Zone Activation Is Not Metonymization

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[Abstract] Zone activation and metonymization are both cognitive operations. The former as a ubiquitous phenomenon concerns all readings and senses, as well as meaning facets, but is different from the latter in that zone activation takes place within senses at the level of qualia structure, while metonymization is a contingent relation that occurs between senses. Active zone phenomena are complicated as they can be associated with a nominal referent in some unique way, in addition to their frequently functioning as sub-parts of a profiled entity.

[Keywords] active zone, zone activation, metonymization, cognitive operation, part-whole relationship

Introduction

"Active zone" as a concept used for explaining linguistic indeterminacy was first proposed in Langacker (1984). Since then it has been taken up in different works of his with the original ideas or even the same wording kept intact (Langacker, 1990; 1999; 2009). Owing to the overarching nature of "active zone" as a concept, different studies have been made as to what actually is active-zone phenomenon, what are the substantial differences, if any, between zone activation and metonymization on the one hand, and those between zone activation and facetization on the other. Among the studies which have inspired the present one include Paradis (2004; 2011), Geeraerts and Peirsman (2011), Barcelona (2011), and Bierwiaczonek (2013), in particular. So far, however, no special study has appeared concerning a true picture of fundamental differences between zone activation and metonymy in the proper sense of the term. Built on previous researches, and supported by typical examples, this study, speculation- and comparison-oriented, aims to reveal basic differences between the two linguistic phenomena.

Active Zone

Active zones, based on Langacker (1984, p. 177; 1990, p. 190), are "those portions of a trajector or landmark that participate directly in a given relation". From his classic example, it is clear that the direct participants in the specific BITE relation are neither the "dog", nor the "cat" as a whole, but the "focal areas" (1984, p. 177; 1990, p. 190) of the two living entities, i.e., the teeth and, to a lesser degree, jaws of the dog, and the specific part(s) of the cat being bitten:

(1) a. Your dog bit my cat.   b. Your dog bit my cat on the tail with its sharp teeth.

What should be pointed out is that, in (1a), there are, indeed, active zones, which, however, are neither salient nor autonomous, and much less clearly demarcated. Further on that phenomenon, Langacker (1984, p. 177; 1990, p. 190) added insightfully that, to the relational conception, the participation of certain areas is obviously more direct and critical than that of others. Further instances as follows reveal the ubiquity of active-zone phenomena (cf. Langacker, 1984, p. 178):

(2)   a. David heard a noise.   b. The customer waved.

        c. The receptionist smiled happily.   d. The cow is chewing the cud.

In the cases of (2), different facets or parts of the trajector or syntactic subject, selected as the direct participants in the relations represented by the verbs, are all in the active state and thus function as active zones. However, Langacker (1999, pp. 63, 66; 2009, p. 50) further claimed that active zones do not have to be confined to the sub-parts of a profiled entity, and that they generally need only to be in a certain relation with the nominal referent. In other words, the discrepancy between the profile and the active zone (hereinafter referred to as "profile/active-zone discrepancy" or simply as "zone activation") of an entity need not be based on a part-whole relationship, but merely requires a certain unique association between the directly involved part and the integral whole. Surprisingly, the supplementation of the definition seems just to complicate the active-zone problem, as Langacker extended the concept to cover what is normally known as metonymy. Still, that argument of Langacker's should be illustrated as follows:

(3) I'm in the phone book.

(4) The kettle is boiling.

(5) That car doesn't know where he's going.

The target concepts (i.e., "active zones") of the above three examples are the name together with phone number of the speaker (profiled as "I"), the water in the kettle, and the driver of the car, respectively. However, most of the linguists would consider (3), (4), and (5) as typical metonymies. And it is just because of his over-extension of the active-zone concept to cover the whole area of metonymy that Langacker's active-zone theory has given rise to controversies, which he himself seemed to be somewhat aware of, as he claimed that the active zone phenomenon like (1) "displays a kind of metonymy, wherein a pivotal entity (here a part) is referenced only indirectly, via the term for another, associated entity (the whole) (Langacker, 1999, p. 62). This claim involves the controversial consideration of (1) as metonymic.

Granted that zone activation is "a kind of metonymy", as Langacker asserts, then, to what degree does it belong to metonymy? Is it prototypical or marginal? The majority of the examples given in Langacker (1984/1990) of zone activation reveal an obvious characteristic, i.e., they are the transfers either from Wholes to Parts or from Parts to Wholes. The latter pattern is chiefly represented by the *b* sentences of (13)-(15)/(12)-(14) in Langacker (1984/1990). What needs, first of all, to be clear are the similarities and differences of Langacker's examples.

Similarities and Differences of Langacker's Examples

It is noted that Langacker's (1984/1990) examples manifest substantial differences as well as commonalities. First, the active zones involved in a relation, even if lexicalized, cannot operate independently of a living organism or an organic entirety; in other words, active zones are, for the most part, non-autonomous entities, illustrated by examples such as (1) and (2). Second, the active zone is largely vague and indeterminate, as shown by (6) as follows, in addition to all the instances of (6) in Langacker (1984). In other words, those instances show that, only when the speaker is not able to accurately or appropriately designate the target concept, does s/he resort to zone activation. Example (6), illustrated by the nominal "my leg", shows the largely vague active zone of an entity in a relation:

(6) The coral stung my leg.

Generally, it would be impossible for every part of one's leg to be stung by a coral or corals except on a very special occasion or unless one intends it to happen. Thus, as the landmark of STUNG, the "leg" does not participate as a whole in the relevant process or relation, yet it would be infeasible to designate the accurate affected position of the leg. This is also basically true of (1).

And even in so clear a case as (1), the active zone of "your dog" is not just confined to "teeth"; otherwise, Example (7) would be perfectly acceptable, while Example (8) would have been regarded as deviant. (See below.)

(7) The baby's teeth chewed the orange.

(8) The baby chewed the orange with its newly emerged teeth.

In Example (8), the active zone is exceptionally assigned the instrument role within the action schema, which means that "baby" as the agent is the major participant of the event all the same. In fact, quite often, the parts directly involved in a relation are not yet conceptualized or lexicalized owing to their vagueness and indeterminacy as active zones, which is reflected in Example (6), as well as Examples (9) and (10) below from Taylor (2002, p. 111):

(9) John kicked the table.

(10) My car got scratched in an accident.

In Example (9), the active zones involve a certain area of the kicker's foot and that of the table being affected, yet neither is easy to be designated. As for Example (10), the active zone is one or more of the indeterminate areas of the car's bodywork. In contrast, in Examples (3)-(5) the active zones or target entities are so fully independent as to be both conceptualized and lexicalized. Summarized as follows are three different situations in terms of the status of the target entities: First, the entities directly involved in a relation, though lexicalized, are unable to operate independently of a living organism or an organic entirety; second, the targets, which are vague and indeterminate, and, for the most part, unlexicalized, makes it difficult to identify the active zones; third, the targets are autonomous entities already conceptualized and lexicalized. The first two situations constitute the proper active-zone phenomena, while the third shows the status of a true metonymy.

Clarification of the Relationship between Active-Zone Phenomena and Metonymization

The above situations show that there ought to be different ways to solve the definitional problem of clarifying the relationship between active-zone phenomena and metonymization. The major consideration lies in the relation between the Part and the Whole. Thus, the first approach might be: All the "Whole for Part" transferred designations should be considered as special cases of active-zone phenomena. With such a perspective, we need only to be confronted with two broad types of non-metaphorical mapping, namely, the "Part for Whole" metonymy and the "active zone" phenomenon. The second solution to the problem might be: Treat cases such as Examples (3)-(5), whose target entities have been lexicalized, as true cases of metonymy rather than active-zone phenomena; meanwhile, classify the "Whole for Part" transferred designations as a subtype of metonymy.

The transferred designation based on the "Part-Whole" relationship is the definitional features of synecdoche, which normally is regarded as a special category of metonymy. To be specific, the cases in which the target entities have been conceptualized and lexicalized are metonymies rather than zone activation, and additionally, the typical "Whole for Part" cases where both the whole and the part have been conceptualized and lexicalized are indisputable cases of metonymization. Importantly, the expression "active-zone phenomenon" or its alternative term "zone activation" should be applied only to the "Whole for Part" designation where the part is either a conceptually vague and indeterminate area rather than a clearly demarcated and lexicalized zone, or indeed a conceptually clear and even lexicalized and yet non-autonomous entity. The present paper adopts the second solution, which is also advocated in Bierwiaczonek (2013).

Active-Zone Phenomena are Not to be Confused with Metonymization

The differences between the two types of construal can be described basically in four aspects as follows, which motivates the present author to adopt the second line of thinking as mentioned above. First of all, the prototypical metonymy allows itself to be paraphrased grammatically, which is hardly applicable to zone activation. Thus, Examples (3)-(5) can be paraphrased as Example (3')-(5'), which are hardly applicable to the instances of Example (2), represented here as Examples (2a')-(2d'):

(3') My name and phone number are in the phone book.

(4') The water in the kettle is boiling.

(5') That car's driver doesn't know where he is going.

(2a') ?? David's ears heard a noise.

(2b') ??David's hand(s) waved.

(2c') ??David's face smiled happily.

(2d') ?? David's digestive system is digesting.

In other words, only when the active zone of a predication diverges from its profile, can the former be spelled out periphrastically (Langacker, 1990, p. 197), such as Example (1b), so long as it is communicatively motivated, yet it is not normally possible in metonymy (Barcelona, 2011, p. 51), as the expression is no longer metonymy, once the target is explicit (cf. Examples 3'-5').

In linguistic practice, "a discrepancy between profile and active zone represents the normal situation" (Langacker, 1984, p. 178), which should be rejected as metonymy. Active-zone phenomena result from a significant conflict between limited linguistic resources and the infinity of conceptualizations. Owing to unlimited conceptualization, referentially one could do with only a certain degree of under-specification as expediency, and correspondingly human language makes use of zone activation for its normal function (Redden, et al., 2007, pp. 6-7).

Secondly, active-zone phenomena differ significantly from the "Whole-for-Part" metonymy in terms of whether a shift of reference is required or not. Owing to the violation of the co-occurrence restriction of the predicate, the metonym has to shift its reference, while in active-zone phenomena, the nominal referent can be literally understood without a shift of reference, as it is semantically fully compatible with the predicate, rather than disobeying the restriction. For an illustration, see the typical cases of metonymy as follows:

(11) The piano is in a bad mood. (This instance is indisputably metonymic if one excludes a less likely metaphorical interpretation, i.e., conferring animacy on the piano itself. cf. Barcelona,2011, p. 34).

(12) China Daily hasn't arrived at the conference yet.

Due to the violation of the selectional restriction, Examples (11) and 12) are not acceptable, unless they are understood as metonymy, in which *piano* and *China Daily* are construed as the player and the reporter, respectively, and therefore, accept the kind of predicates normally co-occurring with human nouns, here specifically, "in a bad mood" and "arrive at the conference". The choice of a "human-oriented" predicate automatically imposes a shift of reference on the "non-human" nominal, the process also known as "coercion" (Geeraerts, & Peirsman, 2011, pp. 91-92). In contrast, none of the subject nominals in the instances of Example (2) violates the selectional

restriction of the verbs with which they co-occur, and the subject-verb collocation is naturally understood and literally acceptable.

Thirdly, relevant to the second argument, metonymy in the true sense reflects the shift of identity, while zone activation neither demonstrates nor coerces the change of identity or shift of reference. Examples shown below:

(13) Proust is still widely read, though in general it is tough. (Croft, 2003, p. 178)

(14a)* I punched Bob and it got black, unable to see. (cf. Bierwiaczonek, 2013, p. 45)

(14b) I punched Bob in the eye, and it got black, unable to see.

The anaphoric "it" in Example (13) is acceptable, as "Proust" has undergone the metonymic transfer from HUMAN domain (source, the writer) to WORKS/PRODUCTS domain (target, the inanimate novels). In Example (14a), the name "Bob" is intended for the active zone (one of his eyes), yet the identity transfer is not allowed or simply rejected for a rational zone activation. In a nutshell, it is impossible to use the anaphoric "it" to refer back to the human nominal as the source for "the eye" as active zone. The reason for the acceptability of the anaphoric "it" in Example (14b) is that the active zone has already been made explicit in the preceding clause and, more substantially, the reference identity between "the eye" and "it" has been maintained.

Besides the three differentiations, significant differences exist between metonymization and zone activation in terms of the extent of extrinsicness versus intrinsicness on the part of the source and the target. Specifically, metonymies tend to rely more on extrinsic relations, while zone activation more on intrinsic relations, as normally active zones are highly intrinsic and inseparable from the entire entity. Noteworthily, "extrinsicness" and "intrinsicness" are not easy to define as a pair of primitive notions. In prototypical terms, the highly contingent relation between the container and its content, e.g., the bottle and the wine, is a typically extrinsic relation, while the relation between a specific scratched area of the surface and the entire car bodywork, or that between the semantic content of a book and its form as physical copy or electronic edition, is a prototypically intrinsic one.

The separation of zone activation from metonymization does not deny intricate cases between the two cognitive construals. For instance, in "My car is leaking oil", the "car" might be considered as metonymy for "the fuel tank of the car", while the particular leaking spot(s), visible or not to the speaker, might preferably be construed as active zone(s).

Scrutiny into Langacker's Approach

"Aspectual verb +object" should be analyzed as metonymy rather than zone activation. It is asserted in the present study that active zone phenomena should be confined only to transfers from the wholes to their parts which are either conceptually vague and unlexicalized or structurally non-autonomous entities, an argument which is quite different from the proposal in Langacker (1984/1990, Ch. 7), which, involving the "Parts for Wholes" transfer, and constituting an obvious challenge to the present approach, tried to analyze the following examples in terms of zone activation:

(15) a. He began eating dinner.   b. He began dinner.

(16) a. The orchestra started playing the next song.   b. The orchestra started the next song.

(17) a. The author finished writing a new book. b. The author finished the new book.

According to Langacker, the *a* sentence has the gerundive phrase as processual landmark, while the *b* sentence takes the landmark of the omitted gerund as the landmark of the main clause verb, and thus the whole process functions as the active zone. To make the matter more complicated, Langacker claimed that the contrast in Examples (15)-(17) draws on a systematic "polysemy" (Langacker, 1984, p. 181) of the predicate verbs, that polysemy is the normal state of affairs for common lexical items, exemplified by verbs such as "hear" having two semantic variants(ibid.), and that aspectual verbs such as "begin", "finish" manifest a pattern of lexical variation hinging on a permitted discrepancy between active zone and profile (Langacker, 1984, p. 185; 1990, p. 198). However hard he tried to illustrate the contrast between the pairs of sentences, his argument is unpersuasive and difficult to accept.

In grammatically metonymic terms, the *b* sentences in the above three examples are preferably interpreted as the "Part for Whole" transfer, that is, the nominal landmark (i.e., syntactic object) as a part is used to designate the relational predication as a whole, which consists of three clearly demarcated conceptual parts (trajector, relation, landmark), and two equally sharply bounded parts (the gerund and its object nominal). Thus, the transfer has all the crucial distinctive features of the Part-for-Whole metonymy on both conceptual and formal levels and thus intuitively more acceptable as metonymy. This argument is further supported not only by the converted verbs known as "object verbs", in which the landmark of the relation is made to stand for the relation itself (e.g., *to weed, to dust*, *to fish*, etc.), but also by converted nouns in which the relation (action) itself represents the trajector (subject) of the relation (action), such as *a sneak, a flirt*, *a coach*, etc. To be brief, the object verbs reveal the Part-for-Whole transfer, while the deverbal nouns reveal the Whole-for-Part transfer.

The Active-Zone Analysis is not Applicable to Raising Constructions

In addition, Langacker (1984, p. 186; 1990, p. 199) extended the active-zone concept to the analysis of raising constructions, illustrated as follows:

(18) a. To paint landscapes is tough.   b. Landscapes are tough to paint. (Object-to-Subject)

Langacker analyzed Example (18a) as the "whole process" functioning as the trajector, and Example (18b) as the raised object of the original infinitive now functioning as the trajector, with the remaining infinitive being "the active zone of the overall trajector with respect to its interaction with the difficulty scale" (Langacker, 1984, p. 187; 1990, p. 200). However, the assumed "active zone" in Example (18b) has actually been made explicit, with nothing implicit in the remaining part of the sentence expressed so transparently, and that makes Langacker's analysis even more problematic, as active zones are usually rather intrinsic and unprofiled by nature (cf. the final differentiation in the preceding section). Thus, the active-zone analysis of the raising constructions such as Example (18b) is both opaque and unpersuasive at all.

From the above discussion, it is clear that Langacker's active-zone concept involves five different types of linguistic phenomena. The first type, the "Whole for Part" transfer, is metonymy in the proper sense, in which the "part" as the target has been conceptualized and lexicalized. Examples are (3)-(5). The second, the "Part for Whole" transfer, is grammatical metonymy operating at the syntactic structure level. Examples are (15b)-(17b). The third is the non-metonymic active-zone phenomenon, in which the potential target is neither conceptualized nor lexicalized, or if it is indeed conceptualized, it is not lexicalized. Typical examples are (6), (9), and (10), illustrating zone activation in the proper sense.

For example, in "Lindy poked him in the ribs", "him" refers to an indeterminate position of the speaker's side which, despite the active zone being preliminarily specified by a prepositional phrase, is difficult for the speaker to identify conceptually and denote lexically, just because the unidentified affected spot of the ribs or side is neither conceptualized nor lexicalized. The fourth is the marginal type of zone activation based on other associations than a part-whole relationship. This is typically represented by the "copulative verb + adjectival complement", e.g., "That runner is fast". The fifth and last type is the raising constructions, which are irrelevant to metonymy, much less zone activation in the true sense. Examples are (18) listed above, and notably (11), (12) and (16) in Langacker (1984).

Active zone phenomena are complicated as they can be associated with a nominal referent in some unique way, in addition to their frequently functioning as sub-parts of a profiled entity. A clear-cut separation of zone-activation from metonymization will avoid the indiscriminate use of the active-zone concept for irrelevant linguistic phenomena, and ultimately guarantee its correct understanding and application.

Conclusion

Metonymization and zone activation as construal operations are both based on the Part-Whole/Whole-Part configurations and select the most salient meaning aspects of a conceptual structure on the occurrence of use. They differ with respect to conventionalization of the profiled meaning. Metonymization takes place between senses while zone activation in the proper sense operates within senses in monosemy, which is quite unlike Langacker's (1984) "polysemy" proposal. Zone activation is a much more pervasive construal than metonymization and concerns all readings on all occurrence of use.

Both metonymization and zone activation are reference-point and salience phenomena at the conceptual level. What is characteristic of metonymy lies in the inclusive relationship between the source and the target domains. Domain inclusion is divided into Source-in-Target and Target-in-Source, the former being subject to "domain expansion", while the latter being governed by "domain reduction", a different cognitive operation from the former. Governed by the cognitive pattern of the Part-Whole/Whole-Part transferred designation, metonymy involves domain expansion and domain reduction as two cognitive operations, while zone activation is a process of highlighting, governed by domain reduction only. Zone activation is and should be treated as a linguistic indeterminacy or underspecification. If the indeterminacy of language is unexceptionally treated as metonymy, then the concept of metonymy will be descriptively inadequate and theoretically useless.

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