Argument Structure in the Verb Phrase (VP)

The verb is the **head** of the VP, that is to say that the verb is the most important part that determines the presence of any other element in the VP.

There are different classes of verbs according to the type of **event** they refer to. Verbs can refer to actions (such as *break*) or states (such as *stand*), processes (such as *grow*), achievements (such as *reach*), etc.

Each event implies the involvement of role players. We therefore say that the verb assigns **roles** (we call them thematic roles, or theta-roles) to its **arguments** (the role players). According to the type of event referred to, the verb is combined with a number of arguments (including complements and the subject) that goes from zero to three (rarely four).

For each verb the information specified in the lexicon includes

a) the type of verb,
b) the thematic roles that are assigned to its arguments,
c) what is the hierarchy of the arguments (with the associated theta-role),
d) whether they assign case to one or more arguments.

It is crucial when learning a foreign language to realize that while the meaning of the verb, namely the event type and, as a consequence, the theta-roles assigned by it can be the same in L1 (our native language) and L2 (our foreign language), the hierarchy of the arguments may be very different. Let us make a very well-known example of the Italian – English contrast:

\[(1)\]

a. John likes potatoes.

b. A Gianni piacciono le patate.

*Like* and *piacere* express the same kind of event. It is a psychological state (of pleasure) which has two theta-roles: the EXPERIENCER of the pleasure and the THE­ME of the pleasure. In both languages the EXPER­IENCER is animate and the THE­ME is not animate. But in English the EXPER­IENCER is the subject while in Italian the subject is the THE­ME. Notice that this does not even imply that the word order is different in the two languages. Italian allows for a postverbal subject and so the order is EXPER­IENCER Verb THE­ME in both languages, but the hierarchy of the arguments is:

\[(2)\]

a. like EXPER­IENCER (Subject) THE­ME (Direct object)
b. piacere EXPER­IENCER (Indirect object) THE­ME (Subject).

We will now give verb classes concentrating on important contrasts and similarities between English and Italian.

Keep in mind in the course of the discussion that the subject agrees with the verb for person and receives Nominative case not directly from the verb but from a clausal functional category Tense when it is [+finite]. In fact only finite clauses have an subject with nominative case:

\[(3)\]

a. John thinks that [ she will winn the game].
b. John believes [ her to winn the game].

In (3a) the embedded clause has a [+finite] tense specification, and the subject pronoun has the morphological form marked for Nominative case *she*, while in (3b) the embedded clause is [-finite] and the subject, which is expressed here is not in the nominative case: *John believes she to be the winner*, but in the accusative. We will see later that this accusative is assigned by the matrix verb *believe*. But this is a particular property of *believe* that enables it to assign case not to its object, which is the whole infinitival sentence, but to the subject of its object.

We will turn to this later. Let us now start from simpler cases.
Traditional grammar classifies verbs according to the number of arguments they select. Furthermore, traditional grammar refers to arguments with the function that they have in the sentence, such as subject, object, indirect object. According to traditional grammar, we have intransitive verbs (with one argument, notably the subject), transitive verbs with two arguments (subject and object), ditransitive verbs with three arguments (subject, direct object, indirect object). This kind of classification, however, does not account for a number of syntactic and semantic properties of verbs, for certain parallelisms between verbs of different classes on the one hand, and for certain differences between verbs of the same class on the other hand.
We will try to highlight these parallelisms and differences and propose a different kind of classification.

1. Transitive verbs
Transitive verbs are characterized by the obligatory presence of two non-prepositional arguments: a subject and a direct object. Transitive verbs assign accusative case to their direct object, while the subject receives nominative case from the [+finite] specification of the Tense in the clause.

Now, if we consider some transitive verbs, we see that they assign different roles to their two arguments. On the subject we find the roles of AGENT, CAUSE, ORIGIN, LOCATION, POSSESSOR, EXPERIENCER; while on the direct object we find the roles of PATIENT (when it is “affected” by the event), THEME (when it is not affected by the event), FACTITIVE (when it comes into existence as a result of the event).

<table>
<thead>
<tr>
<th>Subject [Nominative]</th>
<th>Object [Accusative]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) John [AGENT]</td>
<td>broke (PATIENT)</td>
</tr>
<tr>
<td>(2) John [AGENT]</td>
<td>painted (THEME)</td>
</tr>
<tr>
<td>(3) John [AGENT]</td>
<td>made (FACTITIVE)</td>
</tr>
<tr>
<td>(4) The wind [CAUSE]</td>
<td>moves (THEME)</td>
</tr>
<tr>
<td>(5) Mary [GOAL]</td>
<td>received (THEME)</td>
</tr>
<tr>
<td>(6) Mary [ORIGIN/AGENT]</td>
<td>sent (THEME)</td>
</tr>
<tr>
<td>(7) The box [LOCATION]</td>
<td>contains (THEME)</td>
</tr>
<tr>
<td>(8) Mary [POSSESSOR]</td>
<td>owns (THEME)</td>
</tr>
<tr>
<td>(9) Mary [EXPERIENCER]</td>
<td>hates (THEME)</td>
</tr>
</tbody>
</table>

EXERCISE 1: Find as many examples as you can of the different types of transitive verbs and identify the theta-roles on each argument.

EXERCISE 2: Give the Italian translation of the verbs found in ex.1 and say whether the argument structure is the same.

EXERCISE 3: Find synonyms of the English and Italian verbs of ex. 1-2, and say whether the argument structure is the same.
If we observe the theta roles assigned by the verbs, we find interesting parallelisms between transitive and intransitive verbs. The sentence in the (b)-examples below has only one argument, the subject, but the verb is the same as in the (a)-sentence in which it has two arguments, the subject and the object. Notice that in the (b)-sentences the subject does not have the same role as the subject of the (a)-sentence. Quite on the contrary: the subject in (b) has the same role as the object in (a). The traditional classification of verbs into transitive and intransitive fails to capture this parallelism:

(10)  a. John broke the window.
     b. The window broke all of a sudden.

(11)  a. The wind moves the grass
     b. The grass moves

(12)  a. John made dinner.
     b. Dinner is cooking.

Now notice that there are optional arguments in some case that become obligatory in verbs referring to the same event but with different argument structure:

(13)  a. Mary received a letter (from her mother)
     b. Mary's mother sent a letter to Mary
     c. The letter reached Mary (in Venice)

(14)  a. This knife cuts meat very well
     b. Mary cut the meat with a knife

(15)  a. The chef roasted the meat (over the fire)
     b. The fire roasted the meat
     c. The meat roasted

Notice that the arguments that are not indicated in parenthesis are obligatory. If they are not present the sentence is ungrammatical:

(16)  a. *Mary’s mother sent.
     c. *This knife cuts
     d. *Yesterday Mary cut the whole day.
     e. *The chef is roasting
     f. *The fire roasts.

This means that all arguments of a verb must be realized in the clause.

**Exercise 4:** Now find the Italian counterparts of the sentences in (7). Are they all ungrammatical?
There are pairs of transitive verbs that assign the same thematic roles but different argument structure:

(17) a. The box contains 20 cookies
   LOCATION THEME
b. The cookies are in the box
   THEME LOCATION

(18) a. Mary has a beautiful doll
   POSSESSOR THEME
b. This doll belongs to Mary
   THEME POSSESSOR

(19) a. Mary hates Linguistics
   EXPERIENCER THEME
b. Linguistics disgusts Mary
   THEME EXPERIENCER

Ditransitive verbs are very similar to transitive verbs but they have one more argument, which is traditionally called indirect object. In both Italian and English it can be realized with a PP headed by the preposition to/a.

(20) a. John gave a book to Mary
   ORIGIN THEME GOAL/RECEIVER
b. John sent a letter (to New York)
   ORIGIN THEME GOAL/LOCATION
b. John sent a letter (to his mother)
   ORIGIN THEME GOAL/RECEIVER

Notice that give selects a GOAL which is also a RECEIVER and this argument is obligatory. On the other hand send can optionally have either a GOAL/LOCATION or GOAL/RECEIVER, but not both. Furthermore they are in complementary distribution, as shown by the ungrammaticality of the following sentences: *John sent a letter to his mother to New York. *John sent a letter to New York to his mother.

If the third argument is a BENEFACTIVE, it is realized in a PP headed by the preposition for. A BENEFACTIVE argument is often optional:

(21) a. John bought a book (for her sister)
   AGENT THEME (BENEFATIVE)
b. Susan made a dress (for her daughter)
   AGENT FACTITIVE (BENEFATIVE)
c. Ted answered the phone (for her mother)
   AGENT THEME (BENEFATIVE)

Some ditransitive verbs are also called “double object verbs” in English because they can take a construction in which the third argument is realized as a direct object. As is already apparent in (22b) and (22e) not all verbs that are compatible with a GOAL or a BENEFATIVE can enter a double object construction:
(22) a. John gave/sent Mary a book  
b. *John sent New York a letter  
   ORIGIN GOAL THEME  
c. Mary bought her sister a book  
   AGENT BENEFACTIVE THEME  
d. Susan made her daughter a dress  
   AGENT BENEFACTIVE FACTITIVE  
e. *Ted answered his mother the phone  
   AGENT BENEFACTIVE THEME  

A subclass of the verbs that head a double object construction can have a passive voice of this construction:
(23) a. John was given a book.  
b. Susan was sent a letter  
c. Mary was told a lie  
   GOAL THEME  
(24) a. *Susan was made a dress  
b. *Mary’s sister was bought a book  
   BENEFACTIVE THEME  

EXERCISE 5: Find cases of double object verbs in English and translate them into Italian.

EXERCISE 6: Try to add a BENEFACTIVE argument in Italian to different kinds of verbs and translate the sentences you obtain into English.

2. Intransitive verbs

As already noticed above, it is not possible to optionally omit a direct object of a transitive verb (cf. *John hates. *Mary owns. *Tom made. This is to say that when this is apparently possible, as in the pairs of sentences in (25)-(26), we are dealing with two different argument structure for the same verb. One which selects two arguments in the (a)-sentences and one which selects only one argument, in the (b)sentences:
(25) a. John is eating a sandwich.  
   AGENT PATIENT  
b. John has already eaten.  
   AGENT  
(26) a. John is drinking orange juice.  
   AGENT PATIENT  
b. John drinks  
   AGENT  

The intransitive versione of eat and drink imply a designated object, which is not part of the argument structure but is conventionally associated with the intransitive meaning of the verb. Intransitive eat both in English and in Italian means have a full meal, while intransitive drink means to be an alcoholic. These intransitive verbs assign the AGENT theta-role to its unique argument.

There is a second class of intransitive verbs, which are created by zero derivation from a noun. The meaning is often that of a functional verb such as have, make, take and the noun, as in (3)-(4):
(27) a. We were lunching.  
b. We were having lunch.  
(28) a. You shouldn’t fuss.
(29) a. You should bathe.
b. You should take a bath.

In many other cases, we only have the intransitive verb and no version of it with a functional verb + N, or vice versa:
(30) a. sleep, scream, cough
b. take a nap, have a shower, do one’s homework

There is no reason that one construction is favourite in one language and disfavourite in another. Languages just differ on specific cases. As a consequence, when learning the vocabulary of a foreign language, we have to learn each verb on its own.

Notice also that the possibility of zero derivation of verbs from nouns is not a property of intransitive verbs:
(31) a. guess the answer
   have a guess about the answer
b. xerox the documents
   make a xerox of the documents

Notice also that up to now we have dealt with intransitive verbs whose unique argument is an agentive subject. But in section 1 above we have seen that there are one argument verbs which assign the role THEME/PATIENT/FACTITIVE to their unique argument. We call these unaccusative verbs and we will see in section 3. that they behave quite differently from agentive intransitives.

3. Unaccusative verbs
We have previously observed that transitive verbs assign accusative Case to their THEME/PATIENT/FACTITIVE object. If a one argument verb assigns this kind of theta-role to its subject, being the subject this argument cannot receive accusative case from the verb. So for such verbs to exist they must not assign accusative. This is why they are called unaccusatives. In (32)-(33) we see a list of unaccusative verbs:
(32) a. The enemy sank the ship
    AGENT PATIENT
b. The ship sank
   PATIENT
(33) a. The boy broke the vase.
    AGENT PATIENT
b. The vase broke
   PATIENT

Motion verbs are all unaccusatives, in fact their argument is not an agent but it is the THEME of the movement. This is more apparent in Italian, where unaccusative verbs take essere as the auxiliary of the present perfect, and favor the postverbal position of the subject:
(34) a. E’ partito [il treno delle cinque].
b. Solo quando saranno tornati [tutti i suoi amici], tornerà anche [Gianni].

This is absolutely impossible in English where the subject is always preverbal:
(35)  a. [The five o’clock train] has just left.
    d. Only when his friends have all come back, John will be back.
    e. John came to solve our problems.

Sometime the subject must be postverbal in Italian. This happens in particular when a different element is in preverbal position and functions as the Topic of the sentence:

(36)  a. Not for the first time, an argument had broken out over breakfast. (ChS:1)
    b. Non era la prima volta che scoppiava un litigio durante la colazione. (CS:1)
(37)  a. Nel cortile risuonò, sonora e aspra, la voce di Draco Malfoy. (CS:90)
    b. Loud and scathing, Draco Malfoy’s voice echoed around the courtyard. (ChS:75)
(38)  a. Seconds later, a bell clanged, and Malfoy stepped into the shop. (ChS:42)
    b. Un attimo dopo un campanello suonò e Malfoy entrò nel negozio. (CS:48)
    c. Un attimo dopo suonò un campanello e ...
(39)  a. Know only that no harm can befall you whilst I am here. (ChS:78)
    b. Sappiate soltanto che niente di male potrà accadervi fintanto che io sono qui. (CS:93)

Unaccusative verbs in English also allows a postverbal subject, as in (40a), under very strict conditions:
    a) the subject position must be filled by the expletive pronoun there (40b);
    b) the subject must be indefinite (40c).

(40)  a. There arose a terrible misunderstanding.
    b. *Yesterday arose a terrible misunderstanding.
    c. *There arose this terrible misunderstanding.

This shows that unaccusativity is a universal property of language which manifests itself in different ways according to independent properties of different languages.

EXERCISE 6: Find sentences with unaccusative verbs in English and translate them into Italian. Try different positions for the subject and discuss which is the best choice in your opinion.

4. Psych(ological) verbs

A subclass of “transitive verbs” assign the roles of EXPERIENCER and CAUSE/THEME. These verbs refer to psychological states and are called phych verbs for convenience. There is no clear hierarchy between the two arguments and for this reason we have to learn for each verb which role is assigned to the subject and which role is assigned to the other argument.

We can have a complete parallelism between Italian and English:

(41)  a. Gianni ama/odia/ non sopporta la matematica.
    b. John loves/hates/can’t stand mathematics.

    EXPERIENCER
    THEME

(42)  a. La matematica me interessa/diverte/preoccupa.
    b. Mathematics interests/amuses/worries me.

    THEME
    EXPERIENCER
EXERCISE 7: Find sentences with psych-verbs in English and translate them into Italian. Mark the argument structure for each case and keep a register of the different subclasses.

5. Zero argument verbs
There are verbs that take no argument. Among these verbs we find weather verbs such as those in (47a), predicates that describe a situation such as the adjectives in (47b), the time expressions in (47c) and the identification construction in (47d). Notice that apart from (47a) we always find a copula be in these structures:

(47) a. It rains/ snows/ hails.
    b. It’s cold/ hot / pleasant in the attic
    c. It’s five / time to go
    d. It’s me.

The expletive pronoun it fills a subject position without an argument. This kind of pronoun does not exist in Italian, or better: Italian has a unpronounced pronoun to serve this function:

(47) a. Piove/ Nevica/ Grandina.
    b. E’ caldo/freddo in soffitta.
    c. Sono le cinque / E’ ora di andare
    d. Sono io.

Notice that the copula agrees with the predicate in *Sono le cinque e Sono io* in Italian. This correlates with the nominative case on io, while English has the non-nominative form me.

EXERCISE 8: Find other cases of Expletive it and translate them into Italian.