT (Szwedek 2011: 345), or to concentrate on the actual collocation patterns of the linguistic units derived from the source domain, which resulted in either invalidating two-domain mappings altogether (see, for instance, Haser 2005; Givón 2005) or in reformulating them as more precise, i.e., data-driven, analogies, whereby specific delineations have been proposed for both source categories (cf. Jäkel 2002; Ritchie 2003; Semino et al. 2004) and target domains (cf. Glynn 2002). Placing “alleged metaphors...within the full polysemous structure of the expressions involved” (Geeraerts 2010: 209) has also triggered the question of the actual status of figurative senses within the network. If “words like *have* and *in* are polysemous, capable of referring to physical objects and locations as well as psychological states and attributes, ...characterizing *I’m in trouble* as metaphorical is not only odd, but paradoxical” (McGlone 2007: 123). Consequently, metaphoricality has been seen as a gradable relation whereby, for instance, *deep colour*, though “originally derived from the ‘measurement’ sense by a process of metaphorical extension, is now not dependent on it because the mapping is concrete-concrete” (Deignan 2005: 41).

The urge for a systematic distinction between conventional and novel linguistic examples provided in support of conceptual metaphors, i.e., the polysemy cline within metaphor studies, is reflected in column three of Table 1. In fact, in the 18 case studies analyzed, I have distinguished declared conventionality and novelty, motivated conventionality and novelty, and cases where no distinction between the two is maintained by the researcher.

Declared conventionality means that an analyst merely assumes that the data discussed are “highly conventional or conventionalized (i.e. well established and deeply entrenched) in the usage of a linguistic community” (Kövecses 2002: 30), and thus fails to provide elaboration of the proposed criteria. For instance, while Kövecses (2002: 110) argues that the meaning focus of the source domain is “conventionally fixed and agreed-on within a speech community; it is typical of most cases of the source; and it is characteristic of the source only”, no evidence, other than definitions generated by the linguist himself, is provided to support the claims. An analogical approach is assumed

with reference to novel examples and, as a result, declared conventionality/novelty cannot be verified. On the other hand, as Stefanowitsch (2006: 68) observes,

the relative frequency of source and target domain items in a given metaphorical pattern may be used to determine the degree to which the pattern in question is transparently motivated by a metaphorical mapping, and the relative frequency of source and target domain items in a coherent *set of* metaphorical patterns underlying them can be regarded as productive, i.e., as a candidate for a truly *conceptual* metaphor.

Consequently, in the case studies outlined in Table 1, motivated conventional/novel linguistic expressions are distinguished if the examples investigated have been classified on the basis of, at least, the criteria of frequency, productivity and semantic stability (cf. Clark 1996: 71) and have been defined in a way which enables repeat analyses (see examples 4, 14, 15, 17 and 18). Finally, I have discerned analyses of linguistic metaphors where, according to the authors, “it is irrelevant whether a conceptual mapping is systematic across linguistic expressions or not” (Steen 2002: 21) and hence, conventional and novel examples are viewed as qualitatively identical linguistic manifestations of metaphoricity.

Summing up, a comparison of tendencies in columns 2 and 3 of Table 1 shows that preserving a motivated distinction between conventionality and novelty diminishes the likelihood of “discovering” metaphorical mappings among the mechanisms facilitating conceptual integration. To be more specific, in Table 1, declared conventionality/novelty strongly coincides with the presence of conceptual metaphors (examples 1 and 2), while analyses where no systematic distinction has been made between conventional and novel examples support the mechanism of conceptual metaphor in 7 cases (examples 3, 7, 8, 9, 11, 12 and 13), reject it in 2 contexts (examples 5 and 6) and render ambivalent results in two situations (examples 10 and 16). Finally, an optimized definition of conventionality consistently co-occurs with instances where family resemblances are proposed as a central underlying mechanism,<sup>1</sup> while conceptual metaphors are evoked only in the case of novel expressions (examples 4, 14, 15, 17 and 18). In view of the above, rather complex, networks of interdependencies, the role of metaphors in explaining abstract concepts situated within their conventional contexts remains undecided.

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<sup>1</sup> For a definition of family resemblances see, for instance, Ungerer and Schmid (1996: 24-27).

Another important perspective influencing relative salience of conceptual metaphors is the source of linguistic examples (cf. column 4 of Table 1). Instances derived via introspection constitute invented texts which, according to Deignan (2005: 120), “may differ from naturally-occurring texts in that they provide a good deal less context, and in designing them, researchers seem to concentrate on informational content, neglecting interpersonal and modal issues”. Consequently, linguistic examples obtained via a deductive methodology are atypical in that they are relatively impoverished in comparison with natural language settings, where a variety of conceptual mechanisms are likely to be discovered. Thus, data from deduction, i.e., introspection, limited induction, i.e., a non-representative sample of corpus examples, and induction, i.e., a large sample of corpus-derived instances, will vary with reference to the number of conceptual mechanisms potentially included within their contexts.

Column five of Table 1 reflects the above considerations and demonstrates that the scope of examples discussed under the rubric of linguistic metaphors ranges from lexemes through abstract patterns and constructions to collocations.<sup>2</sup> This ordering, I claim, reflects important integrating tendencies within metaphor research due to not only quantitative differences, i.e., the number of linguistic items (and their underlying concepts) incorporated into the study, but also because of qualitative discrepancies, i.e., the amount of (linguistic and conceptual) detail admitted by a particular perspective.

To begin with, while the majority of studies within the framework of CMT concentrate on lexical categories, seeing open-class items as the sole loci of linguistic metaphors means that many cognitively salient structures are left unnoticed, among them function words and basic-level constructions (cf. Talmy 2003). In other words, as Glynn (2002: 1) rightly observes, there are “details of conceptual structure that are not visible in lexical analysis” and, therefore, incorporating grammar into the study of metaphorical language may reveal rich networks of associations unavailable from a lexical perspective. Moreover, Deignan (2006) claims that grammatical patterns found in naturally-occurring data cannot be predicted from the theoretical model of CMT since they are not derived from the source categories proposed. Instead, both source

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<sup>2</sup> In the present paper, a collocation is understood as an element of a word’s linguistic context which is taken to be related to its cognitive model or a scenario (cf. Hampe 2005). In other words, collocations encompass both lexical and grammatical units.

and target concepts are responsible for the linguistic (and cognitive) properties of the emergent metaphorical relation.

To account for the effects of linguistic and conceptual integration, one solution is to, rather arbitrarily, eliminate a number of symbolic units, e.g., prepositions, grounding elements and verbal inflections, from the span of a linguistic metaphor so that an idealized schema can be produced, i.e., a metaphorical proposition (cf. Steen 2002) or a metaphorical pattern (cf. Stefanowitsch 2006). The other approach is to incorporate constructions and collocations attracted by a particular lemma into the analysis. Simultaneously, though, it needs to be observed that although approaches 7, 14, 15 and 18 in Table 1 can all be called integrating in that more than just lexical units or abstract patterns are considered, they are holistic to various extents. For instance, both Glynn (2002) and Janda and Solovyev (2009) concentrate on the distribution of prepositional constructions in the contexts of emotion nouns, while Deignan (2005, 2006) and Strugielska (2012) focus on a variety of elements within a syntagmatic string of a (potentially) metaphorical linguistic expression.

To account for such subtle differences, which are, nevertheless, bound to affect the results of the study, two classes of constructions and two sets of collocations have been distinguished in Table 1.<sup>3</sup> All in all, then, if the scope of a linguistic example were to be taken as a vital indicator of the functional pledge of a particular approach, i.e., if we concentrated on the degree of integration and optimization of syntagmatic and paradigmatic contexts, the 18 perspectives presented in Table 1 clearly vary with reference to their respective cognitive and usage-based commitments.

Table 1. Metaphor: the linguistic perspective – selected case studies

Author	Relations among categories	Entrenchment of examples	Source of examples	Scope of examples
1. Kövecses (2002)	metaphorical mappings	declared conventional and novel	deduction	lexical units

<sup>3</sup>In the same vein, distinctions more refined than those in Table 1 could probably be offered for the category of lexical units. For one thing, open-class items could be distinguished with reference to how many of them are considered in a study. For instance, while most analyses concentrate solely on the lexical words related to potential source and target items, there are also those which incorporate the meaning potentials of other/all lexical assemblies within an utterance (see examples 6, 16 and 17 in Table 1).

2. Kövecses (2008)	generic metaphorical mappings	declared conventional and novel	deduction	lexical units
3. Szwedek (2011)	generic metaphorical mappings	no distinction	deduction and limited induction	lexical units
4. Evans and Zinken (2005)	family resemblances and metaphorical mappings	motivated conventional and novel	deduction	lexical units
5. Haser (2005)	family resemblances	declared conventional and novel/no distinction	deduction	lexical units
6. Givón (2005)	family resemblances	no distinction	deduction and limited induction	lexical units
7. Glynn (2002)	specific metaphorical mappings	no distinction	deduction	constructions 1
8. Ritchie (2003)	specific metaphorical mappings	declared conventional and novel/no distinction	deduction	lexical units
9. Semino et al. (2004)	specific metaphorical mappings	no distinction	induction	lexical units
10. Hanks (2006)	family resemblances and metaphorical mappings	no distinction	induction	lexical units
11. Steen (2002)	generic metaphorical mappings	no distinction	limited induction	(lexical units in) abstract patterns
12. Jäkel (2002)	specific metaphorical mappings	no distinction	limited induction	lexical units
13. Stefanowitsch (2006)	metaphorical mappings	no distinction	induction	(lexical units in) abstract patterns
14. Deignan (2005, 2006)	family resemblances and metaphorical mappings	motivated conventional and novel	induction	collostructions 1
15. Janda and Solovyev (2009)	family resemblances	motivated conventional (and novel)	induction	constructions 2
16. Hampe	family resemblance	no distinction	induction	lexical units

(2005)	blances and meta- phorical mappings			
17. Dobro- vol'skij and Piirainen (2005)	family resem- blances	motivated conven- tional (and novel)	limited induction	lexical units
18. Strugielska (2012)	family resem- blances and metaphorical mappings	motivated conven- tional and novel	induction	collostructions 2

In view of the fact that, as illustrated in Table 1, the functional commitment within the linguistic perspectives on metaphor needs to be approached as a complex category, we are indeed confronted with a network of functional perspectives, each of which could be characterized by means of specific phenomenological and methodological preferences. Importantly, although sometimes the discrepancies among the approaches displayed in Table 1 may seem negligible, e.g., the distinction between declared and motivated conventionality, such “nuances” in fact constitute the core of devolution (cf. Section 2). Consequently, detailed declarations should be encouraged within a functional cognitive linguistics if truly converging evidence is to be assembled.

This problem can be neatly illustrated with reference to Table 1. For instance, if there is one difference between two perspectives, as in the case of examples 11 and 13, which can be distinguished with reference to the number of examples studied, should the approaches be viewed as supporting each other's claims? Likewise, if the differences between examples 15 and 17 lie in both quantitative and qualitative disparities between the linguistic units analyzed, should Janda and Solovyev's and Dobrovol'skij and Piirainen's findings be interpreted as incompatible? Clearly, there is no simple answer to this question but, in view of the fact that in a devolved methodology any fluctuation of a variable should be reflected at the level of a theoretical model, it seems that a family resemblance view upon the approaches assembled in Table 1 is a viable option.

In the clusters of perspectives thus discriminated, the mechanism of conceptual metaphor is unequally prominent. While approaches based on generalization and idealization (see, for instance, approaches 1–3) provide ev-

idence in favor of metaphorical mappings, those built on integration and detail stress the marginal role of conceptual metaphors in the interpretation of abstract concepts, particularly in conventional contexts (see, for instance, approaches 4, 14 and 15). Possibly, then, as Steen (2011) suggests, we are dealing with qualitatively distinct phenomena, i.e., a variety of metaphors. Thus, there is a metaphor understood as an active link between concrete and abstract meanings (see, for instance, approaches 1–3), basic and non-basic interpretations (approach 11), non-resonating meanings (approaches 10 and 14), or conventional and novel senses (approach 4). But there is also a metaphor viewed as a latent disparity within the meaning potentials of categories which can only be resolved, i.e., interpreted either literally or metaphorically, in a context. In other words, according to, for instance, Glynn (2002), Givón (2005), Janda and Solovyev (2009) or Strugielska (2012), a metaphor needs to be defined as a contrast within an exemplar, i.e., a clash between or among the meaning potentials of linguistic units in a particular syntagmatic string, possibly related to the varying degrees of attenuation of their semantic/conceptual representations.

In Section 3.1, evidence for metaphors has been sought in constructed linguistic examples, dictionaries or the corpora. Conceptual projection has been perceived between more or less extended cognitive models underlying a variety of linguistic units. Nevertheless, any functionally plausible definition of metaphoricity which could be proposed on the basis of Table 1 needs support from other perspectives within the cognitive sciences, among which there is the psychological approach to metaphor.

### **3.2. Metaphor: the psycholinguistic approach**

The linguistic perspectives on metaphoricity discussed in Section 3.1 lend plausibility to the conclusion that metaphor, linguistic and, possibly, conceptual, is most likely to occur if the functional commitment is either merely declared, e.g., Kövecses (2002), or minimally pursued, e.g., Stefanowitsch (2006). In other words, if each of the contexts through which usage can be defined is optimized, metaphor can indeed be only sporadically observed among specimens of conventional language.

Naturally, this supposition stands in stark contrast to the central tenet of CMT, which is the tenability of two-domain mappings in the processing of

conventional linguistic examples involving abstract categories.<sup>4</sup> Thus, in order to either validate the postulates of the more formal strand within metaphor studies or to corroborate the suggestions of those working within the more devolved framework, selected psychological accounts of metaphorical language will now be evaluated with reference to the dimensions of the functional commitment distinguished in Table 1. In this way, it will be possible to identify which parameter of the functional orientation is being addressed in a particular psychological approach. Consequently, any evidence for metaphor to be inferred from Table 2, whether converging or diverging, should be taken as a substantiation for a metaphor, i.e., its particular definition which is dependent on a specific set of constraints. Consequently, an absolute confirmation or rejection of metaphoricity is unlikely to be revealed.

The bulk of psycholinguistic research seems to have concentrated on trying to validate CMT from the comprehension perspective and thorough overviews of this strand of investigation have been provided by Steen (2007) and Gibbs and Colston (2012). In the same vein, Table 2 includes an overview of 10 analyses, in which the key question is whether people actually use metaphorical mappings in order to interpret metaphorical linguistic expressions. The answer to this question, as demonstrated in Table 2, can be positive (example 1), uncertain (example 2) or negative (examples 3–10) for conventional language and positive (example 1, 3–7 and 9–10), uncertain (example 10) or negative (example 8) for novel expressions. In other words, “while the evidence that conventional expressions are understood via conceptual metaphors is scant and problematic, there is some evidence that people can spontaneously construct conceptual mappings to understand novel metaphoric expressions” (McGlone 2007: 120).

The above conclusion needs to be understood against the criteria of the functional commitment developed in Section 3.1. In other words, it should be established which of the possible definitions of metaphor from Table 1 are testable by means of the psycholinguistic, comprehension-based research from Table 2. Clearly, the majority of the analyses assembled below are concerned with a metaphor defined as a contrast between senses of lexical units whose

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<sup>4</sup>The term “figurative language” is deliberately avoided here in view of the fact that the construct is in itself ambiguous (see Ariel 2002 for a discussion) and thus, it needs to be either carefully re-defined or relegated from the heuristic apparatus of a functional methodology.

conventionally is assumed, i.e., declared, and whose occurrence is attested within a set of deductively assembled data (see examples 1–8). As demonstrated in column two of Table 2, the results do not corroborate the psychological reality of such mappings.

Moreover, there are two samples of experimental research which are more functional in orientation than the others (examples 9 and 10). To be more specific, McRae et al.'s (1998) constraint satisfaction approach is integrating since it accounts for the various influences provided by syntactic and lexical cues, which results in a number of possible interpretations competing for activation, while Cameron's (2003, 2008) studies focus on two key parameters of a usage-based orientation.<sup>5</sup> Firstly, the degree of conventionality of linguistic metaphors is carefully established on the basis of the analyst's intuition and verified against the judgements of other raters as well as language corpora and dictionaries. Secondly, linguistic examples are not constructed but recorded and thus, they constitute samples of real language reflecting the many mechanisms contributing to a successful interpretations of (potential) conventionalized and novel, or deliberate, linguistic metaphors. Among these, conceptual metaphors, i.e., pre-existing mappings in the minds of language users, constitute only one possible constraint through which metaphor shifting, i.e., the changes and adaptations to a linguistic metaphor observable in discourse, can be explained. As Cameron (2008: 61) argues, there are at least three types of metaphor shifting, i.e., vehicle re-deployment, vehicle development and vehicle literalization, which account for the host of referential ties to be discovered in the web of discourse.

The notion of metaphor shifting and the resulting multitude of links between the source concept and other domains highlight the validity of family resemblances as an alternative to two-domain mappings. In fact a number of similarity relations have been proposed in experimental approaches to metaphor, all of which have stressed the cognitive superiority of emergent, or interactional, features over pre-existing attributes, echoing in the notion of the main meaning focus proposed by Kövecses (2000). In other words, whether defined narrowly, e.g., as an abstract relational schema which may, over time,

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<sup>5</sup>In fact, Cameron (2003, 2008) addresses a number of usage-driven parameters which have not been considered for the current exposition, among which the constraint constituted by ontogenetic development seems particularly interesting.

be lexicalized as an additional sense of the vehicle term (cf. Gentner and Bowdle 2001), or broadly e.g., as “potentially endless links” (Cameron 2003: 191), inter-domain connections revealed through psychological studies stress the cognitive independence of abstract concepts from the categories proposed in CMT.

All in all, then, it can be concluded that the comprehension-based, experimental perspective on metaphoricity presented in Table 2 is only partly compatible with the results displayed in Table 1. First of all, while both methodologies stress the non-relevance of metaphor for understanding conventional language, the linguistic perspective is less definite on this issue than the psychological one. Moreover, while both approaches suggest a low explanatory potential of two-domain mappings in the case of integrated analyses, i.e., such that involve a number of optimized contexts, the psycholinguistic orientation is, on the whole, far less devolved than the linguistic one – there are only two (partly) functional studies among the 10 assembled in Table 2, while there are as many as 14 among the 18 approaches discussed in Table 1. Thus, for metaphor to be more reliably verified from a psycholinguistic angle, experiments which would more accurately replicate the richness of natural contexts, characteristic of language use, are definitely needed.<sup>6</sup>

Table 2. Metaphor: the psycholinguistic perspective – selected case studies

Author	Relations among categories	Entrenchment of examples	Source of examples	Scope of examples
1. Gibbs (1992)	metaphorical mappings	declared conventional and novel	deduction	lexical units
2. Gibbs et al. (1997)	(possible) metaphorical mappings	declared conventional	deduction	lexical units
3. Giora (1997)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	lexical units
4. Gentner and Bowdle (2001)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	lexical units

<sup>6</sup>Martin’s (2006) study into the relationship between results from comprehension-based psycholinguistic research and a corpus-based analysis is an attempt to address this problem.

5. Glucksberg (2001)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	lexical units
6. McGlone (2007)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	lexical units
7. Tendahl (2009)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	lexical units
8. Murphy (1996)	family resemblances	declared conventional and novel	deduction	lexical units
9. McRae et al. (1998)	family resemblances and metaphorical mappings	declared conventional and novel	deduction	collostructions
10. Cameron (2003, 2008)	family resemblances (and metaphorical mappings)	motivated conventional and novel	induction	lexical units

All in all, the psycholinguistic perspective upon metaphor, represented by the 10 studies in Table 2, seems to question the role of conceptual metaphor in processing metaphorical language, particularly in the case of conventional expressions. Moreover, the juxtaposition of the functional criteria in Tables 1 and 2 reveals that the three parameters chosen for verification have not provided a unanimous answer concerning the status of metaphor in a devolved cognitive paradigm. One of the reasons are, undoubtedly, the disparities in the ways each factor has been interpreted in individual approaches, which has rendered the results incompatible in some or most respects. Another explanation, however, might be the fact that further dimensions of the functional pledge need to be incorporated into the analysis in order to strengthen its explanatory potential.

#### 4. Conclusions

Cognitive linguistics is in a state of transition which, expectantly, is going to result in the emergence of a new model through which the various interacting influences shaping the experience of language use could be represented. These

constraints, as argued throughout Section 3, require meticulous definitions since even a minute disparity in determining initial conditions will affect the results and may ultimately lead to the development of a multiplicity of claims, whose validity will be difficult to sustain.

The many characterizations of metaphor which, as demonstrated in Tables 1 and 2, can be supported through linguistic and psycholinguistic perspectives, illustrate this conundrum really well – while there are a number of functionally-driven approaches to metaphoricity, their respective claims are, on the whole, incompatible since they have been built on inconsistently interpreted constraints. In other words, even though the influences considered by one analyst seem attuned with those assumed by another researcher, the results obtained by each are likely to be incongruous since one or more important factors have been developed to reach varying degrees of optimization. Thus, although in the present article selected linguistic and experimental approaches to metaphor have been juxtaposed with reference to the same number of contexts, each seems to constitute a separate perspective. Simultaneously, let us recall that the constraints discussed here are potential dimensions of the functional commitment. However, since each has been interpreted in more or less disparate ways, perfect convergence among the approaches studied may be impossible to attain, which impedes the possible emergence of a universal, functional definition of metaphoricity. Instead, all the perspectives should be linked via family resemblances, representing the degrees to which particular influences have been developed. Ultimately, then, the approaches could be modeled as a complex dynamical system, advocated by, for instance, Cameron (2003) and Gibbs and Colston (2012). Still, the key question concerns the place of metaphor in this network of interdependencies. Definitely, its position cannot be uniformly established. However, the dominant tendency, accentuated throughout this article, is for a metaphor built upon the notion of profile determinance to be of little explanatory value in a devolved model. In other words, construals of metaphoricity which grant special prominence to one linguistic (and conceptual) structure and maintain its superiority over competing explanations are first to demise in a devolved methodology. Nevertheless, if any of the more functional, or usage-based, options are to seriously challenge the formal, or competence-based, approach to metaphoricity posited by CMT, precise definitions supported by compatible converging evidence are urgently needed. This requirement, it seems, opens new opportunities for re-

search into the nature of a metaphor in a language and a thought.

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