Unit 2
A few additional concepts
for doing grammar the SYSTEMIC FUNCTIONAL way

Slides for the session of
Exploring English Grammar – the world of clauses
held on
23.xi.2020

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❶ Constituency

❷ Minimal bracketing

❸ Labeling parts of clauses

❹ Differing analyses

❺ Subject, Actor, Theme

❻ Notational conventions

❼ Grammar vs phonology
    Rank scale of units
    Rankshift (embedding)
    Unit complexes

The main points to be covered in this unit are:

1. Constituency (in orthography, phonology, and grammar)

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2. Maximal vs minimal bracketing

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A few additional concepts

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1. Constituency (in orthography, phonology, and grammar)
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3. SVO vs SPO; SPO vs SPC; $C_{D.O.}$, $C_{I.O.}$, C_S SFPCA

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7. Phonology and grammar compared: rank scale, rankshift, unit complexes

Constituency in writing

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1.1 Constituency in writing

If we look at a passage of writing in English, we can see clearly that it consists of larger units made up out of smaller units. These smaller units, in their turn, are made up of units that are smaller still.

 These units are what we call sentences, words and letters. A passage of written English consists of sentences, which consist of words, which consist of letters. This relationship can be diagrammed as in Figure 1-1.
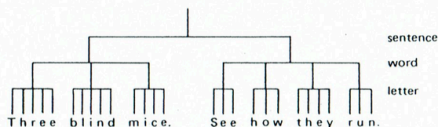

Fig. 1-1 The units of written English

Constituency in speech
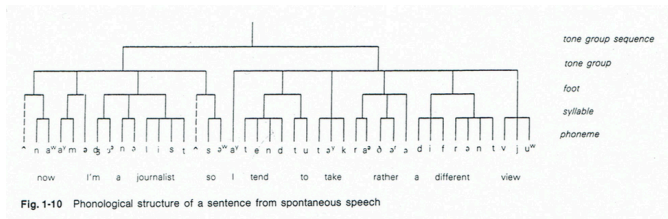
Fig. 1-10 Phonological structure of a sentence from spontaneous speech

Constituency in grammar

In this book we shall not be concerned, except occasionally in passing, with the internal constituent structure of words; our main attention will be on the higher units, and particularly on the CLAUSE. This is because the mode of interpretation adopted here is a functional one, in which the grammatical structure is being explained by reference to the meaning; and there is a general principle in language whereby it is the larger units that function more directly in the realization of higher-level patterns. In phonology, for example, there is no direct relation between the individual vowels or consonants and anything in the grammar; these small units have no grammatical function as single elements. On the other hand the unit of intonation, the tone group, does function directly as the expression of grammatical choices. In the same way, if we want to explore how semantic features are represented in the grammar we look primarily at the structure of the clause, and at what is above and around it; and only then (and only to a limited extent in the present book) do we go on to consider smaller grammatical units. Figure 2-6 gives a specimen analysis of a clause into groups and words (see Chapters 3, 4 and 5 for detailed presentation).
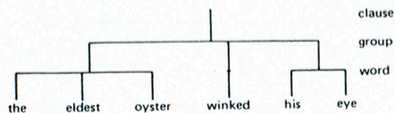
Fig. 2-6 Clause, group and word

Functional grammar: fewer nodes, more branches per node (1)

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Fig. 2-10 Minimal bracketing (a) and maximal bracketing (b)

IFG2, p21

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Functional grammar: fewer nodes, more branches per node (2)

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Rankshift (embedding)

Unit complexes

(a) ranked constituents

Thomas T. Tatimus has been tying his two tubs tentatively to those two tall trees

(b) immediate constituents

Fig. 2-11 (a) minimal and (b) maximal bracketing: a more complex example

IFG2, p22

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Functional grammar: 'ranked' constituents

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Fig. 2-12 Minimal bracketing in relation to the scale of rank

IFG2, p24

Labeling parts of clauses: SVO vs. SPO

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Unit complexes

- When classifying languages, linguists talk about "SVO" languages, with the typical order subject, verb, object:

clause

Subject	Verb	Object
↓	↓	↓
nominal group	verbal group	nominal group

↓	↓	↓	↓
determiner	noun	verb	noun
those	*cats*	*eat*	*bats*

Labeling parts of clauses: SVO vs. SPO

- When classifying languages, linguists talk about "SVO" languages, with the typical order subject, verb, object:

		clause		
Subject		Verb		Object

nominal group   verbal group   nominal group
  ↓   ↓   ↓   ↓
determiner   noun   verb   noun
 those   *cats*   *eat*   *bats*
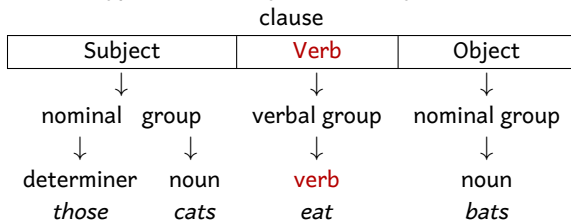
- In functional grammar, we distinguish between the function a unit has, and the type of unit that has that function:
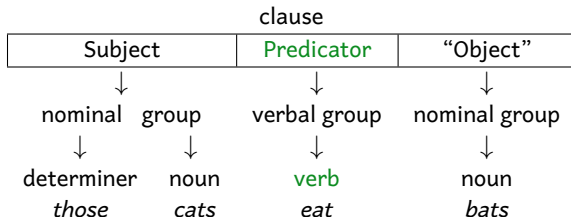
		clause		
Subject		Predicator		"Object"

nominal group   verbal group   nominal group
  ↓   ↓   ↓   ↓
determiner   noun   verb   noun
 those   *cats*   *eat*   *bats*

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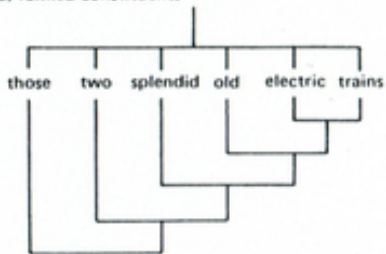
Subject, Actor, Theme

Notational conventions

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Rank scale of units

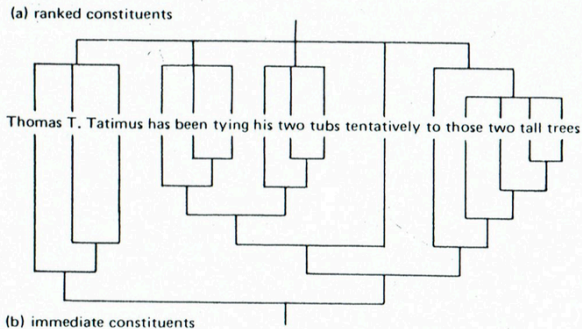Rankshift (embedding)

Unit complexes

Labeling parts of clauses: Object vs. Complement

- The Subject can be fully defined in terms of the interpersonal function of language alone (clause-as-exchange):
Cats eat bats, don't they? ('being the Subject means being responsible for the success of the interpersonal exchange, and therefore being repeated in the tag if necessary')

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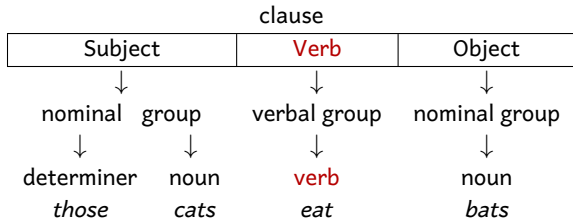Rankshift (embedding)

Unit complexes

Labeling parts of clauses: Object vs. Complement

- The Subject can be fully defined in terms of the interpersonal function of language alone (clause-as-exchange): Cats eat bats, don't they? ('being the Subject means being responsible for the success of the interpersonal exchange, and therefore being repeated in the tag if necessary')

- The label 'Object' combines information from two separate functions: the interpersonal ("this is a Complement—it is not actually the Subject, but it could potentially be, e.g. in the passive") and the experiential (in the clause-as-representation, the Goal, the thing that is "impacted" by the action):

interpersonal:	Subj	Pred	Complement
experiential:	Actor	Process	Goal

<div align="center">

cats   *eat*   *bats*

"Object"

</div>

Labeling parts of clauses: Object vs. Complement

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interpersonal:	Subj	Pred	Complement
experiential:	Actor	Process	Goal

      cats   *eat*   *bats*

                    "Object"

- If necessary, subscripts can be added to distinguish different types of Complements—"Direct Object", "Indirect Object", and "Subject Complement": C_{DO} (cats eat bats), C_{IO} (my cat gave me a bat), C_S (the bat was a present),

Labeling parts of clauses: SFPCA

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- The finite auxiliary verb has a direct and important function in the structure of the clause-as-exchange, so we label it Finite (abbreviated as F if necessary):

Subject	Finite	Predicator	Complement
our cats	don't	eat	bats

- Anything else, apart from Finite and Predicator, which is not actually the Subject, and is not a potential Subject (i.e. a Complement), is labelled as Adjunct:

S	F	P	C	A
Subject	Finite	Predicator	Complement	Adjunct
our cats	don't	eat	bats	in winter

Differing analyses in different functional dimensions

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Unit complexes

- If you had just joined the queue at the box office of a cinema, you might turn around after a few minutes and notice a lot of people behind you. If you felt a bit crowded, you might say:

all these people	have	come	in	after	us
S	F	P	A		A
Actor	Process (!)				Goal (!)

A child might even say: "Look at all these people we've been come in after by!", thus proving that, for the child, the people are not just 'doing something', but 'doing something to' him.

Subject, Actor, Theme

the duke	gave	my aunt	this teapot
psychological Subject grammatical Subject logical Subject			

Fig. 2-19 Same item functioning as psychological, grammatical and logical Subject

this teapot	my aunt	was given by	the duke
psychological Subject	grammatical Subject		logical Subject

Fig. 2-20 Psychological, grammatical and logical Subject realized by different items

These three different types of "subject" from traditional grammar can be renamed as follows:

this teapot	my aunt	was given	by	the duke
Theme	Subject			Actor

Fig. 2-21 Theme, Subject and Actor

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A narrative with different configurations of Subject, Actor and Theme

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Unit complexes

(a)	I	caught	the first ball
	Theme Subject Actor		

(b)	I	was beaten	by	the second
	Theme Subject			Actor

(c)	the third	I	stopped
	Theme	Subject Actor	

(d)	by	the fourth	I	was knocked out
		Theme Actor	Subject	

Fig. 2-23 Narrative embodying different conflations of Subject, Actor and Theme

Meaning of Theme, Subject and Actor

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Unit complexes

(i) The Theme functions in the structure of the CLAUSE AS A MESSAGE. A clause has meaning as a message, a quantum of information; the Theme is the point of departure for the message. It is the element the speaker selects for 'grounding' what he is going on to say.

(ii) The Subject functions in the structure of the CLAUSE AS AN EXCHANGE. A clause has meaning as an exchange, a transaction between speaker and listener; the Subject is the warranty of the exchange. It is the element the speaker makes responsible for the validity of what he is saying.

(iii) The Actor functions in the structure of the CLAUSE AS A REPRESENTATION. A clause has meaning as a representation, a construal of some process in ongoing human experience; the Actor is the active participant in that process. It is the element the speaker portrays as the one that does the deed.

IFG2, p34

Metafunctions and their reflexes in the grammar

Table 2(3)   Metafunctions and their reflexes in the grammar

Metafunction (technical name)	Definition (kind of meaning)	Corresponding status of clause	Favoured type of structure
experiential	construing a model of experience	clause as representation	segmental (based on constituency)
interpersonal	enacting social relationships	clause as exchange	prosodic
textual	creating relevance to context	clause as message	culminative
logical	constructing logical relations	—	iterative

IFG2, p36

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Notational conventions (1)

Systemic description

Capitalization labels used in systems and realization statements

Capitalization	Convention	Example
lower case, or lower case with single quotes	name of term in system (feature, option)	'indicative'/'imperative'
small capitals	name of name of system	MOOD, MOOD TYPE, SUBJECT PERSON
initial capital	name of structural function (element)	Mood, Subject; Theme, Rheme

Operators in system specifications

Operator	Symbol	Example
entry condition leading to terms in system	:	indicative : declarative/ interrogative
systemic contrast (disjunction)	/	declarative/interrogative; declarative/imperative: tagged/ untagged
systemic combination (conjunction)	&	intensive & identifying: assigned/ non-assigned

Operators in realization statements

Operator	Symbol	Example
insert	+	indicative ↘ + Finite
order	^	declarative ↘ Subject ^ Finite
expand	( )	indicative ↘ Mood (Finite, Subject)
preselect	:	mental ↘ Senser: conscious

IFG4, p ix

Notational conventions (2)

Graphic conventions in system networks

$a \rightarrow \begin{bmatrix} x \\ y \end{bmatrix}$ there is a system x/y with entry condition a [if a, then either x or y]

$a \begin{cases} \rightarrow \begin{bmatrix} x \\ y \end{bmatrix} \\ \rightarrow \begin{bmatrix} m \\ n \end{bmatrix} \end{cases}$ there are two simultaneous systems x/y and m/n, both having entry condition a [if a, then both either x or y and, independently, either m or n]

$a \rightarrow \begin{bmatrix} x \rightarrow \begin{bmatrix} m \\ n \end{bmatrix} \\ y \end{bmatrix}$ there are two systems x/y and m/n, ordered in dependence such that m/n has entry condition x and x/y has entry condition a [if a then either x or y, and if x, then either m or n]

$\left. \begin{matrix} a \\ b \end{matrix} \right\} \rightarrow \begin{bmatrix} x \\ y \end{bmatrix}$ there is a system x/y with compound entry condition, conjunction of a and b [if both a and b, then either x or y]

$\begin{matrix} a \\ c \end{matrix} \Big] \rightarrow \begin{bmatrix} m \\ n \end{bmatrix}$ there is a system m/n with two possible entry conditions, disjunction of a and c [if either a or c, or both, then either m or n]

IFG4, p x

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Notational conventions

Annotation of text

Boundary markers

Stratum	Symbol	Unit (complex)	Example
lexicogrammar	‖ ‖	clause complex	
	‖	clause	
	ǀ	phrase, group	
	⟦⟦ ⟧⟧	rankshifted (embedded) clause complex	
	⟦ ⟧	rankshifted (embedded) clause	
	[ ]	rankshifted (embedded) phrase, group	
phonology	///	tone group complex	
	//	tone group	
	/	foot	
	^	silent beat	
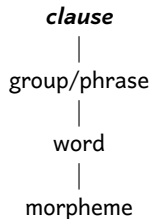
IFG4, p x

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Rank scale of units

GRAMMATICAL
STRATUM

clause
|
group/phrase
|
word
|
morpheme

PHONOLOGICAL
STRATUM

tone group
|
|
foot
|
syllable
|
phoneme

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GRAMMATICAL STRATUM	PHONOLOGICAL STRATUM
clause	tone group
|	|
group/phrase	
|	foot
word	|
|	*syllable*
morpheme	|
	phoneme

1 On each stratum there are four ranks of unit.

Rank scale of units

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GRAMMATICAL STRATUM	PHONOLOGICAL STRATUM
clause	tone group
group/phrase	
word	foot
	syllable
morpheme	
	phoneme

❶ On each stratum there are four ranks of unit.

❷ In the unmarked case, one tone group corresponds to one clause.

Rank scale of units

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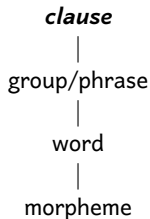
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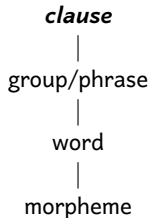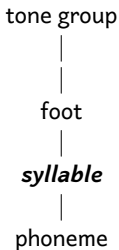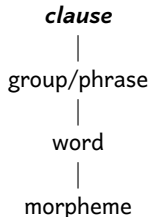| GRAMMATICAL STRATUM	PHONOLOGICAL STRATUM
clause	tone group
|	|
group/phrase	|
|	foot
word	|
|	***syllable***
morpheme	|
	phoneme

❶ On each stratum there are four ranks of unit.

❷ In the unmarked case, one tone group corresponds to one clause.

❸ The central unit on each stratum is shown by ***bold italics***.

Rankshift (embedding)

1. Rankshift involves a unit from a higher rank functioning as (part or all of) a unit at a lower rank.

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2. There is no rankshift on the phonological stratum; e.g. a tone group is never embedded in a foot.

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1. Rankshift involves a unit from a higher rank functioning as (part or all of) a unit at a lower rank.

2. There is no rankshift on the phonological stratum; e.g. a tone group is never embedded in a foot.

3. Here are two examples of grammatical rankshift:

|| they | sipped | the cocktails [[that Daniel had mixed]] ||

The 'defining' or 'restrictive' relative clause *that Daniel had mixed* functions as a post-modifier of the noun *cocktails* in the nominal group *the cocktails that Daniel had mixed*, which functions as the 'direct object' of the *sipped*.

|| [[that they were sipping cocktails at midnight]] | shocked | me ||

The *that*-clause *that they were sipping cocktails at midnight* functions as the subject of *shocked*.

|| = clause boundary, | = group/phrase boundary, [[ ]] = rankshifted clause.

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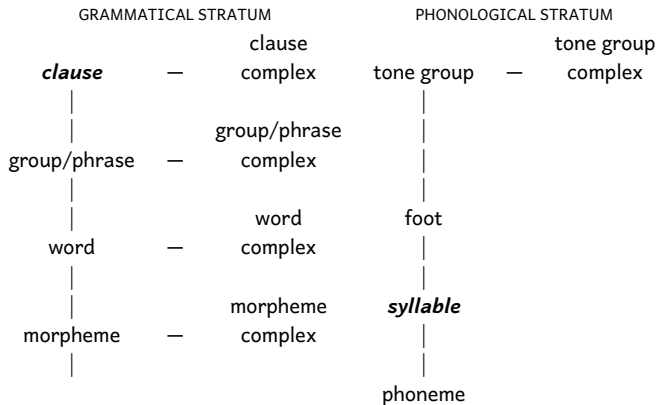Rank scale of units

Rankshift (embedding)

Unit complexes

GRAMMATICAL STRATUM		PHONOLOGICAL STRATUM	
	clause		tone group
clause —	complex	tone group —	complex
|		|	
|	group/phrase	|	
group/phrase —	complex	|	
|		|	
|	word	foot	
word —	complex	|	
|		|	
|	morpheme	*syllable*	
morpheme —	complex	|	
|		|	
		phoneme	

❶ On the grammatical stratum, two or more units of the same rank can be arranged in a linear structure, forming a complex unit at that rank (e.g.: "He's a cook and she's a doctor.")

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Rank scale of units

Rankshift (embedding)

Unit complexes

GRAMMATICAL STRATUM		PHONOLOGICAL STRATUM	
	clause		tone group
clause —	complex	tone group —	complex
|		|	
|	group/phrase	|	
group/phrase —	complex	|	
|		|	
|	word	foot	
word —	complex	|	
|		|	
|	morpheme	*syllable*	
morpheme —	complex	|	
|		|	
		phoneme	

❶ On the grammatical stratum, two or more units of the same rank can be arranged in a linear structure, forming a complex unit at that rank (e.g.: "He's a cook and she's a doctor.")

❷ On the phonological stratum, formation of complex units is possible with units of the highest rank.

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