

Lecture 5

IS in Systemic Functional Linguistics

Systemic Functional Linguistics

M. A. K. Halliday (1967, 1970, 1985, . . .)

- initially inspired by the Prague School works
- two independent (though interesting) dichotomies:
 - *Information Structure: Given-New*
 - *Thematic structure: Theme-Rheme*

Close semantic relationship (though they are not the same!):

"[O]ther things being equal, a speaker choses the Theme from within what is Given and locates *information focus*, the climax of the New, within the Rheme."

- Information Structure is listener-oriented
- Thematic Structure is speaker-oriented

Outline

- Halliday's information structure
- Halliday's thematic structure
- Word order modeling using a combination of constraints
- Daneš's thematic sequences

SFL: Halliday

Information Structure:

- *information unit*
 - not exactly any unit in clause grammar (marked when boundaries overlap)
 - made of two functions/elements:
 - * *Given* (optional; info presented as recoverable)
 - * *New* (obligatory, marked by prominence; info presented as nonrecoverable)
 - Given typically precedes New (cf. CB/NB)
- Halliday discusses information structure in relation to intonation (in English)



SFL: Halliday

Thematic structure:

- Theme is the point of departure of a message; Rheme is the remainder
- Theme grammaticalized in many languages:
 - e.g., English: first position
 - Japanese: suffix *-wa*
 - tagalog: particle *ang* and typically clause final (Martin, 1992)
- Theme is a **textual** notion (related to global text-organization strategies; e.g., dates/places in biographies, places in geographical descriptions) (Fries, 1981), locations (e.g., menus, tollbars) or means (e.g., clicking on an icon, mouse button) in software manuals



THEME in “normal” declarative clauses

THEME is the first *experiential* element (= participant or circumstance).

In declarative clauses MARKED iff not the Subject.

Subject	nominal group	I	had a little nut-tree.
Subject	nominal group	A wise old owl	lived in an oak.
Subject	nominalization	What I want	is a proper cup of coffee.
Adjunct	adverbial group	Merrily	we roll along.
Adjunct	prep. phrase	On Saturday night	I lost my wife.
Complement	nominal group	A bag-pudding	the King did make.
Complement	nominalization	What they could not eat that night	the Queen next morning fried.
Predicator	(lexical) verb	Forget	it I never shall.



Maximally extended THEME

Only a limited set of typed of words appear before the first experiential element.

Textual themacity of markers of rhetorical structure

Interpersonal the themacity of interactional information

Well	but	then	Ann	surely	wouldn't	the best idea
continuative	structural	conjunctive	vocative	modal	mood-marking	topical
textual			interpersonal			experiential
THEME						

be to join the group
RHEME



Definitions of parts of THEME

Part of the THEME		Can contain only such an element:
textual	continuative	a member of small set of discourse signallers (<i>yes, no, well, oh, now</i>)
	structural	an obligatory thematic element*
	conjunctive	an conjunctive Adjunct*
interpersonal	vocative	any vocative item (personal name etc.)
	modal	a modal Adjunct*
	mood-marking	finite verbal operator or a <i>WH</i> - interrogative or imperative <i>let's</i>
experiential	topical	the first experiential element

* Defined later.



Structural THEME

OBLIGATORY THEMATIC ELEMENTS are the following expressions:

Class	Type	Examples
conjunctions	co-ordinator	and, or, nor, either, neither, but, yet, so, then
	subordinator	when, while, before, after, until, because, if, although, unless, since, that, whether, (in order) to even if, in case, supposing (that), assuming (that), seeing (that), given that, provided (that), in spite of the fact that, in the event that, so that
relatives	definite	which, who, that, whose, when, where, (why, how)
	indefinite	whatever, whichever, whoever, whosever, whenever, wherever, however

STRUCTURAL THEME contains obligatory thematic elements.



Conjunctive THEME

CONJUNCTIVE ADJUNCTS are the following expressions:

Type	Meaning	Examples
appositive	i.e., e.g.	that is, in other words, for instance
corrective	rather	or rather, at least, to be precise
dismissive	in any case	in any case, anyway, leaving that aside
summative	in short	briefly, to sum up, in conclusion
verificative	actually	actually, in fact, as a matter of fact
additive	and	also, moreover, in addition, besides
adversative	but	on the other hand, however, conversely
variative	instead	instead, alternatively
temporal	then	meanwhile, before that, later on, next, soon, finally
comparative	likewise	likewise, in the same way
causal	so	therefore, for this reason, as a result, with this in mind
conditional	(if . . .) then	in that case, under the circumstances, otherwise
concessive	yet	nevertheless, despite that
respective	at to that	in this respect, as far as that's concerned

CONJUNCTIVE THEME contains conjunctive adjuncts.



Modal THEME

MODAL ADJUNCTS are the following expressions:

Type	Meaning	Examples
probability	how likely?	probably, possibly, certainly, perhaps, maybe
usuality	how often?	usually, sometimes, always, (n)ever, often, seldom
typicality	how typical?	occasionally, generally, regularly, for the most part
obviousness	how obvious?	of course, surely, obviously, clearly
opinion	I think	in my opinion, personally, to my mind
admission	I admit	frankly, to be honest, to tell you the truth
persuasion	I assure you	honestly, really, believe me, seriously
entreaty	I presume	please, kindly
desirability	how desirable?	(un)fortunately, to my delight/distress, regrettably, hopefully
reservation	how reliable?	at first, tentatively, provisionally, looking back on it
validation	how valid?	broadly speaking, in general, ion the whole, in principle, strictly speaking
evaluation	how sensible?	(un)wisely, understandably, mistakenly, foolishly
prediction	how expected?	to my surprise, surprisingly, as expected, by chance

MODAL THEME contains modal adjuncts.



Real examples of extended THEME

- (122) Oh soldier, soldier, won't you marry me.
 (123) Please doctor don't give me any more of that nasty medicine.
 (124) On the other hand maybe on a weekday it would be less crowded.
 (125) So why worry.

Just to remember:

Part of the THEME	Can contain only such an element:	
textual	continuative	a member of small set of discourse signalers (<i>yes, no, well, oh, now</i>)
	structural	an obligatory thematic element*
	conjunctive	an conjunctive Adjunct*
interpersonal	vocative	any vocative item (personal name etc.)
	modal	a modal Adjunct*
	mood-marking	finite verbal operator or a <i>WH</i> -interrogative or imperative <i>let's</i>
experiential	topical	the first experiential element



Information- and Thematic-Structure In Automatic Text Generation



WO in Czech and English Instructional Texts

- Flexible context-dependent WO generation in Cz and En in procedural instructions in software manual texts (Kruijff-Korbayová et al., 2002)
- Several contextual factors determined by text and sentence planning:
 - Status of entities referred to: familiarity and identifiability
 - Information structure: topic-focus articulation (Sgall et al., 1986)
 - Discourse organization: genre-specific thematic scaffolding; theme as “point of departure” (Halliday, 1967; Halliday, 1985)
- Language-specific constraints imposed by grammaticality and defaults (unmarked ordering)
- Realization by a systemic functional grammar in KPML; general WO algorithm



Examples of WO Factors

Familiarity and indetifiability:

- (126) *Otevřete nový soubor. Nakreslete kruh.*
 Open a new file. Draw a circle.
- Soubor uložte.*
File save.
Save the file.
 - # Uložte soubor.*
Save file.



Examples of WO Factors

Information structure:

- (127) *Obrázek obsahuje kruh a obdélník.*
 The drawing contains a circle and a rectangle.
- Kruh vymažte.*
Circle delete.
Delete the circle.
(saying something about the circle)
 - Vymažte kruh.*
Delete circle.
Delete the circle.
(saying what should happen next)



Examples of WO Factors

Theme as point of departure:

- (128) a. **In the File menu** choose the Open command. (Location)
 b. Choose the Open command in the File menu.
- (129) a. **By pressing** Ctrl-O open a file. (Means)
 b. Open a file by pressing Ctrl-O.
- (130) a. **To open a file** press Ctrl-O. (Purpose)
 b. Press Ctrl-O to open a file.



Thematic Progression Types



IS and Thematic Progression Types

Daneš (1979, 1985) studies THEMATIC SEQUENCES, provided that utterances are divided into THEME (what is talked about) and RHEME (what is said about it).

CONTACT THEMATIC SEQUENCES:

Thematic sequence		Notation
thematization of the preceding theme	a <i>repetition</i> of the preceding rheme	$T_{i+1} = R_i$
	a <i>derivation</i> from the preceding rheme	$T_{i+1} \leftarrow R_i$
continuous theme	a <i>repetition</i> of the preceding theme	$T_{i+1} = T_i$
	a <i>derivation</i> from the preceding theme	$T_{i+1} \leftarrow T_i$
thematization of preceding utterances	the preceding utterance	$T_{i+1} = U_i$
	a <i>summarization</i> of utterances $U_i \dots U_j$	$T_{i+1} = I_{i,j}$
theme is derived from a <i>hypertheme</i> (the theme of a superordinate text unit, e.g. a text paragraph)		$T_{i+1} \leftarrow T^*$



Thematic Progression Example

0. *Národní muzeum* $T_0 \# R_0$ *stojí na Václavském náměstí.*
 The National museum $T_0 \# R_0$ stands on the Wenceslas square.
- 1a. *Toto náměstí* $T_{1a} \# R_{1a}$ *je jedním z nejrušnějších míst v Praze.* $T_{1a} = R_0$
 This square $T_{1a} \# R_{1a}$ is one of the most busy places in Prague.
- 1b. *Horní části tohoto velkého prostranství* $T_{1b} \# R_{1b}$ *se tak dostalo krásné dominanty.* $T_{1b} \leftarrow R_0$
 The top part of this large area $T_{1b} \# R_{1b}$ has thus received a nice dominant.
2. *Tato skutečnost* $T_2 \# R_2$ *je známa snad každému návštěvníkovi Prahy.*
 This fact $T_2 \# R_2$ is known perhaps by every visitor of Prague
 $T_2 = U_0$



3a. *Je {to} T_{3a} velmi památná budova.* $T_{3a} = T_0$
 {It} T_{3a} is a very memorial building.

3b. *Sbírky Národního muzea T_{3b}#R_{3b} představují významnou*
 The collections of the National museum T_{3b}#R_{3b} represent an important
národní kulturní hodnotu. $T_{3b} \Leftarrow T_0$
 national cultural value.

4. *Jiná mimořádně významná pražská budova, Národní divadlo, T₄#R₄ je*
 Another remarkably important Prague building, the National theatre, T₄#R₄ is
umístěna na Smetanově nábřeží. $T_4 \Leftarrow T^*$
 situated on the Smetana embankment.



Daneš: T-R in Complex Text Units

Complex utterance		Notation
simple text units	one T-R nexus	$T_1 - R_1$
conjoined (paratactic) text units	conjoined nexuses	$(T_1 - R_1) conj (T_2 - R_2)$
	conjoined topics	$(T_1 conj T_2) - R_1$
condensed (hypotactic) text units	conjoined foci	$T_1 - (R_1 conj R_2)$
	nexus $T_2 - R_2$ incorporated into topic if $T_2 = T_1 \vee T_2 = R_1$, T_2 can be elided	$(T_1 cond (T_2 - R_2)) - R_1$ or equivalently $T^* - R$
	nexus $T_2 - R_2$ incorporated into focus if $T_2 = T_1 \vee T_2 = R_1$, T_2 can be elided	$T_1 - (R_1 cond (T_2 - R_2))$ or equivalently $T - R^*$



T-R Condensation Example

From (Korbayová and Kruijff, 1996)

1. První autorovi známou prací, $T_1 \# R_1$
The first work known to the author $T_1 \# R_1$
2. která $T_2 \# R_2$ se zabývá strukturálním programováním
which $T_2 \# R_2$ is concerned with structural programming
3. $T_3 \# R_3$ a opírá se o gramatický formalismus (afixové gramatiky),
and $T_3 \# R_3$ relies on a grammar formalism (affix grammars),
4. je práce Silvarberga (1978).
is the work of Silvarberg (1978).

The complex utterance can be analyzed as $(T_1 cond (T_2 - (R_2 conj R_3))) - R_1$
 where $T_3 = T_2$, and T_3 is elided



Summary

- Information Structure (Given/New) and Thematic Structure (Theme/Rheme) separate but related:
 '[O]ther things being equal, a speaker choses the Theme from within what is Given and locate *information focus*, the climax of the New, within the Rheme.'
 – Theme \approx point of departure
 – a textual notion related to global text organization strategies
 – one topical element and optionally further textual and interpersonal elements
 – grammaticalization of Theme
- Thematic structure as additional source of word order constraints
- Systematic relationships of Themes to preceding Themes/Rhemes
- Condensation "basic" Theme-Rheme pairs in complex utterances