The Complex Domain Matrix of Ditransitive Constructions

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Abstract

This study focuses on the semantics of ditransitive constructions. Its main aim is to show that the semantics of this type of construction is made up of elements belonging to different conceptual domains. In order to fully analyze the complexity inherent in the semantics of this type of construction we draw on the concept of domain matrixes, proposed originally by Langacker. An analysis of different types of constructions shows that the matrixes are made up at the same time of elements from different domain types. It was also proven that a hierarchy or a difference in prominence can be identified among the domains that make up the matrix. This is so given that some of them are necessary to characterize the matrix of one type of construction whilst others are not. Given this observation, we propose the existence of basic domains and secondary domains in relation to their participation in the configuration of a ditransitive construction matrix.

Key words

ditransitive constructions, domain matrix; prominence of domains

1. The semantic complexity of grammatical constructions

The complexity of the semantic base of linguistic elements is one of the main principles in Cognitive Grammar. This principle presupposes that the semantics of a linguistic element can be made up of aspects belonging to different conceptual domains. Clausner/Croft (1999: 7) exemplify this notion by affirming, for example, that the semantic lexeme *bird* includes, among other things, our knowledge of its size, the fact that it is made up of physical matter, its habitual activities (flying, eating), its lifecycle from egg to its death, etc. These aspects of the concept *bird* are specified in a set of different conceptual domain such as SPACE, PHYSICAL OBJECT, TIME, LIFE, etc. The set of domains presupposed by a concept (in this case by the

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concept bird) and evoked through its use constitutes its domain matrix (Cf. Langacker, 1987: 147).

Another example brought by Clausner /Croft (1999: 17) refers to grading adjectives such as *narrow/broad, sharp/dull, good/bad,* etc. The domain matrix of these adjectives combines qualitative dimensions (spatial property, feeling and valuing, respectively) with the domain SCALE. This domain gives to the semantics of the adjectives mentioned the idea of 'linear order' as regards spatial property, feeling or valuing and it is due to this aspect that adjectives are gradable. This example is particularly interesting for the purposes of this study given that it shows that the domain matrix can contain highly schematized domains, as is the case with the SCALE domain, which in turn can be combined with others of a more concrete nature¹. As will be seen in the rest of this section and especially in Section 3, the domain matrix for grammatical constructions is made up principally of schematized domains.

The main notion that we seek to defend in this work is that grammatical constructions in general and ditransitive constructions specifically also have a multidomain matrix. We will look at some examples that support this idea.

Firstly, we can observe the conceptual structure of a simple relational structure, as that related to prepositions of the type *above* or *below* used in expressions as in (1).

(1) The picture above the sofa. The sofa below the picture.

In commenting on the semantics of these types of prepositions, Taylor (2002: 205) affirms that they express a relation between objects in the vertical space domain and points out "that the relational profile includes not only the relation as such, but also the entities that are related" (206). Evidently, this does not suppose that these prepositions possess as part of their semantics reference to concrete entities (such as *picture* or *sofa*). Their reference to objects is more of a schematic nature. In order to support this affirmation Taylor (2002: 206-208) presents two main arguments: (1) prepositions such as *above* or *below* impose restrictions on the type of entities that can be related through their use. For example, it is necessary, for

¹ Clausner / Croft (1999) consider image schemas as a specific type of conceptual domain and show through the example commented on above and others that they are participants in the domain matrix of many concepts.

both to be concrete spatial objects. Therefore the use of expressions such as the picture above the enmity would be inappropriate. In other words: these prepositions possess as part of their conceptual content a specification (schematic) on the types of object that can be related through their use; (2) in some circumstances it is not necessary to explain lexically one of the entities related through the use of the preposition. The example in (2) illustrates this possibility:

(2) The sky above.

The possibility to construct through the context the conceptual content of the omitted lexeme ('the Earth surface' in the case of (2)) is considered by Taylor as an indicative that the semantics of a preposition possesses aspects that can help to successfully realize such a construction process.

If the analysis proposed by Taylor is correct, it can be concluded that the semantics of the prepositions *above* or *below* is made up of elements from two distinct conceptual domains. On the one hand, the expression of a type of relation in the SPACE domain and on the other, the denotation (schematic) of elements from the conceptual domain OBJECT.

The complexity of the domain matrix increases a little more in the case of temporal relations such as the one expressed in the sentence in (3):

(3) Joe left the office.

According to Taylor (2002: 212) the construction in (3) denotes a situation in which Joe is initially in the office, he consequently leaves, he occupies over a specific interval different positions in relation to his starting point, until he ends up in a position that is outside the office. According to this analysis, the semantics of the construction includes at least the following aspects: different positions in space (a starting point, a final point as well as intermediate positions), a movement marked through these positions, a necessary interval of time to realize the movement and objects with specific characteristics.²

Consequently the matrix for this complex temporal construction has to do with elements belonging at least to conceptual domains of SPACE, TIME, MOVEMENT and OBJECT. Figure 1 seeks to represent the complexity of this domain matrix.

² To this we can also add the image schema CONTAINER, presupposed by the semantics of the verb *to leave*.

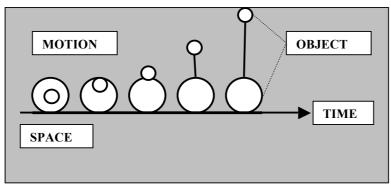


Figure 1: domain matrix of a complex temporal relation (Joe left the office).

These few examples already give a first impression as to the complexity of the domain matrix in grammatical constructions. In Section 3, we focus again on the analysis as we look at the configuration of the matrix for ditransitive constructions. Before this however it is important to concretize certain theoretical dimensions that are prerequisites to the analysis.

2. Theoretical Prerequisites

In Cognitive Linguistics in general and in Cognitive Grammar specifically there are two apparently contradictory notions – or to a certain extent conflicting – in the conceptual domain. This is 'apparently' so because we will seek to show that in reality the two notions complement each other in stressing aspects of the same phenomenon.

The first notion is functional in nature. It is undoubtedly the notion most widely and explicitly defended in Cognitive Grammar. Based upon this notion, a domain is a structure that functions as a conceptual basis for at least one concept (Cf., for example, Langacker 1987: 147-154; Croft 1993: 339; Clausner / Croft 1999: 5-7). Thus, based upon this vision, any conceptual structure – whatever type it maybe – must always be considered a domain once it plays a support conceptual role for another structure (Clausner/Croft 1999: 5).

The second notion has a more implicit nature and results from the observation that the conceptual basis of the majority of concepts (and according to the thesis we defend in this current study, there are also the grammatical constructions) is inherently complex and heterogeneous given

that it is made up of a set of elements, different in nature. This observation leads us to question if this heterogeneous set can be considered as a single domain (made up of different dimensions) or if it would be better to suppose that it is a matter of elements from different domains and in principle independent. They combine in a timely manner so as to form the conceptual base for a specific concept, nevertheless, they do not integrate a different domain from its respective domain of origin. If we opt for the latter interpretation, it can be concluded that there are relatively broad areas of experience and conceptualization (TIME, SPACE, OBJECT, etc.) that integrate our conceptual structure and whose existence is independent of the fact that some of their constitutive elements is used to form the basis of a specific concept.

It is not difficult to find arguments that support either interpretation. On the one hand, the elements that make up the basis of a specific concept are in many instances integral parts of the bases of many other concepts. The image schema SCALE that forms the basis for grading adjectives, as we saw in the previous section, is also a constituent part of a great variety of other scale concepts, such as for example, numbers, strength, intensity of feelings, etc (Cf. Johnson 1987:121-124). Evidently the concept of OBJECT also exists independently of its use as a constitutive element for the conceptual base for complex temporal relations such as that shown in Figure 1 above. SCALE and OBJECT appear to be fixed elements in our conceptual structure and can be used to create the conceptual base for different concepts.

At the same time, the conceptual bases identified show in general a high degree of fixity. In other words, they are seen as indivisible conceptual units (Cf. Langacker 1987: 150; Clausner / Croft 1999: 7). Thus, for example, when we use a grading adjective such as *narrow* we do not need to construct its semantic base through a composition operation that brings together the image schema of SCALE with the spatial property of width. Both aspects are activated rather in a block, as constituents of the same conceptual unit. Through this, the semantic base of the concepts complies with one of the basic requirements of conceptual domains: its high level of fixity and structuring in our cognition (Cf. Clausner / Croft 1999: 13).

In looking at the fixity factor, the opposition between considering the conceptual base of a specific concept as a single domain (with different dimensions) and as a matrix of domains can be interpreted as different points in the same process. Thus, the conceptual base of a 'new' grammatical construction resulting, for example, from a grammaticalization process, can be made up of conceptual aspects that are presented as easily separable elements. As the conventionalization process for the new construction

advances, the fixation of its conceptual base also progresses in our cognition. The final result of this process is a new autonomous conceptual unit integrated by elements that are co-activated through the use of grammatical construction. At this moment, the conceptual base is manipulated in spite of its complexity as a pre-packaged assembly, no longer requiring conscious attention to its parts (Langacker 2000: 3-4). Further, nothing prevents the same elements from being in turn constitutive parts in other conceptual structures of our cognition with a greater or lesser degree of complexity and fixation.

In order to develop in the next section the analysis of the conceptual base of ditransitive constructions we will use the term domain matrix so as to emphasis that the conceptual base of these constructions is characterized by its high degree of complexity. In focusing on this term, we do not want nevertheless to suggest that in all cases we have a conceptual base with a low degree of fixation and consequently with a high degree of separability of constitutive aspects. These factors certainly vary from case to case.

3. Semantic complexity of ditransitive constructions

The aim of this section is not to elaborate a semantic typology of ditransitve constructions.³ What we are seeking to do is simply to analyze the matrix of underlying domains in relation to some types of ditransitive constructions and through this analysis identify regularities that characterize the organization of these matrixes. The types to be analyzed are: TRANSFER OF OBJECT, TRANSFER OF CONTROL, TRANSFER OF PERCEPTION, and TRANSFER OF ACTION.

3.1 Material Transfer: Transfer of Object and Transfer of Control

The first category proposed to characterize the semantic pole of many ditransitive constructions is the notion of MATERIAL TRANSFER. Authors such as Goldberg (1992: 51), Delbecque/Lamiroy (1996: 90-92) or Hollmann (2007: 64) consider (implicitly or explicitly) that there exists a

³ In the literature we found some proposals for semantic taxonomy of ditransitive constructions (for example: Golbgerg 1992 and 1995; Delbecque/Lamiroy 1996; Newman 1996 and 2005; Hollmann (2007). It is also worth making reference to the research group "Ditransitive Constructions in the World's Languages" (http://email.eva.mpg.de/~haspelmt/Ditransitive.html), coordinated by Bernard Comrie, Martin Haspelmath and Andrej Malchukov.

difference between situations in which the receptor ends up obtaining - as a result of the action denoted by the verb - a concrete material object from situations in which this does not occur. For these authors, a great number of ditransitive constructions denote concretely an action that can be characterized in the following manner: N_0 makes that N_1 enters the domain of N_2 .

Although the authors' attention was focused on the change underwent by the receptor through the action, it is important to observe that we can identify specific characteristics in all the constituents of the action called MATERIAL TRANSFER and they differentiate the action from other types of actions also codified by ditransitive constructions.

Let us focus firstly on the subject. To this constituent the characteristics [+animated] and [+volitional]⁵ are attributed (Cf. Delbecque/Lamiroy 1996: 92) (Cf. Goldberg 1995: 143-145; Hollmann 2007: 66). If we apply these characteristics to the concrete case of material transference, we obtain as subject a volitional agent that carries out an action or a series of actions over a concrete material object so that this object moves out of its domain to enter the domain of the entity denoted by N₂ (receptor).

To characterize the type of action carried out, it is important to observe that the domain can be interpreted in two different manners. Domain can be interpreted firstly in relation to spatial-temporal parameters. In this case, change of domain means that the object changes the place occupied by the agent to the receptor. As a result of this application there is the application of physical force (with different degrees of complexity, depending on the case) by the agent on the material object. Let us observe the following cases:

- (1) dar o leite aos bezerros. Give milk to the calves.
- (2) já comencei a entregar os sacos para a fábrica I have already started delivering the bags to the factory

⁴ We adopt here the notation system used in Delbecque/Lamiroy (1996) in which N₀ represents grammatical subject of the active voice, N₁ the direct complement and N₂ the indirect complement.

⁵ In relation to the subject, the semantic category [+volitional] supposes not only that the subject carries out the action denoted by the verb, but also intends to do it.

In (1) the realization of the state of things denoted by the sentence *give milk* to the calves presupposes physical force (or a set of movements) on the object (milk) for it to get to the receptor's place (calves). Similarly in (2) the realization of a state of things denoted by delivering the bags to the factory implies the applying of physical force over the objects in question (bags) so that they get to the receptor (factory).

In other cases, nevertheless, another interpretation of domain stands out, that is, domain as possession. In the sense in which an object changes domain implies that it changes possessor, leaving the agent's possession and entering the receptor's. Control over the object goes from the agent to the receptor (CF. Newman 2005: 160). Change in control places demands on the agent at two levels. On the one hand, it demands the adoption of a psychological state that can be characterized in the following manner: 'the agent intends to produce a change in control over the object' (Cf. Goldberg 1995: 143). Further, in many instances, this psychological state has an open manifestation through a speech act (perlocutionary) that verbalizes and bases the change in control⁶. Let us look at the following sentences:

- (3) *Paga oitenta e três reais para o pião*. He pays eighty three reais to the worker.
- (4) Eu dou esta garrafa para o Senhor João. I give this bottle to Mr. John
- (5) O vizinho deu o lote para o filho dele. The neighbor gave the lot of land to his son.

In (3), (4) and (5) what is in the foreground is not the change in place but the change in control over the objects (money, bottle and lot). In (3) the agent has (or had) the intention of transferring control of the eighty three reais to the receptor. In (4) the intention of transferring control – in this case over the bottle – is apparent through the perlocutionary speech act that carries out transference of possession of the object. The example in (5) shows clearly that the transference of control does not necessarily suppose a transference in the spatial-temporal domain. Control over the object (the lot) goes from the

⁶ In the case in which the agent coincides with the speaker.

⁷ In (4) it is a bottle of sugar-cane liqueur that the speaker offers as a gift to one of the persons present (Mr. Juan).

agent to the receptor without there existing (neither can there exist) a dislocation of the material object (lot).

If we were to summarize what has been shown up to now, we will get two types of subjects in ditransitive constructions that denote MATERIAL TRANSFER:

- 1. N_0 [+animated] [+volitional] transmitter agent of a material object through physical force..
- 2. N_0 [+animated] [+volitional] transmitter agent of control over a material object through a psychological state and a speech act.

In the first instance, there is an agent with characteristics [+animated] and [+volitional] that carries out a physical action over an object; in the second case, there is an agent with the same characteristics [+animated] and [+volitional] that adopts a physical state of change in possession and in many cases, externalizes this state through a speech act.

Our observations in relation to the subject can serve as a starting point to characterize in a more detailed manner the type of action called MATERIAL TRANSFER. Material transfer can be instantiated in relation to two different domains: the spatial-temporal domain and the control domain (or possession) (Cf. Newman 2005: 160). One concretization in relation to the first domain supposes an action that has as a consequence the object's movement from the agent to the receptor. In relation to the second domain, concretization implies a communicative action (speech act) and the adoption of a psychological state that bases transfer of control over the object. Examples (1) and (2) show a concretization of the first type, whilst examples (3), (4) and (5) illustrate a concretization of the second. The following frame summarizes these types of action.

- (1) V MATERIAL TRANSFER IN THE SPATIAL-TEMPORAL DOMAIN THROUGH THE APPLICATION OF PHYSICAL FORCE
- (2) V MATERIAL TRANSFER IN THE CONTROL DOMAIN THROUGH A PSYCHOLOGICAL STATE ANDPERFORMING OF A SPEECH ACT

Let us look at the receptor. In the case of material transfer to the receptor, generally the semantic characteristics [+animated] and [+volitional] are attributed (Cf. Goldberg 1992: 62; 1995: 146-147; Delbecque/Lamiroy 1996: 92; Hollmann 2007: 66-67). Volition in relation to the receptor is a semantic characteristic that has given space to two distinct interpretations in the literature. Volition can be understood as real volition or potential volition. The first interpretation demands the receptor to show clearly his/her willingness to receive the object being transferred (Cf. Hollmann 2007: 67), whilst the second considers it enough that the receptor possesses the capacity to want to receive the object transferred (Cf. Goldberg 1992: 62; 1995: 146-147). In this study we will opt for the second interpretation.⁸

These two categories can also be combined with a third parameter proposed previously: type of domain. With this, it is possible to differentiate the reception of an object transferred by the agent through a physical action from reception in the sense of accepting transfer of control over the object. The following figure shows the characteristics of these types of receptors:

- (1) N_2 [+animated] [+volitional] receptor of a material object.
- (2) N_2 [+animated] [+volitional] receptor of control over a material object.

The sentences in (1) and (2) contain receptors of the first type whilst the receptors in (3), (4), and (5) belong to the second type.

Finally, we can also differentiate two types of transferred entities. On the one hand, what is transferred can be the material object, as is the case with *milk* in (1) or *bags* in (2). On the other hand, the transferred entity is not the object in itself but the control over it. This is the case with *eighty three* in (3), *this bottle* in (4) and *the lot* in (5). This differentiation is opposed to the idea – present explicitly – or implicitly in many studies – that in the case of MATERIAL TRANSFER the transferred element is always a concrete object. Common to both types of transferred entities is nevertheless the category [-animated] (Cf. Delbecque/Lamiroy 1996: 90-92). In short, we find the following characterization for the transferred object:

- (1) N_1 [-animated] material object..
- (2) N_1 [-animated] control over material object.

⁸ Our decision is based upon practical motives. It is considered that with the first definition the operationalization of the category is restricted to a great extent, since it becomes substantially dependent on the subjective interpretation regarding intention in terms of the receptor wanting to receive or not the object in each one of the cases studied.

⁹ Cf. Delbecque/Lamiroy (1996:92); Hollmann (2007:64-65). An exception was found in Newman (2005: 16-161) who differentiates transference in the spatio-temporal domain from transference in the control domain.

In short, two distinct types of MATERIAL TRANSFER have been profiled: OBJECT TRANSFER and CONTROL TRANSFER. These two types include respectively the following sets of semantic characteristics:

- (1) OBJECT TRANSFER: N₀ [+animated] [+volitional] transmitter agent of a material object through physical force + V MATERIAL TRANSFERENCE IN THE SPATIO-TEMPORAL DOMAIN THROUGH PHYSICAL FORCE + N₁ [-animated] material object + N₂ [+animated] [+volitional] receptor of a material object.
- (2) TRANSFER OF CONTROL: N_0 [+animated] [+volitional] transmitter agent of control over a material object through a psychological state and speech act.+ V MATERIAL TRANSFERENCE IN THE CONTROL DOMAIN THROUGH A PSYCHOLOGICAL STATE AND A SPEECH ACT [-animated] control over material object + N_2 [+animated] [+volitional] receptor of control over a material object.

If we were to apply our main thesis on the complexity of the semantics of grammatical constructions to the specific case of ditransitive constructions, we can conclude that the semantics of these constructions does not only include an abstract notion of transference but also information on what conceptual domains are used in each case to specify the constitutive elements of the denoted transference process. Figure 2 shows us the domain matrix used to specify the constitutive elements of the OBJECT TRANSFER.

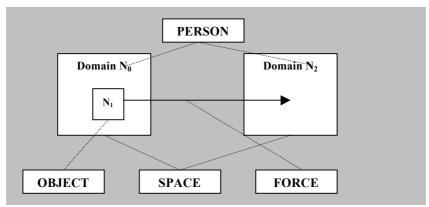


Figure 2: domain matrix for OBJECT TRANSFER.

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The domain matrix that makes up the TRANSFER OF OBJECT includes prototypically the following domains: PERSON that specifies the elements N_0 and N_2 , OBJECT that specifies the element N_1 , SPACE that specifies the context in which the transfer is developed and FORCE that specifies the instrument used to execute the transference process.

Figure 3 represent the domain matrix that underlies the TRANSFER OF CONTROL.

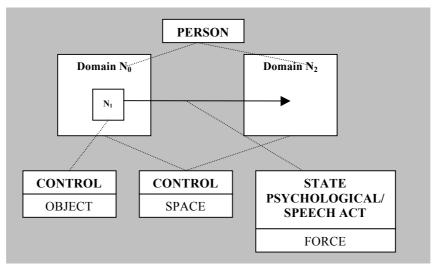


Figure 3: domain matrix for TRANSFERENCE OF CONTROL.

As we see in Figure 3, the domain matrix for the TRANSFER OF CONTROL introduces two conceptual domains not present in the matrix for OBJETCT TRANSFER. It has to do on the one hand with the CONTROL domain, used as the main domain for the semantic specification of the transferred element N₁, as well as for the specification for the very process of transference. On the other hand, there is also a new domain for the specification of the transfer instrument, since the transfer is realized firstly in this case through the adoption of a set psychological state, and in many cases, the adoption of this state is externalized through a speech act. In dealing with main conceptual domains for the specification of TRANSFER OF CONTROL, we consider the domains TRANSFER OF CONTROL and PSYCHOLOGICAL STATE/SPEECH ACT as basic conceptual domains in relation to this type of transfer. Without the presence of these domains, it is

not possible to talk about TRANSFER OF CONTROL. Nevertheless, as was previously mentioned, in many cases the transfer of control also goes together with the physical transfer of an object on the agent's part, N_0 to the receptor N₂. Consequently, in these cases the conceptual domains OBJECT, SPACE and FORCE that characterize the OBJECT TRANSFER, can also act in the semantic specification of TRANFER OF CONTROL. However, given that they are not main domains in the characterization of this type of transfer, we classify them as secondary domain.

In comparing Figures 2 and 3, an interesting piece of data comes up. The domains that constitute the matrix for TRANSFER OF OBJECT can also be part of the CONTROL TRANFER matrix, whilst the specific domains for the latter do not integrate the matrix for TRANSFER OF OBJECT. This asymmetry is not an isolated fact but it recurs – as will be seen to follow – always when we compare the OBJECT TRANSFER matrix with the matrix for other types of transfer.

3.2 Transfer of Perception

Another category proposed in the literature as a semantic pole for ditransitve constructions is called TRANSFER OF PERCEPTION (Cf. for example, Goldberg 1995: 149; Delbecque/Lamiroy 1996: 92-93). The most important aspect of this category lies in the fact that the entity transmitted in this case is not the object but the perceptive access to the same. The agent N₀ (that already has perceptive access to the object) makes N1 enter the receptor domain of N_2 , in the sense that N_1 becomes perceptible to N_2 . Let us look at some examples for the corpus:

- (6) Mostrar para quem quer que seja qual é a nossa realidade Show to whoever our reality
- (7) Vou mostrar para a imprensa os relatórios de maio. I am going to show the May reports to the press.

In both cases the objects (reality and reports) are found in the agent's perceptive (and cognoscitive) domain and are 'transferred' to the receptor's perceptive domain (and cognoscitive).

One specificity of the TRANSFERENCE OF PERCEPTION lies in the fact that action of transfer loses the possibility to have a spatio-temporal correlation. Transfer of perception can refer to a concrete material object, but this object does not undergo physical displacement from agent to receptor. The transference is realized in this case through the action of "showing", that can consist, depending on the case, in a concrete deitic act (that is, making an object perceptible to the receptor by drawing attention to the same or placing it in the receptor's perceptive field by displacement) or through the agent's communicative action that makes a specific state of things accessible to the receptor. The example in (7) belongs to the first type, whilst (6) to the second type.

In accordance with the main characteristic of TRANSFERENCE OF PERCEPTION, we obtain the following semantic characterization of the constituents:

TRANSFERENCE OF PERCEPTION: N_0 [+animated] [+volitional] transmitter agent of perceptive access through realization of the act of "showing" + V TRANSFERENCE IN THE DOMAIN OF PERCEPTION THROUGH AN ACT OF SHOWING + N_1 [-animated] perceptive access + N_2 [+animated] [+volitional] receptor of perceptive access.

Corresponding to this semantic characterization we obtain the following domain matrix for TRANFERENCE OF PERCEPTION:

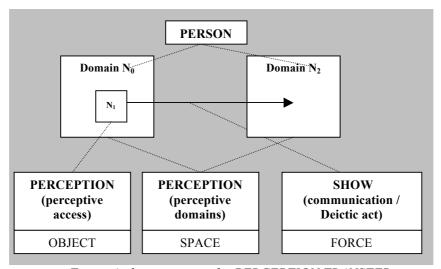


Figure 4: domain matrix for PERCEPTION TRANSFER

As Figure 4 shows, the domain matrix for TRANSFER OF PERCEPTION has the presence of a new domain, not present in the matrixes previously commented upon: the domain of PERCEPTION. This domain is used to specify both the transferred entity (access to perception) as well as to the initial and final points in the transference process (the agent's perceptive domain and the recipient's perceptive domain). Given its importance, we can consider the domain of PERCEPTION as the basic domain for this type of transference. In conjunction with this domain, the concept of "showing" also operates (in its two variants) and it specifies the instrument used to execute the process of TRANSFER OF PERCEPTION.

As stated, 'showing' in some instances can mean dislocating a concrete physical object so that it enters the receptor's perceptive domain. In these cases, together with the previously mentioned domains,- although at a secondary level - the domains OBJECT, SPACE and FORCE operate and specify respectively the dislocated entity, the medium through which the movement is produced and the force needed to produce it. These domains can be considered as secondary domains as they are not central to the characterization of the type of transference called PERCEPTUAL TRANSFER.

In comparing the matrix of domains for PERCEPTUAL TRANSFER with the TRANSFERENCE OF OBJECT matrix (figure 2), we will also observe an asymmetrical situation. The specific domains for PERCEPTUAL TRANSFERENCE do not form part of the matrix for TRANSFERENCE OF OBJECT, whilst the domains for TRANSFERENCE OJBECT can appear in the matrix for PERCEPTUAL TRANSFERENCE.

3.3 Transference of Action

In some cases actions are conceptualized as entities that can be transferred from agent to receptor. This has to do with physical actions, such as in (8), or communicative actions (speech acts) as in (9).

- (8) Ela deu um sorriso para o peão. She smiled at the laborer/she gave a smile to the worker.
- (9) Nós damos as boas vindas aos Senhores. We welcomed them.

In the literature, we have found different proposals to categorize ditransitive constructions of this type. The most common are 'abstract transference' (Cf. e.g. Hollmann 2007: 64-65) and 'abstract movement' (Cf. p. e.g. Delbecque/Lamiroy 1996: 95-96). In this study, we propose the category TRANSFER OF ACTION to take into account constructions as those presented in (8) and (9), in contrast to those just mentioned, given that with this term we focus more clearly on the nature of the entity transferred, as well as the type of transference codified. At the same time, we differentiate this type of transference from others that can be classified as abstract (as for example perceptive transfer or control).

It is important to observe that although in some TRANSFER OF ACTION cases a physical movement of proximity between agent and receptor is realized ('give someone a kiss', 'give someone a kick', etc.), this does not suppose that there is transference of a material object in the sense shown in section 3.1. In the case of TRANSFERENCE OF ACTION the receptor does not obtain a concrete material object, but the result of a physical or verbal action.

The category TRANSFER OF ACTION brings together the following set of semantic characteristics:

TRANSFERENCE OF ACTION: N_0 [+animated] [+volitional] executing agent ('transmitter') of a physical or communicative action + V TRANSFERENCE IN THE DOMAIN OF ACTION + N_1 [-animated] action or result of action + N_2 [±animated] [±volitional] receptor of the result /effect of an action.

Based upon this characterization we obtain the following matrix of domains for the TRANSFER OF ACTION:

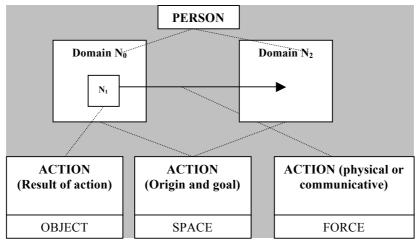


Figure 5: domain matrix of ACTION TRANSFER

As can be seen in Figure 5, the domain of ACTION is predominant in the case of TRANSFER OF ACTION. With the help of this domain, we specify the transferred entity N₁ as the result of an action that comes from N₀ and arrives at N2. These two elements, agent and receptor represent respectively the origin and the goal of the action conducted. The action that produces a specific effect on the receptor can have both a physical as well as communicative nature.

Together with the basic domain of ACTION, we find some secondary domains. Firstly, it is important to observe that actions, both physical as well as communicative are generally conceptualized as forces (Cf. Johnson 1987: 41-64). At the same time and as previously mentioned, in some cases TRANSFER OF ACTION supposes the carrying out of a physical movement of proximity between agent and receptor ('give someone a kiss', 'give someone a kick', etc.). Consequently, in these cases the realization of an action is also specified in relation to the conceptual domain of SPACE. Finally, although there is no concrete material object, the action or its result are conceptualized metaphorically as objects that can be moved by applying force ("give a greeting to someone", "give a warning to someone", etc.). The conceptual domain OBJECT constitutes therefore part of the matrix of domains for TRANSFER OF ACTION.

As with the previous cases, we must conclude that the domain matrix for TRANSFER OF ACTION is made up of domains relative to the TRANSFER OF OBJECT domains, whilst the opposite does not apply.

4. Final remarks

The analysis developed in section 3 seems to confirm our main thesis: ditransitive constructions are from a semantic perspective, complex and heterogeneous structures. The elements that constitute them cannot be specified in relation to a single conceptual domain but in the majority of cases the semantics of this type of construction forms rather a matrix of domains that brings together semantic aspects coming from various conceptual domains.

In analyzing the internal structure of the conceptual domains, there are two aspects that draw special attention. In the first place, we observe that not all the conceptual domains that make up the matrix have the same semantic weight. Among the domains that make up the matrix of a specific type of transference some are more prominent in that they are fundamental to characterizing the type of transfer in question. Thus, in order to characterize TRANSFER OF ACTION the ACTION domain is fundamental or to characterize TRANSFER OF PERCEPTION, the PERCEPTION domain is essential. These more prominent domains can be called *basic domains* and they are differentiated from other domains that may be present in the matrix but are not fundamental to determining their type. The latter are called *secondary domains*.

The second aspect that must be highlighted results from the comparison between the matrixes of domains of the different types of transference analyzed. In conducting this comparison, it was proven that the domains that make up the matrix for the TRANSFER OF OBJECT can form part of the matrix of other types of transference as secondary domains. The contrary, however, does not occur: the main domains for TRANSFER OF CONTROL, ACTION, etc, do not appear in the matrix for TRANSFER OF OBJECT. Form this asymmetry it can be deduced that the domains of the matrix for TRANSFER OF OBJECT can be attributed a prominent role in the structuring of the semantics of ditransitive constructions in general.

Finally, it is important to point out that the results of the analysis developed in this paper are in juxtaposition with investigations that seek to characterize the semantics of types of ditransitive constructions by placing them respectively in relation to a single conceptual domain. ¹⁰

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¹⁰ Cf. e.g. In general Newman (2005: 160-161). This vision also seems to implicit in Goldberg's proposal (1995: 141-151) to describe the semantics of different types of ditransitive constructions based respectively on their relation with a single "systematic metaphor".

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