In the traditional view, blends, unlike compounds, are excluded from grammar and word-formation, so they are considered as dichotomous under the either-or methodology. This research studies the nature of the relationship between compounds and blends from a cognitive linguistic perspective. A data set on both neologisms is investigated to determine whether the border between them is clear. Consequently, the researcher's first assumption is confirmed in that the boundaries between compounds and blends are blurred, finding out cases that belong to the fuzzy border; that is to say, cases difficult to determine whether they are compounds or blends are identified. The alternative categorization might be one that views compounds and blends as shades of grey. With the blurring of the border concerned, only typical compounds and typical blends show some 'difference' at the level of form, which is explicated as a metonymical extension. In addition, a study of the internal structure of both compounds and blends to determine the kinds of schemas they have is done. The results show that compounds and blends have essentially the same schemas.

Linguistic Approach to Blends
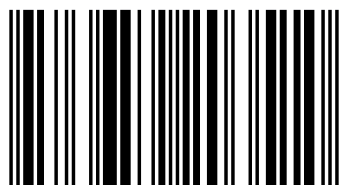
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A Cognitive Approach to Compounds and Blends

Revising the linguistic approach to blends

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A Cognitive Approach to Compounds and Blends

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ABSTRACT

In the traditional view, blends, unlike compounds, are excluded from grammar as well as word-formation; hence, the two kinds of coinage are considered as dichotomous with regard to the either-or methodology. This dissertation dwells on the nature of the relationship between compounds and blends from a cognitive perspective. To accomplish such a task, a data set on both kinds of word-formation is investigated to determine whether the border between the two kinds of neologism is clear. Consequently, the researcher's first assumption is confirmed in that the boundaries between compounds and blends are blurred as a result of the existence of many cases that belong to the fuzzy border; to put it another way, there exist many examples that are difficult to determine whether they are compounds or blends. The alternative categorization suggested might be one that views compounds and blends as shades of gray. With the blurring of the border concerned, only typical compounds and typical blends show some 'difference' at the level of form. Such a 'difference' is explicated with recourse to the metonymical extension, which is a normal linguistic phenomenon. That is, the parts of words used in typical blends and the whole words used in typical compounds are metonymic rather than different. In addition, a study of the internal structure of both compounds and blends to determine the kinds of schemas that both kinds of neologism have is done. The results show that compounds and blends have essentially the same schemas.

ABSTRAK

Menurut pandangan lazim, *blends* tidak seperti *compounds* kerana ia tidak termasuk dalam tatabhasa mahupun pembentukan kata. Sehubungan dengan itu, *compounds* dan *blends* dianggap sebagai dua kaedah pembentukan kata yang berbeza bergantung kepada metodologi. Kajian ini menumpu kepada pertalian fitrah di antara *compounds* dan *blends* mengikut kaca mata pendekatan kognitif. Untuk mencapai hasrat tersebut, data yang dikumpulkan hasil daripada kedua-dua jenis pembentukan perkataan tersebut dikaji bagi memastikan sama ada sempadan di antara kedua-dua jenis *neologism* tersebut jelas. Ekoran daripada itu, hasil yang didapati menampakkan bahawa sempadan di antara *compounds* dan *blends* adalah kabur. Hal ini dikuatkan lagi dengan kewujudan banyak contoh yang menjelaskan kekaburan sempadan tersebut. Pengkategorian alternatif yang dicadangkan adalah hipotesis bahawa *compounds* dan *blends* ibarat bebayang kelabu. Seiring dengan kekaburan tersebut, hanya *compounds* dan *blends* yang biasa sahaja yang menunjukkan sedikit 'perbezaan' terutamanya dari segi bentuk. Perbezaan tersebut dikaji melalui sumber yang berkembang secara *metonymic*, yang merupakan fenomena lazim linguistik. Justeru kerana itu, sebahagian daripada perkataan yang digunakan dalam *blends* yang biasa dan keseluruhan perkataan yang digunakan dalam *compounds* adalah bersifat *metonymic* berbanding perbezaan. Sehubungan dengan itu, kajian terhadap struktur dalaman *compounds* dan *blends* dilaksanakan bagi menguji hipotesis pengkaji bahawa kedua-duanya adalah pada hakikatnya serupa berdasarkan skema yang mendasari pembentukan kedua-duanya *compounds* dan *blends*.

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CHAPTER I

INTRODUCTION

1.5 INTRODUCTION

Word-formation is a very productive process thanks to which the enrichment of languages is mostly ascribed. The concern of this dissertation will be with two main word-formation processes, namely compounds and blends. Based on traditional studies, compounds have been considered as grammatical and so have attracted the attention of linguists, while blends have been considered as ungrammatical and hence have been marginalized. In this situation, compounds and blends have been considered as dichotomous. The purpose of the research is to investigate the nature of compounds and blends for the purpose of categorizing them but from a different perspective.

In this research, the two kinds of word-formation will be categorized under a cognitive approach. Two kinds of cognitive methods of categorization will be utilized, namely categorization by prototypes and categorization by schemas.

1.6 BACKGROUND OF THE STUDY

The diverse nature of word-formation in English as well as in other languages has been a real challenge to linguists. Word-formation in English encompasses various creative processes, the most important of which are compounding, blending, and so on. The researcher will merely be concerned with two of such processes namely, compounds and blends because of the broad scope of word-formation that cannot be fully covered in a limited research.

Compounds have been the focus of many previous studies. These studies have contributed to our understanding and knowledge of compounds, notably the syntactic and morphological properties of compounds. This does not mean that there are no semantic studies of compounds, but the problem is that each study restricts itself to one aspect rather than deals with the different aspects as a whole. The idea that normally hovers about one's mind is that a coinage is the fruit of a process that happens in the mind of the speaker and so is understood as such by the hearer. The coinage then is a uniform process regardless of which aspect is predominant. Thus, the focus on one aspect remains flawed whatever the effort is. A research that accounts for all the factors that influence the neologism would be more reasonable.

Blends, on the other hand, have been given a phonological interest and more or less a morphological interest. But, no study of the semantic side of blends has been highlighted. Thus, approaching compounds and blends in connection with only one aspect has led to a more aggravated situation, letting a lot of phenomena without plausible explication. Such a failure arises from the fact that such word-formation processes have mostly been tackled with little or no attention to the semantic side and the conceptual composition. It is apparent that compounds and blends take place in the speaker's mind before they even come into existence.

Compounds and blends are considered dichotomous in the light of the partial studies - that is, studies that focus on some aspects while disregarding others. This traditional dichotomy, though simple and elegant, raises certain issues. It is true that the appearance of both kinds of word-formation differs. While compounds contain full components, blends comprise only parts of words. Still, intuitively, one cannot help but feel that compounds and blends are two faces of the same coin. That is, one can intuit that there is some kind of similarity between the two kinds of neologism as far as the conceptual process is concerned. What draws the attention to such a point is the fact that whenever one hears a blend s/he immediately thinks of a compound. That is, in interpreting a blend, the source words (which constitute a compound) have to be identified first before the blend can be understood. For instance, when blends such as *smog*, *brunch* and *boost* are heard, they are not perceived as individual lexical items.

Rather, to explain or understand the meanings of such blends, we have to identify their source or original state, namely *smoke fog*, *breakfast lunch* and *boom hoist*, which have the forms of compounds. This state of affairs suggests that both kinds of neologism may after all be related and connected. Such an intuition raises doubt about the claim that blends lie outside the field of grammar and that they are dichotomous from compounds. Perhaps, compounds and blends can be better analyzed using an approach that:

a. involves all the various aspects contributing to the coining of the neologisms concerned; and
b. promotes the conceptual aspect which constitutes the basis for inventing neologisms.

The present research will attempt to incorporate both these factors in the analysis of the relationship and connection between English compounds and blends.

1.7 STATEMENT OF THE PROBLEM

Blends have not been accorded the same level of attention as compounds in linguistics. This fact can be ascribed to the approaches adopted by linguists. The majority of the approaches used to grapple with compounds and blends are classical or rather Aristotelian. Under such methodology, an entity is either a member or a non-member of a category. The entity concerned can be considered as a member only if it meets all the necessary and sufficient conditions. Blends, hence, have been considered as non-members in many linguistic fields such as grammar, because they only comprise parts of words that cannot be words or morphemes under approaches that have adopted the classical methodology, particularly generative grammar. Being excluded from various linguistic fields, blends have traditionally been considered as dichotomous from compounds. In the light of what has been considered so far, three unresolved issues arise with regard to compounds and blends:

a. Are the boundaries between compounds and blends clear? That is, are all the examples of both neologisms clear-cut and discrete?
b. To what extent are compounds and blends different or similar?
c. Are compounds and blends derived from the same conceptual model? To put it simply, do they have the same source schemas?

The assumption of the study is that the relationship between compounds and blends cannot be a dichotomous one that places blends outside the ambit of morpho-grammar and word-formation as assumed in most of the previous works. This assumption (which will be tested in this study using on a data set) is based on two observations.

First, the border between certain compounds and blends might be fuzzy rather than discrete. In other words, there will be examples of compounds and blends that will not fit into current categories of compounds or blends, thus refuting the notion that blends and compounds are dichotomous categories. Instead, the two categories might be members of a single unitary category, bearing some kind of family resemblance between them.

Second, there might be similar and shared conceptual processes involved in the formation and comprehension of compounds and blends. Thus, the conceptual process (that has first attracted the researcher's attention to the relation of blends and compounds) of the derivation and extension of compounds and blends deserves serious investigation. This study represents a small initial effort in this direction. If it turns out that both kinds of neologism are derivable from the same conceptual patterns, then the view that both compounds and blends are in fact non-dichotomous and family members of a single category can be proposed.

1.4 OBJECTIVES OF THE STUDY

With regard to what has been said so far, the main objectives of this study are to answer the questions posed in 1.3. In particular, the objectives of this study are:

    a.   to delve into the diverse nature of both compounds and blends on the basis of a data set for the purpose of determining whether all the cases of the neologisms in question can be categorized clearly into compounds and blends using existing categories and criteria of categorization or whether there exist some instances that defy categorization based on those existing criteria;

    b.   to suggest, propose and argue for a more conceptual and integrated categorization of compounds and blends;

    c.   to provide evidence and argumentation based on "the internal structure"[1] of both kinds of neologism for the purpose of determining whether they are motivated in the same way - that is, whether they have the same schemas.

1.5 SIGNIFICANCE OF THE RESEARCH

Unlike compounds, blends have been marginalized in previous studies of the grammar and structure of word-formation, because blends do not usually conform to morpho-grammatical rules. No one can deny that blends are more a result of euphony, but their resourceful and vital contribution to the enrichment of the vocabulary of the English language requires us to rethink and reconsider their linguistic status. It is true that only a few blends become lexicalized, but the tendency for speakers to create them in everyday use shows that they are a creative and productive process. Thus, investigating the nature of blends is very important in order to account for such creative process and to determine their exact categorical status. Although past studies have proposed that compounds and blends are dichotomous categories, the relationship between compounds and blends remains unclear and undecided in linguistics. The point that attracts one's attention is that compounds and blends are generally not interchangeable. For instance, there is no compound equivalent for the blend *smog* as ?*smoke fog* in the English dictionary. This means that when a blend comes into existence, there is no need to have a compound equivalent for the blend and vice versa since they have the same function. On the basis of this, one can intuit

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[1] The use of the expression "the internal structure" here refers to the semantic and conceptual derivation which brings about both kinds of coinage.

that both morphological processes are of the same nature. There exist very few cases that have both forms, i.e. compound and blend. The compound *Channel tunnel*, as an example, is used alternatively with the blend C*hunnel* by the speakers of English[2]. Such a phenomenon is not restricted to blends, but it does happen at times in language and is akin to the notion of "free variation". In the light of such correspondence, it is important to explore the kind of relationship that lies between compounds and blends.

Linguistic categories have also been shown to be cognitive categories (Taylor (1995), Lakoff, (1987), Fauconnier (1997)); hence, priority should be accorded to the conceptual and semantic side which constitutes the basis on which categories (in our case compounds and blends) are constituted. Thus, an approach to categorization (whether general or linguistic) should be cognitive in nature in that the categorization will be prototypical - recognizing the fuzzy border between the members of a category and highlighting the conceptual foundation of the members of the categories as well as the category itself. This approach might provide us with a better understanding of the speaker's creation of neologisms in general, and to account for all the data instead of confining "non-conforming" data to the "exception to the rule" heap. Thus, approaching compounds and blends using a cognitive methodology could help uncover the conceptual and linguistic structure of such coinages as wholes rather than concentrating on their form alone.

1.5 CONCLUSION

This chapter has provided the rationale and background for investigating compounds and blends, and the objectives of the present study as well as a proposal or solution to the issues of compounds and blends categorization. In the following chapter, a literature review of the definitions and classifications of, and approaches to compounds and blends will be presented along with a detailed examination of the

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[2] The same example is used by Turner and Fauconnier (1995), postulating that the blend *Chunnel* is different from the compound *Channel tunnel* by way of fortuitous accident. The phrase *the tunnel under the English Channel* or the compound *Channel tunnel* integrates the conceptual domains of *Channel* and *tunnel*; then there is an additional integration into *Chunnel* with the existence of the phonemes in *Channel* and *tunnel*.

notion of prototypicality, which forms the solution to the categorization of compounds and blends proposed in this study.

CHAPTER II

LITERATURE REVIEW

2.1 INTRODUCTION

Compounds and blends constitute two of the main productive processes that enrich the English language. Compounds have been given attention by linguists, whereas blends have been marginalized, because blends violate the grammatical rules of composition - that is, their composition does not abide by any rules of grammar. This judgment has been reached under the classical methodology according to which an entity that does not meet all the essential conditions cannot be a member of a category. In this research, the cognitive methodology is adopted to approach compounds and blends.

This chapter provides and discusses some of the definitions as well as classifications of both compounds and blends and reviews some of the previous studies on both kinds of neologism. A review on the notion of prototypicality that will be adopted in categorizing the neologisms concerned is also displayed.

2.2 COMPOUNDS DEFINITIONS AND CLASSIFICATIONS

2.2.1 Definitions of compounds

According to Adams (1973:30), a compound is "the result of the (fixed) combination of two free forms, or words that have an otherwise independent existence". For instance, such free forms as *hand* and *writing*[3] are juxtaposed to form the compound

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[3] The use of italics denotes linguistic forms

handwriting. Indeed, such a definition provides an interesting depiction of compounding. Yet, English comprises various compounds where more than two words are combined, e.g. *wastepaper basket*[4].

Langacker (1973) describes a compound as "a lexical unit in which two or more lexical morphemes are juxtaposed" (1973: 81). This definition outlining that certain compounds consist of more than two morphemes is a more accurate one notwithstanding the binary nature of compounds and the predominance of two-morpheme–compounds in English. As mentioned by Langacker (1973), compounds tend extremely to be binary in character; in other words, they tend to contain in the juxtaposition exactly two stems. Compounds with more than two stems can usually be broken down into a series of binary compounds (ibid, 250-251).

Wastepaper basket, to use the same example, is a binary compound that comprises the elements *wastepaper* and *basket.* Then, *wastepaper* can be classified into *waste* and *paper.* The notion of the binary quality of compounds is a relevant point to the process of compounding. However, it would be more reliable if the definition of compounding alludes to the fact that a compound can have more than two morphemes in its overall structure.

Considering the aforementioned definitions as well as traditional definitions, one may think that all cases of compounds are composed of free morphemes. The problem raised here is that English does have compounds where at least one element is bound. Such word as *cranberry* is made up of the bound morpheme *cran* and the free morpheme *berry.* Still, *cranberry* is accepted as a compound - that is, a neoclassical compound. In this connection, Halpern (2000) defines compounding as the combining of two or more words that have their own lexical meaning to form a new unit that functions as a single word (cited in http://www.cjk.org). Halpern (2000) mentions that in practice the components of a compound are not necessarily free though he does not include such a fact in his definition of compounds.

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[4] No instances of compounds having more than two components exist in the data set; hence, this example is taken from Bauer (1983).

The definitions of Adams (1973), Langacker (1973) and Halpern (2000) highlight the varied nature and quality of compounds. In the next section, we will briefly look at some of the different classifications of compounds.

2.2.2 Classifying Compounds

The classification of compounds is equally varied and complex. Bauer (1983) classifies compound nouns into four groups based on semantic criteria:

(i)   Endocentric compounds, where the compound denotes a hyponym of the head component in the compound, e.g. *tooth decay* is a kind of decay.

(ii)   Exocentric compounds (known as Bahuvrihi in Sanskrit), in which the compound is not a hyponym of the grammatical head, as in *a pickpocket* which is not a kind of *pocket*. In the absence of an expressed semantic head in such compounds, the compound is commonly seen as metaphorical or synecdochic (1983: 30).

(iii) Appositional compounds, where both compounds have the possibility to be the head of the compound. For instance, *maidservant* is a hyponym of both *maid* and *servant*.

(iv)   Copulative compounds (called dvandva in Sanskrit), where the compound is not a hyponym of either component, and the components name disparate entities that combine to form the entity indicated by the compound, e.g. *Rank-Hovis*[5] (ibid, 30-31)

It is also argued that there should be no genus-species compounds such as *?humanman* and ?*animalhorse*, where the determining element is implicit in the head component in the sense that the determining element always denotes the primary defining characteristic of the subgroup denoted by the compound (ibid). However, such a rule does not go without its exceptions. Compounds of this kind, though they

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[5] The example is Bauer's (1983), since there exist no examples of such kind in the corpus.

might look redundant, are common in English (ibid, 94-95), e.g. *palm tree, pathway* and *puppy dog*.[6]

The classification presented by Bauer (1983) is structural in nature. The notion of headedness is ubiquitous in the classification, whether it is present, absent or shared in the compound.

Apart from the major types of compounds mentioned above, Fabb (1998) notes additional types of compounds, namely reduplication or repetition compounds and synthetic (or verbal) compounds. The former are compounds, where the components are alike or almost alike (Fabb, 1998: 69). Some examples are *hush-hush* - that is, silent, and *tick-tock* - that is, sound of a clock[7]. The latter are compounds, where the head components are derived words comprising verbs and one of a set of affixes (usually –er, -ing and –en) (1998: 67). Some instances are *family planning* and *shoe-maker*. Fabb's (1998) classification of compounds is essentially a structural categorization of the compounds.

Adams (1973) provides a different classification of compounds. The approach used by the latter is a kind of combination between grammar and meaning. Her utmost focus is on the relationship between the components of compounds, using grammatical relations in some cases and semantic relations in others.

(i)   Subject-Verb (e.g. *snake-bite*)

(ii)   Verb- Object (e.g. *plaything*)

(iii)   Appositional ('B which acts as, has the function of A', 'B of which A is a particular instance', 'B is an A', e.g. *houseboat / panic reaction / fighter plane*)

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[6] Gusmani (1973) calls such formations as "clarifying compounds" or "classifying compounds"(cited in Grzega, 2002: 12).
    [7] The corpus does not contain any examples of reduplicatives, hence the examples are taken from http://www.fsz.unihannover.de/Sprachbereiche/Englisch/dozenten/mcelholm/download/wordform .pdf

(iv)   Associative ('B is part of A', 'B belongs to A', 'B is typically associated with A', 'B is produced or derived from A', e.g. *eyeball / will-power / candlelight*)

(v)   Instrumental ('B which prevents or cures against A', 'B which is the means of preserving A' and 'B which causes or promotes A', e.g. *raincoat / safety belt / flu virus*)

(vi)   Locative ('A is a place where or a time when B is or happens, e.g. *living room / day-dream*)

(vii)   Resemblance ('B which is in the form of, has the physical features of, A' 'B which reminds one of A', e.g. *piggy bank / frogman*)

(viii)   Composition / Form / Contents (one element specifies the other in relation to some concrete feature) (e.g. *ivory tower / plate glass / inkblot*)

(ix)   Adjective-Noun (e.g. *fine art*)

(x)   Names (e.g. *plywood*)

(xi)   Other (certain cases cannot belong to any of the aforementioned classes (e.g. *telephone directory*[8]) (1973 : 64-88)

The classification provided above is an elaborate and interesting one. Nevertheless, it is not exhaustive in that there remain some compounds without classification.

As noticed from the examples given in both defining and classifying compounds, the latter are not written in the same way. With regard to such variation, a quick enquiry into English compound spelling would seem pertinent before turning to blends.

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[8] This example does not exist in the data set, because it consists of more than two components.

2.2.3 Compound Orthography

A compound can be written as a single word, e.g. *nightmare*, as hyphenated words, e.g. *day-dream*, or as two separate words, e.g. *ivory tower*. What is more striking about compounding is that some cases can be manifested in any of the three different spellings, as in *girlfriend / girl-friend / girl friend* and *wordformation / word-formation / word formation*. In the light of such variation, Adams (1973) states that the spelling of compounds is unreliable (1973: 59). Most linguists have briefly dealt with the diversification marking the orthography. However, there were some proposals to account for such diversity.

Langacker (1973) ascribes the inconsistency of the orthographic treatment of compounds to the intermediate status of compounds. That is, the latter encompass the characteristics of both words (in that they are single complex units) and word sequences (in the sense that they comprise more than one lexical morpheme) (1973: 82).

McElholm (2000) argues that a compound is normally written as separate words in English. After a two-separate-word compound becomes part of the language, it moves to hyphenated and then to single. This suggestion is significant in that it implies the normal evolution of many compounds in English. However, he mentions later that there exist some counterexamples such as *matchbox / match-box / match box*.

Halpern (2000) similarly states that in their appearance, compounds are combined free forms that are viewed as noun phrases thanks to their evolution. Some compounds undergo a stage of hyphenation and then finally may become single, taking into account that some lexemes always remain as separate. He further throws light on the fact that all different forms of compounds are equally legitimate. The orthography does not determine the lexemic status of a string (2000:11). Such a statement is very significant in the sense that it draws attention to the notion that a compound is a unified concept regardless of whether it is single, hyphenated or separate. In spite of the fact that it is not the goal of the study to get involved in the discussion of such issue and its

possible solutions, it has been necessary to draw attention to the orthography issue, as they have implications for the perception of compounds as a category. The approach is neutral with regard to the orthographic conventions for the compounds.

2.3 BLENDS DEFINITIONS AND CLASSIFICATIONS

2.3.1 Definitions of blends

Blends were given special attention by Lewis Carroll, who used various creative portmanteaus (to use Carroll's terminology), in his poem Jabberwocky. However, this does not mean that he was the first one to use blends. Rather, various examples were found before his time. Some examples are *nobodaddy* from *nobody* and *daddy* (coined by William Blake, 1793), and *snivelization* from *snivel* and *civilization* (coined by Herman Melville, 1849) (cited in http://ccat.sas.upenn.edu/~haroldfs /popcutt/handoutsblends78.html#1) [9].

In his *Through the Looking Glass,* Carroll (1872) describes a portmanteau in the following:

> Well, "slithy" means "lithe and slimy." "Lithe" is the same as "active".
> You see it's like a portmanteau - there are two meanings packed up into
> one word.' (Cited in Bauer, 1983: 234).

The blended word is described in such definition as a portmanteau, i.e. a large travelling bag that opens into two equal parts, where the parts of the source words are combined. The question raised here is what parts of the source words are fused. The answer is apparently shown in the Oxford Dictionary definition of a portmanteau word: a word made by joining the first part of one word to the end of another. Instances are *brunch* from *breakfast* and *lunch* and *smog* from *smoke* and *fog*. Nowadays, the word portmanteau has become old-fashioned and so has ceased to be used among linguists in

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[9] These ancient examples are not part of the data set.

particular. Blends sometimes comprise more than two splinters - i.e. parts of morphemes, as in *turducken* from *turkey*, *duck* and *chicken*[10].

A more detailed definition is given by Cannon (1986), who describes a blend as one that includes a telescoping of two or more separate forms into one, or scarcely a superposition of one form upon another (Cannon, 1986: 730). However, the existence of certain blends that do not take in the first splinter of a source word and the end of another is not recognized in the foregoing definitions. For instance, some blends comprise the first splinters of both source words, as in *codec* from *coder* and *decoder*.

Lehrer (1996) similarly mentions that it is not necessary for a blend to contain the first splinter of a contributing word and the last of another. But, she further explicates such a phenomenon, delving into the nature of blends and displaying the constraints that govern them. If a splinter comes before a full word or another splinter, it must be the first part of a word (e.g. *Chunne*l from *channel* and *tunnel*). If a splinter comes after an entire word or another splinter, it may be either the final part of a word (e.g. *busnapper* from *bus* and *kidnapper*) or the initial part of a word (e.g. *codec* from *coder* and *decoder*). The beginning of a blend cannot be the final splinter of a word (1996: 364). Thus far, the difficulty to define a blend has been clear based on the foregoing discussion of the various definitions. Such difficulty mostly comes from the various categorizations of blending. Many linguists have categorized blends in different ways. A brief examination of some blending classifications can be to the point.

2.3.2 Classifying Blends

To begin with, Pyles and Algeo (1968) argue that as far as blends are concerned, both sounds and meanings of the contributing words are partly combined whether by accident or by design. First, a word may be blended when a person has two terms to express his or her idea, as in *needcessity* from *need* and *necessity*. Blends of this kind are slips of the tongue and so are called nonce words. However, they can find their way

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[10] Since the data set is restricted to neologisms containing only two components, this instance is taken from Adams (1973).

into the vocabulary if they are formed many times due to their utility. Second, many blends are formed deliberately, as in *guesstimate* from *guess* and *estimate* in order to free the word-maker of responsibility for error (1968:110: 111).

Bauer (1983) provides one of the main categorizations of blends as follows:

(a)   blends in which only parts of the source words appear in the coinage, as in *Chunnel* from *Channel* and *tunnel*.

(b)   blends in which the two words used as the bases are both present in their whole, e.g. *swelegant* (also *swellegant*) from *swell* and *elegant*, taking into account the overlap in pronunciation, spelling or both.

(c)   blends appear as if they are broken down with respect to other word-formation processes, especially as neo-classical compounds, e.g. *autocide* from *automobile* and *suicide* (1983: 236).

Bauer's (1983) categorization of blends is a structural one. That is, more focus is on the structure of blends, showing the different forms that blends can have. Indeed, this classification is an interesting one, but the concern is only with the form. No reference to the internal structure or rather sense-relations is done.

Adams (1973) classifies blends based on the relationship between their components. Her classification comes as follows:

(i)   Subject-Verb, e.g. *screamager* from *screaming* and *teenager*

(ii)   Verb-Object, e.g. *busnapper* from *bus* and *kidnapper*

(iii) Appositional (coordinative), e.g. *ballute* from *balloon* and *parachute*

(iv)   Appositional that are not coordinative - that is, the first element specifies or qualifies the second, e.g. *slanguage*

(v)   Instrumental, e.g. *beermare* from *beer* and *nightmare*

(vi)   Locative, e.g. *Chunnel* from *Channel* and *tunnel / daymare* from *day* and *nightmare*

(vii) Resemblance, e.g. *bomphlet* from *bomb* and *pamphlet*

(viii)   Composition compound: the first element is the material from which
         the second is made, e.g. *plastinaut* from *plastic* and *astronaut*

(ix)   Adjective-Noun, e.g. *bit* from *binary* and *digit*

(x)   Blends of the punning type (not easily classifiable), e.g. *chattire* from
         chat and *satire* (1973: 153-155).

Adam's (1973) classification is devoted to the relationship between the
components of blends. Her classification is a kind of mixture between grammatical
and semantic relations. Such grammatical categories as subject, verb and object are
utilized in such classification. At the same time, the semantic relations like
resemblance, composition and instrument are referred to. Such classification is very
significant in that it implies that grammar and meaning can interact. However, the
criteria used are not exhaustive, since some examples remain without classification as
seen in criterion (X). Another significant point raised by Adam's classification is that
both compounds and blends have the same internal structure though she refers that
blends that are like compounds in their make-up do not form a significant type of
word-formation in that compound-blends (to use Adam's terminology) are scarcely
used (ibid, 148).

Having sketched some of the definitions as well as classifications of both
compounds and blends, let us now move on to review some of the previous studies on
both types of coinage.

2.4 SOME PREVIOUS APPROACHES TO COMPOUNDS AND BLENDS

2.4.1 Blends and Grammar

Aronoff (1967) considers words like blends as "oddities". They more or less rely on
orthography and so cannot be universal, because orthography is not a requisite to
linguistic behaviour (cited in Bauer, 1983:232). Despite their being common in
English, blends are considered as very awkward in accordance with generative
grammar. To put it differently, they cannot be predicted by a rule without invoking

such ill-understood notions as euphony, which might not be likely to define in generative terms (ibid, 293-294).

Beard (1998) states that blending, unlike grammatical derivation, tends to be a conscious process. That is, a logical rather than grammatical process intentionally forms it: if the reference is part A and part B, the word referring to it should contain parts of the words for A and B (1998: 57). Such a blend as *boost,* for instance, is blended from *boom* and *hoist*, converting the words *boom* and *hoist* into the splinters of such words - that is, *boo* and *st,* which lie outside the boundaries of grammar. This assumption is challenged by the relation of blends to their source words, particularly in comprehension. For instance, to understand the meaning of the blend *clantastical*, their source words *clandestine* and *fantastical* normally must first be identified. Such connection shows that the claimed change from words to parts is a matter of representation rather than a matter of either words or parts. This point will be dealt with in more details in the analysis.

2.4.2 The Assumed Redundancy of Blends

Downing (1977) points out that unlike compounds, blends are usually made up of synonymous or nearly synonymous words. It is true that there are some compounds where the set of entities referred to by the first component (N^1, to use Downing's expression) is equivalent to that referred to by the second component (N^2), but they are generally onomatopoetic reduplications, e.g. quack-quack [11] (1977: 831). Such compounds are unacceptable, because they are redundant. However, there exist some lexicalized forms like *palm tree*, the acceptability of which seems to rely extremely on such factors as context (ibid, 832). The relationship between the components of a reduplicative compound may carry useful information – i. e., classification, in one situation, but it may be semantically empty in another. The question here is whether the categorical label "blend" is redundant The answer to this question is partially clarified through Adam's (1973) classification of blends, where the examples of the different kinds of blends show that blends are not always synonymous or nearly

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[11] The example used here is Downing's (1977).

synonymous, as in *blaccent* (from *black* and *accent*) and *wintertainment* (from *winter* and *entertainment*).

2.4.3 An Onomasiological Approach to Compounds and Blends

Stekauer (2001) suggests a new approach to compounds and blends. To him, productive and regular Word-Formation Rules coin all naming units that come into existence through word-formation process. Hence, every direct result of a Word-Formation Rule / Type is predictable. In relation to him, productivity is defined as a cluster of Word-Formation Types satisfying naming needs in a specific conceptual - semantic field of a language. Such a cluster of Word-Formation Types 'guaranties' (to use Stekauer's term) the coining of a new naming unit in the particular conceptual – semantic field whenever the need arises. Each such cluster is 100% productive. It is worth observing here that Stekauer (2001) regards the notion that the frequency of usage is a criterion for the status of existing words as unacceptable due to the vagueness of the notion "common use" and due to the belief that the frequency of usage can only be applied to words that have already been coined (2001: 6-7).

Based on such analysis, a word-formation process contains five mental levels:

(i)   the conceptual level, where the object to be named is analyzed and classified in general - that is, SUBSTANCE < ACTION (with internal subdivision into ACTION PROPER, PROCESS and STATE), QUALITY, and CONCOMITANT CIRCUMSTANCE (e.g. PLACE, TIME and MANNER),

(ii)   the semantic level, where "the semantic marker" is structured,

(iii) the onomasiological level, where one of the semantic markers is selected to function as an onomasiological base (indicating a class, gender, species, etc.) and another one is selected as an onomasiological mark specifying the base. The mark can be divided into the determining constituent (that sometimes

distinguishes between the specifying and the specified elements) and the determined constituent,

(iv)   the onomatological level, where the onomasiological structure is assigned linguistic units on the basis of the Form-to-Meaning Assignment Principle (FMAP), and so concrete morphemes are selected, and

(v)   the phonological level, where the forms are really coined and assigned their stress patterns and undergo phonological rules (2001: 11-13).

For illustration, let us consider Stekauer's (2001) exemplification. To coin a naming unit representing a person whose job is to drive a vehicle for transporting goods, the process runs as follows:

Conceptual level:

It is SUBSTANCE[1].

SUBSTANCE[1] is Human.

The Human performs ACTION.

ACTION is the Human's Profession.

ACTION concerns SUBSTANCE[2].

SUBSTANCE[2] is a class of Vehicles.

The Vehicles are designed for Transporting various goods.

Etc.

Semantic level:

[+MATERIAL][+ANIMATE][+HUMAN][+ADULT][+PROFESSION];

[+MATERIAL][-ANIMATE][+VEHICLE][+TRANSPORTATION], etc.

Onomasiological level:

> SUBSTANCE¹-SUBSTANCE² (the onomasiological base and the leftmost constituent of the onomasiological mark)

> Logical Obj-Act-Ag (Agent corresponding to the onomasiological base: SUBSTANCE¹, Agent to the determined constituent of the onomasiological mark: ACTION, and Object to the determining constituent of the onomasiological mark, namely SUBSTANCE²

Onomatological level:

> Obj-Act-Ag (Ag selected from *man,-er, ist*, etc., Act from *drive, steer, operate*, etc., and (logical) Obj from *truck* or *lorry*)

Phonological level:

> The new naming unit is assigned its stress pattern and undergoes consistent phonological rules (ibid, 12-13).

Having sketched Stekauer's onomasiological approach to word-formation, let us now move to how compounding and blending are accounted for in such method. Given the suggested mental stages, the basic difference between compounds and blends stems from the idea that the former undergo such mental levels (as seen from Stekauer's example, i.e. *truck driver*), while the latter do not. Blending is described as a two-step process: (i) it consists of coining an auxiliary "full version" naming unit constituent with the onomasiological model of word-formation, and (ii) the naming unit is formally reduced in an unpredictable (and hence, irregular) way (ibid, 33). The first step is similar to compounding, while the second step falls in the scope of the lexical component. Being irregular and unpredictable, it follows that blends are unproductive. As a result of such argumentation, Stekauer excludes blends from word-formation since he views word-formation patterns as one hundred percent productive and hence regular and predictable.

No one can argue against the notion that blending is more or less a peripheral word-formation process. Still, blends fall within the scope of word-formation (cf. Grzega, 2002:10). Excluding blends from word-formation because of their second step process in particular is not fair. It is true that the shortening of a compound into a blend does not carry a new meaning, but there are many cases of new words in English that are considered as resulting from word-formation process though they do not carry new meanings. In this connection, Grzega (2002) gives a very good example to support the fact that not all the new words produced from the word-formation process carry new meanings: *Afro-American* or *African American*, used as alternatives for the outdated word *Black* in America (2002: 10).

Another point that is raised here is that the whole process of blending is unique irrespective of whether there are five steps or two. Such a claim is advocated by the fact that blends are commonly not alternatively used for their source words - that is, compounds. Rather, speakers use either blends or compounds. For instance, no one uses the compound ?*smoke fog* as an alternative for such blend as *smog*. Such a phenomenon may suggest that the second step can be added to the five mental stages for the completion of blending rather than regarding each step in particular. Therefore, the two processes are complementary rather than dichotomous. Once both steps of blending are accepted as such, the whole process results in a new meaning.

2.4.4 A Gradual Approach to Word-Formation

Bauer (1988) regards the different morphological processes as a network where there seems to be a central core of strongly morphological processes composed of prefixation, suffixation, back-formation and neo-classical compounding, and outside the core there lie the much less morphological processes, namely clipping, blending and forming acronyms (1988: 91). However, such network does not mean that there is a fixed line between morphology in the central core and non-morphology outside it. Rather, morphology shades off into other things, and the central core is probably the area, which is most clearly within morphology (ibid). Because of the differences and similarities that exist between affixation processes and other processes, there exist the

central domain of morphology - that is, affixation, and several other processes that at least influence morphology, and may or may not belong to morphology proper. The weaker the links of affixation processes to other processes or the larger the number of intermediate steps in such links, the less likely it is that a process should be considered as morphological (1988:89).

As an instance of such links, neo-classical compounding is similar to blending, because both processes include the fusion of two elements neither of which is potentially free, casually to the extent that the one is indistinguishable from the other. For example, *autocide* has two meanings: (as a neoclassical compound) 'self destruction' and (as a blend) 'suicide in an automobile'. Another example of the links between the various morphological processes is the similarity between blends and acronyms, since both processes are composed of non-meaning-bearing parts of words (ibid, 91).

In fact, Bauer's (1988) discussion sheds light on the importance of regarding the various kinds of morphological processes as a network where some processes are more central than others. Yet, the concern here is only with the form, since the parts of words forming blends and acronyms are considered as 'non-meaning-bearing' (to use Bauer's expression). The question posed here is if the parts of words used in blends and acronyms "do not carry meaning", how does the hearer manage to understand blends and acronyms? The answer is simply that the hearer first looks for the source words of such parts of words then s/he understands the meaning of the neologisms concerned. Thus, the parts of words in such neologisms are not spontaneous parts considered independently; rather, they represent the complete words, and hence they "carry meaning".

2.4.5 A Diachronic Approach to Compounds and Blends

Algeo (1978) objects to Flexner's (1960) assumption that all terms, including compounds, blends and acronyms are well defined. The centre of every kind of word making is obvious, but the boundaries may be fuzzy. He argues that *scuba*, for example, is clearly an acronym for *self contained underwater breathing apparatus*, but whether *Nabisco* for *National Biscuit Company* or *sit com* for *situation comedy* are acronyms or other classes of words cannot be determined. He ascribes such confusion of the traditional taxonomy of word-making to the ill-definition of the word classes in the absence of a consistent set of criteria in addition to the mere study of one aspect of word-formation without any connection with an overall taxonomy and the focus on the clear-cut cases only. However, the traditional taxonomy has broadly been used and has mostly demonstrated satisfactory, because implicitly there is a coherent scheme of classification in it (1978: 123-124).

In order to change such implicit scheme into an explicit one, Algeo (1978) suggests nine diachronic criteria in a sort of questions:

(i)   Does the new item have an etymon? More plainly, is it formed from some already existing words?

(ii)   Does it have a borrowed etymon?

(iii) Does it combine two or more etyma?

(iv)   Does it shorten an etymon?

(v)   Does it have an etymon that lacks a formal exponent in the item?

(vi)   Does it have a phonological motivation?

(vii) Do the etyma include more than one base? That is, if there is only one etymon, does it contain more than one base or if there are many etyma, do at least two contain bases?

(viii) Does the new item derive from written rather than spoken etyma?

(ix)   Does it add new morphs to the language? (ibid, 124-126).

For instance, in relation to criteria (iii) and (iv), a compound is a word class that comprises two or more etyma which are not shortened, as in *flu virus* from *flu and virus*. In contrast, a blend is a word class that contains two or more etyma, at least one of which is shortened, e.g. *beermare* from *beer* and *nightmare*. In connection with criterion (vii), a compound comprises at least two bases, as in *earthquake[12]*, while a blend cannot have two bases, as in dawk (no base at all) and boatel (only one base). Finally, according to criterion (ix), a compound does not create a new morph. Rather, it is a new lexeme achieved by old morphs, e.g. *windmill.* In comparison, a blend forms a new lexeme as well as a new morph, as in *Chunnel* from C*hannel* and *tunne*l[13].

However such diachronic criteria may differ from synchronic in many ways, but a comparison between the two processes may cast light on how the synchronic system reacts to diachronic change (ibid, 128). It is also worthy of note that Algeo (1978) draws attention to the thought that unlike the lexicon, phonology and syntax have been given much attention. The lexicon[14] should be the system where phonology, syntax and semantics come together. To put it differently, the word comes first (ibid).

Really, the approach provided by Algeo (1978) has many advantages. Firstly, it highlights the lexicon, which has been degraded in generative grammar. Secondly, it draws attention to the significance of the diachronic approach to morphological processes. Thirdly, it stresses the importance of regarding the various morphological processes as forming a cline rather than as discrete categories. Still, there is no reference to the conceptual process of coinages. The latter are considered at the level of form, and hence the question how the conceptual basis fits into such approach remains unresolved. In addition, for Algeo (1977), words come first. But, words do not carry meaning. Meaning exists in the mind, and so words are just reflections of cognition. Language seems to be very rich in meaning, which has made many linguists think that meaning exists in the words themselves. But, meaning is in fact in the

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[12] Here, there is no reference to those compounds that involve only one base, in particular neoclassical compounds.

[13] The focus on the differences rather than similarities between compounds and blends is due to the taxonomic and defining task of the nine criteria.

[14] The term lexicon here merely means words, i.e. language.

context of the words being used, and basically it is in the minds of language users rather than in the words themselves (Barlow, 2000: 323).

2.5 THE NOTION OF PROTOTYPICALITY AND APPROACHES TO CATEGORIES

As seen in the literature, most of the approaches to compounds and blends are of a classical kind. In other words, both processes have been viewed as being members or non-members of a class. Blends in particular are ruled out from the categories of grammar and word-formation, and so they are considered as dichotomous from compounds. This view comes from the adoption of the Aristotelian categorization by most linguistic schools, including generative linguistics.

2.5.1 The Classical Approach to Categories

Taylor (1995) summarizes the classical or Aristotelian approach to categories as follows. First, a category is defined with regard to a collection of necessary and sufficient features. For instance, the defining characteristics of the category MAN: [TWO-FOOTED MAN][15] and [ANIMAL] (in Aristotle's definition of *man* as a 'two-footed animal') are necessary in that if any property is not shown by the entity, the latter is not a member of the category. Moreover, they are sufficient in the sense that the entity exhibits each of the defining features. Second, features are binary; that is to say, an entity must be or not be, possess a feature or not possess it, and belong or not belong to it. Properties are a matter of all or nothing. Third, categories have clear boundaries; that is to say, no entities belong to the category to some extent. Finally, all members of a category are equal; in other words, no things are better members of the category than others (1995:22-24). The picture depicted so far implies that some possible candidates are left outside the field. The classical view of categories has been extremely challenged by prototype linguists and theorists in particular.

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[15] Small capitals are used to denote names of categories, while small capitals in square brackets denote semantic features.

The classical approach to categories was challenged with regard to two basic points. Firstly, it is impossible for the majority of natural categories to work out a set of necessary and sufficient criteria in that normally what may be accepted as necessary criteria lack sufficiency. Secondly, not all the members of a category have the same position. While some members (prototypical members) have a privileged status – i.e., a full membership of the category, others (non-prototypical members) have a less degree of membership depending on the extent of their resemblance to the prototypes (Cruse, 1992: 383). Thus, certain members of a category are considered better examples of the category than others. For, instance, *robins* are considered better examples of the category BIRD than *ostriches*. Prototypical examples are the most commonly used among their fellow-members, nearer in meaning to the category name, accessed faster and processed more quickly than more peripheral patterns (ibid). In contrast, if categories are merely defined by features shared by all members, no members can be better exemplars of the category than others. In addition, if categories are defined purely by characteristics inherent in the members, they should be separate from the peculiarities of those doing the categorization. That is, they should not comprise such issues as human neurophysiology, human body movement and specific human capacities in order to perceive, to form mental images, to learn and remember, to organize the things learned and to communicate efficiently (Lakoff, 1987:7).

2.5.2 The Prototypical Approach to Categories

Cruse (1992) suggests that there are (at least) three dimensions of centrality, namely well-formedness, typicality and quality (ibid, 384).

First, *a one-legged bird*, for example, is a less example of BIRD than *a two-legged bird*, because the former is perceived as ill-formed deviating from the notion of a proper canonical form, functions and so forth (ibid). It seems that the notion of well-formedness does not fully suit the categorization of compounds and blends. It is true that a blend does not normally resemble the suitable canonical form, and so it may seem less well-formed than a compound. To put it another way, a composite that only

keeps partial structure of the source words may look a less example than a composite that comprises full words. The former would be perceived as ill-formed deviating from the notion of a suitable canonical form with regard to Cruse's (1992) suggestion. Blends may be less well-formed rather than ill-formed, and such gradual difference appears only at the level of form. Both morphological processes have the same function, distribution and so on, since they are kinds of nouns, adjectives or verbs as shown in the data set.

Secondly, in relation to typicality, a better example is one that has the most frequently encountered characteristics and no salient unusual properties. For instance, the British would consider *a blackbird* as a better example of the category BIRD than an *eagle*, because it is closer to the standard size of birds known to the British.

Thirdly, an example is said to be high on the proportion of quality if it is depicted as 'a shining example of an X' or 'typifies an X at its best'. *A mango* is a better example of APPLE than an *apple* based on quality (flavour, juiciness, etc.). In contrast, an *apple* is a better example of FRUIT than a mango on grounds of typicality (ibid, 385). However, one can do nothing but doubt about the validity of quality as a standard for identifying the best exemplar of a category. Such phenomena as flavour and juiciness are a matter of taste or preference. Moreover, the latter may sharply vary from one person to another, and therefore they cannot be reliable criteria.

Thus, a probabilistic model of prototypes suggests that examples of a concept can vary in the degree to which they share some properties, and hence they can vary in the degree of membership in a category (Smith and Medin, cited in Lehrer, 1992: 368). In certain prototype models, features can be hierarchically ordered with regard to importance (salience) (ibid). A prototype can be considered as the most representative of things included in a class, e.g. the reddest red (or the most cup-like cup). The prototype, thus, is the core of a category that is 'surrounded by' other members that are not as representative of that class (Dromi, cited in Brown, 1992: 21).

2.5.3 Experimental Evidence

Aitchison (1995) says that human beings possess a number of ideal bird features in their minds. They judge whether *a pterodacty*l is a bird by comparing it to a 'prototypical' bird. It is not necessary for the bird under question to have all the properties of the prototype. It can be considered as a bird if it is a reasonable match though it might not be a very good exemplar of a bird (1995: 51-53). Various experiments have been made to test such an idea. Eleanor Rosch is one of the pioneering psychologists who carried out a number of experiments to test the assumption that humans consider some birds as more "birdier" than others, some vegetables as more "vegetable-like" than others, or some tools as more "tooly" than others. The experiment results were pertinent, since among lists of words, certain items were generally considered as very good examples of the category. That is, *a robin* is predominantly thought of as the best example of BIRD, *a pea* as the best example of VEGETABLE, and *a chair* as the best example of FURNITURE, and so on and so forth (ibid)[16]. Such field study proposes that humans do not view the members of a category as the same, nor are they required to meet all the characteristics of an ideal exemplar - that is, a 'prototype' (ibid, 55). Hence, the categorization by prototypes can account for various phenomena that can be outside the reach of the classical categorization.

2.5.4 The Advantages of Prototypicality

Aitchison (1995) concludes that the notion of prototypicality has two main advantages. First, it accounts for how humans handle untypical examples of a category. Such "unbirdy" bird as *a penguin* can be considered as a bird, since it sufficiently resembles the prototype although it does not conform to all the characteristics. Secondly, it explicates how human beings deal with damaged examples. *A one-winged* robin that cannot fly is categorized as a bird notwithstanding its being untypical (ibid). In the classical categorization, it is difficult to account for

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[16] It is worth remarking here that the best examples of a category might not necessarily be universal. At times, they might be culture specific.

such entities, since a member of a category has to match all the properties, otherwise it would be a non-member.

In sum, a prototypical approach to categories usually has four features. Firstly, prototypical categories show degrees of prototypicality. Secondly, they exhibit a family resemblance structure. Their semantic structure takes the form of a radial number of clustered and overlapping readings concentrating round one or more salient readings. Thirdly, they are blurred at the edges; that is to say, there may be entities whose membership of the category is not sure or less clear than that of bona fide members. Finally, a bundle of essential characteristics cannot be used to define prototypical categories (Geeraerts, 1999:29).

One may argue here that the task of categorization becomes more complicated than it is in the classical theory. Simplicity is a good thing, but it should not be at the expense of accounting for existing linguistic as well as extra-linguistic phenomena. An instance of such defect is exhibited in generative grammar that adopts a binary feature system for the sake of economy and simplicity [17]. Consequently, a large number of linguistic phenomena are viewed as exceptions, and hence they are left without explication. The complexity comes from the complex structure of categories proposed by cognitive categories, concepts, containing prototypes, good examples and bad examples and has fuzzy borders.

It is worth observing here that prototype effects occur in both non-linguistic conceptual structure and linguistic structure. Such a notion is attributed to the matter that linguistic structure makes use of general cognitive apparatus like a category structure. Linguistic categories are kinds of cognitive categories (Lakoff, 1987: 57). Hence, it is suggested that compounds and blends are sorts of cognitive categories, depending on the general cognitive mechanism in both their invention and comprehension. Such an idea will be dealt with in more details when the researcher

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[17] In relation to componential analysis, the either-or methodology simplifies the difference between the meanings of words by choosing just one feature, either – or +. Such approach can only handle typical examples that are clear-cut, and hence it is defective.

comes back to the study of the source schemas that both kinds of neologism might have.

So far, the importance of prototypicality in human categorization and the advantages of the cognitive approach to categories over the classical approach have been discussed. However, the notion of prototypicality has been dealt with in a general way. Since there are various prototypical approaches and it is not the research objective to display and discuss them all, the researcher will no more talk about this point. Closer to the researcher's linguistic and morphological concerns is basic level categorization, because the latter might be the more suitable approach to compounds and blends. So, let us have a look at the nature of basic level categorization.

2.6 BASIC LEVEL CATEGORIES

2.6.1 Empirical Evidence

Lakoff (1987) reports that thanks to Berlin (Berlin, Breedlove, Raven 1974) and Hunn (1977), the level of the biological genus has been shown to be psychologically basic for Tzeltal plant and animal taxonomies. The genus comes in the middle of the hierarchy extending from UNIQUE BEGINNER > LIFE FORM > INTERMEDIATE > GENUS > SPECIES > VARIETY (1987:46). In the same vein, Rosch et al (1976) found that psychologically most basic level was in the middle of the taxonomic hierarchies:

TABLE 2.1 Exemplification of the taxonomic hierarchies (Lakoff, 1987: 46))[18].

SUPERORDINATE	ANIMAL	FURNITURE
BASIC LEVEL	DOG	CHAIR
SUBORDINATE	RETRIEVER	ROCKER

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[18] It is worth noting that *retriever* and *rocker* are just examples of *dog* and *chair* respectively. Various other subordinates can be listed, e.g. *St.Berrnard*, *dachshund*, *kitchen chair*, and *living-room chair*.

Lakoff (1987:47) states that basic level categories are characteristic of the following:

Perception: Overall perception shape; single mental image; fast identification.

Function: General motor program.

Communication: Shortest, most commonly used and contextually neutral words, first learned by children and first to enter the lexicon.

Knowledge Organization: Most attributes of category members are stored at this level

That knowledge is generally organized at the basic level is decided in the following manner: Subjects normally list a small number of attributes of category members at the superordinate level (FURNITURE, VEHICLE, MAMMAL, etc.). The majority of what is known is listed at the basic level (CHAIR, CAR, DOG, etc.). At the subordinate level (ROCKING CHAIR, SPORTS CAR, RETRIEVER), there is practically less knowledge than the basic level (ibid). Lakoff (1987) attributes the fact that almost all information is organized at the basic level to Berlin (Berlin, Breedlove, Raven 1974) and Hunn's (1977) hypothesis that gestalt perception - perception of overall part-whole configuration is the basic level. Trevsky and Hemenway (1984), whose main observation is that the basic level differs from other levels in relation to the kind of attributes humans correlate with a category at the level concerned, particularly attributes related to parts, substantiate such hypothesis. Our knowledge at the basic level is mostly organized around part-whole divisions. This is because dividing an object into parts controls a lot of things. Firstly, parts are normally associated with functions, and hence our knowledge about functions is generally connected with knowledge about parts. Secondly, parts form shape as well as the way an object will be perceived and envisaged. Finally, we normally use parts in interacting with things, and so part-whole divisions play a basic role in deciding what motor programs we can use to interact with an object. Hence, a handle is not just long and thin, but it can be held by the human hand (ibid, 47).

2.6.2 The Scope of Basic level, Superordinate and Subordinate Categories

Basic level categories:

(a)   maximize the number of attributes shared by members of the category; and

(b)   minimize the number of attributes shared with members of other categories (Rosch, cited in Taylor, 1995:51).

To illustrate the scope of the basic, superordinate and subordinate categories, consider the following categorization:

FIGURE 2.1 The vertical-horizontal axes categorization (cited in Taylor, 1995: 47)

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                           ARTIFACT
                  /           |           \
              TOOL      FURNITURE      DWELLING PLACE
                       /      |      \
                  TABLE     CHAIR     BED
                         /    |    \
        DINING-ROOM CHAIR  KITCHEN CHAIR  DENTIST'S CHAIR
```
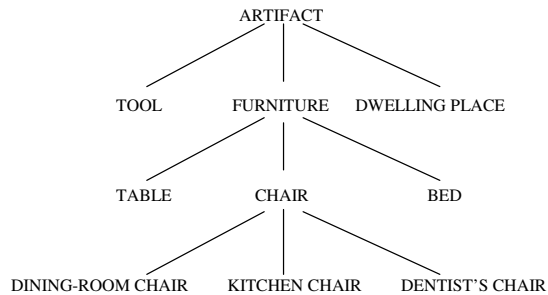
It is worth observing that a category system has both a vertical and horizontal dimension. The vertical dimension is concerned with the level of inclusiveness of the category - that is, the dimension on which such categories as FURNITURE, CHAIR, and KITCHEN CHAIR vary. The horizontal dimension is concerned with the division of categories at the same level of inclusiveness- i.e., the dimension on which CHAIR, TABLE and BED vary (Rosch, 1978:2).

In Figure 2.1 it is difficult to pinpoint any attributes uniquely distinguishing particular objects of FURNITURE from other household ARTIFACTS. Superordinate

categories are more abstract categories whose members have just a few attributes among each other. The category FURNITURE, therefore, is best dealt with reference to making a list of its more typical members rather than a bundle of essential features. To put it plainly, *furniture* is a common word for objects as *beds*, *tables* and *chairs*. In contrast, at the basic level category, *chairs* as an example share some attributes which other kinds of furniture like *beds* and *tables* do not have in common. At the subordinate level, members have many attributes in common as well, but they contain many attributes that overlap with other categories. For instance, several attributes of *kitchen chairs* are shared by other types of chair like *dining-room chairs*. *Kitchen chair* maximizes the attributes that members of the category have in common, but it is not maximally distinguished from other categories on the same level (ibid).

At this stage, one might ask why attributes should be considered as long as cognitive structures are apprehended more as gestalt formations. Normally, humans use gestalts in everyday interaction with concrete reality. Taking the example of basic level categories, the whole might be perceptually and cognitively simpler than its parts, and hence the latter are apprehended regarding the whole (ibid, 62). But, this does not mean that attributes are of no use, since they constitute the dimension on which different objects are viewed as the same. As argued by Langacker (1987), they comprise "the commonality [that speakers] perceive in arrays of fully specified, integrated units" (cited in Taylor, 1995: 63).

To come back to Figure 2.1 again, the superordinate category of FURNITURE includes CHAIR as one of its more prototypical members. The subordinate categories give details gathered around members of a basic level category. However, this does not mean that the structures of subordinate categories are dichotomous from the basic level categories; rather, they are very alike (Ungerer and Shmid, 1996: 86). Subordinate categories are used in lieu of basic level categories for the purpose of specificity. The latter decides the manner in which subordinate categories are categorized, and it is the reason for expressing subordinate categories by compounds and composite terms in many cases (ibid). Hence, humans possibly categorize entities on the subordinate level with recourse to the basic level category, which is usually

simple as mentioned before. That is, it consists only of one morpheme (whether lexical as *chair* or grammatical as a simple noun). Compounds as well as blends might normally be categorized with reference to the source words, which reside on the basic level.

2.7 CONCLUSION

What this chapter has attempted to do is discuss some of the definitions and classifications of compounds and blends, review some of the past studies on both kinds of coinage and present the notion of prototypicality highlighting the basic level categories approach to be adopted in categorizing the coinages under question in this study. In the following chapter, the methodology to be used in this study will be discussed.

CHAPTER III

METHODOLOGY

3.1 INTRODUCTION

The main concern of this chapter is to discuss the methodology employed in this study. It will discuss the theoretical framework for analyzing the categorical status of compounds and blends, the data and their method of collection and the analysis of the data. In addition, some of the limitations pertaining to the analysis will be mentioned.

3.2 THEORETICAL FRAMEWORK

This thesis examines the relationship between compounds and blends. It argues for a different approach to the categorization of the two kinds of word-formation from the classical approaches considered in the literature on compounds and blends discussed in chapter II. As seen in the literature review, the classical method, adopted by the traditional linguists such as generative grammarians, regards entities as members or non-members of a category, and so leaves many phenomena without explication. Using this classical Aristotelian approach, blends unlike compounds are not considered as being part of grammar (Aronoff, 1967; Beard, 1998), nor do blends unlike compounds fall under the category of "word-formation" (Stekauer, 2001).[19] In this condition, blends are assumed to be dichotomous from compounds.

The framework used in this study tests the limits of the classical definitions and classifications of compounds and blends by employing a cognitive approach to

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[19] The references cited here are dealt with in more details in 2.3.

categorization. The capacity to categorize - that is, to decide whether an entity is or is not an example of a category, is basically cognitive in nature. Categorical judgments and categories themselves are often based largely on humans' experience whether bodily, physical, social or cultural. On such basis, are compounds and blends separate categories? Or can they be subsumed within a single category? The unified category framework proposed under a cognitive approach would entail compounds and blends to exhibit degrees of prototypicality and to be cognitively motivated by the same kinds of schemas or conceptual structures. Thus, if compounds and blends are to be considered members of a single category from a cognitive perspective, they must be shown to possess a prototypical categorization pattern, namely that prototypical categories exhibit degrees of prototypicality and are blurred at the borders.

The advantage of the cognitive categorization over the classical categorization is that the former allows for gradual membership, whereas the latter does not and is rigid in the placement of members. Of all the different types of prototypicality, the basic level categories approach is perhaps the most suitable type to be used in the investigation of the compound / blend categories. This is because compounds and blends are subordinates to the source words (from which they are formed) and these source words are basic level categories. At the same time, the basic level categories approach is appropriate, because compounds and blends have many shared and overlapping attributes. The categorization by prototypes will answer the first and second research questions:

a. Are the edges between compounds and blends clear?
b. To what extent are compounds and blends different or similar?

In addition to the categorization by prototypes, an investigation of the motivating schemas of compounds and blends for exploring the internal conceptual structure of both kinds of neologism will be undertaken. The schema analysis will be done for the purpose of answering the third question:

c. Are compounds and blends grounded on the same conceptual model? In other words, are they derived from and / or motivated by the same kinds of conceptual schema?

3.3 THE DATA

In this section, I will discuss two aspects of the data, namely the source of the data used in the study and the compilation as well as selection of the data for analysis.

The researcher's corpus of compounds comprises one hundred instances from some earlier studies, namely Hatcher (1960), Adams (1973) and Bauer (1983). In addition, many instances are taken from the following web pages:

a. http://www.phil-fak.uni-duesseldorf.de/summerschool2002/Aronoff5.pdf
b. http://web.ics.purdue.edu/~baxters/227_f2_note5_shorter.pdf
c. http:// www-psychology.concordia.ca/department/deAlmeida/SCOL360B/Libben-1998-compounds.pdf

The corpus of blends also consists of one hundred examples from previous works, namely Bauer (1983), Adams (1973) and Lehrer (1996). Moreover, many examples of blends are taken from the web sites listed below.

a. http://www.macmillandictionary.com/med-magazine/August2003/10-new-word-   whitelist.htm
b. http://www.web-dictionary.org/encyclopedia/li/List_of_portmanteaus.html
c. http://web.ics.purdue.edu/~baxters/227_f2_note5_shorter.pdf
d. http://www.worldwidewords.org/articles/blend.htm

The data are randomly selected from the previous works and web sites. As mentioned above, the final data set on compounds and blends consist of two hundred

items (a hundred of each) from an initial data set containing around four hundred items (two hundred compounds and two hundred blends). It was necessary to reduce the number of items to be analyzed to two hundred coinages taking into account the time frame of the research and the frequency of particular kinds of coinage. Instead, a principle of diversity of data was aimed for.

This principle of diversity is useful and relevant in this study for several reasons. It will provide the study with a broader base on which the categorization of compounds and blends by prototypes is conducted. A more diverse data set will allow the researcher to fully explore the fuzzy border between the two kinds of word-formation. Also, a diverse data set will allow the researcher to propose and test out a more exhaustive set of conceptual schemas motivating the English compounds and blends.

In the research corpus, all the cases of compounds and blends consist of two members; in other words, there are no cases where there is combination of more than two components.

Both compounds and blends have similar grammatical categories; that is to say, they are nouns, adjectives or verbs (See Table 3.1).

TABLE 3.1 Examples of the various grammatical categories of
compounds and blends

	Noun	**Adjective**	**Verb**
Compound	background	time-consuming	breakfast
Blend	arfe (art + café)	attractivating (attractive + captivating)	boost (boom + hoist)

Both compounds and blends in the data set are made up of items that have the following grammatical combination structures. In the case of compounds, the grammatical combination structures are noun + noun, noun + verb, verb + noun, adjective + noun, verbal noun + noun, or noun + verbal noun. The grammatical

combination structures of blends are noun + noun, verb + noun, verb + verb, noun + adjective, adjective + noun, adjective + adjective, verbal noun + noun, or noun + verbal noun. To have a better idea about the combined grammatical categories in the two kinds of coinage, consider the following table:

TABLE 3.2 Grammatical combination structures in compounds and blends

	Compound	Blend
Noun + Noun	birth control	boatel (boat + hotel)
Noun + Verb	earthquake	
Noun + Verbal Noun	family-planning	spamdexing (spam + indexing)
Noun + Adjective		mantastic (man + fantastic)
Verb + Noun	killjoy	singspiration (sing + inspiration)
Verb + Verb		boost (boom + hoist)
Verbal Noun + Noun	drinking-water	advertainment (advertising + entertainment)
Adjective + Noun	fine art	apronym (appropriate + acronym)
Adjective + Adjective		clantastical (clandestine + fantastical)
Adjective + Verbal Noun		attractivating (attractive + captivating)

As shown from Table 3.1 and 3.2, the data set includes examples from rich arrays of syntactic or grammatical category (or word class) and grammatical combination structure. Hence, the data analyzed in this dissertation are grounded on an enormously diverse data set.

In order to obtain the diverse data set, it was appropriate for the researcher to choose compilation over other methods of data collection. The imperative was to gather as many different examples of compounds and blends as possible. The main objective of this study is to investigate the sort of relationship that characterizes

compounds and blends and to propose or argue for a unified cognitive categorization of the coinages concerned. Therefore, it is more appropriate to compile and include in the discussion data from previous works related to compounds and blends for the sake of continuity in the linguistics argumentation. Gathering new data from texts in journals, in contrast, would be more time-consuming and might not enable the researcher to collect a varied set of data. It is also not apparent that dictionaries are the best sources to get data on neologisms considering the currency and productivity of these items, especially blends. Hence, relying on the dictionary alone will severely limit the number of blends. Furthermore, many blends are not lexicalized, and so restricting the data to the dictionary will leave various blends outside the study. To sum up, the present method of data collection from the sources mentioned has been determined to be the best method for obtaining as diverse data set as possible.

3.4 THE DATA ANALYSIS

As has been discussed, the theoretical framework of this study is cognitive. One of the hallmarks of cognitive science, in particular cognitive linguistics, is the usage of introspection in analyzing data. Introspection, hence, will be crucial in the interpretation as well as the analysis of the data set in this study. The data analysis will proceed in two stages. The first stage addresses the issue of categories, namely the boundaries and the alternative categorization by prototypes. The aim of the second stage is to explore the cognitive motivation behind compounds and blends utilizing the notions of schemas.

In the first stage, the data set will be examined for determining whether there is a clear and definite border between compounds and blends. This is necessary to test the validity of the traditional claim that compounds and blends are dichotomous and necessary to establish the researcher's argument that compounds and blends are essentially similar, namely that they are members of a unitary category. Only after the boundaries between blends and compounds are established, can the explication of the nature of the relationship between both neologisms based on the basic level categories approach be made.

In the second stage, the focus will be on the motivation for both compounds and blends. The data set will be examined in order to explore the internal cognitive semantic structure of each word. The task of such exploration is in turn to determine whether compounds and blends share similar conceptual models or schemas. If it can be shown that both compounds and blends share and are motivated by similar schemas, then the argument for both compounds and blends as being members of a unitary category (say, neologism) can be further advanced. The researcher proposes ten schemas to which compounds and blends in the data set can be resolved. The source schemas are briefly listed in Table 3-3.

TABLE 3.3 List of schemas for compounds and blends

Source schema	Label of schema
X is the agent of the action Y X is the patient of the action Y	Action
X is located at Y Y is located at X	Location
X is for Y Y is for X	Purpose
X specifies X is an example of Y Y is an X	Apposition
Y prevents against or preserves X	Instrument
X causes Y Y causes X	Causal
Y resembles X	Resemblance
X is a characteristic of Y Y is made of X	Composition
Y is part of X	Whole-Part
X is contained in Y Y is contained in X	Containment

The symbol X used in the paraphrases of the schemas stands for the first component of the coinage (i.e. compound or blend), while the symbol Y stands for the second component of the coinage. The data set will be scrutinized against the above schemas to determine to what extent compounds and blends are similar with regard to their derivation.

3.5 LIMITATIONS

In the course of the data analysis, two main analytical limitations are observed.

To begin with, some cases of overlapping between the schemas from which compounds and blends are derived have been encountered. In other words, some compounds and blends can be motivated by more than one schema. Some of the overlapping cases of schemas encountered in the analysis will be mentioned in the analysis.

At times, the researcher faces cases of coinage where there exists some ambiguity concerning the central member of the coinage- that is, whether the first component or the second component is the central part of the coinage. For instance, in relation to Apposition Schema, there are cases of coinage where it is difficult to decide whether the first member (X) specifies the second member (Y) or vice-versa. For example, the blend *brunch* (*breakfast + lunch*) may be paraphrased as 'a breakfast which is a lunch' or 'a lunch which is a breakfast'. In such cases, the researcher will resolve the ambiguity by choosing the most suitable subschema on the basis of introspection and obtaining a collaborating judgment on the schema resolution.

3.6 CONCLUSION

This chapter has attempted to discuss the theoretical framework and the procedures used in the linguistics argumentation. In particular, the chapter has given an account of the data, the method of their collection and the stages and heuristics in the analysis of the data. In addition, some of the limitations encountered in the analysis of the data are mentioned. The next chapter will be devoted to the analysis of the data.

CHAPTER IV

ANALYSIS AND ARGUMENTS

4.1 INTRODUCTION

As seen in the previous chapter, the relationship between compounds and blends will be explicated using a cognitive approach. The purpose of this is to test the validity of the traditional claim that compounds lie in the realm of grammar and word-formation, while blends do not and that compounds and blends are dichotomous categories.

This chapter will be devoted to the analysis of the data set in order to determine whether all cases of compounds and blends can be clearly categorized as such or whether there exist instances that are fuzzy. Following this, a prototypical categorization of both kinds of neologism will be presented. Finally, compounds and blends will be categorized according to the different schemas that motivate them. The data set will be analyzed to decide whether compounds and blends resemble or differ from each other as regards their motivation.

4.2 THE REALITY OF COMPOUNDS / BLENDS RELATIONSHIP

As seen in the literature review, compounds and blends have been treated as dichotomous entities. The goal here is not to deny the differences that may appear between the two processes. But, they have broadly been exaggerated under the either- or methodology. A logical study should take into account differences, similarities and fuzzy cases in order to uncover the extent of the difference that lies between and within linguistic phenomena, between compounds and blends in this work, and to

provide a plausible explication of the variation that characterizes the linguistic categories. In doing so, the difference is revealed to be gradual rather than absolute, paving the way for a more appropriate natural human categorization. In the data set, differences, affinities and fuzzy examples are all at hand.

4.2.1 Compounds / Blends Differences

To begin with, some of the most predominant differences that exist between compounds and blends can be listed as follows:

a. Blends are not as regular, predictable and productive as compounds[20].

b. While compounds consist of two or more etyma that are complete morphemes, blends contain two or more etyma at least one of which is truncated (Algeo, 1978). A compound like *cut-throat* contains two free morphemes, while a blend like *chattire* (*chat* + *satire*) comprises one full word or morpheme- i.e., *chat* and a splinter of *satire*.

c. A blend can form a new morph as in *(a)thon*, whereas a compound cannot.

Such differences (among others) are acceptable and expected within cognitive linguistics. It is not the researcher's aim to rebuff or to refute them, because they constitute part of the attributes of the categories. Still, such differences cannot cover, exhaustively, all the attributes that may exist in a certain category in the sense that there may exist similarities as well. Thus, how can two categories or rather members of a category be considered dichotomous if there are some affinities between them. Such a problem is due to the essential criteria imposed by the classical approach. A member either meets all the necessary and sufficient conditions and so belongs to the category and is similar to the other members or it is not a member of a category. An acceptable alternative to such a view would be one that considers membership as a "gradable" affair. There are degrees of membership in all categories and membership is not a binary issue. Using such a framework, all members of the categories can be

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[20] The difference here is seen as a matter of degree rather than absolute, unlike Stekauer's (2001) argument tackled in the literature review.

placed. In contrast, the criteria or feature-based categories might exclude certain members because of differences, no matter how few they are, and thus have an adverse effect and seriously flaw the results of a categorization study. Instead, the question that should be posed is what are the similarities between compounds and blends? This might enable them to belong to and to share the same linguistic category.

4.2.2 Compounds / Blends Similarities

Some of the most basic affinities between compounds and blends can be summarized as follows:

a.   Both compounds and blends are members of the same class, neologism; that is to say, both of them instigate novel combinations (Lehrer, 1996: 360).

b.   In order to understand a blend, apprehending the two contributing words is necessary, which means that a blend is usually understood with recourse to a compound which in turn has to be interpreted (ibid, 363). The blend *stagflation*, for instance, cannot be understood unless the hearer is familiar with the meaning of both source words *stagnation* and *inflation*, which are fused to supply the meaning of 'a condition of the economy where stagnant demand occurs with severe inflation' (The Oxford English Dictionary, 1989).

c.   Both compounds and blends undergo the same conceptual and semantic process in that two or more meanings are combined to form a new meaning. For example, *chairman* derives its meaning 'the president of a committee or meeting' (ibid.) from the meanings of both *chair* and *man*. Likewise, the meanings of *motor* and *hotel* merge to form a new meaning of *motel*: 'hotel made for motorists' (ibid).

Such affinities are either considered as oddities or ruled out from the categorization under a strictly all-or-nothing approach to compounds and blends. Once a member does not meet all the necessary and sufficient conditions, it is a non-member, and so

no weight is given to the similarities that might exist. Here again, viewing differences as a matter of gradation can help eliminate the oddities and justify the existence of such affinities.

4.2.3 Compounds / Blends – their Semantic and Phonological poles

Another focal reason behind overstating the dissimilarities between compounds and blends stems from the consideration of the various sides of linguistics, e.g. semantics, syntax, morphology and phonology as independent from each other. Consequently, compounds have been given a morphosyntactic interest, while blends have been given a special focus in phonology marginalizing or even denying the semantic role in neologisms in general, and compounds and blends in particular.

As we have seen in the literature review, various morphological and syntactic studies of compounds have been carried out. Without demeaning their contributions, their focus solely on the morphological and / or syntactic aspects (notwithstanding their predominance at the level of form) have left many questions with regard to compounds and blends unexplained. For instance, although syntactical analysis of compounds has contributed to our understanding of headedness in compounds by positing the idea that most compounds are right-headed (e.g. *candlelight*, *fine art*, and *gentleman*), there still exist many counterexamples whose meanings are non-literal and so are non-headed (exocentric compounds). Likewise, morphological studies have illuminated the process involved in the formation of a compound based on two free morphemes, e.g. *safety belt*, *searchlight* and *puppy dog*; however, they have not managed to explain why compounds such as *handcuffs*, *houseboat* and *girlfriend* exist, while ?*footcuffs*, ?*houseship* and ?*womanfriend*[21] do not. Such matter can only be explicated with recourse to the semantics and the cognitive aspects of neologisms that are located in the mind of speakers as well as hearers. Thus, all aspects from concept to form should be taken into account when investigating the linguistic categorization of compounds and blends.

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[21] The question mark is used to express the unacceptability of such forms in current English.

It is true as well that blends are formed on a phonological basis, and hence many linguists argue that they are better analyzed in terms of phonology. Such an idea is supported by the fact that the two contributory words of a blend normally share some phonological similarities between them. An instance of the most significant similarities that may happen between both source words of a blend is at the level of consonants. A consonant from the initial component can be replaced by a different consonant from the second component. For example, in *edutainment* (*education* + *entertainment*), /k/ is replaced by /t/. What is interesting about such consonant replacement is that the two sounds must share some similar features – in the present case, both consonants are voiceless stops. Another instance is *cineplex* (*cinema* + *complex*), where /p/ replaces /m/. Both consonants are bilabial stops (Kelly, 1998:587)[22]. At times, the blended words are so similar that the listener does not even notice there is deletion, as in *swelegant*. It is worth observing here that such similarity vary from one blend to another. Some blends are more phonologically similar to their source words than others are. However, as said before, the focus on one linguistic aspect, regardless of its probable dominance, will lead to an incomplete account of the linguistic phenomena. No matter how small the contribution of a particular linguistic aspect to the formation of a linguistic phenomenon, it is crucial to consider that aspect as well in order to have a better and more complete explication of that linguistic phenomenon. Such a suggestion arises from the fact that a lexical item is a reflection of the concept or meaning in a form that may be moulded syntactically, morphologically and / or phonologically.

Thus, when there is no phonological similarity between the forms of the contributory words, there would be no possibility of a blend being formed. Instead, one might expect a compound in its place, if there is a need to create a new word from the etyma or source words that share no phonological similarity. Barlow (2000) asserts that in creating and probably in understanding a blend, both contributory words are activated. Such blend as *boldacious* may be produced and understood by the activation of *bold* and *audacious*. The assumption that the source words concerned

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[22] Gries (2004:656-660) presents an interesting study on the similarity between the source words and blends overlooking the problem of restricting such similarity to the breakpoints only. In his work, blends are shown to have an overall phonological similarity to their source words.

constitute the inputs to the blend and that affinity in the form of such words (and maybe other characteristics) simplifies and abridges the creation of a blend when communication requires an intimate linking of the meaning of the two word meanings (Barlow, 2000:325). To better analyze compounds and blends, the semantic factor should be taken into consideration and even should be given priority, because the first process that a compound or a blend passes through is conceptual or semantic. Hence, all the components of linguistics from semantics to phonology should be considered with the different components asserting different degree of influence on the linguistics phenomena On such basis, compounds and blends could very well share the same conceptual and semantic cline and are differentiated along phonological and / or at the level of form gradually.

4.2.4 The Fuzzy Border

Having shed light on the importance of the differences as well as similarities that may exist between compounds and blends, and the necessity to include both attributes to supply a full explication, another problem arises with respect to the differences. As far as the differences between compounds and blends are concerned, do such differences encompass all instances of compounds and blends? That is, do all compounds and blends exhibit such differences or are there cases that cannot be resolved as to whether they are compounds or blends? Such questions are very significant in that no category can be defined only based on clearly typical examples. Rather, an examination of whether the boundaries between compounds and blends are clear or not is crucial[23]. Before examining the data set and identifying the quality of both kinds of word-formation, it may be appropriate to examine briefly the notion of fuzziness, which characterizes membership in a prototype category. Fuzziness could account for and resolve the "residue" or "unresolved" instances mentioned above.

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[23] Such a view is not a new one. Algeo (1978) states that the various classes of word–formation are ill-defined in the sense that the core of every class is clear, but the borders may be fuzzy (1978: 123).

4.2.4.1 The notion of Fuzziness

In cognitive linguistics, the borders of categories are fuzzy as well as overlapping. Hence, members that exist in the core are clear, while those that exist at the border are fuzzy. For illustration, consider the following figure:

FIGURE 4.1 Venn diagram representation of overlapping categories
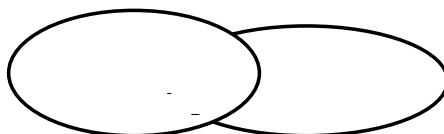
In the figure above, there is certain space where members obviously belong to A, and space where members clearly belong to B; but some members belong to the middle area (the interchange) between both categories. The existence of such fuzzy area in between shows that the boundaries between the two categories are blurred. Perhaps, the most obvious examples of compounds are those that consist of full words or free morphemes. Some examples are *background*, *candlelight* and *fine art*. Likewise, the typical cases of blends may be those whose both etyma are shortened, as in *advertainment* (*advertising + entertainment*), *arfe* (*art + café*) and *brunch* (*breakfast + lunch*). Therefore, typical compounds seem quite different from typical blends with regard to the form.

The real analytical challenge is when just one of the etyma is shortened, leaving one or more stems present in the target form. In cases like these, it is a difficult task to distinguish compounds from blends[24]. Such examples as *escalift* (*escalator + lift*), *squangle* (*square + angle*) and *mantastic* (*man + fantastic*) are more akin to blends because of the overlapping that takes place in such cases. On the other hand, instances as *bombphlet* (*bomb + pamphlet*), *busnapper* (*bus + kidnapper*) and *daymare* (*day + nightmare*) show more resemblance to compounds, containing a free morpheme and an example of clipping. The difficulty in resolving whether such cases

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[24] A similar opinion is given by Bauer (1983: 236).

are compounds or blends from the side of the hearer in particular (since the speaker who coins such forms knows their nature) stems from the resemblance between the two kinds of word-formation.

4.2.4.2 Compound / Blend source of new affixes

As mentioned before, blends may help enrich language by leading to the creation of new affixes. Some expected candidates are *–(a)holic* (from *workaholic*), *-burger* (from *hamburger*), *-gate* (from *Watergate*), *-cade* (from *motorcade*), *-(a)thon* (from *telethon*),
-rati (from *glitterati*), and so forth[25]. Still, such instances are not without complexity. While some linguists state that such affixes are merely abstracted from blends, others argue that they are just derived from other existing words. It goes without saying that the source of affixes is multifarious, but the analysis of the data set reveals that problems can arise when classifying items with new affixes that have been derived from blends and blend-like words. Some of the examples cited above are derived from some words other than blends, some are derived from blends, and others are too difficult to be assigned.

In the analysis, it was established that some affixes, which have traditionally been considered as the outcome of blending, are in fact the product of some other morphological process. For instance, *-burger*, which has been treated as an affix based on a blend for years, turns out to have originated from the shortening of the word *hamburger*. The latter in turn is a short word for *Hamburger steak* named after Hamburg in Germany (*A Comprehensive Etymological Dictionary of the English Language, 1967*). Frath (2005) deals with such example as well as others in more details. According to him, *hamburger* is not a blend, but rather it is the result of the semantic reanalysis and morphemization of only one polysyllabic parent word (Frath, 2005: 5). The word *hamburger* is divided into *ham* and *burger* with the transfer of meaning onto the last part *burger*. This latter has become a productive suffix bringing

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[25] Cannon (1986) uses similar examples and others, citing Soudek (1978) and Bauer (1983) with the idea that they have evolved from blends (1986: 734). It is worthy of note that not all the examples cited here exist in the data set, since the study is not merely a diachronic one.

about various compounds such as *cheeseburger*, *chickenburger* and *baconburger*[26]. The misconception of affixes like this one by linguists in the past is very significant in the sense that it implies that the difference between compounds and blends in such cases is too fine to be recognized.

However, the misconception of such affixes should not be generalized to all the affixes whose existence is ascribed to blending. The term *motorcade*, for instance, is a blend of *motor* and *cavalcade* (*A Comprehensive etymological Dictionary of the English language, 1967*). The affix *–cade*, then, has produced new words such as *aerocade* and *aquacade*[27]. The latter instances are compounds rather than blends, because their second part has already become a suffix, *-cade*, and so does not come from the final part of a source word in such combinations. Hence, it is not possible to decide which of *motorcade*, *aerocade* and *aquacade* is a blend or a compound without recourse to the etymology of each word. All of these terms have the same form, containing of a morpheme and (-)*cade*[28], and hence the difference between such instances of compounds and blends fades.

Another complexity faced here is when it is not possible to determine whether an affix derives from a blend or not. This occurs especially when the formation of a blend coincides with the formation of another blend that has a similar splinter. For example, both *infomercial* and *infotainment* are respectively blends of *information* and *commercial*, and *information* and *entertainment* according to the *Shorter Oxford English Dictionary* (2002). Once there is a clipping of information, namely *info-*, it is difficult to ascertain the nature of the other examples like *infodump* and *infonaut*[29]. Besides, the absence of various examples from dictionaries probably because of their informal or nonce status makes it hard to have a conclusive decision. It is not the researcher's aim here to get embroiled into the origins of affixes or the epistemology of blends. Yet, it has been necessary to mention such phenomenon to show the

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[26] These instances are cited from Frath (2005: 6).
[27] The morphological situation of *–cade* has already been pointed out by Quinion (1996-2004), from whom these examples are quoted (cited in http://www.worldwidewords.org/articles/blend.htm).
[28] The brackets are used to refer to the probability that *cade* can be used as a suffix or as the final splinter of *motorcade*.
[29] Such examples are cited from http://www.worldwidewords.org/articles/blend.htm

difficulty of recognizing certain examples of compounds and blends and hence to show the fuzzy area that exists between the typical examples of compounds and blends.

4.2.4.3 Items that are both compounds and blends

Another set of data that blur the compound-blend distinction are those lexical items that are both blends and compounds, or neoclassical compounds in particular. Some instances are *autocide*, *archology* (or *archology*) and E*urocrat*. The word *autocide* can be interpreted as a neo-classical compound that means 'a self-destroyer or a suicide' according to *Oxford English Dictionary* (1972). It can also be a blend created from *automobile* and *suicide*. The term *archology* might be a neo-classical compound, meaning 'doctrine of the origin of things or science of government' (*Oxford English Dictionary*, 1972). It can also be used as a blend formed from *architectural ecology*. Likewise, the form *Eurocrat* can be used as a neo-classical compound as well as a blend. It can be a combination of a clipping and the Greek morpheme *kratos* (i.e. power), and it can be a blend from *European* and *bureaucrat*[30]. Such instances are very significant in that they show that compounds and blends may have the same form or rather the same word, where boundaries between the two processes are blurred.

So far, the idea that compounds and blends should be considered as shades of gray rather than dichotomous categories has been justified based on the data set exhibiting differences, similarities and border fuzziness. Typical examples of compounds can be distinguished from typical examples of blends, but the two merge at their boundaries. It has also been stressed that the difference between typical compounds and typical blends exists only at the level of the form; in other words, a typical compound comprises full words, while a typical blend consists of parts of words. The question posed at this level is how can both word-formation processes be categorized?

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[30] This instance is also provided by Bauer (1998: 408).

## 4.3 A COGNITIVE CATEGORIZATION OF COMPOUNDS AND BLENDS

A natural categorization of compounds and blends should be one in which all the foregoing characteristics, namely differences, similarities and fuzzy cases are reflected. To illustrate, consider the following hierarchy:

TABLE 4.1 The taxonomic hierarchy of compounds and blends

SUPERORDINATE	WORD-FORMATION
BASIC LEVEL	SOURCE WORDS[31]
SUBORDINATE	COMPOUNDS
	BLENDS

The above hierarchy can be visually represented as:

FIGURE 4.2 Hierarchy of compounds and blends

WORD-FORMATION   (SUPERORDINATE LEVEL)

SOURCE WORDS   (BASIC LEVEL)

COMPOUNDS   BLENDS   (SUBORDINATE LEVEL)
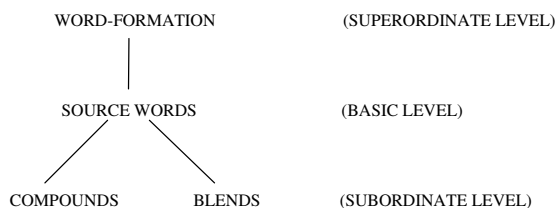
What is interesting about the above hierarchy is that compounds and blends are both subordinate to the same level - that is, basic level. Both processes are produced on the basis of the source words. It is important to highlight the basic level to display the relationship between it and its subordinates. The latter would not exist without the source words, which are already existing words in the language, e.g. nouns, adjectives and so forth. Items such as *boost* and *flu virus* cannot come into existence if the words as *boom*, *hoist*, *flu* and *virus* do not first exist. Thus, both compounds and blends rely on the basic level categories both at the level of production and perhaps at the level of

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[31] Source words here refer to two or more grammatical categories (nouns, adjectives and verbs as regards the data set)

comprehension. However, this does not mean that such dependence is absolute. Rather, it is partial. Some compounds and blends depend on source words to some extent. For example, *homework* and *blaccent* (*black + accent*) are respectively kinds of *work* and *accent*. Yet, this does not mean that the meanings of both source words exactly equal the meanings of the target words in such cases, but rather the latter partially inherits some characteristics from the former. *Homework* can be done in the library instead of at home for example. Likewise, *blaccent* can be an accent of a white man brought up in a blaccent community. Hence, the examples concerned have their own independence notwithstanding the partial attributes they inherit from the source words. Certain compounds and blends rarely rely on the contributory words. An instance of compounds is *pickpocket*, which is not a kind of *pocket*, but rather it is a kind of person. An example of blend is *thighscraper* (*thigh + skyscraper*), which is not a kind of *skyscraper*; rather, it is a type of clothes. Such cases can be understood with reference to the encyclopaedic knowledge as well as the context. In sum, compounds and blends are similar vertically in the sense that both of them are made up of already existing words belonging to the basic level. But, what is the situation concerning the horizontal level?

As for the horizontal axis, some difference might occur at the subordinate level, since subordinates are normally more elaborate and so can differ. However, the difference is seen as a matter of prototypicality. That is, typical compounds can be more prototypical than typical blends. Such difference is reflected in the following figure:

FIGURE 4.3 Prototypicality of compounds and blends
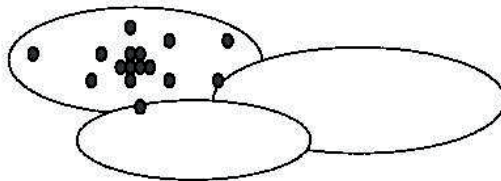
Typical compounds can be seen as more central than typical blends, because the former are closer to the source words (i.e. nouns, adjectives, verbs and so on), which

constitute a special salience in the hearer's mind. Since typical compounds comprise the complete forms of the contributory words that are the simplest and most frequently encountered, they are more typical and representative. For instance, the compounds *plywood* and *return ticket* are felt to be more central to the category source word than are the blends *geep* (*goat + sheep*) or *splisters* (*splinters + blisters*)[32]. Still, such examples only exhibit differences at the level of form of the typical cases of compounds and blends. The notion of such gradual difference can be accounted for as follows.

Firstly, typical compounds are more or less faster to identify than typical blends. As for compounds, the hearer is not required to guess the missing parts of the contributory words. However, such difference does not occur in all the cases. In such telescoped blends as *guesstimate* (*guess + estimate*), *shamateur* (*sham + amateur*) and *slanguage* (*slang + language*), both complete source words are present, which adds to the fuzzy border between compounds and blends discussed before[33]. Besides, the difference in the form can be valid only when the meaning of compounds and blends is literal (i.e. endocentric), as in *family planning* and *smog* (*smoke + fog*), taking into consideration that the meanings of the target words (i.e. compounds and blends) possess only partial attributes from the source words, as seen before. In contrast, those neologisms that bring about meanings that cannot be understood from the source words (i.e. exocentric), as in *plaything* and *thighscraper,* do not exhibit such difference. However, in the absence of psycholinguistics data on this aspect of comprehension, compounds cannot be said to be perceived faster, since both neologisms can be understood with recourse to the encyclopaedic knowledge and context rather than the derived meaning from the contributing words.

Really, the assumption that blends are difficult to understand is invalid on empirical basis (Lehrer, 1996). Lehrer conducted an experiment to identify and

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[32]The difference mentioned here is between typical cases of compounds and blends, since less typical ones do not exhibit such difference.

[33]Kaunisto (2002a) argues that ideal blends are ones where there is overlapping between the final part of the first source word and the initial part of the second source word without any deletion at all, because the deletion of any parts cause "danger" or "threat" (to use Kaunisto's terms) to the intelligibility of a blend (cited in Gries, 2004: 649-650).

interpret novel blends. In the experiment, subjects were given two sets of questionnaires. The first set consists of mere blends, while the second comprises sentences where blends are used in context. Firstly, they were asked to identify the source words, to judge whether the blend is a good word or a poor one and to say whether they were familiar with the word. Secondly, they were asked to classify the blends in relation to whether they were good in comparison with other blends, good in comparison with other new words, and good in comparison with other words on the questionnaire and without specification. Thus, the hearer was asked to identify the source words and give an interpretation. As a result, the following hypotheses by Lehrer (1990) were more or less confirmed:

a.   Blends are more easily identified in context,

b.   The more material from the contributing word, the easier the blend is to identify,

c.   The higher the frequency of the contributing word, the easier it is to identify,

d.   The fewer the number of words in the neighbourhood of the contributing words, the easier it is to identify, and

e.   If one part of a blend is identified, its semantics will be relevant to identifying the other part (1996: 366).

The results of such study led Lehrer (1996) to conclude that blending is a significant source of neologisms and a productive process calling for a serious word-formation interest in blending and for the explication of its mechanisms, i.e. the characteristics mentioned in the five hypotheses, which are similar to the mechanisms of other words (ibid, 385).

Secondly, compounds are more frequently used, more stable and more lexicalized, probably because compounds have traditionally been given more attention in contrast with blends, and because blends are conditioned by the phonological similarity between the source words.

To sum up, typical compounds and typical blends have been depicted as similar vertically and slightly different horizontally. The difference is a matter of prototypicality rather than discreteness. Given the basic level categorization, then, similarities as well as differences are reflected as regards typical compounds and typical blends. Such distinction emerges only at the level of form rather than meaning. Less typical compounds and less typical blends do not show such difference, because they belong to the fuzzy area between the typical cases of both neologisms. It has also been stressed that the only distinction that may exist between typical instances of both kinds of word-formation can be at the level of form. The question raised here is what is the internal structures (or meaning relationships) of both kinds of word-formation? And, what conceptual process do compounds and blends undergo?

4.4 SOURCE SCHEMAS

In the foregoing section, attention has been given to the examination of the data set for the purpose of testing the extent of the difference between compounds and blends. It has been found in the foregoing section that the only assumed difference that may lie between both types of neologism merely involves typical compounds and typical blends and that such difference only occurs at the level of form. In general, compounds and blends are similar taking into account the fact that the boundaries between them are blurred. In the following section, the focus will be on the motivation for both neologism processes, testing the hypothesized conceptual similarity between them.

Before starting the investigation of the derivation of both compounds and blends, it is pertinent to explicate the assumed difference between typical compounds and typical blends: the former comprise the combination of full words, whereas the latter consist of parts of words. The idea raised here is that the dissimilarity assumed is between complete forms, i.e. wholes, and parts of words. The question posed here is whether parts are dichotomous or even different from wholes. Needless to say, parts (prototypical parts in particular) signify rather than differ from wholes. *Kuala Lumpur* and *Malaysia*, for example, can signify a similar concept, and so *Kuala Lumpur* can be used in place of *Malaysia* in many contexts in everyday use. Hence, the meaning of

Kuala Lumpur can be metonymically extended to the meaning of *Malaysia[34]*. That is, *Kuala Lumpur* stands for (or gets access to, to use the cognitive methodology) *Malaysia[35]*. The same process can occur to the structure of words as well. In *shoat*, for instance, *sh* stands for (or gets access to) *sheep* and *oat* stands for *goat*. Such a phenomenon is normal in everyday speech. Such compound as *redskin* stands for an *American Indian*, *NATO* stands for *North Atlantic Treaty Organization,* and so on and so forth.

Another point which is worthy of note here is that the combination in both compounds and blends, is not merely between words or parts of words, but more importantly between concepts. For instance, whether one uses *Chunnel* or C*hannel tunnel*, s/he conveys the same meaning and has the same concept in mind. In the light of what has been discussed so far, the claim that typical compounds and typical blends are different in form is no more valid, since parts and wholes are metonymic rather than different. Having accounted for the variation in the forms - that is, compounds and blends, containing the combination of concepts, it is applicable to turn to the examination of the conceptual derivation.

It goes without saying that both compounds and blends constitute part of the English creative lexicon. Words are not invented without motivation. The creation of both kinds of neologism is a result of source schemas that are based on the speakers' experience in and knowledge of the world. In English, ten schemas giving rise to compounds and blends are suggested. Such schemas, as listed in table 4-2, are examined with regard to the data set. In the following sub-sections, examples of blends and compounds from the data set, which are motivated by the respective schemas, are presented briefly. The main purpose is to reveal whether all the schemas can motivate both compounds and blends or just a particular category.

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[34] It is worthy of note that synecdoche, a variant of metonymy has traditionally been given special focus, but such phenomenon was only regarded in relation to poetics.
[35] As regards cognitivists, metonymy is a cognitive process where a conceptual thing gives mental access to another conceptual thing within the same domain (Kovecses and Radden, 1998: 39).

TABLE 4.2 List of source schemas for compounds and blends

Source Schema	Label of Schema
X is the agent of the action Y X is the patient of the action Y	Action
X is located at Y Y is located at X	Location
X is for Y Y is for X	Purpose
X specifies X is an example of Y Y is an X	Apposition
Y prevents against or preserves X	Instrument
X causes Y Y causes X	Causal
Y resembles X	Resemblance
X is a characteristic of Y Y is made of X	Composition
Y is part of X	Whole-Part
X is contained in Y Y is contained in X	Containment

4.4.1 The Action Schema

Based on the data set, the Action schema has two formulas:

    (i)   X is the agent (i.e. initiator or doer) of the action Y[36]

    (ii)   X is the patient (i.e. the thing that undergoes) of the action Y

    Formula (i) can be illustrated by the following examples:

    (1) (a) *earthquake*

    (c) *screamager* (*screaming + teenager*)

(1) (a) exhibits the first formula of the action schema in that in the compound *earthquake*, *earth* is the agent of the action *quaking* or *shaking*. In the same vein, the

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[36] X and Y are used as symbols of the members of compounds and blends; that is to say, X stands for the first component, while Y stands for the second component.

blend *screamager* in (1) (b) comprises *teenager*, which is the agent of the action *screaming*.

Formula (ii) can be exemplified in the following:

(1) (c) *cut-throat*

    (d) *busnapper* (*bus* + *kidnapper*)

In the compound *cut-throat* (1) (c), *throat* is the patient of the action *cutting*[37], and *bus* in the blend *busnapper* (1) (d) is the patient of the action *kidnapping*. Based on the above discussion, both compounds and blends show the two formulas of the Action Schema; hence, they may equally be derived from the Action Schema.

4.4.2 The Location Schema

The Location Schema here involves both place and time in that the latter share the notion of *at*[38]. This schema also consists of two variants:

(i)   X is located at Y

(ii)   Y is located at X

As for place, variant (i) can be exemplified in (2) (a) and (2) (b):

(2) (a) *swimming pool*

    (b) *motel* (*motor*(*ist*) +*hotel*)

As seen from the above examples, in the compound *swimming pool*, *swimming* is located in *pool*. That is, the act of swimming takes place in the pool. Similarly, in the blend *motel*, *motorists* are located in *a hotel*; to put it another way, *motorists* stay in *a hotel*[39].

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[37] The compound *cut-throat* is extended to *murderer* (person who cuts throats) through metonymy.

[38] The preposition *at* used here signifies the various locative functions like *at*, *on*, *in*, and so on.

[39] It is worthy of note that the compound *swimming pool* and the blend *motel* can also be paraphrased as 'pool for swimming', and 'hotel for motorists', deriving from the Purpose Schema.

Variant (ii) can be illustrated by examples (2) (c) and (2) (d) below:

(2) (c)   *school-teacher*

    (d)   *boatel* (*boat + hotel*)

In the compound *school-teacher*, a teacher works in a school, which means that *a teacher* is located in *school*. In the same way, *a hotel* in the blend *boatel* is located on *a boat*[40].

As mentioned before, the location Schema can also include time in addition to place.

Variant (i) as regards time can be illustrated as follows:

(2) (e) *rush hour*

In the compound *rush hour* above, *rush* or *heavy traffic* occurs at *hour* (i.e. a time at the start and end of the working day). No instance of blends having the schema variant (i) with regard to time has been encountered in the data set.

Instances of variant (ii) are in (2) (f) and (2) (g).

    (f) *day-dream*

    (g) *wintertainment* (*winter + entertainment*)

As noticed from the examples above, the component *dream* in the compound *day-dream* takes place in *the day*. Likewise, *entertainment* in the blend *wintertainment* happens in *winter*.

As seen from the above discussion, no example of variant (i) as regards time is available in the data set as far as blends are concerned. However, this does not mean that such a point might constitute a difference, because blends can be said to derive from the Time subschema regardless of which member forms the time. Besides, they are derived from the Location schema as a whole.

---

[40] The blend *boatel* can also mean 'hotel for boat travelers' and so can derive from the Purpose Schema.

4.4.3 The Purpose Schema

This schema can be paraphrased in the following:

Y is for X

Examples of such a schema are presented in (3) (a) and (3) (b).

(3) (a) *drinking water*

  (b) *motel* (*motor*[*ist*] + *hotel*)

In the compound *drinking water*, *water* is for *drinking*. In the blend *motel*, *hotel* is for *motorists*. Therefore, both compounds and blends may similarly be derived from the Purpose Schema.

4.4.4 The Apposition Schema

The Apposition Schema has three variants:

(i)   X is an example of Y

(ii)   Y is an X

(iii)   X specifies Y

Examples of variant (i) can be seen in (4) (a) and (4) (b) below:

(4) (a) *panic reaction*

  (b) *dancercise* (*dance* + *exercise*)

In (4) (a), *panic* (the first component of the compound *panic reaction*) is an instance of *reaction*. Similarly, *dance* (the first component of the blend *dancercise*) in (4) (b) is an example of *exercise*.

Variant (ii) is exhibited in such examples as the following:

(4) (c) *fighter plane*

  (d) *brunch* (*breakfast* + *lunch*)

In the above examples, *plane* in the compound *fighter plane* is *fighter*[41]. Likewise, *lunch* in the blend *brunch* is *breakfast*[42].

Examples of both compounds and blends deriving from the Apposition Schema variant (iii) have been found in the data. By way of example, consider the following:

> (4) (e) *hunchback*
>
> (f) *shamateur* (*sham + amateur*)

In the compound *hunchback*, *hunch* specifies or qualifies *back* (i.e. 'back that is characterized by a hump'), and *sham* in the blend *shamateur* specifies *amateur* (i.e. 'a player considered as an amateur but behaves as a professional'). In sum, the Apposition Schema equally gives rise to compounds and blends.

4.4.5 The Instrument Schema

The instrument Schema can be paraphrased as follows:

> Y prevents against or preserves X

Examples from compounds as well as blends are found.

> (5) (a) *raincoat*
>
> (b) *radome* (*radar + dome*)

In the above compound *raincoat*, *coat* preserves from *rain*[43]. In the blend *radome*, *dome* preserves *radar antenna*[44]. Thus, one can deduce from such data that the Instrument Schema can give rise to both compounds and blends.

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[41] The compound *fighter plane* can also exemplify variant (i); in other words, *fighter* is an example of *plane*.
[42] One might argue that it is ambiguous whether this blend means 'breakfast is lunch' or 'lunch is breakfast' - that is, whether *brunch* is a kind of breakfast or a kind of lunch. Such an idea is true, but 'Y is an X' is favoured over 'X is a Y' in that the time at which *brunch* is taken is lunchtime rather than breakfast time.
[43] The member *rain* here stands for the act of being wet.
[44] The member *radar* stands for radar antenna.

4.4.6 The Causal Schema

This schema can have the following variants:

      (i)   X causes Y

      (ii)   Y causes X

      The schema variant (i) can be exemplified in the following:

      (6) (a) *hay fever*

         (b) *beermare* (*beer + nightmare*)

In the compound *hay fever*, *hay* causes *fever*. Likewise, *beer* in the blend *beermare* causes *nightmare.*

      Examples of both compounds and blends being derived from the Causal Schema variant (ii) are found in the data set. Consider (5) (e) and (5) (f) below:

      (6) (c) *flu virus*

         (d) *stimulighting* (*stimulation + lighting*)

In (5) (e) and (5) (f) respectively, *virus* (the first member of the compound *flu virus*) causes *flu* and *lighting* (the initial member of the blend *stimulighting*) causes *stimulation*. Thus, both compounds and blends can be derived from the Causal Schema.

4.4.7 The Resemblance Schema

This schema can be paraphrased as:

      Y resembles X

Consider, by way of illustration, the following instances:

      (7) (a) *frogman*

         (b) *bomphlet* (*bomb + pamphlet*)

In the compound *frogman*, *man* is like *a frog*. In the same way, *pamphlet* in the blend *bomphlet* is like *a bomb*. Therefore, the Resemblance Schema may give rise to compounds as well as blends.

4.4.8 The Composition Schema

The Composition Schema comprises two formulas:

(i)   X is a characteristic of Y

(ii)   Y is made of X

To make formula (i) clear, consider the following instances:

(8) (a) *thunderstorm*

(b) *fleep* (*flying* + *jeep*)

The member *thunder* in the compound *thunderstorm* is a characteristic of *storm*. Similarly, *flying* (i.e. moving swiftly) in the blend *fleep* is a feature of *jeep*.

By way of illustrating formula (ii), consider the following examples.

(8) (c) *ivory tower*

(d) *plastinaut* (*plastic* + *astronaut*)

In (8) (c), *tower*, the final member of the compound, is made of *ivory*[45]. Likewise, *astronaut*, the final member of the blend, in (8) (d) is made of *plastic*. On the basis of such examples, it can be concluded that both compounds and blends can be derived from the Composition Schema.

4.4.9 The Whole-Part Schema

The Whole-part schema can be paraphrased in the formula below:

Y is part of X

---

[45] The meaning of *ivory tower* is metaphorically extended to 'a privileged life far from normal difficulties'.

To illustrate, such examples as the following:

(8) (a) *eardrum*

(b) *bungaloft* (*bungalow* + *loft*)

show that the Whole-Part Schema gives rise to both compounds and blends. In the compound *eardrum*, *drum* (the final component) is part of *ear* (the initial component). Likewise, *loft* (the final component) in the blend *bungaloft* is part of *bungalow* (the first component).

4.4.10 The Containment Schema

This schema has two variants:

(i)   X is contained in Y

(ii)   Y is contained in X

Some instances illustrating variant (i) are as follows:

(9) (a) *bookcase*

(b) *keytainer* (*key* + *container*)

In the compound *bookcase*, *book* is contained in *case*[46]. Likewise, *key* in the blend *keytainer* is contained *container*[47].

Examples of compounds and blends deriving from the Containment Schema variant (ii) have also been found in the data. By way of illustration, consider the following:

(c) *bone marrow*

(d) *squangle* (*square* + *angle*)

---

[46] The compound *bookcase* can arise from another schema, namely the Purpose Schema. That is, case is for *book*, which implies that overlapping may occur between schemas.
[47] The blend *keytainer* can also be derived from the Purpose Schema, since it may mean 'a small case for carrying keys'.

In the compound *bone marrow*, *bone* is a container of *marrow*. Similarly, *angle* in the blend *squangle* is contained in *square*. Hence, compounds and blends are equally derived from the Containment Schema.

To summarize what has been found in this section, the only schema variant that does not give rise to blends based on the data set is the Location subschema (Time): 'X is located at Y'. This gap in itself has no consequence for the argument put forth in this thesis, first because blends can be derived from the Time Subschema irrespective of whether such location is X or Y, second because both compounds and blends can already come into existence through the Location Schema.

The most significant finding reached in the previous discussion is that compounds and blends are structured by the same conceptual criterion, which means that the source schemas from which they are derived are alike. Having reached this far, there is still another problem concerning grammar and lexicon.

In the literature review, it has been referred to the exclusion of blends from the field of grammar in particular by linguists and it has been discussed that blends should not be considered outside the realm of grammar. In relation to the source schemas discussed so far, it has been justified that compounds and blends undergo the same conceptual process. One might still insist that typical compounds are of a grammatical kind, whereas typical blends are of a lexical nature. This contention is a non-issue. If the notion of either-grammatical-or-lexical is dispensed with, the point under question will simply be a matter of gradation. Typical blends are more of a lexical nature than of a grammatical nature. In such a sense, compounds and blends are better regarded as situated along a conceptual sequence being lexical at one extreme X and grammatical at the other Y, as shown in the form below:

FIGURE 4.4 The grammar-lexicon continuum

$$X > P1 > P2 \ldots > Pn > Y$$

This grammaticalization form provides a very significant explication of how compounds and blends are placed at a point between X and Y. Typical compounds are more grammatical. Typical blends are more lexical. The less typical cases such as neoclassical compounds and telescopic blends are located at a point along the cline. Thus, the differences assumed to lie between compounds and blends are of no importance once all the cases of compounds and blends are taken into consideration and the approach used takes into consideration the notion of prototypicality and fuzzy border.

4.5 CONCLUSION

What the researcher has attempted to do in this chapter is provide the analysis of the nature of compounds and blends in the data set and provide systematic linguistic argumentation to decide whether they are dichotomous as has traditionally been claimed or not. As a first step, a data set of two hundred words (one hundred of which are compounds, the other hundred are blends) is examined and analyzed in order to see the degree of the difference between them. As a result, only typical instances of both types of word-formation are clear, the boundaries between the two classes are fuzzy in the sense that there exist various examples that are hard to decide whether they are compounds or blends. This has made it necessary to deal with compounds and blends as a gradual continuum rather than dichotomous members. In addition, the wholes combined in compounds and the parts fused in blends are metonymic rather than dichotomous. Finally, the examination of the motivation for both compounds and blends shows that the latter are produced on the same conceptual model, supporting the researcher's assumption that compounds and blends are essentially similar.

CHAPTER V

CONCLUSION

5.1 SUMMARY OF FINDINGS

As seen in Chapter I, the purpose of this work is to explore the nature of the link
between compounds and blends. To achieve such a goal, two steps are taken. First, a
data set on compounds and blends is analyzed so as to test the validity of the claim
that compounds and blends are dichotomous categories. Second, an investigation of
the internal structure of both kinds of neologism is done for the purpose of deciding
whether they are conceptually alike.

As a result of the first step, many words in the data set have been found to
exist in the fuzzy area between compounds and blends. That is, it is not an easy task to
determine whether they are compounds or blends. This implies that the boundaries
between the two types of word-formation are blurred, refuting the supposed
dichotomy between compounds and blends. As a substitute, a prototypical approach to
the categorization of both neologisms is proposed, since it takes into account the fact
that compounds and blends form a continuum within the same category. Typical
compounds and typical blends form the extremes of this continuum, which are
separated by a slight difference at the level of form.

In the second step, the only distinction found between a compound and a blend
at the level of form is explicated by way of metonymic extension. The wholes in the
structure of typical compounds cannot be considered as different from the parts in the
structure of typical blends. Rather, they are metonymic. The results of the

investigation of the motivation for both compounds and blends show that all the ten schemas that are found in compounds are also found in blends. This further suggests and supports the contention of the thesis that compounds and blends are categorically similar.

The results of the two-step analysis confirm the main assumption made in Chapter one. Compounds and blends have similar conceptual patterns, and items derived from such patterns are technically similar, irrespective of the variation that might occur at the surface form level. In the case of compounds and blends, such variation in form can be explicated by metonymy, which is a conceptual phenomenon as well. Therefore, in considering the categorical status of the coinages, the most important level is the conceptual structure level, namely the schemas that motivate the coinages. Subsequently, whether the word is more of a phonological kind or of a syntactic kind, or whether they are more of a lexical nature or of a grammatical nature does not constitute a problem. There is a continuum of compounds and blends ranging from lexicon to grammar. What made the traditional study of compounds and blends defective is the focus on one side, which is only a point along the cline (let say syntax), as if it is independent of the other points and as if the other points do not even exist.

5.2 LIMITATIONS OF THE STUDY

Owing to the limited period of time, i.e. three months, the data set is restricted to only two hundred words. In mitigation, in spite of the size of the data set, the study managed to analyze a sufficiently diverse set of data. Nevertheless, a larger and broader data set might add more discoveries about both types of word-formation. In particular, although the ten schemas giving rise to compounds and blends proposed in this research are exhaustive on the basis of the data set, there might be other schemas motivating English compounds and blends.

In the literature, compounds are given special focus. Nevertheless, the way they are approached is mostly of a grammatical or rather a syntactic nature, which

means that there is no attempt to consider all the aspects contributing to the creation or existence of a compound. As an outcome of such one-sided study, various phenomena in the realm of compounds are without explication and regarded as exceptions, e.g. exocentric compounds and appositional compounds. In the same way, blends are marginalized in the domain of such syntax-oriented study. Hence, few researches are done on blends and such studies are phonological in nature most of the times. Hence, there is a dearth of literature on blends and it has been a difficult task to find necessary material, especially in relation to blends for the present study.

Finally, the schemas proposed in 4.3 have been formulated in relation to an examination of the data set. As such, they are not exhaustive nor are they the final word on the issue of motivations in the formation of blends and compounds in English.

5.3 CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE STUDIES

From the outset of this thesis, the researcher has attempted to argue that compounds and blends are categorically the same. The thesis has attempted to argue and support this view on the basis of the assumption that compounds and blends are motivated by and derived from similar conceptual structures. The arguments are supported and confirmed by the findings reached through the analysis of the data set.

What has been done so far is just a stepping-stone for the future research with the expectation that some readers might disagree as far as some of the researcher's suggestions are concerned. Still, the researcher's primary conviction is that the issues and insights on the categorical status of compounds and blends raised in this thesis are right and very significant for an apprehension of the relationship between compounds and blends. Using the notion of the prototypical categorization, all the factors that contribute to the coining of compounds and blends form a continuum. In other words, the various features, which purport to separate blends from compounds such as issues of grammaticality, regularity, productivity, are no longer relevant. Grammatical considerations have no independent existence. Rather, they go hand in hand with the

lexicon. Such notion will raise doubt about the validity of the classical categorization of the other kinds of word-formation, paving the way for studies on other linguistic categories, such as articles, modals and so on that have thus far been considered using the traditional Aristotelian categorization approach, where entities are perceived as absolute - that is, as black or white. Such an approach has made many contributions. Nevertheless, the approach has also led to the proliferation of exceptions to the rule, and so many cases remain unresolved. The alternative approach is the one used in this study that perceives linguistic categories as shades of gray. Linguistic categorization, like other categorizations, has been a 'victim' of the classical method. Compounds and blends have been considered as dichotomous categories with the assumption that the former are members of grammar, word-formation and so on, while the latter are not. The study here has shown that a prototype basic level cognitively oriented categorization of compounds and blends has its advantage with fuzzy logic being able to provide a better account of compounds and blends over the classical logic.

Another issue that was raised in the literature review concerning the diversity in the orthography of compounds should also be given special attention in future studies. The issue of the orthography of compounds is far from resolved or satisfactorily explicated with regard to the vast variation. The notion of prototypicality and schemas might also provide a convincing solution to this issue.

Another further study should be done involving other languages than English. This is to determine whether the relationship characterizing compounds and blends in English is the same in other languages. In other words, there is a need to examine similar phenomena in across languages to decide whether the border between these items in other languages have the same prototypical basic level categorical status. Subsequently, studies should be done to answer the question of whether the kind of relationship that exists between compounds and blends as well as the schemas motivating them in English are universal or culture specific.

Finally, a study utilising a larger data set should be done to decide whether there exist other schemas giving rise to compounds and blends in English. This is not

to claim that schemas can be exhaustively identified, since new schemas might arise with the birth of new words. However, it is necessary to have an exhaustive set of schemas as regards the existing compounds and blends in English as a whole. A related issue arises here as well: Can the notion of prototypicality and schemas justifying the similarity between compounds and blends be extended to the other kinds of word-formation, e.g. acronyms?

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APPENDIX A

THE CORPORA OF COMPOUNDS AND BLENDS

Compounds	Blends	Compounds	Blends
background	advertainment (advertising + entertainment)	ivory tower	infotainment (information + entertainment)
bee sting	advertorial (advertising + editorial)	jackknife	keytainer (key + container)
birth control	apronym (appropriate + acronym)	killjoy	liger (lion + tiger)
bloodshed	archology (architectural + echology)	landlord	mantastic (man + fantastic)
blood test	arfé (art + café)	lazybones	melodrama (melody + drama)
board game	attractivating (attractive + captivating)	life-boat	mockney (mock + cockney)
bone marrow	autocide (automobile + suicide)	lipstick	motel (motor + hotel)
bookcase	ballute (balloon+parachute)	living-room	motorcade (motor + cavalcade)
breakfast	beermare (beer + nightmare)	maidservant	mousewife (housewife + mousy)
bullseye	behortment (behaviour + deportment)	matchbox/match-box/match box	needcessity (need + necessity)
butterfingers	bit (binary + digit)	morning coffee	oildraulic (oil + hydraulic)
candlelight	blaxploitation (black + exploitation)	mountain-range	opinionaire / opinionnaire (opinion + questionnaire)
car park	blaccent (black + accent)	newspaper	Oxbridge (Oxford + Cambridge)
checkpoint	boatel (boat + hotel)	nightmare	plastinaut (plastic + astronaut)
codfish	boldacious (bold + audacious)	palm tree	psychergy (psychic + energy)
cold war	Bollywood (Bombay + Hollywood)	panic reaction	radome (radar + dome)
courtyard	bomphlet (bomb + pamphlet)	password	screamager (screaming + teenager)

cranberry	boost (boom + hoist)	pathway	Republicrat / Demopublican (Republican + Democrat)
cut-throat	brunch (breakfast + lunch)	pickpocket	seavacuation (sea + evacuation)
day-dream	bungaloft (bungalow + loft)	piggybank	shamateur (sham + amateur)
drinking water	busnapper (bus + kidnapper)	plate glass	shoat (sheep + goat)
eardrum	cattalo (cattle + buffalo)	plaything	singspiration (sing + inspiration)
earthquake	chattire (chat + satire)	plywood	skort (skirt + short)
eyeball	chortle (chuckle + snort) (Lewis Carroll)	postman	slanguage (slang + language)
fairytale	Chunnel (Channel + tunnel)	puppy dog	smever (smart + clever)
family planning	cineplex (cinema + complex)	raincoat	smog (smoke + fog)
fault-finding	clantastical (clandestine + fantastical)	redskin	soundscape (sound + landscape)
fighter plane	Cocacolonization (Coca-Cola + colonization)	return ticket	spamdexing (spam+indexing)
fine art	codec (coder + decoder)	rush hour	Spanglish (English + Spanish)
fingerprint	dancercise (dance + exercise)	safety belt	splisters (splinters + blisters)
fire-place	daymare (day + nightmare)	scarecrow	spork (spoon + fork)
flashlight	dawk (dove + hawk)	searchlight	squangle (square + angle)
flu virus	digerati (digital + literati)	school-teacher	stagflation (stagnation + inflation)
Fortune-hunting	docudrama (documentary + drama)	shell fish	stimulighting (stimulation + lighting)
frogman	dramality (dramatic + reality)	shoe-maker	swacket (sweater _ jacket)
gentleman	dynetic (dynamic + magnetic)	snake-bite	swelegant / swellegant (swell + elegant)
girlfriend / girl-friend / girl friend	edutainment (education + entertainment)	sunbathing	telegogue (television + demagogue)

guide book	escalift (escalator + lift)	swimming pool	televangelist (television + evangelist)
hamburger	faction (fact + fiction)	swimsuit	thermistor (thermal + resistor)
hand-cuffs	fantabulous (fantastic + fabulous)	teacup	thighscraper (thigh + skyscraper)
handwriting	fleep (flying + jeep)	television	threatmantic (threatening + romantic)
hay fever	foon (fork + spoon)	thunderstorm	thwack (thrash + wack)
headline	Frankenword (Frankenstein + word)	time-consuming	tigon (tiger + lion)
homework	geep (goat + sheep)	tooth decay	touron (tourist + moron)
horse-power	ginormous (gigantic + enormous)	trade-union	toystalgia (toy + nostalgia)
houseboat	guesstimate (guess + estimate)	typewriter	transceiver (transmitter + receiver)
hovercraft	glassphalt (glass + asphalt)	wastepaper basket	vodkatini (vodka + martini)
hunchback	herrible (horrible + terrible)	will-power	wintertainment (winter + intertainment)
inkblot		windmill	workaholic (work + alcaholic)
ironing board	infomercial (information + commercial	wordformation / word-formation / word formation	zebrule (zebra + mule)