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Grammatical Competence in English
Shigenori Tanaka
COCONE Institute for Language Education

Introduction

The status of grammar in second language teaching has not been securely grounded. The term “grammar” often carries negative implications including:

- (1) Knowing about grammar does not help when it comes to using the target language.
- (2) Teaching grammar explicitly even hinders the process of developing communicative competence.
- (3) Children come to their native language without knowing it.

The practice of communicative language teaching in Japan and abroad over the last two decades, however, has left a message that the teaching of grammar should be reconsidered in that putting grammar aside in teaching has brought about a marked decline in the overall level of English proficiency on the part of the learners (Widdowson, 1986).

Then, do we need to stress the teaching of grammar again? The answer is yes or no, depending on what grammar we are talking about. The answer is “yes,” because every language has its grammar. Grammar is something—intuitions about acceptability of expressions—which has been somehow internalized by all individuals who speak a given language natively. On the other hand, the answer is “no,” if the term “grammar” used in the question refers to what is called “school grammar,” because we know on the basis of our experiences that school grammar does not work.

School grammar does not work for communicative purposes for the following reasons:

- (1) Excessive use of technical jargons such as “to infinitive,” “participial constructions,” “subjunctive mood,” and “relative clauses.”
- (2) Too much focus is on discrete points, failing to show a whole picture of English grammar.
- (3) The problem of representing actual language usage.
- (4) Lack of adequate explanation, lack of theoretical foundations.
- (5) A failure in designing grammar for communicative purposes.

When we say “yes,” we have an assumption that a new pedagogical grammar has to be developed (Widdowson, 1986; Rutherford and Sharwood Smith 1988, 1989). Pedagogical grammar has to be evaluated with respect to pedagogical soundness. Grammar is pedagogically sound if the following conditions obtain: (1) identifying trouble spots (pedagogical problems) and (2) shooting the troubles (providing pedagogical devices.)

In fact, without having grammar in focus, we are unable to talk about grammatical competence, because the definition of grammatical competence hinges on the theoretical framework of the grammar under consideration.

To give solid theoretical foundations for a construction of pedagogical English grammar, we use a “cognitive stance” (Taylor, 2004). When the stance is applied to the study of language, we can make the following claims:

- (1) Language reflects the way we conceptualize and perceive the world.
- (2) Sense-making and sense-sharing are what we are engaged in in our lives.
- (3) The sense of an expression is defined as “a state of affairs constructed out of the words” (the interpreter’s view) or “a state of affairs to be expressed into words” (the speaker’s view).
- (4) Grammar is semantically-motivated.
- (5) Hence, grammatical phenomena are largely accountable.

The proposed pedagogical grammar consists of three subcategories:

- (1) rule grammar (in a narrow sense)
- (2) chunking grammar—the main grammar
- (3) lexical grammar

Grammatical items are organized and classified into these categories, which, in turn, help define grammatical competence. Rule grammar is a category which deals with pure grammatical rules such as agreement in tense and number, verb forms, forms of negations and interrogations, and so on.

Chunking grammar, to be explained later in this paper, is what we call “grammar,” which is directly related to grammatical competence; it is concerned with the structural schema for chunk formation (e.g., the structural schema for the formation of a nominal chunk) and the chaining process of chunks, or the way chunks are linked and combined

to express something sensible. Chunking grammar includes a set of constructions which are conventionally used when we express modality, compare things, set a hypothetical space, emphasize certain information syntactically, and so on.

Lexical grammar assumes that grammatical information is inherent in some lexical items; thus, by focusing on a lexical item, we claim that we are able to explain grammatical phenomena relating to the item.

Chunking Grammar—the formation of chunks

Our understanding about grammar becomes part of our guiding principles when we approach the tasks of learning and teaching grammar, and assessing the learner's grammatical competence. When we talk about grammar, there seems to be a strong tendency among us English teachers to associate it with the linguistic analyses made by linguists and grammarians about English. In this case, we are talking about grammar as a product. A product view of grammar gives us different angles, and depending on which angle we choose, we have different theories of grammar.

It is our premise that in order to talk about grammatical competence as language resources, we should adopt a process view of grammar as a process. The term “process” is used here in order to emphasize that grammar is a device for information processing, which enables us to represent and talk about the world around and within us. We call a process-grammar “chunking grammar.” Below, we will discuss what a learner should know about English chunking grammar in order to attain grammatical competence in English. In other words, chunking grammar dictates what consists of grammatical competence.

Units of Information: Chunks

Vygotsky (1962) illustrates that there is an unavoidable grammatical constraint that one must linearly arrange words to convey a message.

“Thought, unlike speech, does not consist of separate units. When I wish to communicate the thought that today I saw a barefoot boy in a blue shirt running down the street, I do not see every item separately I conceive of all this in one thought, but I put it into separate words. A speaker often takes several minutes to disclose one thought. In his mind the whole thought is present at once, but in speech it has to be developed successively. A thought may be compared to a cloud shedding a shower of words.”

If our idea in the mind is “a cloud shedding a shower of words”, then the learner must face a horrible task of arranging the words to get his idea across. In that case, the word order constraint may be both a hindrance and a facilitator of language learning. It is a hindrance because the learner is not free to arrange the words. He has to learn how to arrange them. It is a facilitator because once the learner has mastered how to arrange words in a proper sequence, then he can use that knowledge recursively.

The word order constraint facilitates language learning most effectively when it is combined with the knowledge about structural boundaries. That is, language learning is and can be greatly facilitated by our innate tendency to treat information as chunk units and express ideas / thought using chunks. This immediately brings up a question: How many chunks do we recognize? Assuming that information is processed, we claim that a clause conveys clausal information, which is broken down into nominal, verbal, and adverbial chunks.

Nominal chunks are used to represent and talk about the world of things; verbal chunks are required to represent and talk about the world of events (a process, an action, or a state); adverbial chunks give the world of events reality, by providing necessary information (including when, where, why, and how) .

Given this, the task of chunking grammar is to specify how each chunk is structurally constructed and how chunks are chained to produce a flow of discourse or conversation. Thus, chunking grammar is concerned with (1) the formation of chunks and (2) combining chunks. We will look at the formation of chunks first, and then move onto a discussion of the process of chunking in daily conversation.

Nominal Chunks: Nominal Structure

Nominal chunks are expressed or constructed within the nominal structure or nominal structural schema.

<u>Nominal Structural Schema</u>

[Determiner + Numeral + Adjective + Head Noun + Post-modifiers]

The structure of an English nominal differs from that of the Japanese counterpart. Consider the structural configuration of a nominal chunk in the two languages, as shown below:

English: [an interesting Spanish movie I saw last Friday]

Japanese: [watashi ga sennshuu no kinnyoobi ni mita omoshiroi supein eiga]

I last Friday saw interesting Spanish movie

In describing a scene, we arrange words successively. Word order thus becomes an important consideration. The mere presence of word order suggests that language permits certain within-clause positions to be filled by certain elements. Nominal chunks fill in the two most important positions in a clause: that is, the subject position and the object position.

A nominal chunk, by definition, contains its head noun as the obligatory element. When we say that an element is obligatory, it means that the element should be present within the chunk unit; otherwise, the unit itself violates the well-formedness condition. On the other hand, when we say that an element is optional, we mean that we have options to use the element. Nominal information conveyed in a nominal chunk must contain its head noun. The head noun is thus obligatory. There is a case where a nominal chunk consists of a single word as in “Milk is good for you.” where the head noun “milk” receives no modification.

A nominal chunk consists of the head noun and the modifiers, where the modifiers are optional. The concept of “nominal” however includes nominalized verbals and nominal clauses as well, where the head noun is not easy to find. The simplest and yet effective test to judge whether a verbal phrase or clause is a nominal is to use the pronominal “it” and see if the pronominal indeed substitutes for the phrase or clause under consideration. The type of nominals which pass this test include the following:

- (1) that clause: [That John left Japan] is true. ->It is true.
- (2) WH Interrogative sub-clause: [How the paper will sell] depends on him. ->It depends on him.
- (3) Nominal Relative Clauses: [What John really needs] is a new computer. -> It is a new computer.
- (4) Nominal to infinitive clauses: [For John to go to school] is out of question. ->It is out of question.
- (5) Nominal -ing clauses: [Telling a lie] is awful. ->It is awful.

Let us note that Japanese uses “suru koto” when translating these nominal chunks, with the word “koto” referring to an event or an nominalized event.

As suggested above, all nominal chunks occur in subject and object positions: to be

more precise, all nominal chunks occur as subject, object of a verb, complement of a verb, appositive, and object of a preposition, as illustrated below:

- (1) subject: [Whether we really need you] is a different matter.
- (2) object of a verb: I don't know [whether we really need you].
- (3) complement of a verb: The problem is [whether we really need you].
- (4) appositive: The question, [whether we really need you], has not yet been considered.
- (5) object of a preposition: The decision must depend on [whether we really need you].

The System of Articles

To talk about an entity in a scene, we should deal with the system of articles. More precisely, we have to choose the right noun form to refer to the entity in mind. English has five noun forms, as shown below using the lexeme “apple” as an example.

zero + N	apple
a + N	an apple
N + -s	apples
the + N	the apple
the + N-s	the apples

Theoretically, we have two principles to choose the right noun form: the principle of reference and the principle of sense-sharing. The principle of reference is concerned with the relationship between the noun form and the intended entity; it is a matter of referring to the object. The following questions arise:

- (1) What is the difference between study piano and play the piano?
- (2) Why does the form “A William James” permit two interpretations—a person like the famous William James and a person called William James?

The use of a/an is motivated when one perceives an entity as a bounded object, a unit, or a kind. In other words, to use the “a + N” form, one must assume that there are more than one member in the category in question; otherwise, one cannot sample a member.

In order to say a William James, one has to assume that there are more than one William James in the category. Thus, we have two presumptions: (1) there are two William James, with one being a famous one, and the other being one who is similar to

the original, and (2) there are many William James. So depending on which presumption we have, the interpretations of “a William James” differ.

The discussion here suggests that the a priori distinction between countable nouns and uncountable nouns does not make sense, because depending on what entity we have in our mind, the noun form can be countable or uncountable as in “apples” and “apple.” At the same time, we should consider the notion of countability—the degree of countableness. Countability has a lot to do with our commonplace perceptions of the things—salience, purposes, and relevance come into play in determining whether an entity is countable. For example, we do not normally count the number of sands; thus we say, “There is a lot of sand here.” However, pebbles and stones are more easily countable. If you spot a hair which is grey, you say “a grey hair.” But if you see that all the hairs are grey, you simply say “grey hair.” In the same way, noodles are more countable than rice; buffalos are more countable than sheep.

We have expressions such as: a long silence, a coffee, a Ford, a Shakespeare, a cake, a difficulty, and so on. The phrase “Give me a coffee.” may be interpreted differently depending on the context of situation in which the phrase is used (compare a restaurant and a shop selling different kinds of coffees).

The use of “the” is within the realm of the sense-sharing principle. “The” indicates that an entity is something identifiable by the participants. The principle here is: Respect your partner’s frame of reference. This principle constrains the use of “the” within an egocentric space, as illustrated in A’s utterance:

A: (Returning home, a boy reports his mother of an incident that occurred in school) The boy hit me.

B: Wait a minute. I don’t understand which boy you are talking about.

A is talking about a boy who hit him; thus, the referent is definite. But saying “The boy hit me.” to his mother is an egocentric speech because she cannot identify the referent within her frame of reference. There are three cases in which the use of “the” is motivated:

(1). Sharing by Common Knowledge : The speaker is referring to an object which is identifiable to the listener because of common knowledge.

e.g., The earth goes around the sun./ Where is the post office? (→the nearest post office in the area under consideration) / I couldn’t use my car. The tires were slashed. (→ the

common knowledge that a car has tires).

(2) Contextual Sharing : The speaker is referring to an object mentioned earlier or to be specified immediately.

e.g., (I bought a cat.) The cat is very cute. -->previous mention

The cat I'm going to talk about is very small and cute. -->anticipation

(3) Situational Sharing: The speaker is referring to an object both the speaker and the hearer can point to.

e.g., Look at the car across the street. It's a Mustang.

It is always important to consider your partner's frame of reference within which to locate the entity referred to by the noun phrase.

Adjectives: Degree of Adjectiveness

As pointed out earlier, the English nominal chunk structure permits both pre-modification and post-modification. Let us consider the relation between the pre-modifying adjectives and the post-modifying restrictive clauses.

1. Bill bought a blue house.
2. Bill bought a house that was blue.

Premodifiers (e.g., "blue" as in "a blue house") are called attributive adjectives, while postmodifiers (e.g., "blue" as in "a house that was blue") are called predicate adjectives. There are adjectives that are attributive, never predicative, as follows:

the main reason (×the reason is main) / a total stranger (×the stranger is total) / an angry storm (×the storm is angry)

There is also a small class of adjectives that show just the opposite pattern as in asleep (The boy is asleep (×the asleep boy)). The adjectives that function attributively have the following characteristics, according to Bolinger (1967) and Celce-Murcia and Larsen-Freeman (1983):

- (1) The reference of the head noun has already been determined:
e.g., the [very, particular, precise, same, exact] man I was seeking
- (2) The importance or rank of the head noun
e.g., the [main, prime, principal, chief] points
- (3) The head noun is recognized by law or custom.
e.g., the [lawful, rightful, legal, true] heir
- (4) Those adjectives which identify the reference of the noun itself
e.g., a medical doctor [× a doctor that is medical]
a regular policeman [× a policeman that is regular]
- (5) The time reference of the noun
e.g., the future king, the late president, the present chairperson
- (6) The geographical reference of the noun
e.g., a Southern gentleman, the urban crisis
- (7) The intensity or emphasis of the head noun
e.g., a total stranger, a mere child, utter nonsense
- (8) The uniqueness of the head noun
e.g., the sole survivor, the only nominee

On the basis of the distributional analyses of adjectives, we may classify adjectives into three categories below:

Category A: [+attributive, +predicative] e.g., red, big, important, etc.

Category B: [+attributive, -predicative] e.g., main, total, future, etc.

Category C: [-attributive, +predicative] e.g., asleep, sorry, afraid, etc.

This analysis brings up the following three questions language learners would like to ask:

- (1) With regard to category A, how does the difference in position influence or contribute to the semantic difference?
- (2) With regard to category B, what is the operating principles that distinguish category B from category A?
- (3) With regard to category C, what kind of adjectives occur only in the predicative position?

On question (1), there is something semantically more permanent or characteristic about the adjectives that directly precede nouns than the adjectives that directly follow nouns, which tend to reflect temporary states or specific events (Bolinger 1967). This point is shown below:

- (1) the guilty people ----> a characteristic, classifying modifier of the people
- (2) the people guilty ----> the people are described in terms of one act or event

On question (2), Allen (1965: 108) gives an operational definition of “adjective” when he says that an adjective is a lexeme which

- (1) may occur between a determiner and a noun;
- (2) may be compared by the addition of the endings –er and –est, or by addition of “more” and “most” and
- (3) may, in its base form, be modified by the element “very.”

According to this definition, words like “main,” “particular,” and “true” are not adjectives per excellence. Interestingly enough, we have expressions such as “nobody interesting,” “something wrong,” “anything great,” and the like. “Something,” “anything,” “everything,” “nothing,” and “somebody” are, by definition, single words or lexemes. However, intuitively, we know that a word like “something” consists of the determiner “some” and the head nouns “thing.” Adjectives normally occur between determiners and the head noun; with the lexeme “something,” however, there is no position for an adjective to fit in. Hence, adjectives necessarily follow the head nouns, as in “something wrong.”

Question (3) will be most straightforwardly answered by emphasizing that a word like “asleep” is a quasi-adjective, or an adverb, or a combination of the two. The full status of “asleep” as an adjective is thus questionable.

The ordering principles of adjectives

English permits both pre-modification and post-modification. Earlier, we illustrated this with a simple diagram:

[----->N<-----]

This diagram suggests that n elements occur before and / or after the head noun. The

pre-modifying position potentially presents a serious problem among nonnative speakers of English with regard to the ordering of elements.

In Robert Allen's (1965) system, determiners occur first in a noun phrase, then come numerals, descriptive adjectives, adjectival of place of origin or nationality, adjectival nouns, and the head word, followed by post-modifiers, as shown below:

Determiners → numerals → descriptive adjectives → adjectival of place of origin or nationality → adjectival nouns → the head noun → postmodifiers

A determiner must occur in a nominal chunk. Two determiners cannot occur together in the same chunk. We cannot say, "a my friend" or "my a friend." The main function of a determiner is to introduce a nominal chunk. The expression "a my friend" is not semantically impossible; in Japanese, there is a corresponding expression. In English, circumlocutions like "a friend of mine" or "one of my friends" are used to express the intended meaning here. English determiners include:

ϕ, the, a, an, this, these, that, those, each, every, either, neither, another, the other, such a, such, no, a little, little, a few, few, some, several, much, many, a lot of, lots of, more, less, most, my, your(singular), his, her, its, our, your(plural), their, one's, whose, which, what, whichever, whatever, + all possessive noun phrases

When numerals occur in a noun phrase, they usually follow the determiner if there is one (e.g., the three cats); otherwise, they introduce the phrase chunk (e.g., three cats). If an ordinal numeral and a cardinal numeral co-occur, the ordinal usually precedes the cardinal, as in "the first two prizes," although, occasionally, the cardinal precedes the ordinal, as in "the two first prizes." Ordinal numerals follow determiners so consistently that the combination of determiner plus ordinal (e.g., the third...) may be felt by native speakers of English to form a single unit.

When an adjective like "lovely," "pretty," or "beautiful"—that is, an adjective expressing a personal opinion or value judgment—co-occurs with adjectives of sizes and/or shape and/or color, it usually precedes the others. In general, the adjectives nearest the head noun are those which express attributes of the noun about which there would probably be the widest agreement among different native speakers, while adjectives farther away from the head noun expressed those attributes about which different native speakers are least likely to agree (Celce-Murcia and Larsen-Freeman 1983).

On the basis of the foregoing discussion, we may propose the following general principles underlying the ordering of pre-modifying adjectival elements within a nominal chunk:

- (1) Determiners, which introduce nominal chunks, must come first;
- (2) Adjectives referring to characteristics of a head noun come between the determiner and the head noun;
- (3) Numerals come immediately after the determiner, if there is one;
- (4) The order of adjectives follows the order from subjective to objective or from psychological to perceptual. As a result, more objective and perceptual adjectives come closer to the head noun. Adjectives of size, shape, and color generally tend to occur in that order;
- (5) In principle, the number of adjectives pre-modifying the head is limitless, but in practice, it is limited to three.
 - a beautiful, Japanese, wooden box
 - some expensive, modern, silk blouses

If more than three adjectives are used, the expression sounds awkward, as shown below:

- a nice, medium-sized, antique, brown, metal desk (5)
 - a nice, medium-sized, brown, metal desk (4)
 - a nice, medium-sized, metal desk (3)
 - a nice, medium-sized, brown desk (3)
 - a nice, brown, metal desk (3)
- (6) If there are type-A adjectives [+attributive, +predicative] and type-B adjectives [+attributive, - predicative], type A adjectives come first as in “a good main reason,” not “a main good reason.” Type-B adjectives and the head noun tend to unite to form a nominal chunk, as in [a good [main reason]].
 - (7) In general, the pre-modifying adjective closest to the head noun tends to be semantically incorporated into the head noun to form a new nominal head as in “a blue [round table]” and “a round [blue table]”.
 - (8) We must note that so-called “pre-determiners” like “all,” “both,” “only,” and “even” are nominal chunk modifiers, which are outside of the nominal chunk boundaries, as in:
 - all [the apples in the box]
 - only [the apples in the box]
 - especially [the apples in the box]

These principles are psychologically motivated in a sense that they well fit the processing mechanism of nominal information linearly ordered from left to right.

Adding Further Information to the Nominal Chunk: Post-Modification

English permits post-modification as in “an old man who is looking for a young lady,” where the relative pronoun “who” is functioning as a clause introducer. In principle, the number of clauses to be embedded is limitless, and yet, cognitive constraints like memory span come into play when determining the complexity of an utterance. In their experiment, Miller and Isard (1964) asked the subjects to memorize sentences, all 22 words in length, but of varying degrees of self-embedding. The following are examples of successive degrees of self-embedding:

1. She liked the man that visited the jeweler that made the ring that won the prize that was given at the fair.
2. The man that she liked visited the jeweler that made the ring that won the prize that was given at the fair.
3. The jeweler that the man that she liked visited made the ring that won the prize that was given at the fair.
4. The ring that the jeweler that the man that she liked visited made won the prize that was given at the fair.
5. The prize that the ring that the jeweler that the man that she liked visited made won was given at the fair.

Miller and Isard’s subjects could easily remember sentences with one or two relative clauses, but memorization of sentences with three or four self-embedded relative clauses was difficult for all subjects. All five sentences are equally grammatical, and equally long, but they differ in the burden they place on immediate memory. Short term memory span is an important performance variable. Of the five sentences, sentence 1 is easiest, then sentences 2 and 3 follow; the remaining sentences are not subject to natural information processing.

Relative pronouns serve as clause introducers in the following ways:

- [the man [who [x knows it]]]
- [the man [whom [you like x]]]
- [the man [whose mother [x is a friend of mine]]]
- [the man [whose mother [I like x]]]

As the empty variable “x” suggests, a clause introduced by a relative pronoun is not a

was proposed by the committee. <Treat “the idea which was proposed by the committee”
as a nominal chunk>

“What” is also an interrogative pronoun; the use of “what” always suggests that the target object is unknown. This function stays operating even when “what” is used as a clause introducer.

1. What is she writing about?
2. I don't know what she is writing about.
3. I'm not interested in what she is writing about.
4. What she is writing about does not affect her reputations.

Of these sentences, “what” in sentence (1) is obviously an interrogative pronoun; “what” in sentence (2) is also the case of interrogative pronoun; “what” in sentence (4) is called a relative pronoun. However, “what” in sentence (3) permits two readings, suggesting that the distinction between interrogative pronoun and relative pronoun misses the essential function of “what” in all these cases. That is, “what” does not specify the target object; thus, unlike the explanation of a grammar paper, “what” in (4) does not contain the antecedent. It presents something as “something unknown.”

On the other hand, “that” is a demonstrative pronoun, whose function has something to do with the function of “that” when used as a relative clause introducer.

She owns a rifle that is shinny.

.....[a rifle]



that is shinny. <“that” refers to a rifle that she owns>

This is the only possible answer that might be accepted by all members.

[the only possible answer]



that might be accepted by all members

Notice that when the antecedent or the head noun contains adjectives such as “only” and “main,” a post-modifying clause tends to be introduced by “that.” This is understandable if we consider the function of the demonstrative pronoun “that.” The same applies when we explain why the relative-clause introducer “that” cannot be preceded by a comma, indicating that the clause is an additional comment on the part of the speaker.

• I'd always been swimming in lakes, which / *that were really nice because they're not salty and nice and cold, right?

• That's what they call it, 'giri choco,' which / *that means obligatory chocolate that you give to your bosses and things like that.

The pronoun “which” has a function of introducing a clause to give an additional comment, while the pronoun “that” does not permit that function because the demonstrative function of “that” does not go with the idea of giving an additional comment on the head noun.

Six Structural Forms as Post-modifiers

There are six structural forms functioning as postmodifiers, which have different functional properties, which we summarize below:

(1) NP + Preposition Phrase : Expressing the spatial relations.

e.g., a woman in the subway station

(2) NP + Doing: Expressing an incomplete on-going action, suggesting temporariness, concreteness, and visibility. [-tense, +progressive]

e.g., a woman talking to an old man

(3) NP + Done: Expressing a completed action [-tense, +perfective]

e.g., a woman beaten by the man

(4) NP + To Do Phrase: Expressing a sense of futurity, an action planned [-tense, -aspect]

e.g., a rich man to make you happy

(5) NP + Adjectival Phrase: Expressing the (resulting) attributes of the NP as additional information [-tense, -aspect]

e.g., a man enthusiastic about horse racing (Note: in “an enthusiastic man,” “enthusiastic” refers to a current attribute denoting an already existing characteristic)

(6) NP + WH/THAT Clause: Capable of expressing the mood, tense, and aspect of an event, thus being the most versatile of all the post-modifiers.

e.g., a woman who might have married a school teacher

We may also note that there are two types of postmodification with respect to the notional function of the head noun: the objective type and the subjective type. With these two

notional types, the following cross-categorical generalizations emerge:

The Objective Type

the man [whom [I talk to x]]: whom type

the man [whose mother [I like x]]: whose type

the man [to [talk to x]]: to type

The Subjective Type

The man [who [x is standing in the street]]: who type

The man [x standing in the street]: doing type

The man [x in the street]: Prepositional Phrase type

The man [x beaten by a cop]: done type

The man [x enthusiastic about his future]: adjective type

The man [whose mother [x is beautiful]]: whose type

What is the difference, if any, between “the crying baby” and “the baby crying,” or between “the stolen camera” and “the camera stolen”? By definition, an NP must contain its head noun, and head noun refers to something we pick in a scene to communicate. In other words, whenever we start out making a nominal chunk, we have the head noun from the start. No matter how long a nominal chunk may be, we must be clear about what the head noun is. In general, when a pre-modifier is used, we tend to capture an entity in a single shot; by contrast, a post-modifier works when we want to add more information about the head noun.

Verbal Chunk: The Verbal Structure

In this section, we turn to the verbal structure, which is to convey verbal information dealing with the following two pedagogically important points: (1) the propositional argument structure of a verb and (2) time space (tense, aspect, and voice).

Propositional Argument Structure (PAS): NP + V + NP

Fillmore (1977 : 109) claims that scenes “activate or are activated by given linguistic expressions.” Expressions of different types serve as activators. For example, the word “alimony” activates a scene like the following:

“If A pays alimony to B, at one time A and B were married, and that marriage ended in divorce, and at the time of a divorce an agreement was made between the two participants to the effect that one of them would pay money to the other.” (p. 109)

Likewise, each verb activates a certain propositional argument structure or what we call “a verb-driven schema” –or simply “a verb schema” –along with prototypical participants in the event expressed by the verb. An argument position corresponds to a thematic relation. For example, the verb schema of “kill” is: kill (X, Y), where the two argument positions are filled by NPs with the semantic feature [+animate].

There are dative verbs that can trigger three argument positions in their verb schemas, such as give, send, buy, bring, write, and so on.

1. John gave Mary a letter.
2. John sent Mary a letter.
3. John brought Mary a letter.
4. John wrote Mary a letter.
5. John bought Mary a letter.

There is a tendency for a given verb to be associated with a certain verb schema: “break” tends to be associated with break (X, Y); “give” tends to be associated with give (X, Y, Z), and “put” with put (X, Y, Locative). We may, however, note that the same verb can trigger multiple schemas, as illustrated with the verb “give” below:

1. John gave the boy some papers.
2. John always gives papers at Christmas times.
3. John gave a cry when he saw it.
4. It is more blessed to give than to receive.

According to Valency Grammar (Tesnière 1959; Somers 1987), the elements of the sentence are subject to certain governor-subordinate relationships. The top-elements of the sentence are categorized into either “actants” or “circumstantials,” where the actants are the central participants in the state of affairs expressed by the verb in question. The verb’s valency is determined by the number of actants that a verb takes, with the possible valencies ranging from zero to three as summarized below:

Avalent Verbs: rain, snow, etc.

Monovalent Verbs: fall, go, come, etc.

Divalent Verbs: hit, break, make, etc.

Trivalent Verbs: the dative usage of verbs

In Valency Grammar, a verb is considered to be the structural center of the sentence. Tesnière (cited in Somers 1987: 6) notes that “the actant is an integral part of the verb, so that it is often indispensable in order to complete the sense of the verb ... On the other hand, the circumstantial is essentially optional.”

As Somers (1987) points out, however, this way of characterizing actants and circumstantials invites problems. Most notably, prepositional phrases expressing a locative sense are considered circumstantials and yet some circumstantials are obligatory to complete the sense of a certain verb. An often-quoted example is the use of put: “John put the box” leaves a sense of incompleteness, and normally, the verb “put” obligatorily motivates a locative expression such as there, on the refrigerator, and so on. Here, the distinction between complements and adjuncts is crucial.

Intuitively, a verb requires its complement α , and the values of α differ according to the meanings of a verb. Let us assume that α refers to an entity, where an entity can be a physical entity, an abstract entity, or an event. The pronominal “it” can, in fact, refer to both an object or an event. Thus, a sentence like “I liked it” can be used to describe a situation in which someone did something funny, thus “it” referring to an event. With this in mind, let us consider the following:

1. John made wine out of grapes.
2. John made grapes into wine.

Superficially, these two sentences are syntactically the same constructions: NP + V + NP + PP. However, the scope of “make” in (1) is obviously “wine,” the product of making; on the other hand, the scope of “make” in (2) cannot be “grapes,” because this analysis makes the sentence incomprehensible. Rather, we should say that the scope of “make” is [grapes into wine].

The verb “make” has two semantic features: [+focus on product, +change in appearance]. Thus, “make” can focus on a process of changing. This accounts for the intransitive use of “make” – rarely used, though – as in “Ice is making on the pond.” Because of the intransitive usage, the end product is irrelevant here; thus, the remaining feature [+change in appearance] is focused. In the same way, in “John made grapes into wine,”

the process of changing grapes into wine is focused.

What is suggested here is that the value of α can be an event such as [grapes into wine]. This analysis makes it possible to throw away intuitively unnatural dative constructions. If a verb has two objects, i.e., direct object and indirect object, how does the semantics of a verb like “give” work? In other words, we must admit that the two sentences represent the same state of affairs:

1. John gave a paper to Mary.
2. John gave Mary a paper.

Here, according to our analysis, the semantics of “give” is described as “cause something to go out of the subject’s possessional space. In (1), John did something that caused a paper to go to Mary. In other words, the target of “giving” in (1) is “a paper.” A theory of dative alternation forces us to interpret sentence (2) in exactly the same way. However, this is problematic for some reasons.

First of all, the semantics of “give” permits the following sentences.

1. Cows give milk. / The sun gives light. / The experiment gave a good result.
2. A withdrawn person doesn’t know how to give. / It is more blessed to give than to receive.
3. He gave a mean look. / She gave a sudden cough.

In these examples, information about the recipient is missing, and without it, these are all natural sentences because the semantics of “give” is “to cause something to GO [out of the subject’s HAVE space].

In the construction “S + give + A + to B,” the semantics of “give” will be read as: “to cause something A to GO to B.” Here, the feature “GO” becomes a semantic constraint on possible As

On the other hand, the construction “S + give + B + A” will be semantically interpreted differently: S does something that cause [B HAVE A] to happen. Here, the target of giving is not an object, but an event. That is why “cause A to GO” has to be changed into “cause [B HAVE A] to HAPPEN”; we can sense a logical connection of “a thing to go” and “an event to happen.” Notice that in the “give + B + A” construction, the feature of “GO” is not implied; thus, the values of A does not have to be restricted to something alienable. This accounts for the following data:

1. a. John gave Mary a headache.
b. ?John gave a headache to Mary.
2. a. John gave Bill a kick in the pants.
b. ?John gave a kick in the pants to Bill.
3. a. John gave the door a push.
b. ?John gave a push to the door.
4. a. Overwork gave Mary a heart attack.
b. ?Overwork gave a heart attack to Mary.

In these examples, “a headache,” “a kick,” “a push,” and “a heart attack” are not normally perceived as something alienable; (a) sentences here all indicate that B HAD A as the following paraphrases suggest:

- (1) John did something that caused Mary HAVE a headache.
- (2) John did something that caused Bill HAVE a kick in the pants.
- (3) John did something that caused the door HAVE a push.
- (4) Overwork did something that caused Mary HAVE a heart attack.

Here, we assume that [B + A] is a small clause. The term “small clause” is used to refer to “a sequence which could form an independent clause if it had the copula, but from which the copular is missing” (Cattell 1984: 189). The sentence below is a standard example of an embedded small clause:

I consider [John BE a fool].

We would extend the notion of “small clause” to refer to any sequence of words from which a clause is recoverable with the abstract verb BE or HAVE. If the verb “give” is defined as a three-argument predicate, then, the small clause analysis does not work because it permits only two arguments. Nevertheless, we must consider the fact that give can be used both transitively and non-transitively. We must also note that a case such as “John gave a cough” does not motivate a third argument. It is appropriate to describe “give” in terms of “give α ,” where α is a variable to be filled in by a phrase or a clause. If a clause becomes the value for Y, then the small clause analysis comes into

play.

This analysis has advantages as demonstrated above. To add more evidence to support the small clause analysis, let us consider the following sentence from Oehrle (1976):

Nixon gave Mailer a paper.

1. Richard Nixon temporarily handed over a paper to Norman Mailer.
2. The ownership of a paper transferred from Nixon to Mailer.
3. Mailer was able to write a paper thanks to Nixon.

Here, three interpretations are possible depending on the context. The sentence “Nixon gave a paper to Mailer.” permits the first two interpretations, but not the third one. A small clause analysis suggests that the semantic vagueness associated with “have” is carried over to the abstract HAVE in a small clause. In other words, the ambiguity of Nixon gave Mailer a paper. is explained in terms of the intrinsic vagueness of HAVE. What is constant here is the relation “Mailer HAVE a paper,” and the interpretation of HAVE varies contextually.

Thus, HAVE and BE function as abstract verbs in small clauses. With this knowledge, a language learner is able to understand and produce the following constructions easily:

1. John got Bill a ticket for the concert. [Bill HAVE a ticket for the concert]
2. John got Mary happy. [Mary BE happy].

Likewise, the following challenging constructions can be construed easily with the concept of abstract HAVE and BE:

1. Mary made John a good wife. Mary [made [John HAVE a good wife]]
2. Mary made John a good husband. Mary [made [John BE a good husband]]

Sentence (2) is a case of causative “make,” as in “Mary made John happy.” However, sentence (1) used to be presented along with a paraphrase such as “Mary became a good wife for John.” Paraphrasing the original sentence this way ends up with disregarding the use of “make.”

To summarize, grammatical competence includes knowing the following:

- (1) the basic form for the propositional structure of a verb or a verb schema consists of actants and circumstantials, where some circumstantials are obligatorily motivated by verbs and others are optional (although the obligatoriness or optionality is actually determined pragmatically);
- (2) the actant part will be expressed in terms of “verb + α ,” where the variable α is filled in by a noun phrase, an adjective, or a clause / small clause;
- (3) the elements in a small clause are semantically related to each other by the abstract HAVE or BE.
- (4) the semantics of a verb interacts with the construction to describe a state of affairs.

The last point suggests that verbs such as “make” and “give” permit different constructions, and that the interaction of the semantics of “make” or “give” and the construction in which the verb is used determines the meaning of an utterance, or a state of affairs to be constructed out of [or into] words.. The speaker constructs a state of affairs in saying something (i.e., into words); the hearer constructs a state of affairs out of what is said (i.e., out of words).

Time Space: Tense & Aspect

A scene may contain a single event, or a single thing, or a set of events, or a set of entities. Any event may be a process, an action, or a state, which should be placed in a proper temporal and spatial context. Generally, the context of “here and now” is appropriate to capture the relation between events and their temporal and spatial contexts. The context of here and now can be schematically expressed as follows:

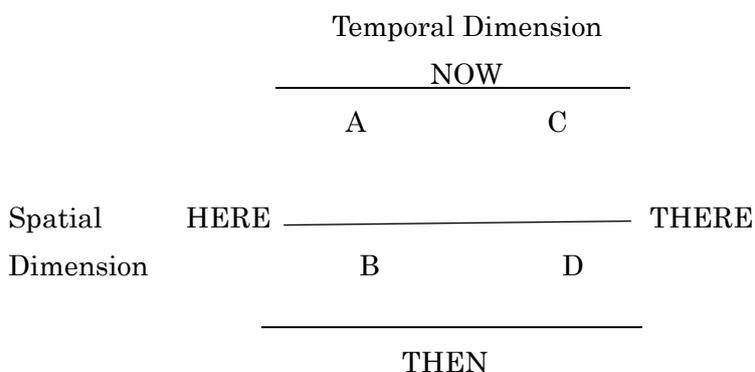


Figure 1. Temporal and Spatial Dimensions

As Fauconnier (1985) points out, we can establish the temporal and spatial spaces (or

contexts), elements within them, and relations holding between the elements by means of linguistic expressions. Elements or things in a scene [event] space are generally expressed by nouns (nominals); relations holding between the things are expressed by verbs and / or prepositions. Temporal and spatial “space-builders” typically include prepositional phrases as in “in Bill’s mind,” “at the beach,” “in 2005,” and so on, and adverbs such as “here,” “there,” “then,” “tomorrow,” and so on. As Fauconnier suggests, underlying subject-verb combinations such as “Max believes” and “I hope” often serve as space-builders. For example, in the sentence “John believed that in Mary’s picture, the flowers were yellow,” “John’s belief” is the parent space in which “in Mary’s picture, the flowers were yellow” holds, and “in Mary’s picture” serves as a daughter space within which “the flowers were yellow” holds. In the sentence above, a past space of John’s belief is introduced by the space builder “John believed,” and the proposition holding in that space is accordingly marked grammatically as “past” (Fauconnier 1985: 34).

Thus, tense indicates which space a description belongs to. Simply, tense is a time-space builder. Here, we are concerned with the tense-aspect system in English. Tense relates to the time when an activity or state occurs. On the other hand, aspect comments on some characteristic of the activity or state. For example, the –ing of the progressive is the aspectual marker in English. Its basic semantic function is to indicate that an activity is in process: i.e., has some duration, and therefore is imperfective or incomplete. The –en of the past participle is also an aspectual marker, and its basic semantic function is to indicate that an activity is complete.

In the English verb system, there are two tenses (present and past) and three aspects (simple, perfective, and progressive) that join to produce eight tense-aspect combinations for finite verbs in the active voice:

	Simple	perfective	progressive	perfect progressive
Present	eat(s)	has/have eaten	am/is/are eating	have/has been eating
Past	ate	had eaten	was/were eating	had been eating

Figure 2. A matrix of present tense and aspect

These grammatical aspects have their distinct functions (see Leech, 1987; Chafe 1970). For example, Chafe describes the meaning of perfective as follows:

“the meaning of perfective in all these sentences seems to be that a certain situation exists at the time of reference –here, let us say, at the moment of utterance. If the situation is the

consequence of an event, perfective means that the event took place prior to the time of reference. Perhaps, the best way to characterize the meaning of perfective is to say that everything is understood to obtain at the time of reference, as in a nonperfective sentence, except that either the beginning of the state or the event which produced the situation is pushed back to an earlier time.” (1970: 172)

To put it simply, the perfective always means that the present state (a completed state) has its origin in past space. The presence of “past” indicates that the time of reference is shifted to the moment of the utterance to some earlier time. This reference point in the past must be established in some way linguistically or non-linguistically. The rule is: when the speaker uses the past inflection, he or she assumes that the hearer knows or doesn’t have to know what the past reference point is. If he or she cannot make such an assumption, he or she is linguistically compelled to add some device to the utterance to establish it such as “last night” and “two weeks ago.”

Here, the tense system and the aspect system are confused in discussing the difference between the past form and the perfective form. With the present tense in mind, let us summarize the functions of three aspects as follows:

Present Simple: to be used to describe an event in a snapshot fashion (Static representation of an event)

	Description of pictures in newspapers
do something	habitual activities
	procedural activities
	generic statements

Present Progressive: to be used to describe an event in a video movie fashion.

be doing something → be in the state of doing something

He is running in the rain. [+ongoing, + observable, +temporary, -complete]

Present Perfective: to be used to indicate that an event which occurred earlier than the moment of the utterance has still relevance to the time of the utterance, thus emphasizing the resultative state of the event.

have [done something], where “have” shows an experiential space within which the event “done something” is present.

The same eight tense-aspect combination occur in the passive voice of finite verbs as well, as summarized in the table below:

	<u>Simple</u>	<u>perfective</u>	<u>progressive</u>	<u>perfect-progressive</u>
Active	beat	have beaten	be beating	have been beating
Passive	be beaten	have been beaten	be being beaten	have been being beaten

Figure 3. A matrix of past tense and aspect

In addition to tense, aspect, and voice, we have modal auxiliaries such as *can*, *should*, *might*, and *may as well*. The rule of combining these items in a verbal chunk has been proposed by Noam Chomsky (1957):

The structure for verbal chunks

[Tense (Modal) (perfective) (progressive) (perfective) + V]
 (Have + -en) (Be + -ing) (Be + -en) + V]

(1) To form a minimum verbal chunk, [tense + V] is required.

(2) Shift and attach “tense” to the verb.

- Bill beats John. / Bill beated John.

(3) All items can be used, but in this order only, and the affix (“-en” or “-ing”) should be attached to the immediately following verb..

- John could have been being beaten by Bill.

[past + can] = could

have be + en be + ing beat + en

(4) Items can be used selectively, but in this order only.

- John has been being beaten by Bill.
- Bill has been beating John.
- John may be being beaten by Bill.
- Bill must have beaten John.

Thus, the grammar of the English verbal chunk includes the propositional argument structure of a verb or a verb schema and the tense-aspect system.

Adverbial Chunks

Adverbial structures are different from the preceding nominal and verb structures because they do not contain the within-structure “head word” functioning as the head information.

Nominal Structure: [the tall young girl wearing a red skirt]

Verbal Structure: [must have been singing]

Adverbials always add more information about “something” which is structurally outside the adverbial structure conveying the information under consideration. Thus, for example, in the sentences below:

The thieves had run away [when the police arrived]

He met her [on the first morning] [in Bangkok]

The clause “when the police arrived” is informationally related to the preceding main clause; “on the first morning” and “in Bangkok” are informationally related to “met her” or “he met her.”

Forms of Adverbials

Adverbial information is conveyed structurally in clauses, phrases, or words, as we see below:

Values tend to be [hierarchically] arranged. This may be shown [through use of the concepts of “means values” and “end values.”] [As the words themselves imply], means values are instrumental values [in that they are sought as part of the effort to achieve other values—end values—that are both more general and more important in the eyes of the groups who are doing the valuing].

In this passage, the bracketed expressions convey adverbial information. An adverbial

chunk may contain or embed another chunk(s) containing adverbial information within it. For example, the adverbial clause starting with “in that they are sought...” has complex sub-structures:

in that they are sought [as part of the effort]
[to achieve other values—end values—]
[that are [both] more general and more important [in the eyes of the groups who are doing the valuing]

Functions of Adverbials

What is suggested above is that adverbial chunks may be more effectively analyzed in functional terms than in structural terms. In the following few pages, we will hence summarize the functions of adverbials in terms of (1) adverbials modifying adjectives, (2) adverbial phrases including a-words, (3) adverbials modifying elements other than adjectives, and (4) adverbials conveying information about “time,” “location,” “manner,” “frequency,” and so on.

First, adverbials modify adjectives in the following way:

A. Adverb + adjective:

e.g., {very, awfully, extremely, just, rather, more or less, a kind of, so, somewhat, breath-takingly, etc.} + beautiful

B. Two-part Adverbial Modifiers

1. Adjective + as / like ...

e.g., cute [as a doll], bright as a button, clean as a breeze, tiny like a bird, etc.

2. Adjective + enough to VP [verb phrase]

e.g., easy [enough for 6 year old children to read]

3. too + adjective + to VP

e.g., too touch [to tackle by ourselves]

4. so+ adjective + that clause

e.g., so poor [that he cannot dine out even at McDoland's]

5. -er / more / less than ...

e.g., sillier than me, more difficult than expected

6. such NP [noun phrase] that clause

e.g., such a wonderful idea that no one can deny it

7. the most adjective that clause

e.g., the most beautiful woman that he ever met

English has a number of adverbial phrases which include such words as:

alongshore, alongside, downstairs, downtown, indoors, inshore, inside, offshore, outside, outdoors, overboard, overhead, underfoot, upstairs, upstream, etc.

By far the largest subgroup of adverbial phrases is the group of what Allen calls “a-words,” or words which begin with the prefix a-, as the following examples show:

aback, abed, ablaze, aboard, above, aboveboard, abroad, across, adrift, afield, afire, aflame, afloat, afoul, again, aghast, aglitter, ago, ahead, alight, alike, alone, along, aloof, aloud, amid, amiss, amok, anew, askew, asleep, astray, athwart, atop, etc.

These words are used as in “his trip abroad,” “a house afire,” and “the light ahead.” Here, however, the classification of these words is not straightforward: words like “abroad” and “away” are prototypically adverbs, while “asleep” and “awake” are more like adjectives.

An adverb has the function of modifying something, typically adjectives. Besides adjectives, clauses, verb phrases, adverbs, prepositional phrases, and even noun phrases become the target of modification.

Modifying clauses

- Happily [they lost the game].

Modifying verb phrases

- We happily [lost the game].

Modifying adverbs

- He has almost [always] had a part-time job.

Modifying prepositional phrases

He used to misplace his watch everywhere, but especially [under the table].

Modifying noun phrases

Ask the boys for help, especially [those big guys].

I like all kinds of fruit, especially bananas.

There is a set of adverbs which come in the middle of a clause. A word of negation, “not,” is a case in point, as in “He did [not] write letters clearly.” Other typical middle adverbs include: already, also, always, ever, kind of, never, often, perhaps, rather, seldom, somehow, sometimes, still, etc. Middle adverbs may themselves be modified by another middle adverb as in “He has almost always had an extra supply of batteries.”

Adverbials convey information of different kinds such as time, location, manner, purpose, instrument, and so on.

[TIME]

- We’ll arrive there [on time].
- [When I get there] I would tell you the whole story.

[LOCATION]

- Put your hand [up on your head].
- He ran [around the track][in the park].
- She went to the restaurant [where I had delicious Thai cuisine].

[MANNER]

- He said so [in a satisfied manner].
- He came back [hurriedly].
- She spoke French [with a Japanese accent].

[FREQUENTLY]

- He said “no” [every time I made a request].
- He was hanging around [all of the time].
- She [often] complains.

[PURPOSE]

- He did everything [to reach the top of the social ladder].

[REASON]

- I came here all the way [because I needed your help].

[INSTRUMENT]

- She broke it [with a hammer].

[CONDITION]

- [If that is the case] I wouldn’t say anything.
- I’ll write it down, [in case I forget it.]

[CONTRAST]

- I think you should put your plan into action, although he disagrees with it.

[CIRCUMSTANCE]

- He smiled, with his legs on the table.

[HYPOTHETICAL]

- [If I had not met you then] I would not be a scientist.

[SUBJECTIVE ATTITUDE]

- Surprisingly enough [Honestly speaking], Tom recently wrote a love story.

In the following section, we will turn to the discussion about the obligatoriness or optionality of adverbial chunks, which is semantically determined by the verb in the clause in question; the intuitive knowledge about the obligatoriness or optionality of adverbials should be part of our grammatical competence.

Obligatory Adverbial Chunks vs. Optional Adverbial Chunks

Let us consider the following sentences containing locative adverbials:

1. He keeps his car in the garage.
2. He washes his car in the garage.
3. In Yokohama, he keeps his car in the garage.

Here we notice that the semantic scope of “in the garage” can be ambiguous in some sentences, more so in (2) than in (1) and (3). In (2), the sentence means either “He washes his car which is in the garage” or “He washes his car, and he does it in the garage.”

- He washes [his car in the garage].
- He washes [his car] [in the garage].

In (1) and (3), it is more likely to interpret that “in the garage” refers to the place where his car is kept than to interpret that “He keeps his car which is in the garage,” although the latter interpretation is not completely impossible.

The comparison of “wash” and “keep” may indicate that “keep” is more strongly associated with the locative adverbial. The prototypical sentences of “keep” include:

1. She keeps valuables in a safe deposit box.
2. You should keep the leftovers in the refrigerator.
3. He kept some money in the drawer.

In these cases, we would say that the locative adverbials are semantically motivated or “triggered” by the verb “keep.” However, the triggering is not obligatory, since the following sentences are perfectly well-formed:

1. She keep valuables.
2. You should keep the leftovers.
3. He kept some money.

Compare the keep sentences with the put sentences, which trigger locative adverbials obligatorily:

1. a. She put valuables in a safe deposit box.
b. ?She put valuables.
2. a. You should put the leftovers in the refrigerator.
b. ?You should put the leftovers.
3. a. He put some money in the drawer.
b. ?He put some money.

The triggering of a locative adverbial is not categorically determined, but in a scalar manner, and that the determining factors are the semantics and pragmatics of a verb. To illustrate, consider the use of “give.” Given the incomplete sentence “John gave papers...,” our semantic and pragmatic knowledge seems to motivate “to + NP” indicating a recipient to complete the sentence, as the first sentence below:

1. John gave papers [to his girlfriend].
2. John gave papers at Christmas times.

We interpret the first sentence as “John did something that caused some papers to go to his girlfriend out of John’s HAVE space.” However, the incomplete sentence “He gave papers” does not necessarily motivate a recipient-indicating adverbial because the second sentence is also possible, where “at Christmas times” is a temporal adverbial.

The distinction between obligatory triggering and optional triggering is done not on a categorical basis, but on a continuum basis, since there is a difference between “keep” and “wash” in their triggering power. Adverbial information is provided in such a way as to complete the “expectation” we have on the basis of the already processed information. Thus, for example, the processing information on the left below tends to motivate the

additional information such as the one listed on the right.

Processed Information

How do you get from here

Harris loaded the wagon

The garden is swarming

She was too young

Joan is getting used

He slid the table

Motivated Information

to the building?

with hay.

with bees.

to go abroad alone.

to her new husband.

into the corner.

The assumption here is that information is processed from left to right in a look-ahead fashion. When someone says, “He keeps the money for her birthday,” we have adverbial information conveyed in “for her birthday.” This is not, however, the information strongly triggered by—or expected from—the preceding elements. We may contrast this with the adverbial information “in his pocket” as in “He keeps money in his pocket,” where we note that the preceding “He keeps money” can motivate the listener or reader to look for the locative information. The adverbial “in his pocket” here will be called “text-driven” adverbial information, which is an appropriate term when we talk about adverbials semantically expected from the preceding text. The prototype example of the text-driven adverbial information is the locative adverbial appearing in the “put” clause (e.g., “She put a bunch of flowers in front of the mirror”).

Chunking: Processing Information Using a Look-ahead Strategy

In the preceding sections, we discussed three types of information chunk: nominal, verbal, and adverbial. Adjectival information is, within the model suggested here, subsumed under the nominal chunk or the verbal chunk because all adjectival information is somehow –attributively or predicatively—related to the head noun. In this section, we discuss how different types of information chunk are arranged within clausal or sentential boundaries. This process of chunking becomes the essential part of grammatical competence.

Positions and Fillers

Following Allen (1966), we assume that English permits the following nine positions for conveying clausal information.

LINKER // ADVERBIAL¹ AUXILIARY¹ SUBJECT AUXILIARY² ADVERBIAL³ VERB COMPLEMEN
ADVERBIAL³

LINKER is a position outside the clause; it is the position frequently used when two sentences or clauses are semantically or logically connected. It is filled by such elements as conjunctions, clause introducers, and attention-getters: e.g., however, and, first, but, although, when, now, listen, by the way, etc.

There are three adverbial positions within a clause. ADVERBIAL² tends to be restricted to what is called “middle adverbs” including: always, never, ever, really, and so on. Middle adverbs usually modify the following verb in the position of VERB, as in “I always drove her home.” As Allen (1966) observes, there is a class of words such as “however” and “therefore” which could appear in different places.

1. However, the secretary does not approve of those men eating in the office.
 2. The secretary, however, does not approve of those men eating in the office.
 3. The secretary does not, however, approve of those men eating in the office.
 4. The secretary does not approve, however, of those men eating in the office.
- (Allen 1966: 172)

No structural position is given in our model specifically for the roving elements, except for the LINKER and ADVERBIAL² positions.

Of the remaining two adverbial positions (ADVERBIAL¹ and ADVERBIAL³), ADVERBIAL³ is quite versatile, permitting multiple adverbials in one position. For example, in the sentence below:

ADVERBIAL³

John came [early][in the morning][to pick up his car]

Three adverbials fill in the ADVERBIAL³ position. There is no theoretical limit on the number of adverbials filling in the position of ADVERBIAL³, although there are practical limitations. The ADVERBIAL¹ position also permits different types of adverbials occurring simultaneously, particularly in the case of spoken discourse.

ADVERBIAL¹

[Well][you know] [in Tokyo nowadays] [to get the feeling of Japan] I feel I really have to

look for it.

There are, however, differences between the two adverbial positions. First, in the case of written discourse, the number of adverbials permitted is more strongly restricted for ADVERBIAL¹ than for ADVERBIAL³, because dense adverbial information before the SUBJECT position makes the sentence stylistically awkward. Also, ADVERBIAL³ is that WH words search for adverbial information (i.e., when, why, where, how) appear only in ADVERBIAL¹, not in ADVERBIAL³:

1. How do you know that John likes Mary?
*Do you know that John likes Mary how?
2. When does she come back?

Also note that ADVERBIAL¹ permits other WH words (i.e., who and what) as well:

1. Who does she really like?
2. What is she looking for?

The AUXILIARY¹ position is used only when one makes interrogative sentences or emphatic sentences (structurally interrogative but semantically declaratives) as in:

1. Do you know the man sitting in a high-winged armchair?
2. How should I know!
3. Have you done it yet?

The SUBJECT position receives nominal information, which is conveyed in a word, phrase, or clause. Notice that the same phrase appears in two different structural positions:

1. [Last spring] was very warm. →SUBJECT position
2. [Last spring] he went to Germany. →ADVERBIAL¹

Given the structural configuration consisting of the 9 positions, the subject of a sentence or clause is formally defined by the two AUXILIARY positions: the subject is made up of all the words that occur between the two AUXILIARY positions:

1. The woman always swimming at night [is] looking for a new job.

[Is] the woman always swimming at night looking for a new job?

2. What he said yesterday [will] make a difference to us.

[Will] what he said yesterday make a difference to us?

Let us note here that if the AUXILIARY¹ position is used, there is a tendency for adverbial information to be conveyed not in ADVERBIAL¹, but in ADVERBIAL³, as the following contrast shows:

[Did] he go to Germany [when he got a lot of money]? > [When he got a lot of money] did he go to Germany?

The reason here is simply that every new clause motivates the recursive use of the sequence of structural positions.

The AUXILIARY² position is used when one makes a negative sentence, as in:

1. He did not know the implication of what she said.

2. I cannot stay here any longer.

The position is also used extensively by the elements below:

Modals: can, should, would, may, will, etc.

Perfectives: have + -en

Progressive: be + -ing

Passive: be + -en

Thus, the string of words “may have been being” in “Harry may have been being deceived by Jun.” fills in the AUXILIARY² position; the VERB position is for the main verb of a clause, “deceived” in this sentence. Against this standard analysis, there is an alternative approach available, “a lexical approach,” which takes “auxiliary BE” or “auxiliary HAVE” as a main verb.

Thus, in sentences like “John is running in the rain” and “John is beaten by Bill,” the element “is” is treated as the main verb, and “raining” or “beaten” is treated as the complement of the verb, in the same way as the treatment of a sentence like “John is happy.”

<u>SUBJECT</u>	<u>VERB</u>	<u>COMPLEMENT</u>	<u>ADVERBIAL³</u>
John	is	[running]	[in the rain]
John	is	[beaten]	[by Bill]
John	is	[happy]	

The reading of each sentence is that X (John) is located in the current state of affairs expressed by the Y element, “running in the rain,” “beaten by Bill,” and “happy,” respectively. If the BE verb is preceded by a modal such as “must,” then the AUXILIARY² position is filled by the modal, as in:

<u>SUBJECT</u>	<u>AUXILIARY²</u>	<u>VERB</u>	<u>COMPLEMENT</u>	<u>ADVERBIAL³</u>
John	[must]	[be]	[running]	[in the rain].

For pedagogical purposes, we consider that this lexical approach is more powerful because “be” remains the same “be” throughout the different uses, having the same semantic function (see Tanaka and Abe 2003).

Finally, the COMPLEMENT position is always determined by the meaning of the preceding verb. It can be a zero complement, as in “It rains”; it can be one complement, as in “John broke the vase”; and it can be two complements (i.e., [A BE B] or [A HAVE B]), as in “John made Mary happy” and “John gave Mary a headache.” Thus, we characterize COMPLEMENT as “ α .”

The most typical structural configuration takes the form of “SUBJECT—VERB— α ,” and this is the structural schema which is recursively used when processing sentential information. A language learner has to know that sentential or clausal information is processed on the basis of the incoming linguistic data from left to right. On this, let us consider how the following sentence is processed:

- Do you know the little boy who was swimming in the river last Monday?

First, given the phrase “do you know,” we realize that this is an interrogative sentence because the AUXILIARY¹ position is used. The following article “the” indicates that we have nominal information which should contain the head noun. Having processed “Do you know the little boy,” we are in a position to close the clause boundaries because the strings of words here fit our structural schema (or expectation). However, the pronoun “who” fails to support out analysis, and automatically motivates a new clause giving

additional information about “the little boy,” a new clause which is again subject to the clause analysis suggested here. The process ends by identifying the following chunking:

AUXILIARY¹: [Do]

SUBJECT: [you]

VERB: [know]

α : [the little boy]

LINKER (=clause introducer): (the little boy who.....)

SUBJECT: [0]

VERB: [is]

α : [swimming]

ADVERBIAL³: [in the river] [last Monday]

Given this overall framework of information chunking, it is the learner’s task to learn how nominal, verbal, and adverbial chunks are linguistically expressed in English, and how they are arranged in a stream of structural configuration.

Grammar in Interaction: Orality and Literacy

In saying something, we use chunks as the unit of information. The formation of a chunk is grammatically governed; thus, “local grammar” operates whenever we try to say or write something in a language. However, grammar for written English and grammar in interaction are different in terms of constraints on chunking. Short term memory span is an important performance variable. Dan Slobin (1979) listed four constraints on language performance:

- (1) Be clear.
- (2) Be humanly processible in ongoing time.
- (3) Be quick and easy.
- (4) Be expressive.

He notes that language cannot fulfill all four of the charges completely, because they are partially in competition. If we want to be perfectly clear, messages take too long to get across; if we were fully expressive, we may not be clear, and so on.

We process linguistic information chunk by chunk, not word by word. We tend to put words together in a chunk. Thus, in oral interaction, “sentence” is unlikely to be the unit

of information. A little reflection suggests that a sentence does not come to our mind when speaking; we use chunks to say something. The principles of adding chunks and modifying the process of formulating a message come into play. We add chunks as needed: a sentence may be an outcome of chunking, but not the unit of chunking (Chafe 1985) .

In written English, however, we have time to edit our language. We don't have to be quick and easy; we can apply stylistic editing to the text as much as we want to attain clearness and expressiveness in fine English. In other words, written English uses "sentence" as the basic unit of constructing a text. Thus, "sentence-grammar" becomes an operating principle; lines in a text should be in accord with the constraints of sentence-grammar.

There are cases in which one writes a script that reflects casual language or vernacular. By and large, however, we can conclude that the unit of written English is "sentence," while the unit of spoken English, if used spontaneously, is "chunk." To illustrate, consider the following:

<<Sample conversation>>

"I read this very interesting article, because it was talking about the aluminum bats, and it said that this Japanese baseball team went to America...or the owner went, and he wanted to buy some baseball bats, and they were trying all these different aluminum baseball bats, and his criteria for which bat he wanted was the sound."

This is a direct quotation from a language corpus of casual conversation. This utterance will be analyzed into chunks:

[I read this very interesting article]
because it was talking about the aluminum bats]
[and it said that this Japanese baseball team went to America...]
[or the owner went]
[and he wanted to buy some baseball bats]
[and they were trying all these different aluminum baseball bats]
[and his criteria for which bat he wanted was the sound]

The speaker is trying to explain why he thought the article was interesting. Here, "because" is not simply a subordinate conjunction, because it does not contain a clause subordinate to the main clause "I read this very interesting article." More precisely,

“because” here functions as a marker of self-justification, and using “because,” the speaker is able to hold a discourse space within which he tries his justification. In this example, “because” is not motivated by “I read this very interesting article,” but by “I say “very interesting.”

A. I read this very interesting article, (I say “very interesting”) because

B. I read this very interesting article, (the reason I read this very interesting article is) because

If the utterance goes like “I read this very interesting article because I wanted to know more about Japanese baseball,” B is the right triggering principle. Also notice that “because” does not introduce a simple clause; rather, it gives the speaker a discourse space.

The use of pronouns is not consistent; depending on the speaker’s roving perspective, “he” is switched to “they,” and then to “his” or “he” as in below:

[and he wanted to buy some baseball bats]

[and they were trying all these different aluminum baseball bats]

[and his criteria for which bat he wanted was the sound]

Thus, in grammar in interaction, “sentence grammar” does not work; in other words, utterances are not governed by “sentence grammar.” The unit of utterance is “chunk”; grammatical constraints work only locally with respect to the formation of the chunk in question, not globally.

This shows that the constraints of sentence grammar are not strong enough to demand well-formedness in terms of complete sentences. On the contrary, if one wants to be grammatically correct and tries to produce grammatical sentences in casual interaction, one may sound unnatural. Furthermore, the above sample shows that a verbal interaction is a joint action; it is often the case that conversational discourse is produced through the process of collaborative chunking. One starts to say something using a fragmentary chunk, and the other joins in by adding another chunk to form a larger chunk.

A chunk is not a part to a whole; it is a fragment which does not presuppose the pre-planned whole, as the following data shows:

“[You know], [I just think, I think] [the first of a strange time] [to make New Year’s

resolutions], [even though] [officially] [it's the start of our calendar], ['cause the winter solstice is in late January], [isn't it?] — [which is really], [technically], [the physical point of the dawning of a new year] [or the death of an old one].”

This can be analyzed into a series of chunks:

① [You know],	① <attention getting>
②[I just think, I think]	② <trying to say an opinion>
③[the first of a strange time]	
④[to make New Year's resolutions],	③④ <introducing the topical point>
⑤[even though]	⑤ <marking a clause of concession>
⑥[officially]	⑥ <qualifying the statement>
⑦[it's the start of our calendar],	⑦ <giving a conventional statement>
⑧['cause the winter solstice is in late January],	⑧ <stating the rationale of the stated opinion>
⑨[isn't it?]-	⑨ <asking for the partner's approval>
⑩[which is really],	⑩ <trying to add more information>
⑪[technically],	⑪ <qualifying the term>
⑫[the physical point of the dawning of a new year]	
⑬[or the death of an old one].”	⑫+⑬ adding information

This is how verbal text is produced in spontaneous daily interaction. In the processing of chunking—or in the process of making a whole—the semantic focus or topical focus can easily change. It is important to become aware of the nature of grammar in interaction. At the same time, however, in the management of conversation, it is also important to note that grammatical competences include the ability to monitor, self-edit or self-correct his or her own English in the act of using English.

Grammatical Constructions

A comprehensive grammar of chunking should deal with (1) cohesion and stylistics – which include substitution, ellipsis, linking, focus and emphasis, (2) perspectives in using English—which includes reported speech, and deixis, and (3) conventional grammatical constructions or prefabricated construction chunks. Here, we will briefly discuss constructional chunks.

In order to compare things, for example, we have the following constructions:

Constructions for Comparison

be as A as B

be not as A as B

A be -er than B

A be the most — among/in

be second to none

it is not so much the fact that as the fact that

<Setting a realistic situational space>

Even if....; even though; unless ...; now that; as long as; no matter what ...

<Setting a hypothetical situational space>

If ...were to ...; if ... should ...; if it were not for...; if only; if it had not been for

<Showing results, purposes, and degrees>

Only to ...; so that ...; in order to; for fear that; never to; enough to

<Modulating the propositional content>

Might as well....; might as well...as; ought to...; would rather....; feel like

<Negating the content>

Anything but ...; notaltogether; notwithout; cannot help -ing; there is no; far from

We have two things to do here: to have an exhaustive list of grammatical constructions and categorize them semantically, and to investigate how they are used in actual communication. A sample of categorization is given above. Thus, let us look at the way of investigating the actual usages of grammatical constructions.

There are two approaches to this problem: one is a corpus-based approach, and the other is a judgment / production-based approach. With a corpus-based approach, we can see how each grammatical construction is used in texts in terms of the frequency of occurrence and the context in which it is used. Advantages of a corpus-based approach include: (1) it is possible to examine the actual usage of a given structure; (2) it is possible to obtain contextual information about the way a construction is used. The disadvantages are : there is possible situational bias in the data; it is difficult to see the

full range of usage; it is difficult to investigate a single construction from different viewpoints.

In contrast, a judgment / production-based approach has the following advantages: it is possible to select a given construction, and examine how it is used in different situation types; it is possible to elicit a large number of native speakers' intuitions about the usage of a given construction; it is possible to draw prototypical exemplars on the basis of production tests. It has its drawbacks: notably, a questionnaire format presents an unnaturalistic context of language usage, and may elicit artifacts.

It is our position that in order to investigate how grammatical constructions are actually used, we should adopt the two approaches. As regards the judgment / production-based approach, we could use the following format:

Construction: no sooner ...than ...				
e.g., No sooner had I finished cleaning up than Junior tore the place apart again.				
[1] I would use this expression:		YES	NO	
	in a business letter.			
	in casual conversation.	YES	NO	
	in formal conversation.	YES	NO	
[2] I encounter this expression in:				
	very seldom			very frequently
casual conversation	1-----2-----3-----4-----5			
business letter	1-----2-----3-----4-----5			
lecture/presentation	1-----2-----3-----4-----5			
newspaper	1-----2-----3-----4-----5			
formal conversation	1-----2-----3-----4-----5			
(e.g., negotiation)				
[3] I think this expression is				
	very informal			very formal
Formality	1-----2-----3-----4-----5			
	Very unnatural			very natural
Naturalness	1-----2-----3-----4-----5			
[4] Please write a typical sentence using "even if":				
()

This format is concerned with the perceived ratio of personal usage in three situation types, the perceived frequency of occurrence in five situation types, the perceived degree of formality and naturalness, and usage exemplars.

As a way of illustration, let us take a look at a study which investigated 150 grammatical constructions with 100 native speakers of English, using the format above (Tanaka 1990). Some of the results obtained from the study are given below (the perceived frequency of occurrence in different situations is omitted here):

	Personal use (%)				
	Business letter	Casual conversation	Formal conversation	Formality	Naturalness
no sooner ...than	57%	75%	76%	3.1	3.3
hardly... when	42%	52%	62%	3.3	2.6
scarcely ... before	33%	37%	53%	3.5	2.2

Exemplars

No soonerthan

- No sooner had she hung up the phone than the salesman rang again.
- No sooner did I get into the house than it began to rain cats and dogs.
- No sooner had the parents gone out of the door than the kids had a wild party.

Hardly ...when

- Hardly had she got in the bath when the postman knocked on the door with a parcel.
- Hardly had he woke up when he remembered the embarrassing incident of the previous night.
- I had hardly finished my meal when my friend phone me and invited me out for dinner.

Scarcely Before

- Scarcely had she put on her makeup before he arrived.
- Scarcely had the rain stopped before a rainbow appeared.
- I had scarcely entered the class before the students started asking questions.

Just looking over the exemplars for these three constructions, it is hard to tell which tend to be used more frequently than others. But if we turn to the results on the perceived ratio of personal usage, we realize that the “no sooner ... than” construction is more frequently used than the other two, and naturalness judged in a default condition for “no sooner ... than” is the highest among the three constructions.

If we use the two approaches complementarily, we will be in a better position to characterize how conventional grammatical constructions are used. Intuitively, it is difficult to tell the difference between “if ... should” and “if ...were to,” both are

conventional constructions for subjunctive future. Research will however show the following differences:

<<“if should” + imperative>>

- If something should happen, call me.
- If the mail should come while I’m away, (please) hold it for me.

<<“if were to” + “S would + root verb”>>

- If she were to refuse, he would die.
- If I were to do this, everyone would be amazed.

At any rate, the point here is that these grammatical constructions are prefabricated patterns to be used as constructional chunks.

Lexical Grammar

The term “lexical grammar” is used in linguistics, and its interpretation is not straightforward. As the term being used in this paper, we assume that grammatical information is inherent in some lexical items; thus, by focusing on a lexical item, we are able to explain grammatical phenomena relating to the item. It focuses on the semantic-functional interrelationships. For example, preposition *to* and *to* infinitive are the same in form, but different in function. Lexical grammar – pedagogical lexical grammar – explains the relationship between the two; to be more precise, by focusing on the semantics of preposition *to*, the uses of *to* infinitive are coherently accounted for, as the following illustrate:

Schema for Preposition “to”

X)(Y

Exemplars: 104 yen to the US dollar, face to face, the key to the door, go[come] to school, keep to the left

To Infinitive

A. Future Orientation

Exemplars: I want to visit Peru./ I have a meeting to be scheduled tomorrow./ He visited

Peru to investigate the mystery.

B. Reflective

I'm happy to meet you.

The semantics of “to” is expressed in terms of the schema illustrated above. This core schema applies to all uses of preposition *to*; it also applies to the explanation of *to* infinitive. The puzzle of *to* infinitive is that it has two separate functions: one showing future-orientation, and the other showing the reflective or causative sense. The core schema simply explains why *to* can have these two functions.

HAVE and HAVE-related Constructions

Let us take a look at the case of HAVE in order to show in more detail the pedagogical power of lexical grammar. In dealing with “have,” we have the following problems which concern us:

1. the semantic extension of have: have {an apple, long legs, sisters, money, an idea, a problem, a walk, etc.}
2. the link between have[+possessive] and have[+perfective]
3. the difference between “be” and “have” as in “Winter is gone and spring has come.”
4. the difference between the past form and the perfective form as in “I did it! vs. I’ve done it.”

Lexical grammar of “have” takes the semantics of “have” and the constructions available for “have.” The semantics of “have” will be explained as follows:

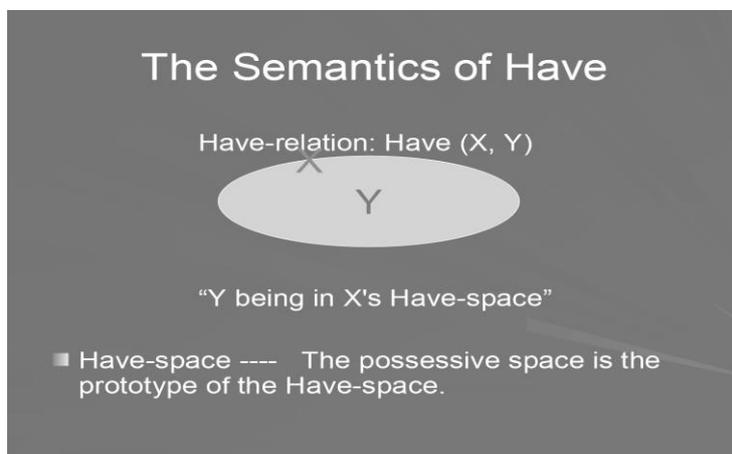


Figure 4. The Core schema of have

This schema will read as “Y being in X’s HAVE-space,” where the possessive *have* is the prototype. Within the framework of lexical grammar, we will account for the following variants of “have” with the use of this HAVE-space.

1. John has apples.
2. He has a big nose.
3. We have a problem.
4. I have a shower at seven sharp.
5. I had a good time.
6. We have finished the project.
7. I’ll have John accept the offer.
8. The students have to submit their papers by tomorrow.
9. He had his hair cut.
10. She had her wallet stolen.

Sentences (1) – (3) are clear cases of the possessive space. However, the remaining sentences do not permit straightforward accounts according to the notion of possessive space. Here, we must notice that the interpretation of the HAVE-space depends on contextual modulation and specification. For example, even a sentence like “John has apples” is ambiguous among several readings including:

1. John has apples in his hands.
2. John has apples somewhere around him, but not in his hands.
3. John eats apples (for breakfast).

To increase the power of the HAVE-space, we introduce the notion of “experiential space” in addition to the possessive space.

The examples stated above are now classified into two types:

Possessive type: John has apples, He has a big nose, We have a problem I’ll have John accept the offer, The students have to submit their papers by tomorrow.

Experiential type: I have a shower at seven sharp, I had a good time, We have finished the project, He had his hair cut, She had her wallet stolen.

Some explanation will be needed here. Let us first look at the causative use of “have” as in “I’ll have John accept the offer,” in relation to causative “make” and “get.”

1. I'll have John accept the offer.
2. I'll make John accept the offer.
3. I'll get John to accept the offer.

These causative verbs highlight different aspects of the causing. The causative “have” is classified as a case of possessive HAVE. In other words, HAVE[+possessive] puts emphasis on the result, guaranteeing that John accepts the offer. The semantic analysis of (1) here will be: I will have something Y, where Y is [John accept the offer]. This implies that I'll have the result I intend to cause.

The causative “make” emphasizes the process as well as the result, because the semantics of “make” involves the process of transformation and the outcome, thus suggesting some kind of force. Hence, the sentence “I'll make John accept the offer.” will be interpreted: I'll make something Y, where Y is [John accept the offer]. Notice here that with the causative “have,” only the result is perspectivized because it implies a possessive space, while with the causative “make,” the semantic perspective includes not only the result [John accept the offer], but also the initial state of [John NOT accept the offer].

The verb “get” is inchoative in nature, and thus, emphasizes the initial state. This explains why the causative “get” requires a “to” infinitive; the semantics of “to” is characterized as having the futurity sense. Thus, “I'll get John to accept the offer” will be read as: I will do something that cause or direct John to accept the offer.

Let us now compare the phrase “have to” with “be to.”

1. The students have to submit their papers by tomorrow.
2. The students are to submit their paper by tomorrow.

Here again, “have to” is considered here as a case of possessive HAVE. The sense of obligation emerges in “have to” in that “submitting their papers by tomorrow” is conceptualized as being within the students' HAVE[+possessive] space. On the other hand, the sentence using “be to” sounds more objective and neutral because the BE-relation simply puts the students in a state in which an action is to be performed in the future. In fact, the possessive sense of “have to” becomes plausible if we consider the relationship between “I have something to tell you.” and “I have to tell you something.”

Now let us consider the auxiliary use of “have” or perfective “have. Gallagher (1969) pointed out that since the two structures, possessive and perfect, are connected through

a continuous historical development, one should look for a continuing connection in modern English. In this connection, the following statement about the lexical item *have* is given in the Oxford English Dictionary:

“This use [perfective use] arose directly from sense 2b, the object possessed having in agreement with it a passive participle of a transitive verb as attribute complement; thus, I have my work done = I possess or have my work in a done or finished condition.”

In other words, there is a semantic motivation behind the perfect “have” in modern English. Our claim about this point is as follows:

1. The perfective “have” indicates a tense (i.e., present / past).
2. The perfective “have” is a case of experiential HAVE.

Thus, the present perfect form differs from the past form in two significant ways:

1. Relevance to the Present Time (Now)
2. A stative or resultative sense conveyed by the present perfect form.

The past form indicates the completion of an action in the past; the present perfect form indicates that one has a completed state of affairs now, thus emphasizing a stative or resultative sense. If one believes that the exhibition is still going on, one can say, “Have you visited the Picasso Exhibition?”; if one believes that the exhibition is over, one should say, “Did you visit the Picasso Exhibition?”

As regards the semantic function of perfective “have,” we emphasize the “stative or resultative sense,” which is an outcome of processing “completion of an action expressed in the past participle form” by experiential HAVE space. With this in mind, compare “I did it!” and “I’ve done it!” The statement “I did it!” shows that something was accomplished; it sounds direct, and implies that something is done. By contrast, the statement “I’ve done it!” shows that something was accomplished and you have [now experience] the state of affairs. You would say “I cut myself shaving” the moment you cut yourself; you would say “I’ve cut myself shaving.” when a friend spots a cut on your chin.

Along the same line of argument, we will compare “Winter is gone.” and “Spring has come.” The verb “be” puts emphasis on the state in which something is done; “have” on the state in which something is done and also on the fact that one has the state of affairs. Thus, the two sentences are semantically different:

1. Winter is gone. → Winter is not here and now. It is in the state of being gone.
2. Spring has come. → Spring is here and now and we have it.

In addition to the causative “have,” we have the case of beneficial “have” and suffering “have” as in “He had his hair cut” and “She had her wallet stolen.” These are the cases of experiential HAVE:

1. He had his hair cut. →The event of his hair being cut accords to his will under the normal interpretation.
2. She had her wallet stolen. →The event of her watch being stolen is against her will under the normal interpretation.

Thus, the causative “have” is different from the beneficial or suffering cases.

1. I'll have [John accept the offer].
Possessive have → causative have
2. He had [his hair cut].
Experiential have →beneficial have
3. She had [her wallet stolen].
Experiential have →suffering have

The point to be emphasized here is that the verb “have” only sets the “HAVE space” where X and Y are related, and the specific interpretation of the HAVE relation has to be determined contextually.

Thus, we have shown here that the verb “have” has a network of constructions, and that the lexical meaning of “have” underlies all the constructions. This illustrates the power of lexical grammar. At the same time, the lexical grammar of “have” becomes part of grammatical competence usable for communicative purposes. More specifically, a learner needs to be aware of the following:

1. Be aware of the schema representation of “have,” which has a strong generalizing power.
2. Be aware of the nature of the HAVE space (i.e., possessive HAVE as its prototype and experiential HAVE as its extension)
3. Be aware of the networking relations of related HAVE constructions.

We still have a task of developing a full-fledged lexical English grammar, a semantically-motivated grammar, capable of accounting for grammatical constructions in a reasonable way. Items for lexical English grammar include the following:

BE (existence, progressive, passive)

Modal Auxiliaries

-ING (progressive –ing, participial construction –ing, post-modifying –ing, and gerund –ing)

TO (infinitive, preposition)

WH (interrogative pronouns, relative pronouns)

Conjunctions (as, if [conditional, nominal clause introducer], etc.)

Determiners (a, the, some, etc.)

Assessing Grammatical Competence

Grammatical competence is undeniably the most fundamental part of communicative competence. However, as we discussed earlier in this paper, there seems no consensus about what we mean by “grammar.” Without answering this question, we cannot even scratch the surface of grammatical competence. Thus, we have spent some time in showing “the type of grammar” we have in mind when we talk about grammatical competence. The grammar we described here is characteristically “chunking grammar.” To further increase its pedagogical power, we have rule grammar – a list of rules, and lexical grammar, which can have a tremendous networking power.

Finally, this sketch of pedagogical grammar dictates what abilities are included in grammatical competence – central to communicative competence. Now, for the purpose of assessing grammatical competence in English, we will characterize it as follows:

Definition: Those who have good grammatical competence should

- Be aware of the basic rules of English such as agreement in number, word order, and verb conjugation; Be able to construct a series of chunks for communicative purposes; Be sensitive to the interrelationships of different functions of a single form; Have a stock of conventional chunk constructions related to notions such as comparison, negation, and modality; Be able to monitor and judge whether a given grammatical deviation is permissible in a natural discourse, and to self-edit (repair or monitor) one’s English as

needed.

The criteria and targets of assessment are given:

Criteria for Assessment

- Knowledge for Understanding : awareness-raising & networking
- Knowledge for Practicing : production/comprehension & automatization

Targets of Assessment

- To test if a learner knows about English basic rules (the system of pronouns, formation of negative / interrogative sentences) and if the learner is able to employ the knowledge in his or her use of English.
- To test if a learner knows about how to make nominal, verbal, and adverbial chunks, and if the learner is able to employ the knowledge in his or her use of English.
- To test if a learner is aware of the difference in chunking between conversational discourse and written discourse, and if the learner is able to combine chunks naturally in his or her use of English.
- To test if a learner is aware of the interrelationships of different functions of a single form (e.g., functions of “have”), and if the learner is able to use the knowledge in his or her use of English.
- To test if a learner has a set of conventional expressions for practical purposes such as showing possibilities, setting a situation of context, making comparison, and so on, and if the learner is able to employ them in using English.
- To test if a learner is able to monitor, self-edit or self-correct his or her own English in the act of using English.