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VERB VALENCY AND CASE GRAMMAR

1. INTRODUCTION

The aim of this paper is to compare the **case grammar** in its first version, presented by Charles F i l l m o r e in 1968 and the **valency theory** within the framework of the **dependency grammar**. Since **dependency grammar** was created by Lucien Tesnière in France and has been developing mainly in Europe, it seemed interesting to compare the theories, originating in different parts of the world and stemming from different linguistic backgrounds. It seemed to us that they have a lot in common as far as the organization of grammar is concerned, especially the position occupied by the verb. While giving reasons for questioning the deep-structure division between subject and predicate which is assumed to underlie the basic form of all sentences in all languages, F i l l m o r e claims in his paper *"The Case for Case"* [1968] that his position seems to be in agreement with that of Tesnière who holds that the "subject/predicate division is an importation into linguistic theory from formal logic of a concept which is not supported by the facts of language" [T e s n i è r e 1959]. In the first section we will try to find all similarities between the two theories, in the second – differences between them. The last part deals with some of the later modifications and uses of the notions of **dependency, valency** and **case,** and includes our conclusions and opinion on how similar the two theories are.

2. SIMILARITIES

### 2.1. Subject as a surface-structure phenomenon

One of the most important elements the theories have in common is
the position of the **subject** notion: they both consider it as a surface-structure
phenomenon only. In Tesnière's grammar subject loses its predominant
position in a tree and becomes one of the three *actants*, all of which are
subordinate to the verb to the same degree, and are situated on the same
level in the tree.

According to Fillmore, the notion **subject of** has no semantically constant
value and there are no semantically relevant relations residing in the
sentence subject relation, which cannot somewhere else be expressed by
labeled relations. Thus, in Fillmore's deep structure there is no VP, and
a system of rules is added for creating surface-structure subjects. The way
Fillmore treats the notion "subject of" is conditioned by his transfor-
mative-generative background, in which the notion "subject" can be identified
as the relation between an NP (Nominal Phrase) and an immediately
dominating S (Sentence); where the relation "subject of" is understood to
hold between elements of the deep structure, one speaks of the deep-structure
subject; where it is understood to hold between elements of the surface
structure, one speaks of the surface-structure subject. This distinction
appears to correspond to the traditional one between "logical subject" and
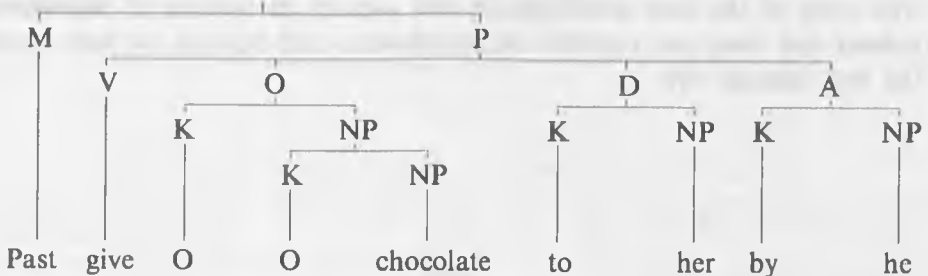"grammatical subject".

Let us compare the base representations of sentence (1) in case grammar
(3) and in valency theory (2):

(1)   He gave her chocolates.

(2)   gave

he   her   chocolates

(3)   S
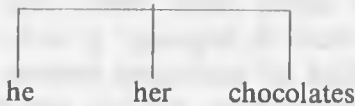
According to Fillmore, the sentence in its basic structure consists of a verb (V) and one or more noun phrases which are associated with the verb in a particular **case relationship**. Each case relationship occurs only once in a simple sentence. A tenseless set of these relationships, involving verbs and nouns (and embedded sentences if there are any) forms a **proposition** (P) and is separated from the **modality** (M) constituent. In 1968 Fillmore claimed that there were six cases, namely: Agentive (A), Objective (O), Dative (D), Instrumental (I), Factitive (F) and Locative (L). In (3), three cases are present: Agentive, Dative and Locative. All of the case categories may be rewritten as K + NP, where K (Kasus) is the underlying element, realized by prepositions, postpositions and case affixes; e.g. in (3) preposition occurring with Dative is *to*, with Agentive – *by* and the noun phrase in Objective case is not preceded by any preposition.

It is clear that in surface structure the subject of the sentence is *he*. However, in both the deep structures *he* appears on the same level as the other two actants *her* and *chocolates* (2) and as the other case relationships (3).

It was mentioned earlier that in Fillmore's **case grammar** there is a system of rules for creating subjects. For (3) there are two alternative surface structures depending on which case relationship is to become the subject. In (1) A became a subject. In (4), the subject is O, i. e. *chocolates*; in (5), the subject is D, i. e. *her*.

(4)   Chocolates were given to her by him.
(5)   She was given chocolates by him.

In case grammar all three sentences, namely: (1), (4) and (5), come from the same deep structure (3). However, if O or D appear as subjects, this choice has to be "registered" in the verb V, in this case *give*.

The base representation of (6) in case grammar is (7) and in dependency grammar – (8).

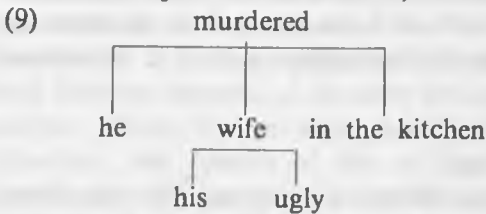(6)   He murdered his ugly wife in the kitchen.
(7)
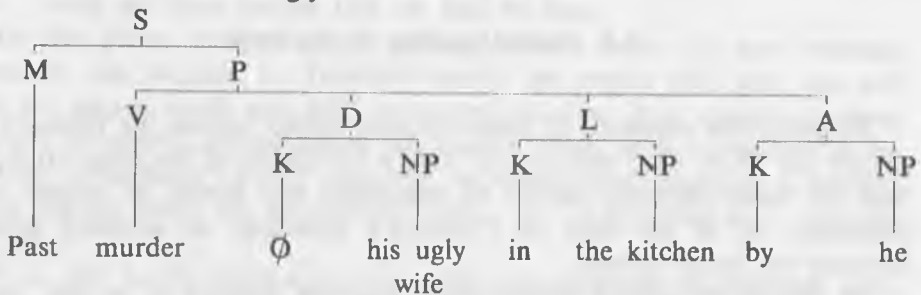
In surface structure (6) the subject is *he* – in deep structure the Agentive. The Dative could also be the subject in surface structure, but it would have to be "registered" in the verb. The surface structure would look like (8).

(8)   His ugly wife was murdered in the kitchen by him.

Nevertheless, whatever the surface-structure subject, the deep structure is the same and none of the cases occupies a priviledged position, as the concept of subject is not a deep structure concept in case grammar.

That the phrase *his ugly wife* (6) is intepreted as the Dative by Fillmore may not be very convincing. However, this particular case assignment is the result of Fillmore's understanding of the Dative case. According to what he claimed in 1968, Dative is "the case of the animate being affected by the state or action identified by the verb", while Objective is "the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb. The term is not to be confused with the notion of direct object". Thus, in Fillmore's intepretation, verbs like *murder* and *terrorize* require "animate subject" and "animate object"; the notions he uses may seem a bit confusing, if we have in mind the fact that this "animate object" is the Dative, not Objective case.

(9)   murdered

```
         ┌────────┼────────┐
         |        |        |
        he       wife   in the kitchen
              ┌───┴───┐
              |       |
             his     ugly
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In (9) the subject *he* does not occupy a priviledged position either, it is the first of the actants. The phrase *in the kitchen* is a circumstantial and is situated after all the actants in the tree.

2.2. Central position of the verb

Rejecting the existence of deep-structure subject means the necessity to rebuild the whole deep structure: if there is no subject in the deep structure, then the basic sentence cannot be composed any longer of subject and predicate, or, in the case of Chomsky's grammar, of nominal phrase followed by verbal phrase.

In Tesnière's internal order, which may be referred to as his "deep structure", the topmost element governing a sentence is a verb. The elements indirectly subordinate to the verb are three actants and circumstantials. Let us compare the trees representing deep structures according to Fillmore (10) and according to Tesniére (11).

(10)

$$S$$

$$M \qquad\qquad P$$

$$V \quad C_1 \quad C_2... \qquad\qquad C_N$$

(11)

$$I$$

$$1 \qquad 2 \qquad 3$$

$$O \qquad O \qquad O$$
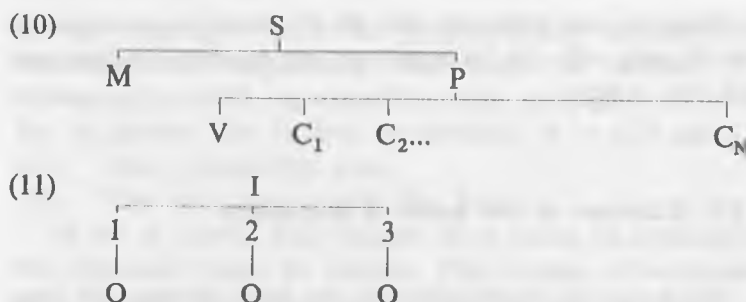
In (10) M stands for modality, P for proposition, and C for case categories. In (11), I stands for verb, O for noun, and the numbers (1, 2, 3) – for the three actants respectively.

It is clear from diagrams (10) and (11) that, as far as the verb position in the deep structure is concerned, the two theories are the same, placing it in the centre: verb is the governing element and the topmost in the hierarchy in dependency grammar and in case grammar it is the immediate constituent of a sentence and all possible noun phrases are its immediate constituents. The difference is the terms in which grammatical structure is described.

Both the deep structures remain the same even if the tense is changed in a sentence. In case grammar this is provided by the separation of proposition from modality constituent. According to Tesnière, even if a tense is changed, the tree remains the same because nothing actually changes in the sentence structure (Tesniére 1959). In such a case it may happen that a nucleus will consist of more than one word, like in (12), (13) and (14).

(12)   John *will sing* this at the party tomorrow.
(13)   John *was singing* this at the concert at 7 p.m.
(14)   John *has been singing* this for half an hour.

In the above examples, all the underlined words in one sentence constitute one nucleus. In Tesnière's model the words *will, was, has* and *been* are empty words and fulfil structural function; in a complex nucleus they are structural centres, called *auxiliairies*. Thus, what is marked in the modality constituent in case grammar, in dependency grammar is marked in the nucleus itself, but the internal order – or "deep structure" – remains the same.

It is also worth mentioning that, although appearing in different form and number, nouns standing by the verb in the internal order called **actants** and entering different **case relationships** in the deep structure, can appear only once in a single clause. Just like the first actant can appear only once in a clause in dependency grammar, thus an Agentive or Dative can only

appear once in a clause in case grammar, too. In (7) there is one Agentive *he* and one Dative *his ugly wife*. In (8) there are two actants: the first one *he* and the second one – *wife*.

2.3. Existence of two levels of description

Existence of *two levels of organization* is the next feature the two theories have in common. According to Tesnière, in language there is a one-dimensional, linear order of speech sequence, in which each word can have only two neighbours, and a multi-dimensional, structural, internal order of a sentence, which may be presented in a tree. It is the task of the structural syntax to discover the deeper structural reality, hidden behind the external form of written or spoken speech, and to find the hierarchical structure of a tree behind one-dimensional sequence of speech.

In the reverse direction speech sequence appears only because the tree is transformed into a linear form. In different languages the linear order can be different, although the internal order is identical, as in the relation between noun and adjective (15).

(15)   English: *white dog*   French: *chien blanc*,
        German: *weisser Hund*   (Helbig 1973).

In case grammar there are also two levels of grammar, called **deep, underlying structure** and **surface structure**; this view is in full agreement with the **transformative-generative** tradition, which Fillmore aimed to modify. In fact, they can be said to represent what was referred to by Tesniére as **internal order** and **external speech sequence**.

2.4. Verb classification

In Tesnière's theory, all the verbs can be classified, on the basis of their valency, into four groups (16).

(16)   1. Avalent verbs (zero valency).
        2. Monovalent verbs (one valency).
        3. Bivalent verbs (two valencies).
        4. Trivalent verbs (three valencies).

According to Tesnière, trivalent verbs set the limit on number of actants, at least in French. Lyons (Lyons 1977) also agrees that most of the verbs have at the highest valency of three. He claims, however, that

in all languages "there are grammatically productive mechanisms for decreasing and augmenting what might be referred to as the intrinsic valency of a verb", e.g. transitive verbs in English are intrinsically bivalent, but in passive they become monovalent as in (17) and (18).

(17)   John opened the door.

(18)   The door was opened (by John).

A lot of doubts and criticism have arisen in connection with criteria of free elements bound by valency. The problem of minimum connected with verb valency was discussed by Gerhard Helbig (1973). Minimum is the possibly smallest grammatically correct sentence, independent of the context influence; deleting any element of this sentence would result in its ungrammaticality. Three kinds of elements were distinguished on the basis of structural minimum:

1. Obligatory actants which can never be reduced because a sentence would be ungrammatical.

2. Optional (facultative) actants which can be reduced in defined conditions.

3. Optional attributes which can be reduced and added in almost every sentence.

In this way Helbig presented a model including on the first level – in respect of quantity – a number of partners of a given verb, on the second – in respect of quality – syntactic distribution, and on the third – semantic surrounding of the verb.

Helbig also proved (1973) that the difference between obligatory and optional actants on one hand and optional attributes on the other, is based on the syntactic deep structure, while the difference between obligatory actants and optional ones is the phenomenon of the surface structure.

Lyons (1968) claims that adverbials such as *in London* or *to London* can also fulfill valency-roles in the "propositional nuclei of sentences", though most grammarians claim that only nominals are capable of fulfilling them. He postulates the existence of "valency-roles, associated with nominals or place-referring adverbials" and "circumstantial-roles, referred to by means of optional adverbs or adverbials".

Sawicki (1988) claims that the theory of valency is capable of eliminating difficulties in verb description resulting from the fact that syntactical behaviour of verbs has been traditionally described by means of the category of transitivity. The theory of valency does not divide verbs into transitive and intransitive ones, but offers a more accurate classification of verbs according to the number and types of complements they are liable to occur with. It enables linguist to account for the syntactical behaviour of a given verb in all possible utterances.

Sawicki proposes a classification of Polish verbs with the aid of valency-notation and claims that it can characterize a verb's behaviour more fully, especially where the difference in valency corresponds to a semantic difference (19).

(19) (2) *mieć*   (N) (ACC)   to have
      (3) *mieć*   (N) AAC za +ACC   to consider sb to be
      (1) *przepadać*   (N)   to disappear
      (2) *przepadać za* (N) za +INSTR   to be very fond of
                                               (Sawicki 1988).

In case grammar, on the other hand, **frame features** indicate the set of **case frames** into which the given verbs may be inserted. These frame features impose a classification of the verbs in the language. In "The Case for Case" Fillmore provides the following examples of frame features of some verbs (20).

(20)   run   +[A]
        open   +[_ O (I) (A)]
        murder   +[_ D (I) A].

Both the classification systems are based on the surrounding of the verb in a clause. In the case of Tesnière's grammar, it is the number and type of relations that a verb forms with its actants, like in (19), where the valency of some verbs is described. For example, in the case of the Polish verb *przepadać* we find out that the verb has either one or two valencies depending on the meaning. If it is used meaning being fond of something or somebody, it takes two actants: the first is in the Nominative case (the notion is used here to mark a morphological case, which denotes an inflectional category, while in Fillmore's case grammar it denotes a deep case) and the second in the Instrumental and has to be preceded by the preposition *za*. It is also marked with the help of parentheses that the actant in the Nominative is not obligatory in Polish. The verb *murder* in (8) has got two valencies, in the example realized by *he* and *wife*.

In case grammar, verbs are selected according to the case environments the sentence provides, what is referred to as the **case frame**. A number of case frames into which a given verb may be inserted form its **frame feature**. For example, the frame feature for the English verb *run* indicates that it takes an animate subject and it has to be an Agent (cp. (20)). According to the frame feature, the verb *murder* takes the Agentive, in (7) realized as *he* and the Dative, in (7) realized by *his ugly wife*. In (7) there is no Instrumental, as it is not obligatory and the phrase *in the kitchen* is a Locative.

2.5. Syntax and semantics in grammar

Although the two grammatical theories discussed here claim the primacy of syntax, they both seem to be very much affected by semantic consideration. Tesnière distinguishes two functions in his grammar: structural and semantic, the former being directed towards connections, relations in a sentence, the latter – towards the meaning of a sentence. Structural relations are **dependency relations** and sentence analysis means the study of hierarchy of connections. It is the task of syntax is deal with the arrangements of these connections and to discover the internal order of the sentence and its hierarchical structure. Thus, syntax is structural, dealing only with relations, not with meanings. It is the structural plan that is essential for linguistics, but it finds reasons for existence only in relation to semantics. Though on first examination it appears that Tesnière shares the generative view that grammatical structure is distinct and autonomous, still it seems that for him, the ultimate basis of grammar; more specifically, the structural relations that constitute for Tesnière the very crux of grammar do not exist independently of the semantic connections they express.

Fillmore, though he remains in the generative tradition, proposed "the substantive modification to the theory of transformational grammar (...) which amounts to a reintroduction of the "conceptual framework" interpretation of case systems, but this time with a clear understanding of the difference between deep and surface structure" (Fillmore 1968). He rejects the notion of **syntactic deep structure** of Chomsky as the artificial level between the **surface structure** and **semantic deep structure**, which is empirically discoverable. The deep structure proposed by Fillmore is "semantic" because it consists of a verb plus a number of noun phrases, associated with the verb in case relationships; these relationships, in turn, are semantically relevant syntactic relations, which form a set of universal concepts.

3. DIFFERENCES

3.1. Origins of the two theories

One of the most important differences between **case grammar** and **valency theory** is their origin. Dependency grammar is a specific form of structural grammar, belonging to the trend of classical structuralism, together with the Prague school or **functional school**, the Copenhagen school

and many others. Case grammar is a continuation of the **generative** tradition in linguistics, which is also one of the schools of structuralism, characterized by very formalized method of description. These origins impose both the attitude towards the tasks of linguistic theory and the methods used in linguistic study.

Dependency grammar, as well as valency theory, created within its framework, is a descriptive school. It aims at a precise and accurate description of a given language. It studies language structure as a system of relations. This system and the rules of grammar should be derived from the corpus of attested utterances. The structural linguist aims at the extensive presentation of language structure, which is not a set of isolated facts, but an integrated whole, in which all elements are interdependent. In the case of dependency grammar, Tesnière thinks that structural relations are dependency relations, and sentence analysis means the study of the structure, constituting hierarchy of connections.

Besides, being a formal grammar, dependency grammar claims to describe the structure of every language on its own terms, and making no assumptions about the universality of such categories as the "parts of speech" (Lyons 1968).

On the other hand, Chomsky claims that a clear description of empirically available data is not enough to give a precise model of language structure. In structural grammar so far, grammar of a language was determined by the list of language elements and types of possible combinations among them, discovered in the texts of *parole*. Chomsky thinks that this model is inadequate; according to him, language is a system of rules, acquired by its users. This creative aspect of the language can be described precisely in a grammar which is a system of rules. Thus, grammar is a kind of a device to produce or to generate sentences of a language. Generative grammar projects every given set of sentences to a bigger, possibly infinite set of sentences, in this way reflecting the creative aspect of human languages. The term **generative** implies that grammatical rules and conditions of their application are strictly determined [C h o m s k y 1965].

Besides, case grammar does not limit itself to the study and description of one language only. Generative grammarians attempt to find language universals. Fillmore assumes that some grammatical features found in one language show up in other languages as well. These features are called **covert categories**. Fillmore claims that case relationships, as described by him, are in large part covert, and that observations made about them "will turn out to have considerable cross-linguistic validity" [F i l l m o r e 1968]. He also claims that his paper "The Case for Case" is a contribution to the study of formal syntactic universals, and he pleads that the grammatical

notion **case** deserves a place in the basic component of the grammar of every language [F i l l m o r e 1968].

3.2. Dependency vs constituency terms of description

Another important difference between the two theories is the type of relations which are assumed to exist between elements of sentences. In case grammar, grammatical structure is described in **constituency terms**; there is no dependency between its elements. In Tesnière's grammar, the relations are dependency relations, and so grammatical structure is described in **dependency terms**. If we compare (10) and (11) we see clearly that, in case grammar, verb and different case relationships remain on the same level in the tree; verb and all cases are immediate constituents of proposition and so cases are not dependent on any other constituent while, according to Tesnière, verb is the topmost element in the hierarchy and governs its actants. In dependency grammar, modifying adjective is an element subordinate to the modified noun and occupies a lower position in the hierarchy in the tree, while in case grammar adjective remains on the same level as the noun and the two elements are immediate constituents of the noun phrase, like in (21) and (22), respectively.

(21)   husband

    your   stupid

(22)   NP

    your   stupid   husband
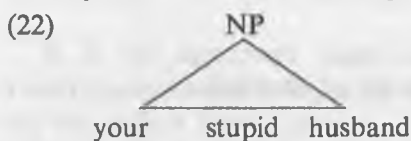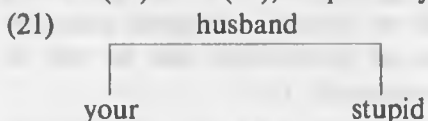
A lot of criticism has arisen in connection with the notion of **dependency**. Generative grammarians claim that the empirical sense of this notion has not yet been precisely defined [H e l b i g 1973]. Case grammar does not use the notion of **dependency** at all. However, Lyons [L y o n s 1977] pays attention to the fact that Fillmore's case grammar depends on the assumption that **government** is found in all languages.

The relation of government has been used both traditionally and within models of generative grammar to describe or explain a number of grammatical phenomena. According to Lyons government is found in a language if it functions as the main element of predicates, unlike in the case of agreement (concord), when verb tends to show agreement with subject or object, in number, gender, person, etc. However, Lyons claims, "if government covers

not only the selection of particular cases in the traditional sense of the term "case", but also the selection of particular prepositions (or postpositions) and particular kinds of subordinate clauses, it is clear that government (though not concord) is found in all languages" [L y o n s 1977].

A standard definition of "government" [A o u n and S p o r t i c h e 1982] is the following:

(23)   α governs β: Every maximal projection dominating a dominates b and conversely.

Maximal projections are categories such as V[erb] P[hrase], N[oun] P[hrase], A[djective] P[hrase], P[repositional] P[hrase] and S[entence]'. The basic structure of an English sentence is, by hypothesis, as follows (24);

(24)   [s NP INFL VP].

Here INFL[ection] contains tense and AGR[eement] in a finite clause, and it is *to* in a non-finite clause. It is stipulated that V, N, A, P and finite INFL, but not non-finite INFL, are GOVERNORS. However, INFL is included in the description of a sentential structure only when it is relevant.

The relation of government plays an important role in the theory of Chomsky 1981 in the following subsystems: Theta-theory, Case theory, Binding theory and Government theory. In Theta-theory, theta-marking itself is possible only under government. Government is a necessary condition for abstract Case assignment. The basic case of government is that of a complement being governed by a head, e.g. the case of a verb governing its complement. However, further research on syntactic relations naturally leads to new hypotheses on the definition of government and its role in syntactic theory.

3.3. Links between the two levels of description

In both the theories there are two levels of description: in case grammar, deep structure and surface structure, and in dependency grammar, external speech sequence and internal order. The difference is the way the two levels are linked. In case grammar, as it is considered to belong to transfor-mational-generative tradition, deep structure is converted into surface representation with the help of transformations.

In the case of Tesnière's theory, the link between the two levels has not been precisely specified. Tesnière claims that it is the task of syntax to discover the internal order and to present it in the hierarchical structure of a tree, and that speech sequence appears because the tree is transformed into a linear form, but he does not give any solution as to how they are actually **transformed** into one another.

4. DEVELOPMENT OF THE TWO THEORIES

Valency grammar holds a rather strong position in general linguistics. In Germany it is now regarded as more or less "classical" approach, and has been researched there by a group of linguists including Helbig, Schenkel, Schumacher, Trautz, Brinker and others. Elsewhere, however, it has been more or less ignored, at least until the 1980s and works by L e e c h 1981; M a t t h e w s 1981; A l l e r t o n 1982 [S o m e r s 1987].

On the other hand, a group of linguists including Hays, Gaifman, Robinson have worked on dependency theory, describing the formal properties of dependency relations and the dependency trees which are used to represent them. In the case of Gaifman and Robinson, the dependency model is compared with phrase structure grammar approach of transformational generative grammar [S o m e r s 1987].

It seems that some elements of both the theories have been developing in two directions. Dependencies are of particular importance in several recent grammatical theories, e. g. daughter-dependency grammar. On the other hand, valency has been researched in many aspects, such as semantic valency versus structural valency, extension of valency onto classes other than verb, or use of valency in grammars different from dependency grammar.

4.1. Daughter-dependency grammar

It is the approach based on a system of syntactic representation, transformations not being required. In a DDG there are no transformations and no surface filters. Instead, "the syntactic rules directly generate all and only the grammatical sentences of the language, assigning to each sentence generated a structure which, from the point of view of TG, can be described as an enriched surface structure"(Schachter 1980). This surface structure may contain types of information that a TG shows in nonsurface representations of sentences, as well as information that a TG does not show at all.

The "vertical" constituency relations between nodes are referred to in terms of **daughter-dependency**; the "horizontal" dependency relations (of subject-verb, etc.) are referred to in terms of **sister-dependency**. All nodes in this approach are complexes of binary features (as opposed to the unitary categories of earlier models of transformational grammar). Classification rules define the permissible combinations of features to construct

categories; dependency rules specify the structures in which these categories appear. All constituents are defined in terms of a notion of relative peripherality; given any two constituents, one will be more peripheral than the other. A notion of syntactic function is assigned to nodes, whose main function is to determine surface-structure word order.

4.2. Extension to classes other than verbs

Some linguists, like Tesnière, consider valency to be characteristic of verbs only. Others, like Soviet linguists (Admoni, Lomtev, Lejkina) and some others (Leech), attribute this property to all parts of speech. Still others – again, Soviet linguists – refer the notion of **valency** not only to the verb and other parts of speech, but also to all language elements on different levels [H e l b i g 1973].

The notion that adjectives and nouns may enter into dependency relationships as governors is recognised by early valency grammarians and some more contemporary as well, e.g. Leech suggests *happy* as monovalent while *glad*, although similar in meaning to *happy*, requires two elements to complete its meaning: *A is glad at/about B* [S o m e r s 1987]. However, the extension of this notion for non-predicate adjectives and nouns in the way that it is extended for verbs, with syntactic form and semantic restrictions of complements described, is largely not taken up.

4.3. Valency in other grammatical theories

The notion of **valency** appears not only in grammars connected with dependency theory. L a n g a c k e r [1988] tries to answer the question what the nature of grammatical valency is, but this question is approached in the context of space grammar. This theory claims that grammar – both morphology and syntax – is symbolic in nature and forms a continuum with lexicon. Consider this Hopi sentence (25).

(25)   taaqua moos-at tiwa

        "The man found the cat".

The Hopi verb "tiwa" is an instance of two-place predicate, in standard predicate-argument terms, since it designates a relation between two salient entities, a searcher and the object sought. Figure (24) is a typical predicate-argument dependency tree representation between (FIND) and its arguments (MAN) and (CAT).

(26)   FIND
          ╱   ╲
       MAN   CAT

Langacker claims that figure (26) is inexplicit on many crucial points; nothing of substance is indicated abot the internal structure of any of the three predicates, nothing shows that (MAN) and (CAT) have different roles with respect to (FIND), and, how (MAN) and (CAT) connect to (FIND) and what permits this combination, are left unspecified.

In Tesnière's dependency grammar the verb *find* has two valencies; *man* and *cat* are obligatory actants which cannot be reduced because the sentence would be ungrammatical. *Man* is the first actant fulfilling the function of the subject and *cat* – the second actant and fulfills the function of the direct object. In case grammar the case frame for *find* looks like (27).

(27)   find +[_O A]

Man is an Agent – an animate instigator of the action and *cat* is in Dative case.

The space grammar conception of **grammatical valency** can be regarded as an attempt to be explicit on all these points. Langacker goes on to characterize the internal structure of the predicates in detail. He claims that (FIND) is conceptually dependent because it presupposes, as an inherent part of ots own internal structure, two things participating in the correspondences, while (MAN) and (CAT) are conceptually autonomous, because they do not similarly presuppose a salient external relationship. The two objects in (FIND) function as its **trajector** and **landmark**, and define its profile (**trajector** and **landmark** are names given to entities in every relational predication, **landmark** functioning as a point of reference for specifying the location of the **trajector**). The dependent structure can be equated with the predicate, and the autonomous stuctures with its arguments.

The essential aspects of a canonical valency relation are summarized in figure (28).

(28)   **Dependent structure**   **Autonomous atrucure**
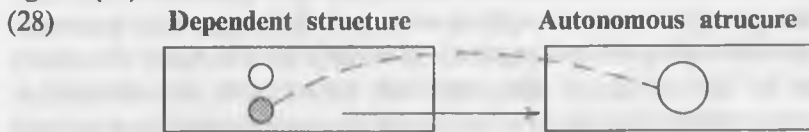
It is a binary relation between two predicates, one of which is autonomous and the other dependent. The dependent structure is relational and includes within its profile an entity, specifically a thing, which corresponds to the profile of the autonomous structure. This entity, only schematically specified within the dependent structure itself, functions as an **elaboration-site** (e-site). It can be said that the dependent predicate organizes the scene, setting up a relation between schematically specified objects, and the autonomous

predicates fit into the scene and elaborate particular substructures (elabo-
ration-sites). The e-site bears a relation of schematicity to the autonomous
structure, schematicity being the relation between superordinate and sub-
ordinate nodes in a taxonomic hierarchy (e. g. the concept (TREE) is
schematic relative to more highly elaborated concepts such as (OAK) and
(PINE)). Finally, the dependent structure is the profile determinant and
hence imposes its relational profile on the composite structure.

This is the basic type of valency relation generally assumed in predica-
te-argument accounts of semantics, but there are ways in which valency
relations commonly deviate from the prototype, namely: a valency relation
need not be binary, it is not necessary that there be a clear assymetry
between an autonomous and a dependent structure, e-site of the dependent
structure does not have to be a thing included in the profile: it can be
a relation rather than a thing.

4.4. Fillmore's modifications: "The Case for Case Reopened"

In 1977, nine years after the publication of "The Case for Case",
Charles Fillmore published another article, "The Case for Case Reopened",
in which he reviewed a few of the basic assumptions of case theory,
discussed some of the most important challenges to the theory and, finally,
he proposed a new interpretation of the role of cases in a theory of
grammar. This new interpretation could be associated with this slogan:
Meanings are relativized to scenes.

Fillmore claims that it becomes necessary to recognize a level of
grammatical structure which makes use of underlying grammatical relations,
although he thought it should be rejected. However, he believes, that a level
of case or role analysis is also needed, as a part of a general analysis of
the scenes that get communicated with speech, and that these two structures
are united by the notion of perspective. According to Fillmore, the study
of semantics is "the study of the cognitive scenes that are created or
activated by utterances" [F i l l m o r e 1977]. We recognize scenes or situations
and the functions of various participants in them. We bring into perspective
some quite small portion of such a scene. Of the elements which are
foregrounded, one of them gets assigned the subject role – in underlying
or logical structure – and one of them – if we foreground two things – gets
assigned the direct object role in the clause. Something like a *saliency
hierarchy* determines what gets foregrounded, and something like a *case
hierarchy* determines how the foregrounded nominals are assigned grammatical
functions.

He points out that the repertory of cases is *not* identical to the full set of notions that would be needed to make an analysis of any state or event. One of the cases he proposed was the agent, identifying the role of an active participant in some event; yet *events* are not restricted in the number of active participants they can have. For example, in the *commercial event*, two different individuals are agentively involved and the actions of *each* of the two are part of our understanding of any of the lexical items that can be used for describing this kind of event or any of its aspects. The point is that a case frame need not comprise a description of all the relevant aspects of a situation, but only a particular piece or section of a situation.

In (6) there are two participants: *he* who is an Agent and *his ugly wife* who is a Patient. The Agent is in the subject position and Patient fulfills the role of direct object. However, it is possible to leave the Agent out of perspective and to put the place where the event takes place in perspective as in (29).

(29)   His wife was murdered in the kitchen.

Although the two elements *he* and *his ugly wife* are nuclear elements [F i l l m o r e 1977], they are not obligatory and so (29) is grammatical, leaving the Agent out of perspective.

4.5. Other modifications of case grammar

Fillmore's research on the notions of case and role analysis was used by Chomsky [C h o m s k y 1980] who incorporated it into his latest model of grammar organization, namely, the **Government-Binding** model. The **theta-theory** module of GB framework assigns proper **theta-roles** to their complements according to **theta-criterion**, which requires that each argument bear one and only one theta-role, and each theta-role is assigned to one and only one argument, theta-role being a semantic argument of a predicate (Agent, Theme, Patient, Source, Goal). A typical representation of lexical information is provided by the **theta-grid**, which is a list of the arguments that a predicate requires. The example of theta-grid for *put* looks like:

(30)   put [Agent, Theme, Location]

John put the book on the shelf.

[J a c k e n d o f f 1972]

Thematic roles used by researchers originate from earlier works, especially those used by Fillmore and Gruber. They include **Agent, Patient** (or **Theme**) and **Goal**. Gruber proposed a set of thematic relations, based on the verbs of motion [G r u b e r 1976]. The system was developed by Jackendoff [J a c k e n d o f f 1972], and incorporated by Chomsky into the theta-theory

module of GB framework. There is no general agreement as to how many thematic roles are required for the description of predicate/argument structure.

We think, however, that Chomsky treated Fillmore's research in a marginal way and that it was Fillmore's theories proposed in "The Case for Case Reopened" that gained more attention, namely the studies on the role of cases depending on given contexts. It seems that the whole **Scenes-Frames Semantics** has stemmed from Fillmore's theories and has been flourishing, explicating the contextualized uses of cases and semantic roles [F i l l m o r e 1982].

5. CONCLUSIONS

After a more detailed comparison of various aspects of case grammar in its first version, presented by Fillmore in 1968, and dependency grammar and valency theory as they were presented by Tesnière in 1957, it seems that, although having a lot in common, there are also considerable differences distinguishing them. As far as their origins are concerned, they have different backgrounds and are supported by different attitudes towards nature of languages, language universals and tasks and aims of the linguistic theory. Besides, they operate various notions in description of language grammar: dependency terms in Tesnière's theory and constituency terms in Fillmore's theory. It implies an entirely different attitude towards language structure and language system. In case grammar the tree represents relations between constituents and in dependency grammar the tree represents hierarchical structure of a one-dimensional sequence of speech.

However, the two theories are similar as far as the structural centre of the sentence is concerned: it is the verb. In this respect both valency and case-like theories of grammar differ from contemporary views of grammar – compare the early Chomsky's notion of kernel sentence consisting of subject plus predicate. In this respect the two theories are quite similar.

It seemed to us that the grounds on which both the theories developed and philosophies concerning the nature of linguistic tasks and aims, and attitudes towards the nature of languages, are so different that they cannot be considered as similar, but only as having a lot in common, namely: the position of the verb.

However, should we try to discuss the notions of valency and case altogether, it turns out that the two may be complementary to one another. L y o n s [1977] claims that "case grammar has attempted to account for valency of verbs". Cases, denoting such semantic roles as those of agent, patient, cause, effect, source and goal, are called **valency-roles** by him. He

also presents what he called **valency schemata** while classifying verbs into groups (31).

(31) 1. Affect (agent, patient)   operative verbs.
      2. Produce (cause, effect)   factitive verbs.
      3. Produce (agent, effect)   operative-factitive verbs.
      3a. Produce (agent, (move (entity, source, goal))).
      3b. Produce (agent, (move (entity, goal))).
      3c. Produce (agent, (move (entity, source))).

If we take into consideration the verb *kill*, it may be either an operative verb, because killing is an action that is performed upon, and affects, a patient, and thus belongs to group 1, but also it may be a factitive verb, because it denotes a process or event whereby a cause produces an effect, and thus belongs to group 2. Verbs like *remove, bring, take*, belong to group 3c, as they denote a movement of certain entity, from certain source to certain goal, performed by an agent [L y o n s 1977].

A very interesting synthesis of the two notions has been proposed by Charle J. Fillmore in his **frame semantics**. He claims that "each lexical item, or idiomatized phrase, can be associated with what can be called *valence description*, a description that specifies, in both semantic and syntactic terms, what the expression requires of its constituents and its context, and what it contributes to the structures that contain it" [F i l - l m o r e and A t k i n s 1992]. Let us come back to the example of the "commercial event" proposed by Fillmore in 1977. "Commercial transaction frame" can be characterized by constructing a scenario of an exchange of goods for money. The categories derivable from the commercial transaction frame are in the first place *Buyer, Seller, Goods* and *Money*. Let us have a look at the semantic and syntactic valence of verbs from this frame (32).

(32)

	Buyer	*Seller*	*Goods*	*Money*
BUY	Subj	(from)	D-Obj	(for)
SELL	(to)	Subj	D-Obj	(for)
SPEND	Subj	NULL	for/on	D-Obj
COST	(I-Obj)	NULL	Subj	D-Obj

[F i l l m o r e and A t k i n s 1992]

In this paper we have tried to compare the two linguistic theories: the dependency grammar and case grammar. We have pointed out that though the cannot be considered as similar, the notions of **case** and **valency** have been widely used in a variety of linguistic theories and grammar models. It seems that the can be both used very widely especially in lexicography. It is our conviction that the model of valency description proposed by

Fillmore and Atkins will lead to research on valency of different parts of speech, not only verbs. Though "frame-based" dictionaries, proposed by Fillmore and Atkins, are still "a distant future" [F i l l m o r e and A t k i n s 1992], it seems that this alternative manner of describing lexical items may advance in the direction of attaining explanatory power and capturing all the information that speakers possess about the words in their language.

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WALENCJA CZASOWNIKA A GRAMATYKA PRZYPADKA

W artykule zawarto porównanie teorii gramatyki przypadka, przedstawionej przez Charlesa Fillmore'a w 1968 r. i gramatyki zależności Luciena Tesnière'a. Omówiono pochodzenie obu teorii, rozwój koncepcji od gramatyki przypadka do semantyki ramowej, jak też pojęcie walencji w różnych teoriach językoznawczych. Także poddano analizie podobieństwa i różnice pomiędzy dwiema teoriami na podstawie analizy zdań.