

Discourse and Function
The Framework of Sentence Structure

Prospectus

Purpose

“Ideally, our discussion of the syntactic structure of the nuclei of kernel-sentences should be conducted within the framework of some generally accepted and universally applicable system of grammatical analysis. Unfortunately, no such system exists.” (Sir John Lyons, *Semantics*, p. 469 (Cambridge, 1994))

This book is a study of how languages use sentences to express meaning. Its purpose is to suggest a methodology by which, for any language, the structure of a sentence can be analysed with some precision. In so doing, the author hopes to have advanced the study of the conundrum posed in the above quotation. The book assumes no knowledge by the reader of specialist academic work, but does assume a knowledge of and interest in language as a means of expression. It is based on a study of reference grammars of 20 languages, of which 9 are not Indo-European.¹ It is therefore directed both at the interested public and at the academic linguistic community.

Background

The book starts with the assumption that the unit of meaning in a language is a sentence. Every language possesses a set of rules, its grammar, under which a sentence appears well or ill-formed to a hearer. Much valuable scholarly effort has gone into exploring how the grammar of each language is used by its speakers to express meaning. Although the order of the elements may vary, all languages employ a single basic sentence pattern of “subject-verb-object-complement-adverbial” which adequately describes a large proportion of sentences, for example:

“I read your book today”; “She went to London by train”; “The train is late”.

However, for other sentences this pattern can only be applied by redefining it so that it loses any useful precision, or by introducing other grammatical terms. What is the subject of an “impersonal” sentence:

English: “There is a fly in the ointment.” “It was by John that the ball was hit.”

or of a “topic-comment” sentence:

Japanese:

“Watashi wa Eigo ga wakaru.” “I understand English.”
[I (topic) English (subject) is-understandable.]

or of an “ergative” sentence:

Hindi: “usne kitāb likhī” “He wrote the book.” [He (agent) book written.]?

Why do some languages employ an “impersonal” construction for a meaning which in other languages is expressed by a subject, verb, and object?:

Italian: “Mi piace cioccolato.” “I like chocolate.” [To-me pleases chocolate.]

Hungarian:

“Jóska feleségének jó állása van.” “Joska’s wife has a good job.”
[Joska wife-his-to good job-her is.]

¹ The 20 languages are English, French, Spanish, Italian, German, Russian, Welsh, Irish, Finnish, Hungarian, Modern Greek, Turkish, Written Arabic, Persian, Hindi, Malay/Indonesian, Chinese, Japanese, Swahili, and Inuit (West Greenlandic). There are also quotations from Serbian, Tagalog, Maori, Samoan, Hausa, Basque, Avar, Latin, and Akkadian.

Welsh: “Bydd yn rhaid i mi godi.” “I shall have to get up.” [Will-be in necessity to me rise.]

Irish: “Tá gúna nua ag Eibhlín.” “Eileen has a new dress.” [Is new dress at Eileen.]

Turkish: “Evin bahçesi var.” “The house has a garden.” [House-of garden-its there-is.]

Hindi: “mere pās ek gārī hai” “I have a car.” [Me-with a car is.]

What is the verb of a “verbless” sentence?:

Russian: “U menya kniga.” “I have a book.” [With me book.]

Arabic: “lahu banūna fī l-jāmiʿati” “He has sons in the University.”
[For-him sons in the-University.]

Turkish: “Vesika kasada.” “The document is in the safe.” [Document safe-in.]

Chinese: “Zhè ge fāngjiān shí mǐ kuān.” “This room is ten metres wide.”
[This unit room ten metre wide.]

Maori: “He pōtae hou tō Hine.” “Hine has a new hat.” [A hat new the-of Hine.]

How can we describe the object of a sentence which in some languages requires a pre/postposition while in others does not?:

French: “Je lui ai résisté.” “I resisted him.” [I to-him have resisted.]

German: “Er folgte mir nach draußen.” “He followed [to] me outside.”

Italian: “I ragazzi hanno ubbidito al professore.”
“The boys [have] obeyed [to] the teacher.”

Russian: “Ona igraet na pianino.” “She is playing [on the] piano.”

Hindi: “hamne duśman par hamlā kiyā” “We attacked the enemy.”
[By-us enemy-on attack made.]

Samoan: “Sa e va’ai ia Malia i le asō?” “Have you seen [to] Mary today?”

Outline of the Book

The problem described above is addressed by considering in greater detail the purposes which a sentence fulfils. The author contends that there are two such purposes, which are independent of each other and of the grammatical rules which are used to realise them. The first is to provide new information, ask a question, or make a suggestion. For this purpose, a sentence looks outward to the previous and following sentences which are uttered by the speaker or by the speaker’s interlocutor. This sequence of sentences is called a discourse and its study is discourse analysis. The second purpose is to describe an action or state that is occurring in the world, which is called a function. The study of sentence functions is called functional analysis, and in contrast to discourse analysis, considers each sentence in isolation.

If a sentence is to be meaningful in a discourse, it must be clear to all parties what it relates to (the topic) and what new information, enquiry, or suggestion is being posed. For instance, in the following pairs of sentences:

“What did he do today?” “He went to town at 10.00”;
“When did he go to town today?” “He went at 10.00”;
“What happened today?” “He went to town at 10.00”;

the topic of the first pair is “he”, of the second pair is “his going to town today”, and of the third pair is “today”. Alternatively, a sentence can introduce new information without a topic: “Someone went to town today at 10.00.” The new information provided by a sentence can then be the topic of the next one in the discourse. By examining the role of sentences in discourse, it seems possible to classify them into seven discourse types, and to describe these with nine discourse elements: {definite}, {select}, {indefinite}, {circumstance}, {only}, {indefinable}, {not}, {but}, and {query}.

Discourse analysis also studies how sentences relate to each other. The means whereby sentences relate to each other in time is called “aspect”, and uses the elements {state}, {imperfect}, {perfect}, {prospect}, and {aorist}:

“Having shut the door, he went to town;” “He was walking in town when he met Mr Jones”.

The means whereby sentences relate or fail to relate to each other logically is called “inference” and uses the element {infer}.

While discourse analysis reduces a sentence to a small number of precisely defined types, the number and variety of actions or states that a sentence describes are in principle unlimited. Functional analysis classifies such actions and states by means of functional elements² which are different from discourse elements. Some functional elements are common to many sentences: {agent}, {object}, {instrument}, {location}, {base}, {participant}, {target}, {recipient}, {beneficiary}, and {causer}. In addition to {agent}, any one of these can in principle be the subject of a sentence, for example an {object}:

Hindi: “patr dāk se bhejā gayā thā” “The letter was sent by post.”
[Letter post-by sent gone was.]

or an {instrument}:

English: “The rain flooded the garage.”

or a {recipient}:

Welsh: “Cafodd y plant ganiatād i fynd.” “The children got permission to go.”
[Got the children permission to go.]

or a {beneficiary}:

Swahili: “Wamenunuliwa sukari.” “Sugar has been bought for them.”
[They-have-been-bought-for sugar.]

Other functional elements are found only for a particular action or state, and occur only with a particular combination of common elements. Examples are the act or state of creation, transformation, location, time, component, quantity, comparison, dependency, identity, role, possession, perception, opinion, interrogation, and necessity. By defining the functional elements which describe an action or state in terms of the additional common elements needed for a meaningful sentence, 37 different such elements, and accordingly 37 different functional sentence types, are identified.³

By analysing discourse structure and functional structure separately, and showing that they are independent, light is thrown on the way in which languages adapt a single system, that of “subject-verb-object-complement-adverbial” to express both structures in the same sentence. In this way, the reader is led to a more robust usage of the conventional grammatical terms, which the author calls components:

² Elements are sometimes called “arguments”, a term in mathematics with the sense “a variable in a functional expression”, where the functional expression is a verb. However, in this methodology the verb itself is an element, which is therefore broader than “argument” as conventionally defined.

³ This figure is arbitrary, and a different functional analysis would doubtless produce a different number.

- A {verb} is the action or state which a sentence describes.
- A {subject} is that which is engaged in the action or undergoes the state described by the {verb}. {subject} and {verb} are a semantic unit.
- An {object} is that which the sentence places in a state or relationship.
- A {complement} is the state or relationship into which the sentence places the {object}.
- A transitive sentence is one whose {subject} is distinct from its {object}. An intransitive sentence is one for which the {subject} and {object} are the same entity.
- A {noun} is any concept word in a sentence which is not a {verb}.
- A {verb} and a {noun} include any restrictive qualifiers which give them an identity.
- An {adverbial} is non-restrictive qualifier of a {verb}.
- A {gerund} is a non-restrictive qualifier of a {subject}.

As might be expected, this usage sometimes produces unexpected results. For example, a {verb} comprises both an auxiliary verb and the word that the auxiliary supports (underlined in these examples):

“I have an interest in stamps.” “This is difficult.” “She is in love.” “He is a grocer.”
 “They are in the shop.” “There is a fly in the room.” “The computer was on”.

Of the following intransitive sentences, only the first would be recognised conventionally:

“His wife drove to work”. “He followed his wife to work”. “His wife was at work.”
 “He was driven to work.”

The two approaches of discourse analysis and functional analysis can be combined if the {subject} is defined as the topic. However, this requires that the language possesses a verb which can be in semantic union with the topic, which is not always the case. In a minority of sentences, the verb is in semantic union with the comment:

Spanish: “La reacción la provocó una alergia o una enfermedad.”
 “The reaction was produced by an allergy or illness.”
 [The reaction produced-it an allergy or an illness.]

Italian: “Di Camilla Cederna leggevo tutto.” “I read everything by Camilla Cederna.”
 [Of Camilla Cederna I-read everything.]

Russian: “Vash bagazh otpravlyat v gostinitsu.” “Your luggage will be taken to the hotel.”
 [Your luggage they-take to hotel.]

Chinese: “Nèi běn zhēntàn xiǎoshuō wǒmen mài wán le.”
 “We have sold out of that detective novel.”
 [That unit detective novel _(topic) we sell finish now.]

Malay: “Sopir itu namanya Pak Ali.” “The name of that driver is Mr Ali.”
 [Driver-that, name-his Mr Ali.]

Other constructions in which the verb agrees with the comment rather than the topic are some causatives and ergatives. It is shown that all these are genuine anomalies, arising from the need to express the discourse and function together concisely in one sentence.

Structure and Benefits

The first five chapters of the book are concerned with the principles of discourse analysis and its realisation in the languages under review. Each discourse sentence type is discussed: existential sentence, statement, negative statement (definite and indefinite), question (definite and indefinite), and hypothesis. While the basics of this exposition are hardly new, it is the experience of the author that some concepts of discourse analysis are not well understood even in academic literature; for instance, “topic” and “focus” are sometimes confused.

The formal notation is proposed as a useful tool in describing discourse structure. The extent and depth of the analysis is claimed to be original. It includes a definition of generic and nonspecific entities which is not widely recognised, and a distinction between {definite}, {indefinite}, and {indefinable} which is believed to be new.

Chapters 6. to 10. lay out the functional classification of sentences which the author proposes, and shows how each functional type is realised in transitive and intransitive constructions. It is suggested that the most basic distinction lies between sentences which perform an action on an {object}, and those which describe a relationship (physical or mental) between an {object} and a person (a {recipient}). So far as possible, the book attempts to cover the ways in which language describes all the events and conditions of the world. Since the world is not a closed system, neither can be the use of language to describe it. However, the process is taken as far as it can be. Chapter 11. extends the functional classification to causatives, inchoatives, and modals. Chapter 12. discusses how the various functional classes of sentence are realised as nouns.

Chapter 13. expresses the discourse structure of sentences as seven discourse sentence types, in the formal notation of discourse elements discussed above. Chapter 14. explores how discourse sentence types are realised through grammar and syntax, and extends the notation to the relationship between a sentence and other sentences in the discourse, including aspect and inference.

Chapter 15. classifies sentences into 37 functional sentences types, each characterised by a {verb} which describes an action or state, and by a combination of other elements. Chapter 16. shows how the seven discourse sentence types and the 37 functional sentence types together support the component description of sentence structure, and explore the application of the component structure in fully describing a sentence.

It is claimed that both this functional classification, and the way it is realised in sentence structure, is original. The formal notation is proposed as a useful tool in functional sentence description. For example, a sentence such as “She brushed her hair” combines in one word the functions of {transform} and {instrument}. “He put on his coat” combines in one word the functions of {agent} and {beneficiary}. “John looked at the signpost” combines in one word the functions of {agent} and {recipient}.

Chapter 17. extends the methodology to adverbials. It distinguishes between true {adverbial}, which are non-restrictive qualifiers of a {verb}, and other apparent adverbials which are either restrictive qualifiers (a {circumstance}), or a {gerund} qualifying a {subject}. It employs an analytic device called an adverbial sentence, which shows how {adverbial} are either an {instrument} or {causer}, or express a function such as location, time, component, dependency, benefit, perception, supposition, or origin. This approach to the discourse and functional structure of adverbials is also believed to be original.

Chapter 18. examines the component structure of questions in relation to their positive and negative replies. Since that part of a question which is not the enquiry is its topic, the same topic must occur in the reply, whether positive or negative. In this way, the different categories of enquiry classify five different types of sentence: a verbal sentence, in which a {verb} is enquired into, a nominal sentence, in which a {noun} is enquired into, a complementary sentence, in which a {complement} is enquired into, an adverbial sentence, in which an {adverbial} is enquired into, and a gerundial sentence, in which a {gerund} is enquired into.

Chapter 19. comprises worked examples.

The totality of the approach developed in this book, including the separation of discourse and functional structure, is believed to provide a new and powerful set of tools for creating the universally applicable system of grammatical analysis which Sir John Lyons was seeking.

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