Dependency Structure of Binary Conjunctions
(of the IF…, THEN… Type)

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Abstract

The dependency surface-syntactic structure is proposed, within the Meaning-Text framework, for binary conjunctions of the IF–THEN type; e.g.:

IF→Y, THEN←X

A universal typology of conjunctions is sketched, and three examples of English binary conjunctions are given. Binary conjunctions are “discontinuous” phrasemes-idioms, collocations and formulemes that have to be considered together with their actants, since there are no direct syntactic links between their components. Full lexical entries for two Russian binary conjunctions are presented, supplied with linguistic comments, and deep-syntactic rules ensuring the expansion of a deep-syntactic binary conjunction node into the corresponding surface-syntactic tree are illustrated.

1 The Syntactic Structure of a Binary Conjunction

This paper examines subordinating and coordinating binary conjunctions (or correlative subordinators/coordinators, as they are known in the literature: Quirk et al. 1991: 935–941, 999–1001). The typical examples are the subordinating conjunction IF…, THEN… and the coordinating conjunction EITHER…, OR… The discussion is carried out within the Meaning-Text approach (see Mel’čuk 1974, 2012, 2016b).

In sentence (1) dependency relations between lexemes are obvious, except for THEN, the second component of the conjunction IF…, THEN…:

(1) If A→and→B are→equal, then B←follows→C.

The dependency for THEN is proposed in what follows.

Without THEN the superordinate clause can linearly precede or follow the subordinate clause with IF; but with THEN it can only follow. This gives the idea to make this THEN dependent on IF: IF→r→THEN; as a result, the binary conjunction IF…, THEN… can be stored in the lexicon exactly in the form of this syntactic subtree. Such a description had been tacitly accepted for almost half a century:

• In Mel’čuk 1974: 231, No. 31, (e), the surface-syntactic relation [SSyntRel] r between IF and THEN was called “1st auxiliary.”
• In Mel’čuk & Pertsov 1987: 331, No. 19.1, it was rebaptized “binary-junctive.”
• In Iomdin 2010: 43, it appears under the name of “correlative SSyntRel.”
• In Mel’čuk 2012a: 143, No. 51, it is “correlative-auxiliary.”

However, this syntactic description of binary conjunctions contradicts the definition of surface-syntactic dependency (or, more precisely, that of surface-syntactic relation), which was advanced in Mel’čuk 1988: 130–144 and has been used as such since; see its newer formulations, for instance, in Mel’čuk 2009: 25–40 and Mel’čuk 2015b: 411–433. In order to lay bare this contradiction, only the first part of this definition—namely Criterion A—is needed, strictly speaking. Nevertheless, to facilitate the task of the reader I will cite here the whole definition—that is, the full set of criteria for SSyntRels. (Of course many substantial explanations and interesting special cases have to be bypassed.)
2 Criteria for Surface-Syntactic Dependencies (= Surface-Syntactic Relations)

NB: Given the limitations of space and time, the formulations below are approximate and controversial cases are not considered; for important details, see the above references.

Criterion A: PRESENCE of a syntactic dependency between two lexemes in an utterance (prosodic unity of and linear arrangement in the configuration L₁-synt–L₂)

In a given utterance, the lexemes L₁ and L₂ can have a direct Synt-dependency link (= they can form a configuration L₁-synt–L₂), if and only if both Conditions 1 and 2 are simultaneously satisfied:

Condition 1
(a) General case
L₁ and L₂ can form a phrase of L, such as
N—V, V—N, ADJ—N, PREP—N, ADV—ADJ, etc.
(b) Special case
L₁ and L₂ cannot form a phrase, but the lexemes L₁, L₂ and configurations of lexemes of the set {Lᵢ} appearing in the same utterance can, such that the following are also phrases of L:

• L₁→{Lᵢ₋₁} L₂→{Lᵢ₋₂}
• L₁→{Lᵢ₋₁} and L₂→{Lᵢ₋₂}

Condition 2
The linear position of one of the lexemes L₁ and L₂ in the utterance under consideration must be specified with respect to the other.

Examples
Case (b) covers configurations of two types:
(i) L₁→L₂(PREP)→L₃(N)→L₂, as in one of them

Here, *one of cannot be a phrase, while the utterances of them and one of them are phrases, having of and one as their heads. Therefore, a syntactic link between ONE and OF is allowed.

(ii) L₁→{Lᵢ₋₁} L₂(CONJ)→{Lᵢ₋₂}, as in pseudo-subjectival

It is obvious that he was there

Criterion B1-B3: DIRECTION of the syntactic dependency between two lexemes in an utterance

Criterion B1 (passive syntactic valence² of the phrase L₁-synt–L₂)

In a phrase L₁-synt–L₂ the lexeme L₁ is the syntactic governor of L₂, or the head of the phrase L₁-synt–L₂, if L₁ determines the passive syntactic valence of the phrase to a greater extent than L₂.

Example
The passive valence of the phrase John—and—Mary is that of a noun (it can be the subject and the direct object of a verb, the object of a preposition, an apposition, etc.); the passive valence of the phrase and—Mary is determined by AND; therefore, MARY—synt→AND—synt→JOHN.

This is actually the general schema for coordinating conjunctions:

L₁→synt→CONJ(coord)→synt→L₂.

Criterion B2 (morphological contact point in the phrase L₁-synt–L₂)

In a phrase L₁-synt–L₂, where both L₁ and L₂ have the same syntactic properties (and influence the

Here, *became—that cannot be a phrase, while became—obvious and that—{he was there} are phrases, with became and that as their heads; thus, BECOME and THAT can be considered syntactically linked.

Condition 1 of Criterion A requires that, in order to have a direct syntactic link in the given utterance, two lexemes L’ and L” could form a phrase of the language.

Condition 2 of Criterion A requires that, in order for two lexemes L’ and L” to have a direct syntactic link in the given utterance, one of them must determine the linear position of the other.

These conditions are logically independent:
—In He took in his knapsack a book full of vowels [Keats], Condition 1 allows the adjective FULL to depend on KNAPSACK (full knapsack is a phrase of English), but Condition 2 does not.
—In I wish I was either in your arms, or that a thunderbolt would strike me [Keats], Condition 2 allows the particle EITHER to depend on OR (either has to precede the governor of or), but Condition 1 does not.

Footnotes:
¹ For the surface-syntactic relations mentioned in this paper, see Mel’čuk 2015c and 2016a.

² Passive syntactic valence of an LU is the set of all possible syntactic governors of L.
passive valence of $L_1$–$\text{synt}–L_2$ to the same degree), the lexeme $L_1$ is the syntactic governor of $L_2$, or the head of the phrase $L_1$–$\text{synt}–L_2$, if $L_1$ determines the morphological behavior of the phrase to a greater extent than $L_2$.

**Example**
In the French phrase *Bibliothèque Mitterand* ‘Mitterand Library’ the head is *BIBLIOTHÈQUE* since the phrase imposes the agreement of the adjective in the feminine gender (the gender of *BIBLIOTHÈQUE*): *La Bibliothèque Mitterand est spacieuse* ‘The Mitterand Library is spacious’.

**Criterion B3** (denotation of the phrase $L_1$–$\text{synt}–L_2$)

In a phrase $L_1$–$\text{synt}–L_2$, where both $L_1$ and $L_2$ have the same syntactic and morphological properties (and influence the passive valence and morphological behavior of $L_1$–$\text{synt}–L_2$ to the same degree), the lexeme $L_1$ is the syntactic governor of $L_2$, or the head of the phrase $L_1$–$\text{synt}–L_2$, if $L_1$ determines the denotation of $L_1$–$\text{synt}–L_2$ to a greater extent than $L_2$.

**Example**
The denotation of the phrase [*the American* writer—*Dos Pasos*] is a real person (an American writer having a particular name), not the name *Dos Pasos*; therefore, we have 

$$\text{writer} \rightarrow \text{synt} \rightarrow \text{DOS PASOS}.$$ 

Criteria B1–B3 form a hierarchy:

$$B1 > B2 > B3$$

This means that if Criterion B1 is applicable, it determines the syntactic governor; otherwise, Criterion B2 is pressed into action, and if applicable, it determines the syntactic governor; if it also fails, Criterion B3 is supposed to solve the problem.

**Criteria C1-C3: TYPE of the syntactic dependency between two lexemes in an utterance**

**Criterion C1** (presence of semantic contrast: Minimal Pair test)

Notation: $w_i(L)$ is a wordform of lexeme $L$.

A hypothetical SSyntrRel $r$ should not describe two phrases

$$w_i(L_1) \rightarrow r \rightarrow w_i(L_2)$$

if 1) they contrast semantically

$$[w_i(L_1) \rightarrow r \rightarrow w_i(L_2)]' \neq [w_i(L_1) \rightarrow r \rightarrow w_i(L_2)'],$$

and

2) they formally differ only by some syntactic means of expression—i.e., by word order, syntactic prosody, or syntactic grammemes.

In such a case, $r$ should be split into two different SSyntrRel, $r_1$ and $r_2$.

**Example**

Rus. *žena–synt→druga* ‘wife of friend’ and *žena–synt→drug* ‘wife, who is a friend’ should be described by two different SSyntrRel (actantial-attributive and qualifying-appositional), since these phrases semantically contrast and formally differ only by the case of *drug*: the genitive in the first phrase and the same case as that of *žENA* in the second.

**Criterion C2** (syntactic substitutability: Substitution test)

A SSyntrRel $r$ must have a prototypical dependent that is allowable with any governor.

**Example**

*have–synt→been and be–synt→going* should be described by two different SSyntrRel (perfect-analytical and progressive-analytical) since there is no word-class whose element is possible as a dependent both with *HAVE and BE* within an analytical form.

**Criterion C3** (no limited repeatability: Cooccurrence test)

A SSyntrRel $r$ must be either unlimitedly repeatable or non-repeatable—that is, it cannot be limitedly repeatable.

**Example**

*write→synt→after the lunch, write→synt→on the next line, write→synt→over the door* etc. can all be described by the same SSyntrRel: circumstantial, since the number of these dependents is theoretically unlimited. On the contrary, [*They* returned→synt→all and [*They* returned→synt→drunk] require two different SSyntrRel (floating-copredicative and subject-copredicative), since otherwise the dependent will be repeatable exactly twice.

Now we are fully equipped to take on the problem formulated in Section 1: What is the dependency structure of a binary conjunction?

3 The Dependency Description for Binary Conjunctions

Consider the expression “IF $Y$, THEN $X$”:

—The expression *IF THEN* is not a phrase of English;

—$\text{IF}_L$ forms a phrase with the subordinate clause $Y_{[i_{+2}]}$, and $\text{THEN}_L$, with the superordinate clause $X_{[i_{+1}]}$;

—$\text{IF}_L$ subordinates the Main Verb of $Y$ and is itself subordinated to the Main Verb, of $X_{[i_{+1}]}$:

$$\text{MV}(X_{[i_{+1}]}) \rightarrow \text{IF}_L \rightarrow \text{MV}(Y_{[i_{+2}]})$$.
thus corresponding to Case (b) of Condition 1 of Criterion A;
—THEN is subordinated to the Main Verb of $X_{[4,1]}$.

As a result, we have the following SSynt-structure for a subordinating binary conjunction (both of its components depend on the Main Verb of the superordinate clause):

$\mathbf{f} \rightarrow Y$, THEN $\leftarrow X$.

This proposal is aimed at correcting a mistake that has been being perpetrated for many years; it concerns all the binary conjunctions and a motley set of expressions similar to them.

4 Conjunctions: A Typology

A sketch of conjunction typology will give the discussion a certain depth: it will make clear that the proposed solution is typologically plausible.

- According to their meaning/function, conjunctions are divided in two major families: subordinating vs. coordinating. These two families are very different in their properties and behavior—as different as two major opposed ways of syntactic linking: subordination and coordination.

- According to their form, conjunctions are classified along two independent axes:

  - the number of components: single (just one component) vs. binary (two components) vs. repeated (theoretically unlimited repetition of the second component);

  - the structure of components: simple (all components are monolexemic) vs. compound (at least one component is plurilexemic).

A binary or repeated conjunction is necessarily linearly discontinuous—its components cannot be in linear contact. (In a sentence like *He is an either-or person* we do not have a binary conjunction used as such, but its meta-linguistic name as a premodifier.)

Since repeated conjunctions can be only coordinating, there are 10 logically possible classes of conjunctions, see Table 1 below. (Since there are no English examples for Class 10, Russian conjunctions are supplied; raised semi-brackets ‘˜’ enclose idioms.)

5 Binary Conjunctions in English

Here is a (non-exhaustive) list of English binary conjunctions.

<table>
<thead>
<tr>
<th>Subordinating</th>
<th>Coordinating</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF…, (THEN)…</td>
<td>‘BOTH… AND…’</td>
</tr>
<tr>
<td>‘NO SOONER…, THAN³’</td>
<td>‘EITHER… OR…’</td>
</tr>
<tr>
<td>‘THE³…, THE³’</td>
<td>‘NEITHER… NOR…’</td>
</tr>
<tr>
<td>NOT ONLY…, BUT ALSO…</td>
<td>NOT SO MUCH…, AS…</td>
</tr>
</tbody>
</table>
| The first component of a coordinating binary conjunction and the second component of a subordinating binary conjunction are themselves not conjunctions, but, respectively, adjectives or particles, which depend on an element in the corresponding clause—via the modificative, the auxiliary or the restrictive SSyntRel (according to the conjunction).

<table>
<thead>
<tr>
<th>simple</th>
<th>compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>subordinating</td>
<td>coordinating</td>
</tr>
<tr>
<td>simple conjunctions</td>
<td></td>
</tr>
<tr>
<td>single</td>
<td>IF, WHEN, ALTHOUGH</td>
</tr>
<tr>
<td>binary</td>
<td>IF…, (THEN)…, ‘THE…, THE…’</td>
</tr>
<tr>
<td>repeated</td>
<td>‘EITHER…, OR…, OR…, OR…’</td>
</tr>
</tbody>
</table>

| Table 1: Classes of conjunctions |
The following three examples will be helpful.

'NO SOONER – THAN':
deep binary subordinating conjunction, consisting of the surface subordinating conjunction 'NO SOONER' and the particle THAN (THAN is a comparative conjunction).

(2) No sooner had I arrived than the kids rushed towards me.

'THE3 – THE3':
deep binary subordinating conjunction, consisting of the surface subordinating conjunction THE3 and the particle THE3 (THE3 is the definite article).

(3) a. The higher you climb the colder it gets.

b. It gets colder the higher you climb.

'EITHER – OR':
deep binary coordinating conjunction, consisting of the surface coordinating conjunction OR and the particle EITHER.

(4) I'll have either tacos or pizza.

6 Phraseological Nature of Binary Conjunctions

A binary conjunction is a plurilexemic expression that is not free: it is a phrase (Mel’čuk 2015b: 263–362). However, it is quite an uncommon phrase: its components are not directly syntactically linked. Such syntactically discontinuous phrasemes have not been considered before. Indeed, a phrase is “a phrase that…,” while IF – THEN or EITHER – OR are obviously not phrases. Therefore, one has to consider ta binary conjunction together with the lexical expressions (in this case, clauses) that implement its actants: IF Y, THEN X and EITHER Y OR X are bona fide phrases. It is under this form that they must be stored in the lexicon. (For more on the semantic, deep-syntactic and surface-syntactic representation of binary conjunctions, see Section 8.)

But if binary conjunctions are phrasemes, what type of phraseme are they?

Five of the English binary conjunctions—'NO SOONER Y, THAN X', 'THE1 Y, THE3 X', 'BOTH X AND Y', 'EITHER X OR Y' and 'NEITHER X NOR Y'—are idioms: they are non-compositional.

The conjunctions NOT SO MUCH X, AS Y and NOT ONLY X, BUT ALSO Y are formulaenes (a subtype of cliché; Mel’čuk 2015a)–compositional, but completely fixed expressions.

And the binary conjunction IF Y, THEN X is a collocation, although of an unusual type: there is no direct syntactic link between the base and the collocate. In this collocation, the base is the first component (IF), which controls the use of the second component (the collocate THEN); the latter can be optional, must follow the base and occupies the initial linear position in the superordinate clause.

Binary conjunctions are characterized by syntactic discontinuity: they form phrases only together with their actants, since their own components are syntactically not directly linked to each other. In this, they are unlike almost all other phrasemes. However, they share this feature with a few idioms, which it seems worthwhile to quote here:

'NOTHING → IF NOT X(ADJ) ≈ 'extremely':

Barbara was nothing if not feminine.

Rus. 'PRI VSËM X-e' 'despite X' (Apresjan 2014):

pri vsëm ego talante 'despite [lit. ‘with all’] his talent'

Rus. 'TO LI TAK I VŠEČČƯ' 'I signal that X(V) will take place, TO referring to something very bad':

To li ty toga ešt uvidiš!' 'I signal that what you will then see will be very bad' [lit. ‘That whether you then still will see!’].

Fr. 'EN TOUT X(N)'

'while being completely ADJ(X)':

Je te le dis en toute amitié

'I tell you this being completely [your] friend [lit. ‘in all friendship’].

7 An Illustration: Russian Binary Conjunctions KAK…, TAK I… lit. 'as..., so also…'

To demonstrate my proposal in action, I will offer here the lexicographic descriptions—that is, lexical entries—for two Russian binary compound conjunctions:
the coordinating 'KAK X, TAK 1 Y' = ‘both X and Y’, see (5), and
the subordinating ‘KAK Y, TAK (l) X' = ‘as Y, X’, see (6).

First, two illustrative sentences and their surface-syntactic structures.

(5) Russian

*On čitaet kak anglijskie, tak i francuzskie knigi.*

He reads both English and French books.

In (6), TAK ‘so’ is not a manner adverb, but a component of the second part of a binary compound conjunction; it is semantically empty and is positioned always at the beginning of the superordinate clause. This is why it needs a special auxiliary SSyntRel. It links the second component of some binary subordinating conjunctions to the head of the superordinate clause, cf. (2).

The conjunctions ‘KAK X, TAK 1 Y’ and ‘KAK Y, TAK 1 X’ are:

• homonymous and belong to two different vocables;

• idioms, since their meanings are by no means compositional;

• syntactically discontinuous in that *kak tak i is not a phrase of Russian: only kak X, tak i Y is a phrase.

Here are the lexical entries of both Russian binary compound conjunctions. (For the organization of a lexical entry of the *Explanatory Combinatorial Dictionary*—a special lexicon of the Meaning-Text approach, see, among others, Mel’čuk 2013: Ch. 11.)

‘KAK X, TAK 1 Y’ = ‘both X and Y’: idiom, deep binary compound coordinating conjunction (Sannikov 2008: 302–303); written language.

**Definition**

‘kak X, tak i Y’-1: ‘i X, i Y’

[lit. ‘as X, so also Y’]

**Government Pattern**

\[
X \text{ⅠⅠⅠ} \quad Y \text{ⅠⅠⅠ} \\
1. L \quad 1. L
\]

(‘L’ stands for ‘lexeme’ 3)

1) L ≠ 'ADJ(short)', PREDICATIVE

(Sannikov 2008: 303)

‘On byl kak bolen, tak i goloden’

‘He was both sick and hungry’

(bolen and goloden are short adjectives).

**Surface-Syntactic Structure**

KAK→auxil→Y→coord→TAK→coord-conjunct→X→restr→I

**Lexical Functions**

\[
\begin{align*}
\text{Syn} & : & i X, i Y & \approx \text{‘both X and Y’} \\
\text{Anti} & : & i X, i Y & \approx \text{‘neither X nor Y’}
\end{align*}
\]

**Examples**

V ětoj proporcii izmenjaetsja *kak* cena, *tak* razumeetsja, i *bogatstvo*;

lit. ‘In this proportion changes as price, so, of course, also wealth’.

Tam vy smožete *kak* vinogradnogo soka vypit’, *tak* i černiki poest’

lit. ‘There you will be able as grape juice drink, so also blackberries eat’.

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3 Thus, X and Y cannot be expressed by clauses.
Ja kak sebe takogo ne pozvoljal, tak i ne poz-
voljaju lit. ’I as to.myself such.things didn’t
allow, so also don’t allow’ = ‘As I didn’t allow
this to myself before, so I do not now’.
Oba filosofa izucali kak fiziku, tak i kosmo-
logiju
lit. ‘Both philosophers studied as physics, so
also cosmology’.

’KAK Y, TAK (I) X’² ≈ ‘as Y, X’; idiom, deep binary
compound subordinating conjunction; colloquial style.

Definition
’kak Y, tak i X’²: ‘immediately at/since the
moment of Y, X’

[lit. ‘as Y, so also X’]

Government Pattern

| X ↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑∪

8 Deep-Syntactic Rules for Binary
Conjunctions

Finally I would like to illustrate the Sem-rules
and DSynt-rules that ensure the treatment of a
binary conjunction. Two examples will be
given: for a binary conjunction that is an idiom
’NO SOONER Y, THAN² X’ and for one that is
a collocation (IF Y, THEN X).

Example 1

Sem-structure
’X ← 1–no_sooner_than²– 2 → Y’

DSynt-structure

<table>
<thead>
<tr>
<th>L(‘X’)</th>
<th>L(‘Y’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>attrib</td>
<td>attrib</td>
</tr>
<tr>
<td>circumstantial</td>
<td>circumstantial</td>
</tr>
<tr>
<td>subord-conjunctional</td>
<td>subord-conjunctional</td>
</tr>
<tr>
<td>THEN²</td>
<td>THEN²</td>
</tr>
</tbody>
</table>

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<tr>
<td>attri</td>
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<td>circumstantial</td>
</tr>
<tr>
<td>subord-conjunctional</td>
<td>subord-conjunctional</td>
</tr>
<tr>
<td>THEN²</td>
<td>THEN²</td>
</tr>
</tbody>
</table>

Shading indicates the context: that part of the
rule that is not manipulated by it but whose
presence is necessary for the rule to apply.
L(‘X’) stands for «lexical expression L of
meaning ‘X’».

The correspondence between these two struc-
tures constitutes a DSynt-rule for the binary com-
pound conjunction ’NO SOONER Y, THAN² X’. In
other words, this rule, as as part of its lexical
entry, is exploited during the transition from the
deep-syntactic structure of a sentence with this
conjunction to its surface-syntactic structure.

A binary conjunction that is an idiom exists as
such only in the DSynt-structure, where it appears
on one node. This reflects its semantic unity.

Example 2

Sem-structure
’X ← 1–if_then– 2 → Y’

DSynt-structure

<table>
<thead>
<tr>
<th>L(‘X’)</th>
<th>L(‘Y’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>attrib</td>
<td>attrib</td>
</tr>
<tr>
<td>circumstantial</td>
<td>circumstantial</td>
</tr>
<tr>
<td>IF</td>
<td>IF</td>
</tr>
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</table>

SSynt-structure

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<tr>
<th>L(‘X’)</th>
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</tr>
<tr>
<td>circumstantial</td>
<td>circumstantial</td>
</tr>
<tr>
<td>IF</td>
<td>IF</td>
</tr>
</tbody>
</table>

Examples

Kak pervyj raz ssodil ja v ataku, tak ot very i
otpal
lit. ‘As first time went I in attack, so from faith
[I] also fell.away’ = ‘After my first attack I lost
my faith’.

Kak on rodilsja v Armavire, tak tam i vyros
lit. ‘As he was.born in Armavir, so there [he]
also grew.up’.

Etta dama kak podnjala ruku “za”, tak i ne
opustila eë, kogda golosovali “protiv”
lit. ‘This lady as rose hand for, so [she] also
didn’t lower it when [people] were voting
against’.

Kak budeš´ s nej govorit´, tak vsë (i) pojimèš
lit. ‘As [you] will with her talk, so everything
[you] also will.understand’.
9 Conclusions

1. A dependency syntactic structure is proposed for binary conjunctions, both subordinating and coordinating.

2. A universal typology of conjunctions is sketched, and three examples are given of English binary conjunctions.

3. Binary conjunctions are “discontinuous” phrasemes—phrasemes that have to be considered together with their actants.

4. The full lexical entries are presented for two Russian binary compound conjunctions: the coordinating ‘KAK X, TAK Y’ ≈ ‘both X and Y’ and the subordinating ‘KAK Y, TAK (I) X’ ≈ ‘as Y, X’.

5. Two sample DSynt-rules for introducing a binary conjunction into the SSynt-subtree are presented for the binary conjunctions ‘NO SOONER Y, THAN X’ and IF Y, THEN X.

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References


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