SYNTACTIC RELATIONS VERSUS SEMANTIC ROLES WITHIN RELATIONAL FRAMEWORK

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I. Syntactic relations

Semantic roles, also called thematic relations or theta roles, refer to the arguments of the predicate. In all languages it is possible to express an event in several ways using different words. For example, if we want to express an event involving mechanic, tools and to fix a car, we can use two constructions:

\[ \text{e.g. } \text{The mechanic fixed the car} \quad \text{or} \quad \text{The car was fixed by the mechanic.} \]

In both sentences the doer of the action is the mechanism, the tools and the car being affected by the action, the fixing, but they differ in how NPs referring to the mechanic and the car are realized syntactically. In the first sentence the NP referring to the doer of the action is the subject and the NP referring to the thing being affected is the direct object, while in the second sentence the NP referring to the thing being affected is the subject and the NP performing the action is the object of the preposition by. This contrast is captured in the system of voice: (1.1) is active, (1.2) is passive.

There are, then, different types of relations holding between a predicate and its arguments in a sentence: grammatical relations like subject, direct object, and semantic roles like agent and patient. As there is no agreement regarding the correct set of semantic roles, this paper will discuss only the most common semantic roles. This structure will be referred to as argument structure. If we add another NP to the example above the following structures will be obtained:

\[ \text{e.g. } \text{The mechanic fixed the car with his tools.} \]

His tools does not function as subject, direct object or indirect object, being introduced by the preposition with. Its semantic role is called instrument in this case. It can function as subject in a construction such as His tools were used to fix the car in a special case of passive voice which in relational framework is called circumstantial voice. Thus, the verb fix has three arguments: agent, patient and instrument and each of them can function as subject in a particular voice form.

Taking into account the discussion above we have to make a terminological distinction. NPs functioning as Subjects and Direct and Indirect Objects will be referred to as terms. The NPs which do not have the grammatical relations mentioned above will be referred to as non-terms. In the example The mechanic fixed the car with his tools, the mechanic and his tools are terms, while in an example such as The tools are used by the mechanic to fix the car, the mechanic is a non-term.
Another distinction that should be made is that between Direct and Oblique arguments. Direct arguments are those which are not preceded by prepositions, while the Oblique ones are marked by preposition.

II. Semantic roles
While there are only three grammatical relations, the number of semantic roles is much larger. Semantic roles depend on the meaning of the verb they relate to.

(ii.a) **Agents** are typically animate and normally trigger the action expressed by the verb, both intentionally and unintentionally.

* e.g. The man murdered his wife.
  The man killed the child in the accident.
  *The man murdered the child in the accident.

The last example is incorrect because the verb *murder* presupposes an intentional action, while the verb *kill* presupposes an intentional or unintentional action.

*The man killed his wife intentionally.*

(ii.b) **Patient** arguments are either in a state of condition or undergo a change of state or condition.

* e.g. The old man is dead.
  The old man died.¹

(ii.c) **Theme** arguments are semantically similar to patients because they also refer “to entities which are located or which undergo a change of location; they also denote entities which are possessed or which undergo a change of possession” (Van Valin Jr. 2001: 24):

* e.g. The teacher gave the book to his student.

In this example *the book* is a theme, not a patient because it undergoes a change of possession, not a change of state. Similarly, *The teacher put the book on the table*, the book is a theme, not a patient because it undergoes a change of its location.²

(ii.d) **Recipient** arguments are the Noun Phrase that undergo the actions and it can have two syntactic functions:

– **Indirect Object:**
  * e.g. Mary gave a book to John, John is the recipient argument.

– **Subject:**
  * e.g. Mary received a book from John, Mary is the recipient argument.

(ii.e) **Goal** arguments differ from recipient arguments in the fact that the former has as finality a change of location, while the latter has as finality a change of possession.
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e.g. Mary sent the book to John.

(ii.f) **Source** arguments are Propositional Noun Phrases that indicate the starting point of the action.

e.g. They ran from the school.

(ii.g) **Benefactive** arguments indicate the beneficiary of the action

e.g. He bought a bunch of flowers for his teacher.

We can notice that goal, location, recipient and source arguments function with Themes due to the fact that Theme arguments indicate a location, a possession, or a change of location or possession. This is why Themes do not occur with patients. These arguments are closely related to the meaning of the verb; i.e. an event of moving needs a change of location.

Nevertheless, the properties of verbs can not be explained only in relation to the state of affairs they embody. Different verbs require a different number of elements. Transitive verbs require at least one element, the Direct Object, but there are cases in which only a Direct Object is not enough for the sentence to be grammatically correct. For example, the verb *put* requires two elements, a Direct Object and an Adverbial Modifier of Place:

e.g. I put the book on the table.

* I put the book.

* I put on the table.

Other verbs, such as *buy, run, give, drink* can function with only one element:

e.g. Leslie bought some flowers.

Leslie bought some flowers for her teacher.

Leslie brought some flowers for her teacher from the corner.

Leslie gave the flowers.

*Leslie gave to the teacher.

Mike drank a beer.

Mike drank in the pub.

In the case of intransitive verbs, the arguments have one of the above mentioned semantic roles. Nevertheless, some verbs function both as transitive and intransitive verbs, e.g. *drink*. The Agent in *Mike drank a beer* and *Mike drank in the pub* is the same in both transitive and intransitive constructions. This is not the case in intransitive constructions that come from transitive ones through passivization. The Subject in this type of intransitive constructions is Patient, not Actor.

e.g. The man broke the glass.

The glass broke.
The Subject is an Agent in the first example, and a Patient in the second example. If the transitive sentence is paraphrased the semantic identity of the transitive Direct Object and the intransitive Subject becomes explicit. The identity of the patient in the two forms in overt.

*e.g. The man caused the glass to break.*

Another category is represented by transitive verbs that do not express actions, such as *see, understand, like* and therefore their Subjects are not Actors. Van Valin jr. (2001) classifies the Subjects of these verbs in: perceivers, cognizers and emoters. Generally they are referred to as experiencers.

*e.g. The child saw a cat on the roof.* Perceiver
*The child understood the story.* Cognizer
*The child liked the cake.* Emoter

Semantic roles can be discussed in general terms such as Agent, Patient, Experiencer or in more specific terms, such as runner, giver, drinker, thinker, lover, broken, killed. Agents can be divided into: buyer, giver, drinker and so on (see the examples above), Perceivers can be divided into hearer, feeler, taster and so on, Cognizers into: knower, believer, thinker, Emoters into: liker, lover, hater and so on. In order to differentiate the specific semantic roles from the most general ones, the former are referred to as verb-specific semantic roles and the latter are represented by Thematic Relations.

Relational grammar identifies one more level of semantic roles that are relevant from a linguistic point of view, namely grammatical relations. If we analyse the following examples we notice that there is an overlap between the thematic roles of the Subject and the thematic roles of the Direct Object:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Direct Object</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The writer wrote a new novel.</em></td>
<td>Agent</td>
</tr>
<tr>
<td><em>The child got a good mark.</em></td>
<td>Recipient</td>
</tr>
<tr>
<td><em>Mother gave her son a new car.</em></td>
<td>Agent</td>
</tr>
<tr>
<td><em>The child saw the film.</em></td>
<td>Experiencer</td>
</tr>
<tr>
<td><em>The clown amused the child.</em></td>
<td>Agent</td>
</tr>
</tbody>
</table>

From the examples above we can notice that Recipient, the Recipient can have the syntactic functions of Subject as well as of Direct Object. If we take into account the passive counterparts of these sentences, the grammatical relations are different, but the Thematic roles are the same. The role of the Subject of an active voice and the object of *by* in a passive construction will be referred to as *Actor*, and the role of the Direct Object of an active construction and the Subject of a passive verb is called *Undergoer*. Relational framework considers that these roles, Actor and Undergoer form an intermediate level between Thematic relations and grammatical relations, called semantic macroroles. As a result the order is:

1. Verb-specific semantic role;
2. Semantic role;
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(3) Thematic relations;
(4) Semantic macroroles;
(5) Grammatical relations

If we analyse a construction such as People believe in God, the Noun Phrase people have the following roles and function: (1) believer; (2) cognizer; (3) experiencer, (4) Actor, (5) Subject.

Generally, the semantic macrorole of Actor can have the Thematic role of Agent, while the semantic macrorole of Undergoer can have the Thematic role of Patient. As a result, relational grammar identifies two hierarchies which identify the types of Agent-like or Patient-like Thematic relations. Agent and Patient are on the top of these hierarchies. Nevertheless, if a verb does not have an Agent, then it has an Instrument, an Experiencer, or a Recipient.

e.g. The man killed his neighbor.
[Agent] The key opened the door.
[Instrument] The old man felt dizzy.
[Experiencer] The students received their grades.
[Recipient]

In Patient-like hierarchy, if a verb does not have a Patient, then it will have a Theme, a Stimulus, an Experiencer or a Recipient.

e.g. The singer was awarded the prize.
[Theme] Mike saw the quarrel.
[Stimulus] The clown amused the children.
[Experiencer] The flowers were given to the teacher.
[Recipient]

We can conclude that, although semantic macroroles Actor and Patient represent useful generalizations, using them in order to describe the active constructions in which the Actor has the syntactic function of Subject and the Undergoer has the syntactic function of Direct Object and the passive constructions in which the Undergoer functions as Subject and the Actor as non-term, we can not ignore the verb-specific semantic roles and the Thematic relations in these constructions. If we use Thematic relations to analyse the Active sentences, the Subject can be represented by an Agent, an Instrument, an Experiencer or an Recipient; in Passive sentences, The Subject can be expressed by a Patient, Theme, Experiencer, Stimulus, Recipient or Source, while the non-term can be an Agent, an Instrument, an Experiencer or a Recipient. The more roles we use, the more
complicated this analysis becomes. This is why the generalizations are important in order to understand the relations between the syntactic functions and the semantic roles within relational framework.

NOTES

1 Patient arguments often appear with verbs like: kill, destroy, wash, break.
2 Theme arguments occur with verbs like: put, give, place, buy.

REFERENCES

Hopper & Thompson, “Transitivity in Grammar and Discourse”, in Language 56, 1980, pp. 281-299.

ABSTRACT

The paper is structured into two parts: the first part discusses the syntactic relations in sentence, while the second part presents the most important types of semantic roles, pointing out that the number of these semantic roles is much larger than the one of syntactic roles. We analyse the most important levels of generality with respect to semantic roles, namely verb-specific semantic roles, thematic relations and grammatical relations, paying attention to the overlapping of these levels.

Key words: syntactic relation, semantic role, thematic role