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## SETTINGS AND PARTICIPANTS: ANALOGOUS SEMANTIC EXTENSIONS IN CONCEPTUALLY REMOTE DOMAINS

### Abstract

This article concerns a phenomenon, claimed to be semantic in nature, which can be observed in expressions from conceptually distant categories. The phenomenon in question consists in the modification of lexical categories in which the form of the words is retained, but their meanings undergo essential, yet analogous, shifts. The two domains selected for the purpose of this study are so-called meteorological expressions (e.g., *it's raining*, *snow fell* etc.) and the names of political states (*France*, *Mexico*, *Vietnam* etc.). These domains are mutually independent and constitute unrelated areas of knowledge. What is intriguing, however, is the similarity of the semantic shifts, also known as conversion or zero-derivation, which occur in these categories. The term “semantic extension” has been chosen as a convenient shorthand for the phenomenon in question. The article argues that due to altered profiles imposed on essentially the same base, the semantic extension under investigation results in shifts between the profiles of a “setting”, a “participant” and a “process”. In a comparative perspective between the two domains in question, zero-derived settings and participants alternate on a regular basis. The analysis applied here adopts tools exploited in cognitive grammar (e.g., profile, base). If semantic extensions towards settings and participants can be confirmed in such distant domains, further research can be undertaken in other domains. If related semantic effects are found in more domains, the semantic categories of a setting and a participant should be included in descriptive grammars.

**Keywords:** zero-derivation; conversion; semantic extension; domain; setting; participant; meteorological expression; state name

## 1 Introduction

This article addresses the general phenomenon of semantic extension, also known as, or combined with, morphological zero-derivation (or conversion), metonymy, or active zones (see Section 2). It needs to be emphasized from the beginning that two conceptually remote and unrelated domains will be considered as providing comparable instances of semantic extensions. Initially, the article

focuses on the semantic extensions which take place between various occurrences of so-called “meteorological expressions” (e.g., *it’s raining* etc.) (see Section 3). Subsequently, the focus turns to the specialist domain of political state names (e.g., *France, Iran, Uganda* etc.) in their numerous, but systematically distributed, incarnations (for a comprehensive account of the problem, see Twardzisz, 2013). This article argues that effects occurring across different uses of such names are at least comparable with, if not the same as, the semantic extensions found among meteorological expressions. Hypothetically, semantic extensions are ubiquitous and form a much broader category of effects to be found across other domains.

The related phenomenon of morphological zero-derivation/ conversion has been approached in the literature on a number of occasions (see, e.g., Bauer, 1988; Bauer & Valera, 2005; Štekauer, 1996). The multiplicity of morphological treatments and the subtle differences between them are beyond the scope of this article. Suffice it to say that morphological zero-derivation/ conversion has also been interpreted as a special case of semantic extension (see Section 2) (cf. Langacker, 1987a, 1991; Twardzisz, 1997). Meteorological expressions (e.g., *it rained heavily, when the rain starts* etc.) involve lexical items which undergo a complex phenomenon which can be labelled as conversion (e.g., *rain* (N) ~ *rain* (V), *snow* (N) ~ *snow* (V)). However, meteorological expressions constitute a fairly narrow and homogeneous conceptual domain, which may be governed by its own domain-internal principles. Therefore, it becomes necessary to examine other conceptual domains where related semantic extensions can also be identified and analysed. Semantic extensions, if ubiquitous in language, cannot be limited to just one, uniform domain. Given this, some comparison will be carried out outside the category of meteorological expressions. For comparative purposes, the domain of political state names will provide instances of conversion effects which show regular shift patterns (e.g., *Germany saw another terrorist attack* (setting) ~ *Germany refused to act* (participant)). It is to be assumed that some abstract mechanism of semantic extension occurs between so-called “settings” and “participants”, which constitute fundamental components of probably all interactions, more specifically nominal clausal elements (Langacker, 1987b).

On the one hand, it may appear puzzling that the conceptually unrelated domains of meteorological expressions and political state names display comparable semantic effects. On the other hand, such apparent similarities should not be treated as unnatural at all. If the speaker’s general cognitive abilities are responsible for her/his subjective construal of all meanings (Langacker, 1987a, 1991, 1993a), then it is only to be expected that even distant conceptual domains are organized according to the same principles of construal. In other words, the choice of a particular domain, no matter how “distant” it is, should not obliterate the basic tenet of the underlying and universal cognitive mechanism at work.

In what follows, semantic extensions are claimed to be taking place across meteorological expressions as well as constructions with political state names. Semantic extensions are understood here as effects taking place within the semantic structure of a given category, inseparably tied with the phonological structure that symbolizes it, leaving its (phonological) form unaffected (Langacker, 1987a, p. 493, 1991, p. 553). Semantic extension involves two elements and is “based on some perception of similarity or association between the original (sanctioning) sense of an expression and its extended sense” (Langacker, 1987a, p. 157). The most challenging task which should accompany this fundamentally theoretical project is to indicate which senses in both domains constitute the original (sanctioning) senses and which senses are their extensions.

## 2 Zero-derivation, conversion, metonymy, active zones, semantic extension . . .

Related phenomena, considered here as semantic in character, have been studied under several alternative names: zero-derivation, conversion, metonymy, active zones and semantic extensions, and possibly some others. While all of these names are used interchangeably in this article for stylistic diversity, every effort will be made to prioritize “semantic extensions”. Zero-derivation (or

conversion) is not a novelty in linguistic literature. For example, Bolinger (1975, p. 116) seeks and discovers zero-derivation almost everywhere when he claims that “there is a sort of ‘zero-derivation’ every time the meaning of a word is extended”. The phenomenon occurs not only when one syntactic category is changed into another syntactic category, but whenever ‘something else’ than zero is added to the base. Another view of conversion, adopted within the general context of metonymy, involves so-called semantic transfer (Leech, 1974, pp. 216–217). Conversion is understood here as an alteration of syntactic function without a change of morphological specification. Thus, *the whole town* in *The whole town turned out to welcome us* undergoes semantic transfer, which is “a major change in the semantic specification only” (Leech, 1974, p. 217). The semantic transfer in question consists in changing the profile of *the whole town* as a kind of setting to that of an active participant. A similar view is expressed by Stein (1977), who acknowledges that, just as morphological zero-derivation is treated as a case of conversion, any type of semantic conversion should be viewed in the same way. An example of semantic conversion can be found, for instance, in *Paris was outraged*. Here, the place name *Paris* is semantically transferred to mean ‘the people who are there’. Such effects are treated as cases of conceptual metonymy in numerous cognitive linguistics accounts (Barcelona, 2009; Bartsch, 2002; Croft, 2002; Dirven, 2002; Panther & Thornburg, 2004).

Morphological zero-derivation/conversion in English has received considerable attention in morphological literature (e.g., Bauer & Valera, 2005; Dirven, 1999; Štekauer, 1996; Twardzisz, 1997). Morphologically related nouns and verbs sharing the same (phonological) form are the typical converting pairs, for example, (to) *walk* ~ (a) *walk*, (to) *cook* ~ (a) *cook*, (to) *award* ~ (an) *award*, *clean* ~ (to) *clean*, *sugar* ~ (to) *sugar*, *skin* ~ (to) *skin* etc. Diverse subtypes of zero-derived verbs have been accommodated in semantically motivated patterns under the general label of “extensions of things to processes” (e.g., *glue* (N) ~ *glue* (V) etc.) (Twardzisz, 1997). Other subtypes of extensions deriving nouns from verbs have also been placed under regular schemas (*wait* (V) ~ *wait* (N), *cheat* (V) ~ *cheat* (N) etc.) (Langacker, 1987a, pp. 472–474). The mechanism in question assumes that while the same (phonological) form is retained in the sanctioning and extended category, it is the content of the semantic pole that undergoes modification, shift or whatever term is applied by a particular author. It is surprising, however, that arguments for semantic extension are not accompanied by proposals for the modification of the syntactic constructions accompanying semantically shifting lexical categories.

Not only nouns and verbs are involved in converting pairs. Adjectives have also been assumed to participate in zero-derivation, for instance, (a) *regular*, (two pints of) *bitter*, (a) *daily*, *roast*, (the) *final*, (a) *brick* (garage) and so on (Quirk & Greenbaum, 1989; Quirk, Greenbaum, Leech, & Svartvik, 1985). Conversion effects have also been found in units other than word-level syntactic categories: for instance, (i) conversion from closed-system words to nouns (*too many ifs and buts*); (ii) conversion from phrases to nouns (*one of the also-rans*); (iii) conversion from phrases to adjectives (*an upper-class manner* ~ *his manner is intolerably upper-class*); (iv) conversion from affixes to nouns (*... and other isms*). In the case of countable and uncountable nouns, Langacker (1987a, p. 189) proposes that, at the highest level of abstraction, there are the abstract schemas abbreviated to “count noun” and “mass noun”, with the overarching “noun” schema. The semantic structure (pole) of the noun schema is profiled by a thing, defined as “a region is some domain” (Langacker, 1991, p. 555). The region designated by a count noun is characterized as bounded, because it is spatially limited (e.g., *I’m fed up with this irritating sound*). The region designated by an uncountable noun is characterized as unbounded, as it is spatially unlimited (e.g., *Light travels faster than sound*). Although the two nominal instantiations form categories of their own, transition between them can legitimately be accounted for by means of a shift in the profiling of essentially the same base. Semantic extension results in the imposition of alternate profiles on the same base.

The following section will present a selection of meteorological expressions from a cross-linguistic perspective. Although the focus will finally be on the English equivalents of such expressions, it is important to obtain a broader view of this universal domain, at least across some

Indo-European languages.

### 3 The domain of meteorological expressions

Talking and writing about weather is common to probably all linguistic communities and cultures. Different language systems have developed numerous ways of expressing conceptualizations of weather conditions. As a result, a variety of linguistic means of expressing such conceptualizations can be found across languages and language families (see, e.g., Eriksen, Kittila, & Kolehmainen, 2010). Although the numbers and types of linguistic ways of describing weather conditions are impressive, they all employ key lexical categories, such as the English words *rain*, *snow*, *hail*, *wind*, *fall*, *blow*, *pour* etc., and their more or less distant synonyms. English itself is full of various instantiations of the above lexical categories. A cursory survey of the Corpus of Contemporary American English (COCA) (Davies, 2008–) provides several exemplary meteorological expressions accommodating the above words (the number of tokens is given in brackets):

- |     |                      |                                  |
|-----|----------------------|----------------------------------|
| (1) | in the snow (2,008)  | it was pouring (63)              |
|     | in the rain (1,942)  | it's windy (52)                  |
|     | it rains (693)       | it's/was going to snow (34)      |
|     | it was raining (543) | it never rains (27)              |
|     | it's raining (505)   | a light rain was falling (14)    |
|     | it snowed (194)      | it was raining cats and dogs (7) |
|     | it snows (150)       | it hailed (5)                    |
|     | the wind howled (98) | a strong wind was blowing (3)    |
|     | the rains came (74)  | in all this rain (3)             |
|     | it's pouring (72)    | the rain rained (1)              |
|     | etc.                 |                                  |

The expressions in (1) constitute only a fraction of what one may find in the domain of meteorological expressions. In the analysis, instances of so-called deliberate metaphors (Steen et al., 2010), such as *stones rained down on him*, *a rain of bullets* etc., will be omitted. However, one should be able to accommodate such metaphorical expressions alongside non-metaphorical ones seamlessly in a comprehensive descriptive model.

Like all finite clauses in English, meteorological expressions in the form of finite clauses also require an overt subject. In most cases, it is the “prop” word *it* or a (converted) noun (*rain*, *snow*, *hail*). In earlier accounts of English grammar, the “prop” subject *it* is held to be meaningless or semantically “empty” (Quirk & Greenbaum, 1989, p. 173; Quirk et al., 1985, p. 748) or “unspecified” (Jespersen, 1933, p. 155). Several related languages with the same syntactic requirement also display relevant “prop” subjects, for instance:

- |     |    |            |                         |             |
|-----|----|------------|-------------------------|-------------|
| (2) | a. | es regnet  | ‘it rains/it’s raining’ | [German]    |
|     | b. | het regent |                         | [Dutch]     |
|     | c. | det regnar |                         | [Swedish]   |
|     | d. | det regner |                         | [Norwegian] |
|     | e. | det regner |                         | [Danish]    |
|     | f. | það rignir |                         | [Icelandic] |

Naturally, verbs other than *rain* also necessitate a “prop” subject, for example:

- |     |    |            |                               |          |
|-----|----|------------|-------------------------------|----------|
| (3) | a. | es schneit | ‘it snows/it’s snowing’       | [German] |
|     | b. | es donnert | ‘it thunders/it’s thundering’ |          |
|     | c. | es gießt   | ‘it pours/it’s pouring’       |          |

Other language families may be divided over the requirement of displaying an overt subject. For example, within the Romance language family, French requires overt subjects, as in:

- (4) a. il pleut 'it rains/it's raining'  
 b. il pleut depuis deux heures 'it's been raining for two hours'

but other languages in this group are content with covert subjects, as in:

- (5) a. Ø está lloviendo '(it) rains/(it) is raining' [Spanish]  
 b. Ø està plovent [Catalan]  
 c. Ø está chovendo [Portuguese]  
 d. Ø plouă [Romanian]  
 e. Ø piove [Italian]

In the constructions without an overt subject, only the verb constitutes the form and meaning of the meteorological expression. Similarly, Slavic languages – highly inflectional systems – are capable of dispensing with overt subjects in expressions equivalent to the *it's raining* construction. Otherwise, Slavic phrases equivalent to *falls rain*, *goes rain* etc. are exploited, as in:

- (6) a. Ø prší [Czech/Slovak]  
 b. (Ø) pada (deszcz) [Polish]  
 c. pada kiša [Croatian]  
 d. Ø dežuje [Slovenian]  
 e. Ø вали [Bulgarian]  
 f. пада киша [Serbian]  
 g. идет дождь [Russian]  
 h. ідзе дождж [Belarusian]  
 i. йде дощ [Ukrainian]

Languages also employ a variety of verbs designating downward movement, often mixed with sound. The range of possible verbs which elaborate the nouns *rain* and *snow* is quite broad. The following verbs are commonly found with the Polish nouns *deszcz* 'rain', *śnieg* 'snow' and/or *grad* 'hail': *pada* '(it) falls', *sypie* '(it) sprinkles', *tlucze* '(it) bangs', *wali* '(it) pounds', *bije* '(it) beats', *leje* '(it) pours', *sika* '(it) pisses', *raqbie/tnie/sieczce* '(it) chops, cuts, slashes' etc. (Twardzisz, 1998). For clarity, a specific noun designating the actual substance may have to accompany each of these verbs, for example:

- (7) a. deszcz leje 'rain is pouring'  
 b. śnieg sypie 'snow is sprinkling'  
 c. grad wali 'hail is pounding/banging'

The whole repertoire of meteorological expressions seems to be unlimited, even among the Indo-European languages. Other language systems exhibit comparable, and at the same time language-specific, features. Hypothetically, two conspicuous nominal senses are exploited universally, and these are a kind of active participant and a stative setting. These nominal senses of overt nominals, as well as covert subjects, are accompanied by verbs expressing a wide variety of processes. This hypothesis, however, needs to be tested extensively across more languages. Here, the article will be limited to expressions prevailing in English and will hypothesize about similar such effects potentially taking place in other languages. In Section 6, meteorological expressions will be analysed again with the aim of establishing regular types of semantic extensions observable in statistically significant expressions. In the following section, a domain remote from, and semantically unrelated to, meteorological expressions will be explored. Apart from confirming obvious differences, the purpose of the comparison of the two distant domains is to reveal intriguing similarities which may shed light on the conceptualization of semantic roles more broadly.

The apparent ubiquity of the effects examined here necessitates the exploration of any domains randomly chosen, no matter how detached from each other they appear to be. With this in mind, the domain of names of political states will undergo a thorough analysis of semantic effects revealed in written specialist discourses.

## 4 The domain of names of political states

Names of political states constitute a sub-category of place names, which, in turn, come under the rubric of proper names. Typically, proper names (*East End*) are contrasted with common nouns (*sledge hammer*) (Quirk & Greenbaum, 1989; Quirk et al., 1985). Primarily, state names designate conventionalized locations and naturally combine with prepositions to render complete locative relations (e.g., *Her sister has lived in Finland for several years.*). Other contextual factors (e.g., the kind of verb) determine the locative character of state names (e.g., *The pipelines will bypass Ukraine, Belarus and Poland...*). Linking verbs following state names in the position of an active-voice subject are commonplace (e.g., *Turkey has become an important example of a country...*, *Croatia has been willing to accept refugees*). State names appear as both subjects of active-voice sentences (e.g., *Greece sank into recession*) as well as those of passive-voice sentences (e.g., *Botswana was colonized by the British*). They frequently serve as possessors in Saxon genitive constructions (e.g., *Latvia's euro ambitions are on hold*). Syntactic objects are commonly filled with state names (e.g., *... massive earthquakes hit Haiti and Chile this year*).

The range of interactions which active-voice subjects with state names enter seems to be unlimited. Here is a small sample of such constructions:

- (8) a. Thailand recognized the legitimacy of gay marriage last month.  
 b. Venezuela has exchanged old bonds.  
 c. Vietnam will borrow over \$70 billion next year.  
 d. Israel was buying up Hungary.  
 e. Ecuador raised duties on 600 goods.

Any such expressions are instantly recognized as metonymic (Croft, 1993; Kövecses, 2002; Radden & Kövecses, 1999), or more generally as reference-point phenomena (Langacker, 1993b). Interpretations provided for such statements vary across numerous accounts, but they aim to show a human factor (hidden) behind state names (e.g., ‘people in the state’, ‘a leader for a state’, ‘representatives of’, ‘those responsible for’ etc.). Pre-cognitive accounts highlight the “stand-for” or “refer to” relationship between the name itself and the actual actor (Nunberg, 1978). In the classic view, metonymy is understood to involve transfers of, or shifts in, meaning (see, e.g., Ullmann, 1957, p. 232, 1962, p. 218). Cognitive researchers reject a (mere) “stand-for” relationship and underline a conceptual character of metonymy (Radden & Kövecses, 1999, pp. 17–19). Conceptualist approaches to metonymy reject its merely linguistic character as a figure of speech, postulating instead that it is a mental phenomenon. They deny the substitution function of the words involved, but stress cognitive relationships between them to form new, complex meanings. Such occurrences are claimed to be pervasive conceptual mechanisms in language (Feyaerts, 2000, p. 59; Panther & Thornburg, 2004, p. 92). The critical point is the claim that the mechanism in question is believed to “provide mental access” from one entity to another unnamed entity without naming the latter (Kövecses, 2002, p. 144; Langacker, 1993b, p. 30). Thus, the state names listed in (8) are claimed to direct our attention to other unmentioned entities, such as governments, their employees, representatives, presidents, prime ministers and so on. A survey of different points of view adopted by cognitive linguists on conceptual metonymy has been extensively discussed in Twardzisz (2014a, 2014b).

Without denying some of the metonymic effects taking place in the above cases, the findings demonstrated by cognitive metonymy researchers are not sufficiently convincing. The overarching assumption of conceptual metonymy research is that metonymy is more than a mere linguistic phenomenon. As such, it requires the constant refinement of unnamed metonymic targets, which supposedly pin down with more precision the otherwise vague reference points. As has been seen in numerous accounts, such refinements of metonymic targets often lead to confusing and inconsistent proposals (Twardzisz, 2014a, pp. 91–93, 2014b, pp. 113–116). In each such proposal, there is a different specification of a target, while the reference point appears to be invariably the same (i.e., the name of a political state). Multiple designations of metonymic targets seem to be largely

intuitive. In the case of state names, the specifications of metonymic targets vary from account to account and involve a range of entities such as “place”, “people”, “voters”, “national government”, “actions of national governments” etc. (see, e.g., Croft, 1993, p. 353, 2002, pp. 184–185). There is no denying that in many cases the name of a given state conventionally invokes its government in political contexts (e.g., *Hungary > the Hungarian government*). However, it is not certain whether metonymy opens up an unlimited range of multiple interpretations to choose from. The identification of metonymic targets of state names is propelled by the conviction that entities other than the actual reference points (state names) are in need of further explication. Once the process of target identification is in place, it becomes unstoppable as more and more fine-grained entities are pinpointed and deliberately invoked.

The incessant individuation of metonymic targets is considered here to be problematic as these targets reflect researchers’ subjective choices and fit their argumentative frames. However, these radically individuated metonymic targets do not have to be, and are not, shared by other researchers with other research goals. Moreover, there may be many more targets identified in other related contexts, making the resultant multitude of senses unmanageable for descriptive purposes. What is worse, various research results show that markedly distinct targets are postulated for political state names used in similar syntactic constructions.

At the far end of the continuum of possible roles played by state names, there are those assimilated to human participants. Depending on the metaphoric import of the accompanying verb, the name is re-interpreted as a human actor performing a particular activity. In the sentence *Iran made an announcement yesterday*, the target of the metonymic state name is identified as “an individual or individuals in charge”. The human-like characteristics of the following names are indelibly rooted in the following verbs and post-verbal elements:

- (9) a. Ukraine said it would pay its debt in full.  
 b. Japan issued sharp criticism.  
 c. Burundi looked east for trade.  
 d. Estonia celebrates its 100th birthday.

Cognitive literature is full of multifarious interpretations of metonymic effects occurring across unlimited masses of data. The number and variety of interpretations is a result of a self-propelling metonymy business which dictates that more and more detailed senses are allegedly involved. Based on the particulars of individual studies, their authors propose metonymic targets complying with the specifics of their data.

The alternative mechanism of “active zones” (Langacker, 1984, 1987a, pp. 271–274, 1991, 1993b, 2009, p. 50), launched somewhat independently of metonymic targets, does not appear to solve much of the dilemma created by their arbitrary identification and assignment. The two mechanisms, metonymic target identification and active zone assignment, evidently overlap, but their results demonstrate certain constructional and contextual differences. One may wonder whether these contextual differences are sufficient to employ somewhat different accounts. Depending on the research goal, either metonymic targets are sought or else active zones are assigned. In the case of a political frame (e.g., *Nixon bombed Hanoi*), the “controller for controlled” or “responsibility” metonymic analysis and explanation is preferred (Lakoff & Johnson, 1980, pp. 38–39; Panther & Thornburg, 2004, p. 108). In the case of a non-political frame (e.g., *David blinked/swallowed* etc.), the “active zone” analysis is favoured (for details, see, Twardzisz, 2014b, p. 113). Although the contextual differences between the two statements are evident, it is not clear why two different analyses are applied instantly in both cases. Metonymy, as opposed to active zones, is not prescribed once and for all to political contexts, and vice versa.

This article argues for a more explicit and consistent solution, grouping a diverse range of targets under only two unequivocal categories of settings and participants. Rather than providing mental access to numerous and confusing potential targets or active zones, both meteorological expressions and state names undergo semantic extensions between only two accurately determined

roles: settings and participants.

## 5 State names as settings and participants

In a general scenario pertaining to clause structure, a certain canonical model involves some “energetic interaction of discrete, mobile participants within a stable and inclusive setting” (Langacker, 1987b, p. 383). The participant/setting dichotomy lies at the heart of the phenomenon of transitivity, which is characteristic of some, though not all, sentences with two or more nominals (Smith, 1994, p. 10). Based on the so-called “stage” model, a setting is a “global, inclusive region within which an event unfolds or a situation obtains” (Langacker, 1991, p. 553).

In cognitive semantics, the role of the construal of meaning is crucial. How a given entity is understood, that is to say whether it is conceptualized as a participant or setting, is very often the matter of subjective rather than objective factors. It is the speaker (conceptualizer) who chooses to view an entity as either a participant or setting. In support of this hypothesis, Langacker (1987b, pp. 389–390), discusses spatial and temporal settings in (10a) and (10b) respectively:

- (10) a. *This arena* witnesses many thrilling contests.  
 b. *Tuesday* saw yet another surprising development.

The setting-subjects *This arena* and *Tuesday* take verbs of visual perception and abstract nouns in the post-verbal position. Despite the verbs *witness* and *see*, characteristic of humans, the subjects are neither humans nor personifications. As intransitive processes, the sentences in (10a) and (10b) result in unacceptable passives, as in:

- (11) a. \*Many thrilling contests are witnessed by this arena.  
 b. \*Yet another surprising development was seen by Tuesday.

The mere presence of two nouns in the positions of the subject and object does not automatically guarantee that the sentence is transitive (Langacker, 1991, pp. 301–302). Consider the following sentences:

- (12) a. The UK displaced Germany as the biggest exporter.  
 b. Germany was displaced by the UK as the biggest exporter.  
 c. Italy approaches the 150th anniversary of its unification.  
 d. ?The 150th anniversary of its unification is approached by Italy.  
 e. Nigeria saw the highest incidence of abduction.  
 f. \*The highest incidence of abduction was seen by Nigeria.

In (12a), both *the UK* and *Germany* act as legitimate participants. As a result, the passive voice in (12b) is applied correctly. The sentence in (12c) is intransitive as *the 150th anniversary ...* does not function as a fully-fledged participant. Also, the process *approaches* does not instantiate an energetic interaction between two entities, as there are no two interacting entities. What remains unclear though is the profile of the subject *Italy* in (12c). Judging by the accompanying verb, *Italy* can perfectly well function as a participant but even this role does not help with the dubious acceptability of the passive in (12d). The state name *Nigeria* in (12e), despite an active verb following, is a setting for an abstract entity rather than an active participant. The ill-formedness of the passive sentence in (12f) confirms the non-participant status of the active voice subject *Nigeria*. In fact, the idea of the verb *see* as an active verb loses its impetus in view of the fact that the setting-subject prefers a verb interpreted as ‘provide an environment for’ rather than one meaning ‘notice someone or something’ (Twardzisz, 2013, pp. 207–208). Other occurrences of state names as settings proliferate specialist discourse, for example:



- (13) a. Belgium is a microcosm of the EU.  
 b. Cambodia is now a sanctuary.  
 c. Canada remains one of the world’s most tolerant countries.  
 d. Jamaica has seen no executions since 1988.  
 e. Saddam Hussein invaded Kuwait in 1990.  
 f. The French could hold neither Syria nor Lebanon.  
 g. Two thousand troops from Djibouti are to be made immediately available.

Names of states functioning as settings are not reserved for subjects. They appear in all other syntactic functions. The participant-setting dichotomy is sufficiently detailed and at the same time it avoids a confusing multitude of metonymic targets.

Exact proportions and statistics regarding the two roles played by names of states are difficult to assess due to the proliferation of such names. The high frequency of occurrence of state names in specialist discourses makes it difficult to conduct a carefully planned corpus search and analysis. One such analysis has been reported in Twardzisz (2013, Ch. 5). A tailor-made corpus was compiled, consisting of all occurrences of 192 state names used in *Newsweek*’s and *The Economist*’s online archives throughout 2010. Automatically retrieved data underwent a manual search of all the syntactic contexts hosting all the state names. Although the search focused on personifications with state names, all occurrences with their syntactic contexts were gathered and categorized. Locative expressions, headed by (locative) prepositions, were separated from constructions in which state names occupied one of the following positions: (1) the subject of an active sentence, (2) the object of an active sentence, (3) the subject of a passive sentence, (4) the object of optional *by* in a passive sentence and (5) the possessor in the Saxon genitive construction. Overwhelmingly, locative expressions with state names top the frequency list. Numerous other stative constructions contribute to the predominance of the role of a setting played by state names. All the above-mentioned syntactic contexts constitute a minority among all occurrences of all state names. Even adding prepositional phrases with *for* and *with* (e.g., *a carrot for Cuba*, *flirt with Venezuela*) to the pool of the above participant-like syntactic contexts, the numbers of possible participants are still lower than those of settings. Across the five frequency groups into which all state names were divided, constructions with participants range from 11% to 32%. Given this, settings constitute between 89% and 68% of all occurrences of state names in this analysis.

Settings and participants form sufficiently conspicuous categories. Settings are fairly vague and dormant physical locations and participants are active and mobile entities. Participants can be thought of as animated settings, which take part in all kinds of interactions and perform activities. Depending on the accompanying verbs, names-participants can be further sub-categorized as, for example, “doer” (*China did its bit...*), “loser” (*France has lost...*), “peddler” (*Azerbaijan peddles...*) etc. These verb-motivated semantic sub-categories, like fine-grained metonymic targets, are too detailed to be of any use for general descriptive purposes. In order to maintain a manageable and synthetic level of descriptive accuracy, the article will limit itself to the two categories of settings and participants.

Having established that names in the domain of political states should preferably be interpreted as either participants or settings, let us now see how this differentiation works for the meteorological lexical categories.

## 6 Meteorological expressions as settings and participants

The concept of a setting has already been explored to some extent in linguistic literature. English, German and French meteorological expressions with the verbs *rain* and *snow* require *it*, *es* and *il*, respectively. The so-called “semantic dummy” in generative syntax, the *it* of meteorological expressions has received the label of “the ambient *it*” (Bolinger, 1973, 1977; Chafe, 1970; Ruwet, 1986). The ambient *it* is interpreted as a “maximally schematic setting” or as an “all-encompassing

environment” (Bolinger, 1973, p. 261, 1977, Ch. 4), one that has no intrinsic meaning but constitutes the very notion of a setting. According to Bolinger, meteorological expressions with *it* constitute part of all *it*-constructions, where meteorological *it* has a very general meaning and encompasses notions such as weather, time, and circumstance, which becomes evident from the context.

Endorsing Bolinger’s (1977, p. 84) view of the “ambience” or “all-encompassing environment” of the subject *it*, Langacker (1991, p. 366) proposes that the “atmospheric” sense of *it* is additionally characterized as an abstract setting. Given the choice between participant-subjects and setting-subjects, the *it* of meteorological expressions enjoys the status of a non-participant of a relation. This assumption can be evidenced by the fact that the following sentences with *it* or *il* do not become passivized:

- (14) a. Il tombe de la pluie. ‘It falls (some) rain.’  
 b. \*De la pluie est tombee par lui. ‘(Some) rain is fallen by it.’  
 c. It’s raining cats and dogs.  
 d. \*Cats and dogs are being rained by it.  
 e. It’s raining big drops.  
 f. \*Big drops are being rained by it. (after Langacker, 1991, p. 365)

The noun phrases following the verbs in (14a), (14c) and (14e) are claimed by Langacker not to correspond to direct objects, in the narrow sense of the term. *La pluie* in (14a) and *big drops* in (14e) correspond to the actual substance that does the raining. In the case of the noun phrase *cats and dogs* in (14c), it is not cats and dogs that are seen as falling downwards from the sky as the actual meteorological substance. *Cats and dogs* is rather the target of the process of raining and as such does not correspond to the subject *it*. Jackendoff’s (1983) lexicalist approach, though different in detail from that of Langacker’s, confirms the semantic character of *it* in *it’s raining*.

The lexical information for the verb *rain* has the following form: [[GO]<sub>[thing RAIN]</sub>, [path DOWNWARD]]. Paraphrasing the above formula, one can say that *rain* is a verb designating the movement of the “thing” *rain* along the “path” in the downward direction. In this notation, the verb *rain* subsumes its subject, or, better still, its “theme”.

English lexical categories such as *rain*, *snow*, *hail*, *sleet* etc. function as either nouns or verbs, with a debatable morphological direction of derivation, if any. In principle, any one-syllable noun can become a verb and vice versa, by either extending or imposing an altered profile on the same base. A cognitive semantic description of major constructions involving the lexical categories *rain*, *snow* etc. requires three distinct profiles imposed on the same base, namely those of a “process”, a “thing” and a “setting” (Langacker, 1991, p. 366). Due to the lack of rigid conceptual boundaries, it is relatively easy to conceive of altered profiles imposed in different contexts within one domain of a meteorological substance such as rain.

One of the three profiles proposed designates the category *rain* in the role of a setting/abstract region. This sense is present in such clauses as *The rains came* (74, COCA), *The rain continued* (54, COCA), *We had a good rain* (1, COCA) etc. In the translation equivalent from other languages *It falls rain* (0, COCA), we confront the setting-subject construction. Here, *it* is an abstract location for the very thing *rain*, which also constitutes some kind of a setting, with both elements semantically inseparable. Viewed as such, the construction *It falls rain* corresponds semantically to the typical constructions found, among others, in Japanese, Chinese or Polish. In all of these constructions, the profile of a setting corresponds to the trajector (or primary figure – Langacker’s technical terms) of any process in which this setting will appear. This is probably the most abstract case, as the primary figure is conceived of as an all-encompassing region, which itself performs the process of raining.

The second profile schematically depicts the thing *rain* (which acts as the trajector), in a clause such as *Some rain came at nighttime* (1, COCA). This clause differs from the ones considered above primarily in that (some) *rain* profiles here the actual water, that is, a thing. The noun *rain* is

also a participant in the entire process. In the case of non-English constructions such as *rain is* (Basque) or *rain goes* (Russian), the noun *rain* contains a significant semantic load and shows up in both nominal senses. This profile also designates “redundant” constructions of the type *rain rains*, occasionally found in German, French, Turkish, Russian and others. In such constructions, the semantics of the noun overlaps to a large degree with the semantics of the verb (Ruwet, 1991).

The third profile shows the category *rain* in its processual function, as the English verb *rains* in *it rains* (693, COCA), or the Spanish *llueve*. In these two examples, it is not clear what or who does the raining. In other words, a potential agent is missing altogether. To use Quirk’s terminology, verbs like *rain*, *snow*, *hail*, *thunder*, *sleet* etc. are so-called “non-agentive duratives” (Quirk et al., 1985, p. 201). Prototypical processes require a primary figure – a trajector, corresponding to a subject and – a secondary figure – a landmark, corresponding to a direct object. The process of raining as worded in English, and in a number of other languages, does not meet these syntactic and semantic requirements. Thus, it is necessary to recognize and fully accommodate processes which do not exhibit clearly defined trajectors (not to mention landmarks), as is the case with verbs such as *rain*, *snow* etc. Such “deviation” does not seem to be unnatural when one considers what kind of substance does the raining, snowing and so on. In fact, it may be argued that the opposite is “unnatural”. According to this interpretation, the processes *rain* or *llueve* are still considered to be complex temporal relations in which drops of water move downwards. What is crucial for the process, as can also be observed here, is that elements (drops) of the process and their interconnections are profiled when changing their position along a vertical axis (cf. Jackendoff, 1983). Therefore, it is not necessary to seek and establish the trajector of this process. The most important requirement, that the process *rain* contains the indispensable process *rain*, is met regardless.

The third profile highlights the processual character of such expressions, typical for *pro*-drop languages. The first two profiles make the distinction between the two types of subjects: setting and participant, respectively. The differences between all three types of constructions reside in altered profiles imposed on essentially the same base. In the case of the setting/participant alteration, which is our key conversion pair in this analysis, focus is taken off the all-encompassing region and is fixed on the very thing *rain*. Though the degree of the alteration is a relative matter, it may be seen as insignificant. The three profiles discussed above are accommodated in diagram format (Langacker, 1991, p. 366).

The language data at hand are largely covered by the three schematic profiles outlined above. Meteorological expressions from *pro*-drop and non-*pro*-drop languages are schematically handled by these three options. Expressions with nominal subjects, for example, *The wind is blowing* (160, COCA), *The rain was pouring* (7, COCA) and others, can be accommodated under the second profile and are sanctioned by its participant-like image schema. What remains to be addressed is the minority of meteorological expressions with agentive subjects, usually corresponding to a divine causer/agent, as in:

- (15) a. [...] the Lord God had not caused it to rain upon the earth [...]. (Gen., 2: 5)  
 b. God will rain a heavy rain on you [...]. (Bleotu, 2012, p. 60)

Such expressions instantiate agentive interactions which open up a new perspective for the language of meteorology in general. Due to their marginal character in contemporary language, they should be treated as a linguistic curiosity, rather than a distinct fourth category (profile).

Semantic extensions in the domain of meteorological expressions show three distinct zero-derived categories (profiles): settings, participants and processes. These three profiles involve different semantic shifts without any change of form. Semantic extensions in the domain of political state names involve two zero-derived categories (profiles): participants and settings. For a processual extension of a state name, a suffix has to be added, for example, *Americanize*, *Germanize*, *Russify* etc. In this way, all three types of extensions are available in both domains. Semantic extension combined with formal suffixation is not the same type of operation as morphological

zero-derivation. Nevertheless, the process of suffixation must also involve semantic extension, which is the focus of this article. The inability of state names to zero-derive verbs is a specific feature of this domain. In the domain of meteorological expressions, zero-derived verbs are available for several categories (*rain, snow, hail*). Morphological diversity within domains is the norm, rather than an exception. In principle, a shift between the syntactic categories of nouns and verbs involves the addition or deletion of the dimension of time and whatever goes with it. This dimension is not required by participants and settings which are profiled solely within the nominal base. As additional phenomena in this analysis, extensions from nouns towards verbs can be ignored here as irrelevant for nominal participants and settings.

## 7 Conclusions

This study has examined the application of analogous semantic extensions to two conceptually remote domains. Similar analyses can be conducted in other domains in order to ascertain whether the two nominal extensions, settings and participants, are categories independent of any particular domain. The cognitive model recognizes three kinds of structures: phonological, semantic and symbolic, with the third structure combining the first two. With the same form retained, it is the semantic structure (pole) which naturally accommodates apparently different changes in a very systematic manner. Langacker’s (1987a, 1991) model stresses the role of conventional imagery in meaning construal, being the result of engaging the speaker’s cognitive abilities in the conceptualization process.

The analysis conducted above employed some of the basic tools of the cognitive model regarding meaning construal. Specifically, modified profiles imposed on the same base are claimed to account for zero-derived expressions in semantically remote domains, namely, meteorological expressions and constructions with the names of political states. Profiling these (lexical) categories as either settings or participants, and only additionally as processes, is consonant with the theoretical underpinnings of cognitive grammar. What is more, it ensures the naturalness of the description, which is also in line with the naturalness of the phenomena under consideration.

The goal of this article was to test the applicability of the same (theoretical) concept of semantic extension, operating between the nominal role of a participant and that of a setting, to two distant domains. As a mainly theoretical contribution, there was little room for a painstaking search of corpus data. Nevertheless, none of the language examples used above are unattested. All data invoked are “usage-based” in Langacker’s sense (they are natural, illustrative and mostly retrieved from COCA). Frequency analyses are difficult to obtain as it is not clear which corpus, genre, mode and variety of English should be taken as representative to be scoured. Statistics of use, even if possible to obtain and finally provided, would not have influenced the theoretical claims made here.

This article has made the argument against the alternative accounts proposed by the “metonymy” and “active zones” interpretations. The article has invoked other accounts by the author which demonstrate more extensive argumentation against metonymy as a device for explaining semantic extension. Without denying some basic metonymic effects (e.g., conventional extension: [name of state] > [the state’s government]), the inconsistent results of metonymy research, in which each individual author proposes her/his own list of fine-grained metonymic targets, is challenged. Such proposals may be interesting, but at the same time are highly subjective in postulating impressionistic targets and have little descriptive effect due to being massively unrestrained.

Two allegedly incompatible analyses included in the article are in fact congruent with the theme of this paper. The investigation focuses on “semantic extensions in conceptually remote domains”. The two domains involved, meteorological expressions and names of political states, are undoubtedly remote from each other in many respects. The impression of oddness and separateness one may have is the direct result of combining any two “conceptually remote domains”, not only the two compared above. This combination, however, is what constitutes the primary purpose of

this investigation and, at the same time, its inevitable limitations.

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