CHOMSKY'S THETA THEORY: DESTROYING THE TRADITIONAL IDEALS OF THE SYNTACTIC AND SEMANTIC CONFIGURATIONS OF ENGLISH SENTENTIAL STRUCTURE

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Abstract

In *Syntactic Structure* (1957), Chomsky proposes an interface between syntax and semantics. Similar view is expressed in his *Aspects of the Theory of Syntax* (1965) wherein he claims: "some parts of the semantics map fairly nicely into syntax." With the development of semantics and the subsequent useful insights gleaned from semantic theories, it is easy to theorize the extent to which syntax is determined or constrained by semantics. Theta-theory, though a syntactic theory, attempts to provide the syntactic and semantic configurations of predicates and the potential thematic relations that different arguments characterize. The key question that the theory seeks to answer is how there exists one-to-one correspondence between grammatical arguments and thematic relations thereby formulating the form and meaning correspondence in theta criterion. The theory challenges the tradition accounts of subject, object and any other part of the sentence and comes up with more substantial description of these sentential components. This study describes the syntactic mapping of different phrases to different syntactic positions like subject, object and adjunct etc., and attempts to re-evaluate these components from linguistic perceptive. The study also describes some of the thematic gaps that theta theory contains and seeks to fill these gaps with the semantic views of different semanticists.

Keywords: Theta theory, Valency, Core and Non-Core Complements, Thematic Relations, Thematic Hierarchy

1. Introduction

Theta theory (1986) discusses the thematic roles of the predicates. Predicates, according to the theory, are argument assigners. The theta roles, however, are assigned to arguments in specific syntactic positions namely external (subject) and internal (object/complement) positions. Hence, verbs donate while NPs or PPs receive Θ -roles. Accordingly, it is contended that the thematic roles that the arguments receive depend on the lexical properties of verbs. In other words, the argument structure of a sentence is licensed by the verb. The division of arguments into obligatory and optional categories is done on the basis of syntactic principles. The case assigned to the external argument as a result of Θ - marking is called ergative case (Woolford, 2015).

The theory indicates the syntactic mapping of the arguments onto subject and object positions without specifying semantic or selectional constraints².

The predicate can be one argument, two or more than two arguments depending on the lexical nature of verb involved. Arguments are the participants involved in the activity or state of an action.

Among the thematic structures, adjuncts have peripheral roles because they modify the predicates and are not considered active participants. Consider the following sentence.

3. "The king smokes a cigar after lunch."

In (3), NP1 "The king" and NP2 "a cigar" are both arguments because they are involved in the act of smoking but "after lunch" merely provides information about the time of smoking. This entity is not involved in the act of smoking-- it is neither the consumer nor the consumed. Likewise, in (4) The NPs "John" and "his teeth" are obligatory arguments (Agent and Patient respectively) involved in the act of brushing, but the PP "after the breakfast" adds no essential information to the semantic consideration of the sentence except temporal and highlights the time of the given action. This part of the sentence is, therefore, optional and can conveniently be omitted without disturbing the thematic structure of the sentence.

4. "John brushed his teeth after breakfast."

English is a typologically a subject-prominent language, inasmuch as the subject is very sharply set apart syntactically from other clause elements. The object is called internal argument because of its syntactic proximity to the predicate while the subject is called external argument because of its syntactic distance from the predicate. The object is an internal argument s-(semantic)selected and Θ-marked by the head V. Internal argument is always the complement of the predicate and is the syntactic sister of it. The combination of the predicate and its complement collectively assign theta role to the external argument--the subject. Structurally, a subject is an NP--a daughter of S, an objectis an NP--a daughter of VP and adjunct is a PP which contains an NP as a daughter generally called the object of preposition .An indirect object can be NP as well as PP.

The thematic arguments of a predicate find mention in the subcategorization frame wherein only obligatory parts are mentioned. The optional categories such as adjuncts do not find expression in the subcategorized entries of a predicate. Depending on the lexical nature of a predicate, it can be monadic, dyadic or triadic-

Intransitive verbs like smile, laugh, shout" etc., take one external argument. Mono-transitive verbs like "eat, hit, attack, see, kiss, drink" etc., are dyadic argument structures. Besides the internal argument (subject), they take one NP as a complement. Triadic predicates take one external and two internal arguments. Ditransitive verbs like "give, send, sell, lend, pay, bring, donate, mail, contribute, supply, demonstrate, throw, make, prepare, cook, ask, request" etc., are triadic argument structures.

²S-restrictions refer to semantic constraints on argument structures. Jackendoff (1990, p.51) describes it like this: the complement of "drink" involves something liquid and "pay" is predicated by an amount of money only. Huddleston& Pullum (2012) explain the phenomenon like this: "Ask" imposes selection restriction on the subject, "have" does not. So we can have (2), but not (1).

^{(1). &}quot;*The knife asked to touch the baby." (selection restrictions apply)

^{(2). &}quot;The knife had touched the baby." (no selection restrictions)

"Hit" for instance takes Agent and Patient but "see" takes Experiencer and Theme. Similarly, "receive" takes recipient, theme and source. The sum of all such information forms theta grid of the predicate. Theta grid is the sum of all thematic relations. All these properties are specified in the lexicon of the lexical items. Hence, the lexical entry of "hit" will show that it s-selects Agent and Patient as given below:

Hit: V, [--NP] < Agent, Patient>

This study is an attempt to analyze the syntactic and thematic parameters of predicates. It aims at providing a conclusive yet not final solution to some of the linguistic structures that are widely misunderstood in conventional grammar. The study discusses the structure of the sentence from thematic point of view and concludes that the syntactic and semantic configurations of the sentence is best understood when it is looked at within Θ -theory.

2. Literature Review

Theta theory has been approached from diverse perspectives. Carnie (2021), for instance, considers theta theory an accurate description of restrictions on certain linguistic structures. The semantic contents of the predicates in the forms of thematic roles are codified in theta grid and in relation with the subsequent theta criterion, the theory prides answer to the question that why certain verbs cannot appear in certain argument structures.

Yule (2020) in his analysis of thematic roles specify Agent and Theme as central theta roles and considers others peripheral. For him Agents are characteristically humans while Themes are non-humans. His description of S-selection provides good insights into the understanding of theta theory. The semantic features like "animate, human, non-human" etc., license the NPs to features as the Agent, Theme, Patient or Experiencer etc., of a particular verb.

Radford, Atkinson, Britain, Clahsen & Spencer (2009) add to the discussion and argue that arguments get thematic roles under Linking Rules. The external argument occupies the position of a specifier of T while the internal argument appears as the complement of V get their Θ-roles under the impacts of Linking Rules which changes a syntactic structure into its corresponding semantic description.

Cook and Newson (2007) perceive the theory as the representation of D-structure of the arguments. The theta-role assigned to a given argument in a specific syntactic position verifies the assertion that an argument with a valid Θ -role can be constituent of the sentence. There are also distributive constraints on the arguments and one argument can receive a thematic role in one position only and cannot take another Θ -bearing argument as in (5).

5. "*3The dog chewed the slipper the bone."

3. Valency

O-theory recognizes the argument structures of predicates by using the terms like monadic, dyadic and triadic, Huddleston & Pullum (2012) add to the discussion by using the term valency. It refers to the lexical ability of a verb to take complements. Predicates are categorized in terms of particular kinds of complements [O (object) and PC (predicative complement)].

However, whereas Θ -theory specifies the number of arguments, valency describes the core and non-core complements of the predicates. Intransitive verbs, for instance, are monadic in Θ -theory and take one external argument as illustrated above. They are monovalent and combine with just one complement as shown below.

6. "He died."

However, an intransitive verb can be bivalent as illustrated in (7).

³Asterisk means unacceptable

7. This depends on the price.

NP PP

In this case, the verb "depend" takes one external argument NP and one PP complement. Without PP, the sentence stands unacceptable:

8. "*This depends. "

Similarly, Complex Intransitive verbs like "seem, become, feel" are intransitive but they are bivalent because they must have one Predicative Complement besides the external argument. Consider the following examples.

9. "Mary seemed quite competent."

NP1

NP2 (PC)

10. "He became angry."

NP (Pro) AP (PC)

Dyadic predicates are characteristically bivalent.

11. "He read the paper."

Ditransitive verbs which are triadic are trivalent.

12. "She gave John some food."

NP1 (Pro) NP2 (O14) NP3 (O2)

Likewise, Complex transitive verbs are also trivalent.

13. "This made Ed angry:"

NP1 (Pro) NP2 (O) AP (OC⁵)

In some cases, a predicate can be quadrivalent or tetravalent which means that it can take four complements. Consider the following examples.

14. "I'll trade Michael this bicycle for your binoculars."

NP1 NP2 (O1) NP3 (O2) PP (Non-core complement)

15. "I bet you \$ 1 that it rains."

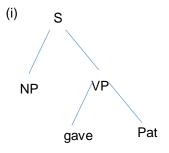
NP1 (Pro) NP2 (O1) NP3 (O2) CP (Complement Clause)

4. Core and Non-core Complement

A prototypical core complement is manifested through NPs. Non-core complements, by contrast, are phonologically realized through PPs. The core complements in (16) and (17) are underlined.

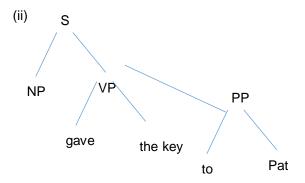
- 16. Kim gave Pat the key.
- 17. Kim gave the key to Pat. Non-core complement

Core complements are in mother-daughter relationship with the verb, while those functioning as non-core are in grandmother and granddaughter relationship and hence indirectly related to the verb as shown in figure (i).



⁴O1 means Indirect Object and O2 means Direct.

⁵OC means Object Complement



As shown in figure (ii), the PP "to Pat" is the complement of "give', but the NP "Pat' is indirectly governed by the verb and hence is an oblique. The preposition canonically contributes to the thematic role of "Pat" and marks it a recipient.

PPs functioning as non-core complement often have the preposition (italicized) specified by the verb:

- 18. "It consists of egg and milk."
- 19. "He didn't look at the picture."
- 20. "It depends on the cost."
- 21. "John gave it to Mary."
- 22. "He supplied them with sufficient food."
- 23. "They blamed it on Kim."

In 18-20, the preposition immediately follows the verb, whereas in 21 &22, it is separated from the verb by another complement (O), but in either case the occurrence of the PP is dependent on the occurrence of the right kind of verb. Moreover, the prepositions are not replaceable without loss of grammaticality as in (24) or (25) or an unsystematic change in meaning (*look at /for*).

- 24. "*It consists with egg and milk."
- 25. "*He bought it to Kim."

These PPs clearly qualify as complements (non-core) by our licensing criterion. We can compare "put" with "read" which can take an optional adjunct:

26. "John read the book in his room."

The PP "in his room" is an adjunct and is omissible from (26).

5. Syntactic Position of Complements

There is a basic or default position for complements (core/non-core), with its occurrence in other positions being permitted only under a limited set of conditions.

(iii). Basic/default position (the underlined NPs/PPs)

- 27. "She will accept the proposal."
- 28. "He gave the key to Kim."

(iv). Non-basic position (the underlined NPs/PPs)

- 29. "Will she accept the proposal?"
- 30. "To Kim he gave the key."

Non-basic position is limited largely to interrogatives and to declaratives containing a preposed elements (the underlined)as follow:

- 31. Only then will she accept the proposal.
- (30), a preposed construction, is relatively unusual and restricted in discourse distribution. For example it would not be an appropriate response to such questions as "What did Henry so with

that key?" or "What happened next?" Adjuncts have considerably greater mobility. The adjunct "in his room" in sentence (26) can take initial, medial or end position with equal degree of acceptability.

6. Thematic Roles

The argument structure of a predicate can manifest itself in different thematic relations (Jackendoff 1972) or theta-roles (Chomsky 1986). It can be Agent, Actor, Patient, Theme, Factitive Theme, Recipient, Beneficiary, Experiencer, Source and Goal. The external and internal arguments are assigned different thematic roles. The non-argument part of the sentence – adjuncts-- get no thematic roles. They, however, can be theta-bearing when they feature as complements of the predicates (see section 1.4).

Fillmore (2003, p. 194) calls the subject and object as nuclear elements and adjuncts as non-nuclear elements. Adjuncts are circumstantial constituents of a sentence which manifest the temporal or locative aspects of the events.

In the following sentence, the predicate "hit" assigns Agent and Patient roles to the NPs as external and internal argument.

32. "John hit Michael." Agent--- Patient

An external argument can also be Actor. Consider (33):

33. "The car hit the tree." Actor--- Patient

The traditional definition of a subject that "the part which names the person or thing we are speaking (Wren & Martin, 2003, p. 2), or writing about (Yates, 2013, p. 23)" or as Leech and Svartvik (2002, p. 395) contend that "the most typical function of a subject to denote the person, event, etc., causing the happening denoted by the verb." Similarly, object is generally defined as "the word which receives the action of the verb (Leggett, Mead & Charvat 1982, p. 14). These parts of the sentence have some unexplored aspects that have accurately been explained in theta theory.

Dowty's (1991) principle of Proto-Agent is applied for determining the Agent and Actor role of the external argument. This principle states that external argument as Agent contains four entailments: volition, sentience, causation and movement. Since "John" in (32) has all the four, so it is Agent but "the car" in (33) lacks the first two properties and hence is Actor. Following this course of distinction, we can say that every Agent entails Actor but every Actor does not entail Agent. Bolinger (1981 p. 95),Radford, Atkinson, Britain, Clahsen, & Spencer (2009, p. 333) also point out the same difference and says that "the car" in the following sentence (34) is Actor but not Agent as it does not possess volition and hence cannot take manner adjunct like "deliberately."

34. *"The car ran over the rat deliberately."

Huddleston & Pullum (2012) explain the difference between agent and actor with the help of the following examples.

35. "My uncle returned." Agent

36. "I coughed to remind them I was waiting." Agent

37. "My headache returned."

Theme

38. "I coughed (involuntarily)." Non-agent

In (35), the subject argument will be interpreted as agent but in (37), it is not a causer, merely theme. (38) readily allows a non-agentive interpretation (an involuntary cough), but the purpose adjunct in (36) excludes this (requiring a deliberate, purposeful cough).

Jackendoff (1990) suggests the following test frame for Agent/Actor.

(v). "What NP did was..."

Consider (39):

39. "The sponge absorbed the water."

40. "Bill received a letter." Goal--- Theme.

(39) can appear in (v) frame:

- (vi). "What the sponge did was absorb water."
- (40), however, cannot and so "receive" has neither Agent nor Patient.
- (vii). "*What Bill did was receive a letter."

An argument may appear as Experiencer. In this case, the argument merely perceives or experiences some sort of feeling. The perceived argument is termed as preceptor a stimulus. Chafe (1964) believes that such subjects, unlike Agents, are not the instigators of actions. The following example illustrates it.

- 41. "John seems happy." Experiencer-percept
- 42. "The show delighted us." Stimulus---experiencer

The external argument can also be Instrument (italicized):

43. "The saw cut the tree." Instrument --- Patient

Now consider the following sentence.

44. "The knife cut the lace." Actor/Instrument ---Patient

Huddleston & Pullum (2012) say that the instrument role is invoked only where there is an explicit or implicit agent using the instrument. In (44), the NP "the knife" bears the causer role. This does not entail that anyone used the knife (perhaps it was accidently knocked off the table and fell onto the lace, cutting it as it did so). This interpretation, however, cannot be extended to "the saw" in (43). This means that the NP "the knife" entails movement property which the NP "the saw" lacks. This consideration leads to conclusion that an NP can serve an instrument or an actor provided that it is capable of movement.

Theta-theory recognizes more than one thematic role for an argument as evident in the following examples.

45. "The sodium emitted electrons." Source /Actor---Theme

46. "John received a present." Beneficiary/Goal--- Theme

47. "Amy lost the book." Patient/Source--- Theme

The internal argument of the sentence may take the form of Patient or Theme. The former is affected object while the latter is "effected⁶" object⁷. Fillmore (2003) calls them "affectum" and "effectum "object respectively. The affectum object is understood as existing antecedently to John's activities, while effectum object's existence results from Agent's activities⁸. Huddleston& Pullum (2012) use Factitive Theme for them. Jackendoff (1990) suggests that a rough-and-ready test for patient role is the ability of an NP to appear in the frame:

⁶A term used by Quirk and Greenbaum (1973). See *A Concise Grammar of Contemporary English*. P. 175.

⁷ Theme object does not undergo any constitutional change; it merely undergoes spatial or locational changes as a result of happening. Patient object, on the other hand, receives the effect of the action and hence changes in the course of the action.

8 consider

^{48. &}quot;John ruined the table."

^{49. &}quot;John built the table."

In (48), the object is understood as existing antecedently to John's activities, while in (49) its existence resulted from John's activities. Fillmore (2003, p. 27).

(viii). [What happened/What Y did] to NP was...

In the following examples, "the window" is Patient object while "the book" is Theme object.

50. "John broke the window."

Agent, Patient

51. "George put the book at the corner of the bed."

Agent, Theme

The NP "the window" in (50) can appear in (viii) frame as

(ix). "What John did to the window was break it."

In (52), the NP "the room" does not qualify as Patient, and so it cannot appear in (viii) form as

- 52. "John entered the room.
- (x). "*What John did to the room was enter it."

Saeed (2003, p. 149) takes Theme as an entity whose location is described. "The book," for instance, is Theme in the following sentence:

53. "The book is in the library." Theme

Yule (2020, p. 132) considers it an entity which is not involved in any action, but which is simply described as the NP "the ball" in (54).

54. "The ball was red." Theme

Patient and Theme may also appear as external arguments of the sentence as shown below.

55. "John fell down."

Theme/ Patient

56. "Kangaroos inhabit Australia."

Theme--- Location

7. Adjuncts

Adjuncts are considered optional arguments and are therefore not mentioned in the argument structure of predicates. There are predicates like "Be, put, lay, live, rid, deprive" and sentences that start with Θ -less "there" which take adjuncts as obligatory complements. In the following sentences, the underlined PPs are non-core complements.

57. "The librarian put the book on the shelf." Agent, Theme, Location

58. "Sheis on the balcony."

Theme, Spatial location

59. "The meeting is at noon."

Theme, Temporal (adjunct)

60. "John rid the room of vermin."

Agent, Patient, Theme

61. "The robbers deprived Jack of money."

Agent, Patient, Theme

62. "There are some books on the table."

Theme, Spatial Location

In similar fashion, "at the stop" in (63) shows a Location:

63. "The bus is at the stop." Theme, Location

As optional non-argument parts of the sentence, adjuncts can take different thematic roles. These have been illustrated in the following section of the paper.

7.1Adjuncts as Instruments

Consider the following examples of instruments such as "with" phrases (underlined):

- 64. "John opened the door with a key." Instrument
- 65. "Sam broke the window with a hammer." Instrument

Instruments are characterized as the means by which an action is accomplished by an agent/actor (the instrument "with" NP can be paraphrased "by means of NP.") So the Agent acts on an instrument while the Patient is acted upon by the instrument. However, it is pragmatically determinable how the Agent acts on the instrument and how is the Patient affected by the instrument.

Likewise, every "with" adjunct will not be Instrument. Consider the following example.

66. "We buttered the bread with cheap margarine."

The NP "the cheap margarine" is something put on the bread, not used to carry out an action. This "with" phrase comes to function as Theme.

An instrument can be subjectivized as in (67):

67. "The key opened the door."

In the passivized structure of (67), the subjectivized instrument is realized as "with PP" (Fillmore, 2003)

68. "The door was opened with the key."

It can also feature as an object:

69. "I broke the hammer on the vase."

This, according to Fillmore (2003, p. 196), can happen when a hammer is swung against a vase and the hammer breaks down. The NP "the hammer" is nuclear element of the sentence and comes to function as Goal.

7.2 The Passive By-Phrase

The "by-"phrase in passive transformation is treated as an optional adjunct. Its deletion as an external argument of the passive predicate is recognized as permissible with no argument variation.

This "by" phrase, according to Shintani (1979), assumes obligatory dimension in certain cases. This happens when the subject of the active is Actor as illustrated below.

70. "The ceremony was preceded by a minute's silence."

71. "The lights were switched on and off by this electrical device."

This means that the subcategorization of the active and passive can assume different syntactic dimensions when Actor features as the subject of the active construction.

7. 3. For "adjuncts" (beneficiary)

A triad predicate like "sell" takes obligatory "to" adjunct and an optional "for" adjunct. The "for" adjunct can serve as beneficiary as in (72).

72. "Bill sold a book to Harry for Mary."

In (72), the object of "for" denotes the recipient of the benefit that the subject undertakes. This contrasts with the "for" of benefit in (73).

73. "Bill sang a song for fun."

In (73), the object of "for" denotes the benefit that the subject will receive by singing the song. The recipient and benefit reading of "for' adjunct makes sentence (74) ambiguous.

74. "Bill would do anything for a pretty face."

If we follow the benefit reading of "for," Bill attains the thematic role of Recipient and wishes to have a beautiful face; on the beneficiary reading, Bill becomes the Source of benefit for anyone with a beautiful face.

With verbs "buy, pay, rent, sell," and "trade," the object of "for" describes the Theme of the counter-transfer.

75. "Bill bought/rented a lawnmower from Harry for \$25."

The "for" of exchange in (75) is the benefit that the Source (Bill) of the main clause intends to receive.

The beneficiary and exchange reading of "for" lends ambiguous status to (76):

76. "Bill obtained some food for his dog."

Following the exchange reading, Bill trades his dog for food; on the beneficiary reading, Bill becomes the Source of obtaining some food with the purpose of giving it to his pet.

There are "for's" of goals (77) or purposes as in (78).

77. "Bill headed for home."

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⁹Fillmore (2003, p.196) divides the arguments of the sentence into nuclear and non-nuclear elements. The vase in is put out of perspective, become a non-nuclear element and takes a PP form.

78. "Bill tried for a new job."

"For" adjuncts, however, do not entail realization. For instance, (79) does not entail that Mary heard the song. The song was meant for Mary, but the sentence does not entail the realization of that intention.

79. "John sang a song for Mary."

There are adjuncts like adversative "on" which entail obligatory entailment. Consider (80):

80. "My car broke down on me."

Sentence (80) shows that the object of "on" means "me" is the recipient of an adverse action--is negatively affected by the action. "For" adjuncts as beneficiary carry no idea of realization. By contrast, the adversative adjuncts "on" have such effects: it is odd to say (81):

81. ?? "My car broke down on me, but it didn't have effect on me."

7.4. Dative Argument Structures

Predicates "sing, make, "or "buy" alternate between NP-NP and NP-PP structures(Murcia & Freeman, 1983, p. 237). Consider the following examples.

- 82. "Susan made George a picture."
- 83. "Fred bought George a car."

The corresponding dative "constructions" for (82) and (84) will be 82 (b) and 83 (b):

- 82 (b). Susan made a picture for George.
- 83 (b). Fred bought a car for George.

Some linguists like Green (1974) and others have shown that the two constructions are not semantically equivalent. Jackendoff (1990) says that the beneficiary NP-NP construction carries the implicature that the NP2 serves as a benefit for the beneficiary NP1. The NP-PP construction, on other hand, carries no such implication: rather, the whole event serves as a benefit for the beneficiary NP. Relevant contrasts appear in the following:

- 84. "Bill removed the garbage for Harry."
- 85. "Nancy fought the dragon for the King."

These in NP constructions are ungrammatical:

86. "*Bill removed Harry the garbage."

87. "*Nancy fought the king the dragon."

Bolinger (1980, p. 28) analyzes the ditransitive structures as indirect and direct objects. The former among the two is a recipient or beneficiary. Consider the following sentence:

- 88. "John gave the bird the rat."
- 89. "John gave the rat the bird."

With preposition "to" the structures become:

90. "John gave the rat to the bird." Or

91. "John gave the bird to the rat."

However, in a question "Who got the rat?" the answer can only be (92), not (93):

- 92. "John gave the rat to the BIRD,"
- 93. * "John gave the bird the rat."

Similarly, in response to a question

(xi). "What did John give to the bird?"

We can say (94), not (95).

- 94. "John gave the bird the RAT,"
- 95. *"John gave the rat to the bird."

This analysis explains that the better answer is the one which puts the replacement word or the emphatic element for "who" and "what" at the end as the illustrated examples above show. This

can be described as psychological iconism: "what comes last remains most vivid in the mind" (Bolinger 1980, p. 28).

Green (1974a) observes that NP1-V-NP2 NP3 is by and large synonymous with its prepositional variant NP1 V NP3 PP as can be seen in the following sentences:

- 96. "John gave Mary an apple."
- 97. "John gave an apple to Mary."

But in case of verb like "teach" semantic discrepancy creeps in:

- 98. "Robert taught Anna syntax."
- 99. "Robert taught syntax to Anna."

Whereas the first implies the learning of syntax, the second suggests Anna's status as student of syntax with no implication that she learned it as well. Jackendoff (1990, p. 296) believes that the second sentence shows the stronger Beneficiary status of the student concerned.

8. Thematic Hierarchy

The absence of thematic hierarchy is one of semantic gaps of theta theory. The theory does not account for the hierarchy of thematic roles. Hierarchically, the relative order of Theme and Goal has been the topic of debate among the different hierarchical theories. Linguists like Grimshaw¹⁰ places Goal before Theme. Jackendoff (1972, p. 261) in his theory of thematic hierarchy attempts to resolve this conflict.

Consider the following examples.

- "Bill entered the room." 100. Theme, Spatial Goal
- "Bill received the letter." Goal, Theme 101.
- "John gave Mary a book. Source/Actor, Goal, Theme 102.

These examples illustrate that Goals that precede Themes are all possessional Goals as shown in the forms of the external argument of "receive" and the internal complement of verb "give" in examples (101) and (102) respectively. Goals that are postposed are generally spatial Goals such as the internal complement of "enter" in example (100). Moreover, in case of possessive verbs such as "receive" and 'give" the canonical thematic role of possessional Goals is Beneficiary, which accounts for its placement ahead of Theme. The same applies to "have" which can be termed as the stative version of "receive" illustrated in (104). On the contrary, in a spatial verb like "enter" either the Goal is assigned the dominant thematic role, placing it after Theme, or the Theme also has the thematic role of an Actor and the Goal has the role of Patient as in case of verb "hit" shown in example (103). In either case the Theme is put ahead of Goal.

- "The car hit the boy." Theme/Actor, Goal/Patient
- 104. "I have a book." Beneficiary Goal, Theme

9. Conclusions

The study derives the following possible conclusions.

- (i). The syntactic and semantic configurations of the sentence imbibe a complex collage of thematic relations. Instead of oversimplifying the structure of the sentence by means of labels like "subject, verb 'and "object," a much more deep analysis is required in order to reach some conclusive understanding.
- (ii). Predicates are thematic role assigners. These roles, however, are assigned to arguments in specific syntactic positions only i.e., external and internal. The external argument is always an NP; the internal, however, can be both core (NP) or non-core (PP) complements.
- (iii). Predicates are valency bearing just like they are theta bearing. Valency differs from theta in one respect that it denotes the total number of complements of the predicate.

¹⁰Quoted in Jackendoff (1972).

- (iv). A subject is not simply the doer of an action. Syntactically it is the external argument and semantically it can be Agent, Actor, Instrument, Source, Goal etc. Similarly, every object is not the receiver of an action. An object can be Patient, Theme, Goal, Beneficiary, etc.
- (v). PPs are canonically adjuncts which are non-argument parts of the predicates and hence, do not find representation in sub-categorization frame. Thematically, adjuncts can attain different roles depending on their lexical structures.
- (vi). Thematic hierarchy is determined by the possessional and locative nature of the predicate involved.

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