
Chapter 1
The functional approach to language and the typological approach to grammar

What is functionalism?
"...A functional approach to language means, first of all, investigating how language is used: trying to find out what are the purposes that language serves for us, and how we are able to achieve these purposes through speaking and listening, reading and writing. But it also means more than this. It means seeking to explain the nature of language in functional terms: seeing whether language itself has been shaped by use, and if so, in what ways — how the form of language has been determined by the function it has evolved to serve..."

What are the primary functions of human language?
Givón (2001: 7):
It will be taken for granted --- that the two primary functions of human language are the representation and communication of knowledge (experience).

Well-coded human communication may thus be divided, broadly, into two sub-systems (id., 7-11):
- the cognitive representation system
  * the conceptual lexicon (-> words, e.g. nouns, verbs; conceptual meaning)
  * propositional information (-> clauses; propositional information)
  * multipropositional discourse (discourse coherence)
- the communicative coding system
  * the peripheral sensory motor codes (domain of phonetics, phonology and neurology)
  * the grammatical code

What grammar is?
Givón (2001: 11-12):
The grammatical code is propably the latest evolutionary addition to the arsenal of human communication. --- At its most concrete, the primary grammatical signal involves four main coding devices:
- morphology
- intonation
  * clause-level melodic contours
  * word-level stress or tone
- rhytmics
  * pace or length
  * pauses
- sequential order of words or morphemes
From the primary grammatical signal ---, yet more abstract levels of grammatical organization must be inferred:

- hierarchic constituency organization
  * morphemes into words
  * words into phrases
  * phrases into clauses
- the grammatical category-labels
  * noun, verb, adjective
  * noun phrase, verb phrase
- scope and relevance relations
  * operator-operand relations
  * noun-modifier relations
  * subject and object relations
- government and control relations
  * agreement
  * coreference
  * modality
  * finiteness

What grammar does?
Givón (2001: 13):
Grammar codes, simultaneously, both propositional semantics and discourse coherence (pragmatics).

> Although it [grammar-as-code] is located wholly in the clause, its functional scope is not primarily about the propositional information couched in the clause in which it resides. Rather, grammar is predominantly about the coherence relations between the propositional (clause) and its wider discourse context.

> The traditional structuralist methodology, of examining (or experimenting on) isolated clauses, has tended to obscure this overwhelming fact about what grammar does.

Methodological issues: isolated clauses and conscious reflection
Givón (2001: 16-18):
The most common descriptive method used in grammatical analysis has been that of studying isolated clauses (sentences) outside their discourse context.

-> drawbacks: if grammar is used indeed primarily to code inter-clausal coherence, --- [studying grammar outside its communicative context] skirts the very data that may help to establish the pragmatic function of morphemes and constructions.

-> strengths:
  - one cannot begin analysing natural discourse without having first gained some preliminary knowledge of word structure (morphology) and clause structure
  - the clause-in-isolation field method, in its proper domain, has always rested on unimpeachable empirical foundations (e.g. studying form-meaning associations; hold all variables constant, but one, and record the effect)
-> the validity of the results rests upon two related assumptions:
  - the meaning of the manipulated forms is accessible to conscious reflection
  - all speakers will respond uniformly
The communicative intent in some cases (clauses) is not always available for conscious reflection (c.f. examples f-j below) and another method, that of studying grammar in its natural communicative context, is needed.

The theme-and-variation approach to syntax

The notion of syntactic construction (clause-type) occupies center stage in grammatical description.

-> examples of clause-types (p. 17):
  a. Marla hit Henry
  b. Marla didn't hit Henry
  c. (hey you,) Hit Henry!
  d. Who hit Henry?
  e. Did Marla hit Henry?
  f. Marla has hit Henry
  g. She hit Henry
  h. Marla hit him.
  i. Henry was hit by Marla
  j. The woman who hit Henry (was Marla)
  --- etc.

-> all the clause-types above share, more or less, the same propositional semantic theme (i.e. 'Marla hitting Henry'); the clause-types above are structural variants of that theme

-> The various clause-types — structural variants — found in the grammar of a language (e.g. above) are nothing but differential grammatical packaging of propositional-semantic contents in different discourse-pragmatic functional domains.

-> Constructions, or clause-types, are thus the grammatical coding instruments that signal discourse-pragmatic function.

The notion of syntactic construction, or clause-type, is rather rich. It does not only involve constituency and hierarchy, category labels, rhytmics and sequential order, but also the grammatical morphology and intonation pattern associated with the construction. It also involves the more abstract behavioral constraints on scope and relevance and government and control typical of the construction.

Basic clause (syntactic construction)
Givón (2001: 19):

The neutral or basic clause is the main, declarative, affirmative, active clause.
(c.f. Chomsky 1965)

-> Why (id., 37-41)?
  - the main argument: basic clause is the MOST FREQUENT clause-type in human discourse and thus UNMARKED syntactic construction -> such a clause-type has to have a privileged cognitive position
  -> functionally, markedness correlates with distributional frequency (this still demands an explanation, e.g. ease of articulation)
  -> NB! markedness is a matter of degree, and context dependent (c.f. in everyday discourse active voice is the unmarked case but in academic writing the unmarked case is passive)
  -> An important logical consequence of the context dependence of markedness is that substantive explanations of markedness must be domain specific (c.f. placing the agent in the subject role, thus making the active clause the unmarked case, propably reflects a cultural norm of talking
more about purposeful actants like ourselves than about dumb objects)
- also: the subject of a basic (theme) clause has the highest
number of subject properties, as against the subjects of non-basic clauses
(variations) [Keenan's 1975 and 1976 studies, according to Givón (2001: 39)
In theme-and-variation approach, the neutral or basic clause is just one clause-type,
used in a particular functional domain.

The fact that clausal grammar codes simultaneously propositional-semantic information and
discourse-pragmatic function has far reaching consequences -> the coding requirements are
often in conflict, so that the resulting structure is an adaptive compromise between the
competing functional pressures.
-> example:
   a. (then) she cut the meat with a knife (and) \(\textit{neutral-pattern main clause}\)
   b. well, the knife with which she cut the meat...
   \(\textit{indirect-object relative clause}\)
-> time-saving, ease of cognitive processing...

\textit{Adaptiveness and iconicity of grammar}

Givón (2001: 34)
The functional approach to grammar is founded on the assumption that \textit{grammar}, like all
biologically-based systems, is \textbf{adaptively motivated and thus in principle} non-arbitrary
(c.f. structuralism), that is, \textbf{iconic} (NB: iconicity is a matter of degree, not absolute; c.f.
Peirce)
->
Some iconic principles in grammar

* Intonation rules
  - Stress and predictability
    "Less predictable information chunks are stressed"
  - Melody and relevance
    "Information chunks that belong together conceptually are packed
together under a unified melodic contour"
  - Pause and rhythm
    "The size of the temporal break between information chunks
corresponds to the size of the cognitive or thematic distance between
them"

* Spacing rules
  - Proximity and relevance
    "Information chunks that belong together conceptually are kept in close
spatio-temporal proximity"
  - Proximity and scope
    "Functional operators are kept closest to the operand to which they are
relevant"

* Sequence rules
  - Order and importance
    "A more important information chunk is fronted"
  - Occurrence order and reported order
    "The temporal order in which events occurred will be mirrored in the
linguistic report of events"

* Quantity rules
  - Zero expression and predictability
    "Predictable — or already activated — information will be left un-
expressed"
  - Zero expression and relevance
    "Unimportant or irrelevant information will be left unexpressed"
These are the rules of pidgins' proto-grammars, but they are also attested in grammaticalized language. The iconic rules are integrated with the more symbolic machinery (morphology, hierarchic-syntactic constructions, grammatical word-order etc.)

Example:
- **a. neutral active:** The woman shot the deer (most topical agent)
- **b. agented passive:** The deer was shot by a woman
- **c. agentless passive:** The deer was shot (least topical agent)

*The rule-governedness of grammar*
Are there strict rules in a grammar?
-> no, *all grammars leak*, as Sapir put it in 1921, but no grammar is totally flexible and always negotiable, as Hopper suggested in 1987 (Givón 2001: 27-28)

**Grammatical categories**
...are prototypes (in Rosch's sense).
- **Multiple criterial features**  
  Membership in a natural category is determined by a potentially large basket of features, of which some are more crucial than the others
- **Prototypes and graded membership**  
  The most prototypical member of a category is the one displaying the largest number of criterial features
- **Strong feature association**  
  In the majority of instances, having one criterial feature implies having many of the others
- **Clustering around the categorial mean**  
  Outlier and ambiguous members of a category tend to be a relatively small minority

-> The hybrid nature of (prototype-based) categories is an adaptive compromise of two conflicting demands on biologically based information processing:
  - the need for rapid processing (biologically: automated processing), i.e. the need to stereotype (*Strong feature association, Clustering around the categorial mean*)
  - the need for fine distinctions (biologically: attended processing)
Chapter 3

**Simple verbal clauses** and argument structure

Simple — main, declarative, affirmative, active — clause serves as the reference point for grammatical description.

Simple clauses are basic clauses (i.e. they are most closely related to themes).

Describing the various types of simple clauses is tantamount to describing the various types of verbs, or *predications*, used in language.

*Why?*

Verbs, or predicates, make up the semantic core of clauses, defining their semantic type.

Verbs are characterized semantically first by the obligatory semantic roles of the participants in the state or event they code. Each verb — and verb type — has a characteristic cluster of such obligatory participants.

In addition to their assigned semantic roles in the state or event, participants also assume characteristic grammatical roles in the clause, such as subject, direct object or indirect object. Thus, while semantic roles define the state or event semantically, grammatical roles define the clause syntactically.

Simple clauses are thus defined in terms of their two matching templates or *frames*, one semantic, the other syntactic:

- **Defining frames of simple clause**
  - **semantic**: semantic frame of *participant roles*  
    (semantic structure of *state/event-types*)
  - **syntactic**: syntactic frame of *grammatical roles*  
    (syntactic structure of *clause types*)

The semantic roles of the participants in the state/event are systematically mapped into the grammatical roles in the clause (NB: there are exceptions).

*Why?*

Simple clauses exhibit the strongest isomorphism between semantics and syntax (c.f. they are most closely related to themes).

*Preferred argument structure*: The characteristic cluster of semantic roles of each verb have their 'preferred' mapping into grammatical relations in the simple clause.

**States, events, and actions**

- A proposition may signify a **state**, involving no change over time. The state may be either temporary (of limited duration), or permanent (of relatively long duration), or of some intermediate duration.
- A proposition may also signify an **event**, involving change from one state to another over time. The change may be fast and **bounded**, thus construed as a change from a distinct initial state to a distinct terminal state. Or it may be slow and **unbounded**, i.e. construed as an ongoing **process** without focusing on the event's temporal boundaries. Some events, further, are deliberately initiated by an active agent. Such events are called **actions**.
- examples:
  a. temporary state:  she was angry
  b. permanent state:  she was tall
  c. bounded event:    the ball dropped
  d. unbounded event:  the ball rolled downhill
  e. bounded action:   she dropped the ball
  f. unbounded action: she rolled the ball downhill

Transitivity

Simple clauses — and thus verbs — are either transitive or intransitive.

Semantic definition:
Semantic prototype of transitive event
a. agentivity: having a deliberate, active agent
b. affectedness: having a concrete, affected patient
c. perfectivity: involving a bounded, terminated, fast-changing event in real time

Syntactic definition:
Syntactic prototype of transitive event
Clauses and verbs that have a direct object are syntactically transitive. All others are syntactically intransitive.

Prototypical mapping between semantic and syntactic transitivity
If the simple clause codes a semantically transitive event, the event's agent will be the clause's subject, and the event's patient the clause's direct object.
Chapter 3.3
The Classification of verbs and simple clauses

3.3.1 Dummy-subject verbs

- Verbs in this class code states or events involving mostly natural conditions or weather phenomena. They are clearly intransitive in that they have no object. What is more, they seem to have no other semantic participant either. One may in fact say that the state or event they represent is indistinct from — or is itself — the participant. Such nondistinctness is only to be expected, since the phenomena in question are not spatially localized prototypical states or events, but rather spatially diffuse. Verbs in this class often take a syntactic subject, but it most commonly turns out to be a non-prototypical dummy subject. In many languages, the 'dummy' is a pronoun, but one that refers to no entity in particular, and cannot be assigned a clear semantic role. It thus merely but fills a formal syntactic role.

- Syntactically, the verb phrase in dummy-subject clauses may be either adjectival or verbal:
  a. It's hot (in here) (adjectival dummy-subject clause)
  b. It's so nice (in here) ("")
  c. It rained (verbal dummy-subject clause)
  d. It was hailing (hard) ("")

- In some languages, all predicates in this class are formally verbs.
- The noun form denoting the condition may also be used as the dummy-subject:
  a. The rain is falling/pouring
  b. The temperature is raising.


3.3.2 Copular clauses and copular verbs

- Semantically, copular clauses represent permanent or temporary states. Their subject occupies the semantic role of either a patient or dative of state. What is more, most of the lexical-semantic load of the predication is not carried by the copular verb itself, but rather by its non-verbal predicate — either an adjective (or AP) or a noun (or NP).

-> examples:
  a. He is a (lousy) teacher (nominal [NP] predicate)
  b. She is (very) tall (adjectival [AP] predicate)

- The copular verb is thus often itself a dummy verb, acting as the syntactic head of the verb phrase but carrying a reduced lexical-semantic load. --- In many languages the copular verb may carry distinct grammatical features.
- In many languages, copular clauses may appear without their copular head verb.
- Syntactic form: S[ NPsubj[ PRO ] VP[ [Cop] [NPpred/APpred] ] ]

3.3.3 Simple intransitive verbs

- Verbs in this class may code either states, events or actions. Their subject may be either an agent, patient or dative.

-> examples:
  a. He worked (hard) (agent subject [action verb])
  b. She sang/danced ("")
  c. She walked ("")
  d. They spoke ("")
  e. She meditated (dative subject [mental-state verb])
  f. He suffered ("")
3.3.4 Simple transitive verbs

- Prototypical transitive verbs (patient-object):
  The various sub-types of prototypical transitive-verbs classify the types of change undergone by the patient-object. Some verbs denote physical creation of an object where none existed before, as in:
  a. He built a house
  b. She painted a picture
  c. He made a coffee table
  Others denote the physical destruction of a previously-existing object, as in:
  a. They demolished a house
  b. She mashed the glass
  c. He carefully evaporated the solvent
  Others denote a considerable change in the object's physical condition, as in:
  a. She cracked/broke the pot
  b. He enlarged the livin-room
  c. They chopped the wood
  d. She cut her hair
  e. They killed two prisoners
  Some transitive verbs may denote a change in the object's physical location, as in:
  a. They moved the barn
  b. She shifted her leg
  c. He dropped the ball
  Others may denote changes in the surface conditions of the object, as in:
  a. He washed his shirt
  b. She bleached her hair
  c. They painted the walls
  Others yet may denote a change in some less visible internal qualities of the object, as in:
  a. He heated up a cup of soup
  b. She chilled the gaspacho
  c. They magnetized the floor
  Some prototypical transitive verbs, in addition to the change affecting the patient-object, also involve an incorporated manner sense, as in:
  a. She murdered him (kill deliberately)
  b. He smashed the glass (break completely)
  c. They shredded the documents (tear into small pieces)
  Others denote, in addition to the change, an incorporated instrument sense, as in:
  a. She knifed him (stab with a knife)
  b. They hooked a huge shark (catch with a hook)
  c. She slapped him (hit with the palm)
  Others may denote an incorporated location sense, as in:
  a. She housed them all winter (keep in the house)
  b. He bagged the apple (put in a bag)
  c. They imprisoned them (put them in prison)
Syntactic form (of a clause containing a transitive verb with a subject and direct object): S[NPsub][ PRO ] VP[ [V] [NPobj] ]

Less prototypical transitive verbs (metaphoric extensions of the prototype of semantically transitive event in terms of either the agent or patient)

Dative-subject verbs (dative subjects are conscious participants in the event without either intending or actively initiating it; the object of such verbs is also the less common patient of state rather than the prototype patient of change; the verb is most commonly a state verb):
   a. He saw her
   b. She felt no remorse
   c. They heard the music
   d. They know the answer
   e. He wanted two oranges
   f. She understood the problem

Dative object verbs (object is a dative participant whose involvement in events is typically mental rather than physical):
   a. They insulted her (> producing visible agitation)
   b. She spoils him rotten (> his overt behavior shows it)
   c. He amused her (> they roared in laughter)
   d. She entertained the crowd (> they applauded wildly)

Patient-subject/cause with dative-object (extension of the previous type; subject is a non-human cause):
   a. The offer insulted her
   b. This knowledge spoiled his appetite
   c. The idea amused him

Instruments as transitive subjects (extension of prototypical trans.verbs):
   a. The hammer smashed the window
   b. Her fist hit him with full force
   c. Penicillin finally cured him

Goal or source locatives as direct objects (locative object is patient-like, appearing to be more affected by the event):
   a. She approached the house
   b. She swam the channel
   c. They entered the house
   d. He rode the horse
   e. She left him

Verbs with associative direct objects (associative participant, co-agent)
   a. He met Sylvia (in the garden)
   b. She fought him (to a draw)
   c. He joined her (for lunch)

Verbs with incorporated patients (implied patient; overt object is "location")
   a. He fed the cows
   b. She stoked the furnace
   c. She dusted the table
   d. They robbed her

Verbs with cognate objects (object is an abstract product, activity [e.g. spatial motion], or mental event; resembles intransitive event)
   a. She sang a song
   b. They danced the rumba
   c. He gave a brief speech
   d. She gave him a kiss
   e. They made a sharp turn
f. She took a leap  
g. I made an error  
h. I had an idea  
i. They made a promise

**Verbs of possession (‘have’)**
- Many semantically transitive verbs can become syntactically intransitive (e.g. they ate, she drinks...)

### 3.3.5 Intransitive verbs with an indirect object

- Verbs in this group take a subject and an indirect object, with the latter most commonly marked by an adposition (c.f. transitive verbs). They may be further divided into a number of semantic subtypes, not all of which fall into the same syntactic type in all languages

- **The prototype:** Verbs with a locative indirect object
  * subject: agent or patient  
  * indirect object: locative

Some of these verbs code events of motion (subject moves toward or away from the locative object):
- a. She walked into the yard  
- b. He came from Buffalo  
- c. She arrived at the house  
- d. They went to the market  
- e. He swam across the river

Others code states of location (the subject is in/at/on/under/etc. the locative object):
- a. The book is on/under/behind/in front of the table  
- b. She is at/inside/out/near the house  
- c. They sat on/under/behind the table

Locative case-marking morphemes may be semantically rich (as in English) or bleached, leaving the verb itself to carry much of the semantic information. There are indeed languages with scant or no nominal case-marking. In such languages, all information about the semantic role of the indirect object is coded in the verbal word, either as a part of the verb-stem meaning, or by specific affixes.

- **Verbs with dative or patient indirect object**
  - a. She looked at him  
  - b. He listened to the music

- **Verbs with associative indirect object**

### 3.3.6 Bi-transitive verbs

- Bi-transitive verbs code events with three participants
  * syntactically: subject, object, indirect object (NB: there is cross-ling. variation)  
  * semantically: agent, patient, [prototypically] locative

- **The bi-transitive prototype:** Locative indirect object
  - a. He put the book on the table  
  - b. She sent the merchandise to the store  
  - c. They took the book off the shelf  
  - d. She brought the horse into the barn
- Dative-benefactive objects
  a. She gave the book to him  (direct object=patient)
  b. She gave him a book       (direct object=dative)
  c. She sent the book to him  (direct object=patient)
  d. She sent him the book     (direct object=dative)

- Alternating instrumental-locative objects
  LOCATIVE IO INSTRUMENTAL IO
  a. put/pour x into y         fill y with x
  b. take x out of y           empty y of x
  c. give x to y               supply y with x

- Verbs with two apparent direct objects
  a. They appointed Mary Chair
  b. They consider this man their chief

- Three object verbs?
  a. He bought the book from Mary for five dollars
  b. They sold the house to Jaane for peanuts