

A General Inventory of Surface-Syntactic Relations in World Languages Part One

A universal list of surface-syntactic relations [SSyntRels] is compiled based on the idea that a SSyntRel **r** is “the same” in different languages if and only if this **r** has the same set of core functions in all these languages (just like the nominative in different languages is still a nominative since it is used everywhere for nomination – its core function; its other functions might be different). A few remarks are formulated on the Deep-Syntactic structure: 12 universal deep-syntactic relations are briefly introduced, and a list of 30 fictitious lexemes is presented (they are used in DSyntSs to represent syntactic constructions carrying lexical-type meanings). After a concise characterization of SSyntRels, the paper offers a list of 112 SSyntRels known in world languages: subordinate and coordinate; the subordinate SSyntRels are divided into clause-level and phrase-level SSyntRels, with further subdivision into valence-controlled vs. non-valence-controlled and then into Noun Phrase SSyntRels, Adpositional Phrase SSyntRels, etc.

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1 Introductory Remarks

The present paper, written within the Meaning-Text approach, stands upon the following three specific assumptions concerning the syntactic structure [SyntS] of a sentence:

1. The SyntS is described in terms of syntactic dependencies.
2. The SyntS is described on two levels of representation: deep-syntactic structure [DSyntS] and surface-syntactic structure [SSyntS].
3. The SSyntS uses a set of typed (= labeled) surface-syntactic relations [SSyntRels].

It is impossible to explain or justify our approach here – it should be taken for granted (on the Meaning-Text approach, see Mel'čuk 2012b, 2013, 2015; on dependency in general, see Mel'čuk 1988, 2009, 2014; on SSyntRels in particular, see Iordanskaja & Mel'čuk 2009).

Surface-syntactic relations [SSyntRels] are – by definition – language-specific, just as nominal cases or phonemes. Thus, the **subjectival** SSyntRel in Russian is, of course, not the same as the **subjectival** SSyntRel in Basque or Lezgian, neither semantically nor formally; the Russian nominative case is absolutely not the same as the nominative in Kurdish or Dargwa; and the Russian /t/ is by no means identical with /t/ in English, Mandarin or Hawaiian. These facts, however, do not prevent linguists from compiling general inventories of nominal cases and those of phonemes, based on the structural resemblance of the corresponding entities. With all possible distinctions between them, nominatives of different languages are of course different, but the nominative is the case of nomination in all languages; and /t/ is everywhere a voiceless dental plosive consonant. Quite similarly, the Subject – the dependent element of the **subjectival** SSyntRel – is the most privileged among the actants of a finite verb in any language, while the Direct Object – the dependent element of the **direct-objectival** SSyntRel – is the second most privileged among the actants of a transitive verb; etc. The idea of a “universal” list of SSyntRels known today suggests itself, and the present paper tries to pick up the challenge.

Let it be emphasized lest there be a misunderstanding: the proposed list of SSyntRels is not an *a priori* universal construction; it is “universal” in the most trivial sense – it represents a set-theoretical union of the lists of SSyntRels established empirically for several languages.

Tentative lists of SSyntRels for particular languages – Russian, English, French, German, Spanish, Arabic, etc. – have been published over the last 50 years (see the references in Iordanskaja & Mel'čuk 2009: 153). The general inventory of SSyntRels proposed below is based on a list of Russian SSyntRels (Mel'čuk 1974: 221–235, 2012: 135–144; Iomdin 2010), a list of English SSyntRels (Mel'čuk & Pertsov 1987, Mel'čuk 2015: 444–453 [3.4.11]), and a partial list of French SSyntRels (Iordanskaja & Mel'čuk 2009); these three lists have profited from many previous works, duly indicated in the above titles. The resulting set of SSyntRels underwent numerous corrections and additions, embodying the experience acquired during the last decade. Therefore, any mismatch between the present list and previous publications must be resolved in favor of the former.¹

The list presented below includes all SSyntRels known (to me) today, among them – several SSyntRels that appear only in colloquial style or in syntactic phrasemes.

The SSyntRels are not supplied with systematic explanations and justifications – I limit myself to a minimum of examples and cursory remarks.

It goes without saying that the present proposal is by no means final; it is a rough sketch that needs to be improved and sharpened in many respects.

2 The Deep-Syntactic Structure

To help the reader evaluate the system of suggested SSyntRels, it is necessary to present the set of deep-syntactic relations [DSyntRels] and that of fictitious lexemes appearing in DSynt-structures of sentences. Each SSyntRel on the list below is supplied with the information of its correspondence to DSyntRels and/or fictitious lexemes.

2.1 Deep-Syntactic Relations

The DSyntRels are linguistically universal in the following sense of the term *universal*: taken together with fictitious lexemes, they are sufficient to describe the DSyntSs of any language.

- All syntactic constructions known in world languages are divided into two major families: coordinate *vs.* subordinate constructions. The coordinate constructions are described by two DSyntRels: **COORD**(inative) and **PSEUDO-COORD**.

NB: In previous publications, the **PSEUDO-COORD** DSyntRel (and the corresponding SSyntRel) was called *quasi-coordinative*. In the present paper, an attempt is made at improving the terminology. Namely, the prefix *quasi-X* will be used, from now on, for an element that is not an X, but – under appropriate conditions – can be treated as an X, i.e., confounded with genuine Xs (for instance, quasi-elementary [*sign*], quasi-grammeme, quasi-morph). An element that is not an X and can never be confounded with Xs, but resembles X to a sufficient degree will be called *pseudo-X*. This modification concerns also such names of SSyntRels as **quasi-subjectival* \Rightarrow *pseudo-subjectival*, etc.

- The subordinate constructions are subdivided, in their turn, into weak-subordinate *vs.* strong-subordinate. The weak-subordinate constructions are described by the **APPEND**(itive) DSyntRel.

The strong-subordinate constructions fall into two subsets: modifying *vs.* actantial DSyntRels.

- The modifying constructions are described by the **ATTR**(ibutive) and **ATTR**_{descr(iptive)} DSyntRels.

- The actantial constructions are described by DSyntRels **I**, **II**, ..., **VI**, and **II**_{dir(ect).sp(eech)}.

NB: A Deep-Syntactic actant [DSyntA] of a lexeme L is, as a rule, a syntactic dependent of L that expresses one of L's semantic actants – that is, a

DSynt-actant of L is controlled by L's active valence. For instance, in the sentence *Because of this, John reminded Mary about the exam in my presence* the lexemes JOHN, MARY and EXAM are DSyntAs of REMIND, since they are imposed by the meaning of the verb ('X reminds Y of Z'); however, the expressions *because of this* and *in my presence* are not the verb's actants, but freely added circumstantials.

A lexical unit may have up to six DSynt-actants, which gives six actantial DSyntRels. An additional DSyntRel is introduced for Direct Speech, which functions as an object of a communication verb: [*Mickey*] *shouted*, -II_{dir.sp} → "**Come** [*over right away!*]".

These all add up to the 12 DSyntRels used in the Meaning-Text approach, namely:

Two coordinate DSyntRels

– **COORD**, as in MARY-COORD → JOHN-COORD → OR ANN ⇔ *Mary, John or Ann*

The **COORD** DSyntRel represents normal coordination, either without a conjunction or with one.

– **PSEUDO-COORD**, as in

IN-[NEW YORK]-PSEUDO-COORD → ON-[MANHATTAN]-PSEUDO-COORD → AT [JOHN'S] ⇔

[*He stayed*] *in New York, on Manhattan, at John's*.

This DSyntRel represents syntactic constructions of elaboration, where, for instance, a prepositional phrase follows – necessarily without a conjunction – another such phrase.

Ten subordinate DSyntRels

– One appenditive DSyntRel

APPEND, as in

SORRY ← **APPEND** - [I] - BE_{IND, PRES, NON-PERF, NON-PROGR} BUSY ⇔ *Sorry, I am busy*.

The **APPEND** DSyntRel subordinates such "extra-structural" elements as parentheticals, addresses, interjections and prolepses to the Main Verb of the clause.

– Two modifying DSyntRels

ATTR, as in

RED ← **ATTR** - FLAG ⇔ *red flag*

MAN - **ATTR** → OF [GREAT COURAGE] ⇔ *man of [great courage]*

VERY ← **ATTR** - INTERESTING ⇔ *very interesting*

DRIVE_(V) - **ATTR** → FAST ⇔ [*John was*] *driving [very] fast*

The **ATTR** DSyntRel describes all types of modifier constructions (minus descriptive ones, see the next DSyntRel).

ATTR_{descr} as in MARY - **ATTR**_{descr} → TIRED [AND HUNGRY] ⇔ *Mary, tired [and hungry]*

The **ATTR_{descr}** DSyntRel is used for so-called descriptive modifiers, which do not restrict the denotation of the element modified, but simply qualify it.

– Seven actantial DSyntRels

I, as in

JOHN←I→READ ⇔ *John is reading.*
 MY←I→TRIP ⇔ *my trip*
 TRANSLATION←I→BY JOHN ⇔ *translation [of this novel] by John*

II, as in

BOOK←II→READ ⇔ *[John] is reading a book.*
 JOHN←II→EXPULSION ⇔ *John's expulsion*
 FOR←II→JOHN ⇔ *for John*

III, as in

BOOK←II→SEND←III→JOHN ⇔ *[Mary] sends a book to John / sends John a book*

IV – VI, as in

HUNDRED DOLLAR_{PL}←II→LEND←IV→MONTH ⇔
[Would you] lend [me] \$\$100 for a month?
 ISTANBUL←III→MISSION←IV→MONTH ⇔
 \—V→STUDY
a mission to Istanbul for a month to study Turkish

II_{dir.sp}, as in

WHISPER←II_{dir.sp}→COME_{IMPER} ⇔ *[John] whispered: "Come [back!]"*

2.2 Fictitious Lexemes

Along with DSyntRels, the DSynt-structure uses fictitious lexemes, which carry the lexical-type meanings expressed by meaningful SSynt-constructions (Mel'čuk 2013: 37–42). Here is an approximate universal inventory of fictitious lexemes (for an example of use, see next page).

NB: This enumeration does not include a number of fictitious lexemes needed to represent syntactic phrasemes, such as Rus. X KAK X 'quite an ordinary X' or X, TAK X 'I don't care whether this is an X or not', etc.

«AFFECT»	«CAUSE _N »	«INCLUDE»	«SHOULD»
«AFTER»	«CONDITION»	«INSTRUMENT»	«START_
«ALTHOUGH»	«FROM» (<i>one</i>	«MATERIAL»	BRUSQUELY»
«BE»	<i>from these</i>)	«MAYBE»	«TITLE» (<i>title of</i>
«BE_ABLE»	«GOAL»	«MOVE _{DIR} »	<i>professor</i>)
«BE_FROM»	«HAVE»	«NAME»	«WHILE»
«BECOME»	«HAVE_TO»	«NUMBER [of]»	«WILL_BE»
«BELONG»	«IF»	«SAY»	«WITH»
	«IF _{IRR} »		

3 Characterization of Surface-Syntactic Relations

A SSyntRel **r** describes a family of binary syntactic constructions (which can of course consist of a single construction). Each SSyntRel **r** must meet the conditions formulated in Iordanskaja & Mel'čuk 2009:

1. The syntactic constructions described by **r** resemble each other to a sufficient degree – that is, they share enough relevant linguistic properties.
2. **r** satisfies the formal requirements of Criteria C for the type of SSyntRel (Mel'čuk 2009: 33–40): namely, **r** does not cover semantically contrasting “minimal pairs” (Criterion C1), has a prototypical dependent that passes with all possible governors (Criterion C2), and is not limitedly repeatable (Criterion C3).

However, the list proposed in this paper has not been systematically checked for minimality – that is, for necessity of each SSyntRel included; I am pursuing, in the first place, sufficiency. At the same time, I strive for the maximal clarity, so that I did not collapse two SSyntRels even if this seemed formally possible, but would make the system less transparent. Therefore, some SSyntRels listed below may turn out redundant.

The SSyntRels on the list have been established based on the following premise:

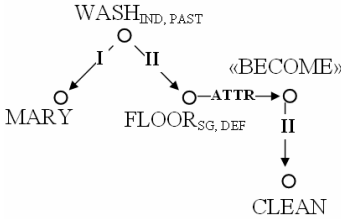
1. The Surface-Syntactic Structure (plus, of course, the SSynt-Communicative Structure) must be sufficient for determining prosodization, word order and morphologization for the sentence under synthesis.

To put it differently, the SSyntS-to-DMorphS transition does not require any information from the preceding levels of linguistic representation (the DSyntR or SemR): whatever information is needed for it must be contained in the SSyntRels used (plus, of course, the SSynt-Communicative structure and all the necessary lexicographic information about the properties of lexical units involved).

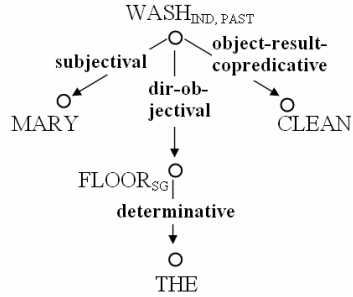
And now, to the surface-syntactic relations themselves. But before I present a tentative list of SSyntRels in various languages, let me illustrate the transition between a DSynt-structure and a SSynt-structure, to demonstrate correspondences between DSynt-relations and fictitious lexemes, on the one hand, and the SSynt-relations, on the other hand. This is done for sentence (1):

(1) *Mary washed the floor clean.*

Deep-Syntactic Structure of (1)



Surface-Syntactic Structure of (1)



4 A List of Surface-Syntactic Relations Found in World Languages

For better surveyability, the SSyntRels described here are grouped as follows:

- First, SSyntRels are divided into subordinate and coordinate relations.
- Second, the subordinate SSyntRels are subdivided into two sets:
 - Clausal SSyntRels, which typically hold between the heads of phrases within a clause. These SSyntRels either link the verb to its actants/circumstantials, or are similar to such SSyntRels; certain clausal SSyntRels can also hold between the lexemes within a phrase (for example, **agentive-objectival** and **comparative-objectival** SSyntRels).
 - Phrasal SSyntRels, which hold only between the lexemes within a phrase, never between heads of phrases within a clause (for example, **determinative** and **modificative** SSyntRels).
- Third, inside of each subdivision of subordinate SSyntRels, the line is drawn between valence-controlled SSyntRels, which necessarily embody complementation, and non-valence-controlled SSyntRels, which can be either modificative or ancillary (\approx auxiliary).

|| An SSyntRel $G-r \rightarrow D$ is said be valence-controlled if and only if r is explicitly mentioned in the government pattern of its syntactic governor G .

NB: The terms *modification* and *modificative* are used here in a very broad sense – to refer to any subordinated element that does not represent complementation and is not an ancillary (\approx “grammatical,” or “structural”) element.

The name of a SSyntRel is an adjective derived from the name of its dependent member: Subject \sim **subjectival**, Direct Object \sim **direct-objectival**, etc. The systematic effort to have “self-explanatory,” logically

derived names for SSyntRels sometimes results in names that are too long and cumbersome; such is, for instance, the **direct-object-comparative-conjunctive-completive** SSyntRel, which subordinates the complement of a comparative conjunction that is semantically correlated with the Direct Object of the clause. For practical use, such names can, of course, be abbreviated at will.

In the examples, the SSynt-dependent of the SSyntRel under examination is boldfaced, and words not participating in the construction illustrated are included in brackets.

First, a synopsis of the list of SSynt-relations possible in various languages.

I Subordinate Surface-Syntactic Relations: 1–103

I.1 Clause-Level SSyntRels: 1–42

I.1.1 Valence-Controlled = Actantial

I.1.2 Non-Valence-Controlled SSyntRels

I.1.2.1 Actantial SSyntRels

I.1.2.2 Copredicative SSyntRels

I.1.2.3 Circumstantial SSyntRels

I.1.2.4 Extra-structural SSyntRels

I.2 Phrase-Level SSyntRels: 43–103

I.2.1 Any Type of Phrase SSyntRels, Non-Valence-Controlled

I.2.2 Nominal Phrase SSyntRels

I.2.2.1 Valence-Controlled

I.2.2.2 Valence-Controlled and Non-Valence-Controlled

I.2.2.3 Non-Valence-Controlled

I.2.3 Adpositional Phrase SSyntRels, Valence-Controlled

I.2.4 Verbal Phrase (= Analytical Form) SSyntRels, Non-Valence-Controlled

I.2.5 Conjunctive Phrase SSyntRels, Valence-Controlled

I.2.6 Word-like Phrase SSyntRels, Non-Valence-Controlled

II Coordinate Surface-Syntactic Relations: 104–112

Each SSyntRel **r** is supplied with the following three types of data:
 – **r**'s correspondence with DSyntRels or with a fictitious lexeme. If there is no such correspondence (that is, **r** is introduced by DSynt-to-SSynt-rules), **r** is not required to have a prototypical dependent.

– **r**'s standard (= most frequent, normal) governor G. Other, more specific governors may be indicated in the examples.

– **r**'s prototypical dependent D.

Part I of the paper presents only the first fragment of the list of SSyntRel—namely, SSyntRels Nos. 1–42; the continuation will be given in Part Two, next issue of the journal.

I Subordinate Surface-Syntactic Relations: 1–103

I.1 Clause-Level (= Clausal) SSyntRels: 1–42

I.1.1 Valence-Controlled SSyntRels: 1–27

Actantial, pseudo-actantial and quasi-actantial SSyntRels (subjects and objects)

NB: A SSynt-actant of a lexeme L is not necessarily valence-controlled by L (Mel'čuk 2015: 94–99); for instance, the following types of SSynt-actant are non-valence-controlled:

- beneficiary, as in [*He*] *did*–[*it*]–*oblique-obj*→*for you*;
- price, as in [*He*] *did*–[*it*]–*oblique-obj*→*for two hundred dollars*;
- *Dativus Ethicus*, as in Fr. *Goûtez-dat-eth*→*moi ça!* lit. ‘Taste on.me this!’

1. **Subjectival** (expresses DSyntRel I; the G is a V_{FIN}, and the prototypical D is an N).

The Subject is the most privileged dependent element of the finite verb (Mel'čuk 2014b).

[*As the*] **reader**←**subj**–*will* [see...] | **I**←**subj**–*am* [fine.]

It←**subj**–*was* [dawning.]

That←**subj**–[*John left*]–*amazed* [us.]

It←**subj**–*amazed*–[*us that John left*.]

To←**subj**–[*read*]–*is* [to empower,] **to**←**subj**–[*empower*]–*is* [to write.]

Carrying←**subj**–[*out attacks*]–*became* [increasingly difficult.]

Enough←**subj**–*has* [been said on this topic.]

[*Which way*] **to**←**subj**–[*choose*]–*must* [be decided later.]

[*The*] **easiest**←**subj**–[*of these solutions*]–*turned* [out to be the last one.]

– The G = V_{FIN} can be a zero wordform (see also Annex 1):

Russian

On←**subj**–*Ø*_{BYT}–[*star*] lit. ‘He old’.

On←**subj**–*Ø*_{BYT}–[*v Londone*] lit. ‘He in London’.

[*Vot*]*Ø*_{BYT}–[*tebe moja*]–**subj**→*ruka* lit. ‘Here to.you my hand’.

Ja←**subj**–[*tebe ne*]–*Ø*_{BYT}–[*mama!*] lit. ‘I to.you not mum!’ = ‘I am not your mum!’

– The Subject can be a zero lexeme:

Russian

[*Tam*] *Ø*^{PEOPLE}←**subj**–*rabotajut* lit. ‘There «they» are_working’. = ‘People are working there’.

[*Na dvore*] *Ø*^{METEO}←**subj**–*bylo* [temno] ‘Outside it was dark’. ~

[*Na dvore*] *Ø*^{METEO}←**subj**–*Ø*_{BYT}–[temno] ‘Outside it is dark’.

Sp. *Ø*^{METEO}←**subj**–*está* [lloviendo] ‘It is raining’.

– The G can be an invariant interjection

Rus. **Ivan**←**subj**–*bac* [emu po morde] lit. ‘Ivan bang! to.him on mug!’ = ‘Ivan punched him in the face’.

– The Subject can be a headless relative:

[*What he*] **has**←**subj**–[*written*]–*is* [*interesting*.]

– The Subject can be a dummy introduced by DSynt-to-SSynt-rules:

It←**subj**–*is* [*great that you are here*.]

It←**subj**–*rained*.

– In some languages, under specific conditions, the Subject can be “doubled” by a resumptive clitic:

┌**subj** ─┐
└────────┘

Fr. *Le premier-ministre*←**subj**–*considère-t-il* *que cette conversion n'est pas allée à son terme ?*

lit. ‘The Prime-Minister believes-he that this conversion did not run its course?’

NB: This fact does not contradict Criterion C3, which forbids limited repeatability of a particular type of dependent. The doubling clitic does not represent another dependent element: it is a syntax-imposed repetitive marking of the same dependent (among other things, the subject and the doubling clitic are coreferential).

2. **Conditional-subjectival** (expresses DSyntRel I and the fictitious lexeme «IF»; the G is a V_{FIN} , and the prototypical D is an N)

Russian

Znaet–**cond-subj**→**on**, [*čto ja ego ždu*, – *xorošo*] lit. ‘Knows he that I him am.waiting, is.good’. = ‘If he knows that I am waiting for him, this is good’.

Pridët–**cond-subj**→**on** [*vo-vremja – vsë budet v porjadke*] lit. ‘Will.come he...’ = ‘If he comes on.time, everything will.be in order’.

[*O*,] *znal*–[*by*]–**cond-subj**→**ja**, [*čto tak byvaet!*] lit. ‘Oh, would.know I...’ = ‘If only I knew that it can be like this!’ (B. Pasternak).

NB: The meaning of ‘irrealis’ is rendered here by the conditional-subjunctive form of the verb (marked by the particle **by**), not by the SSyntRel itself.

3. **Irrealis-subjectival** (expresses DSyntRel I and the fictitious lexeme «IF_{IRR}» (≈ ‘if only’); the G is $V_{IMPER, 2, SG}$, and the D is an N)

(2) Russian

<i>Uznaj</i> – irr-subj → ja	[<i>ob</i>	<i>ëtom</i> ,	<i>vsë</i>	<i>by</i>	<i>bylo</i>
learn-IMPER.2.SG	I-NOM	about	this	everything	would
<i>v</i>	<i>porjadke</i>				be
in	order				

‘Had I learned about this, everything would be in order’.

4. **Debitative-subjectival** (expresses DSyntRel I and the fictitious lexeme «HAVE_TO»; the G is a $V_{IMPER, 2, SG}$, and the D is an N)

(3) Russian

[A]	ja ← deb-subj – <i>rabotaj!</i>	
And	I-NOM	work-IMPERF.IMPER.2.SG

‘And I have to work [when some other people don’t]!’

5. **Ingressive-subjectival** (expresses DSyntRel I and the fictitious lexeme «START_BRUSQUELY»; the G is a V_{INF}, and the D is an N)

(4) a. Russian

[A] **ty**←**ingress-subj**–[nu]—*vopit'*_{INF}! 'And you started screaming'.
and you-NOM come.on scream

b. French

[Et] **Marie**←**ingress-subj**–[de]–*crier*_{INF} lit. 'And Mary to scream'. =
'And Mary started screaming'.

6. **Pseudo-subjectival** (expresses DSyntRel I or is introduced by SSynt-rules; the G is a V_{FIN}, and its prototypical D varies according to the language: thus, in English it is a THAT-clause)

[It←**subj**]–*amazes*–[us]–**pseudo-subj**→**that** [*John left*.]

[It←**subj**]–*is*–[vital]–**pseudo-subj**→**to** [*keep accurate records*.]

French

[Il←**subj**–*est*] *venu*–[trois]–**pseudo-subj**→**voisins** lit. 'It has come three neighbors'.

[Il←**subj**–*est*] *venu*–[ton]–**pseudo-subj**→**frère** [*et ses enfants*]

lit. 'It has come your brother and his kids'.

– Pseudo-Subjects also describe clefts:

[It←**subj**]–*was*–[John who]–**pseudo-subj**→**reacted** [*first*.]

[It←**subj**]–*was*–[to John]–**pseudo-subj**→**that** [*I spoke first*.]

[It←**subj**]–*was*–[(to) John to whom I]–**pseudo-subj**→**spoke** [*first*.]

[It←**subj**]–*is*–[novels that John]–**pseudo-subj**→**prefers**.

Fr. [C'←**subj**]–*est*–[moi qui]–**pseudo-subj**→**ai** [*ouvert la fenêtre*]
'It is me who have opened the window'.

NB: In the preceding examples, *John*, *to John*, *novels* and *moi* depend on the form of the verb 'be' by the **copular-attributive-objectival** SSyntRel, No. 22.

– Pseudo-Subjects include a placeholder (a dummy lexical element needed to occupy a particular linear position; the Main Verb does not agree with a placeholder, but agrees with the actual Subject):

There←**pseudo-subj**–*exists*–[a]–**subj**→*condition for ...*] vs.

There←**pseudo-subj**–*exist*–[**subj**→*conditions for ...*]

There←**pseudo-subj**–*appear*–[*to be better*]–**subj**→*rooms*.]

Ger. **Es**←**pseudo-subj**–*haben*–[*einige interessante*]–**subj**→*Vorstellungen stattgefunden*] lit. 'It have some interesting shows taken.place'. =
'Some interesting shows have taken place'.

7. **Direct-objectival** (expresses DSyntRel II; in most cases, the G is a V_(trans), and the prototypical D is an N).

The DirO is the second most privileged clause element.

[*He wanted to*] **see**–**dir-obj**→**John**. | [*He*] **knew**–**dir-obj**→**this**.

[He was] given–[the]–**dir-obj**→**permission** [to carry out his plans.]

[He] knew–**dir-obj**→**that** [Mary was in town.]

[He] knew–[Mary]–**dir-obj**→**was** [in town.]

[He] knew–[why Mary]–**dir-obj**→**was** [in town.]

[He] knew–[what method]–**dir-obj**→**to** [adopt.]

[Which **way**←**dir-obj**–[to]–choose [must be decided later.]

make–[possible]–**dir-obj**→**neutralizing** [the consequences]

make–**dir-obj**→**it** [possible to neutralize the consequences]

NB: Cf. make–[it]–**object-attributive-objectival**→**possible** [to neutralize the consequences], No. 25.

want–**dir-obj**→**to** know

[I] need–**dir-obj**→**to** know–[what]–**dir-obj**→**to** [expect.]

[This] **piece** [[of history, the negotiators have] chosen–**dir-obj**→**to**] ignore.

– The DirO can be a headless relative:

[I] saw–[what John]–**dir-obj**→**had** [written.]

– The DirO can be a bare infinitive:

Fr. [Il] aime–**dir-obj**→**nager** ‘He likes to swim’.

Fr. [Le député] dit–**dir-obj**→**avoir** [rencontré le patriarche orthodoxe Ignatius]

lit. ‘The congressman says have met the orthodox patriarch Ignatius’.

– The DirO can be a clitic:²

Fr. [Nous] **l’**←**dir-obj**–avons [perdue] ‘We have lost her’.

Serb. [Mama] **ga**←**dir-obj**–[je jedva]–naterala [da nosi jaknu]

lit. ‘Mom him has barely made that he.wears jacket’. = ‘Mom barely made him wear a jacket’.

– The DirO can be a correlative pronoun TO ≈ ‘that’:

Rus. [Ja] videl–**dir-obj**→**to** [čto on napisal] lit. ‘I saw **that** what he had.written’.

– The DirO can be a dummy introduced by DSynt-to-SSynt-rules:

[I] made–**dir-obj**→**it** [clear that I am serious about tackling the problem.]

– In some languages, the DirO can be introduced by a preposition:

Sp. Vi–**dir-obj**→**a** [tu amigo] lit. ‘I.saw to your friend’.

Rom. [L’am] văzut–**dir-obj**→**pe** [prietenul tău] lit. ‘Him I.have seen to friend.the your’.

NB: In this sentence we see the doubling of the DirO by a clitic: *l’*; see the NB after No. 14.

Mand. Wǒ **bǎ**←**dir-obj**–[wǒ-de qìchē]–mài-le lit. ‘I my car sold’. = ‘As for my car, I sold it’.

NB: This construction is possible in Mandarin only for a DirO that is a Given Focalized Theme, and only in case of a transitive verb that expresses an action upon the referent of the DirO. Cf. No. 13 below.

– The DirO can be a cognate object that expresses a Deep-Syntactic manner circumstantial:

[*He*] *died*–[*a terrible*]**–dir-obj**→*death* (≈ ‘He died in a terrible way’).

Ar. *Dafaṣa+nī dafīat+an_{ACC} kabīrat+an_{ACC}* lit. ‘He.pushed.me a.push big’. = ‘He pushed me hard’.

– The G of a DirO can be an invariant clausative:

Rus. *Doloj*–**dir-obj**→*eë!* ‘Down.with her!’

Rus. *Von*–**dir-obj**→*eë otsjuda!* ‘Off.with her from.here!’

– A special case: an IndirO/OblO masquerading as a DirO (Mel’čuk 2015: 498).

[*It is quite*] *like*–**indir-obj**→*John*. | [*be*] *worth*–[*a*]**–indir-obj**→*trip*

Ger. *Was_{ACC}*←**obl-obj**–*fragst* [*Du mich_{ACC}*]? lit. ‘What ask you me?’ = ‘About what are you asking me?’

8. **Quasi-direct-objectival-1** (expresses DSyntRel II; the G is a $V_{(trans)}$ of a particular semantic class, and the prototypical D is an N; see Iordanskaja & Mel’čuk 2009: 190–192)

This SSyntRel describes “incomplete” DirOs, as those seen below:

[*The ticket*] *cost*–[*300*]**–quasi-dir-obj-1**→*dollars*.

[*The table*] *smells*–[*the*]**–quasi-dir-obj-1**→*herring*.

These DirOs are incomplete in the sense that they do not have all the properties of normal DirOs: for instance, they do not passivize.

9. **Quasi-direct-objectival-2** (expresses DSyntRel III; the G is a light verb, and the D is an N)

This SSyntRel describes a “V→N” collocation that functions syntactically as one transitive verb; in terms of lexical functions, the collocate V is Labor₁₂ of the collocation base noun N; see Mel’čuk 2015: 94.

(5) a. Korean

John+i enehāk + il konpu+lil←**quasi-dir-obj-2**–*hay+ss + ta*
 SUBJ linguistics ACC study_(N) ACC do PAST DECL(arative)

NB: 1. SUBJ is the subjective case, which marks the Subject (but cannot be used for nomination).

2. The collocation ‘do study_(N)’ is used as a transitive verb ‘[to] study [something]’.

b. Persian

Madār Ramin-ra bedar←**quasi-dir-obj-2**–*kārd*
 mother DirO wakening_(N) made

‘The mother woke Ramin’.

NB: The collocation ‘make wakening_(N)’ is used as a transitive verb ‘[to] wake up [someone]’.

10. **Pseudo-direct-objectival** (expresses DSyntRel II; the G is a $V_{(trans)}$, and the prototypical D is a THAT-clause)

make–[**dir-obj**→*it clear*]**–pseudo-dir-obj**→*that* [*we want to neutralize the consequences*]

[He] doubts-[**-dir-obj**→it]-**pseudo-dir-obj**→*that* [we want to neutralize the consequences.]

[The rumor] has-[**-dir-obj**→it]-**pseudo-dir-obj**→*that* [you are looking for a job.]

make-[**-dir-obj**→it possible]-**pseudo-dir-obj**→*to* [neutralize the consequences]

[Girls] like-[**-dir-obj**→it very much]-**pseudo-dir-obj**→*when* [you think of them.]

11. **Infinitival-objectival** (expresses DSyntRel II; the G is a V_(modal), and the D is a V_{INF})

can-**inf-obj**→*read*; *should*-**inf-obj**→*read*

• But: Fr. [*Je*] **peux-dir-obj**→*nager* 'I can swim'. ~ [*Je*] **le←dir-obj**-*peux* lit. 'I can it'.

12. **Direct-speech-objectival** (expresses DSyntRel II_{dir.sp}; the G is a communication verb/noun, and the D is (the head of) a Direct Speech expression)

[Churchill] **declared**-[*in front of a large audience in Brooklyn*]-**T-dir-obj**→**am** [*sure that the great struggle of the future would be between English-speaking nations and communism.*"]

NB: Cf. *He whispered*,-["**Three**]-**dir-sp-obj**→*words!*" vs.

He whispered-[*three*]-**dir-obj**→*words*.

[Then Edmund Burke uttered his famous] **sentence**-[*on the wrongs of Ireland*]-**dir-sp-obj**→*suffered* [*so much on account of religion.*"]

Rus. *On tol'ko ulybnulsja*-(*maxnul*-[*rukoj*])-[:*"Ja vsë*]-**dir-sp-obj**→***sdelaju!***"

lit. 'He just smiled (waved with hand): «I'll do everything!»'

NB: Such verbs as ULYBNUT'SJA or MAXNUT' are intransitive and cannot have a DirO. They are not even *bona fide* communication verbs, but they can be used as such to express the fictitious lexeme «SAY». In Russian, Direct Speech can be introduced by a verb denoting its author's gesture (like 'smile'), a brusque change of state (like 'flare up') or a brusque action ('wave his hand'); see Iordanskaja & Mel'čuk 1981.

13. **Affected-objectival** (expresses the fictitious lexeme «AFFECT»), which represents the meaning of the Mandarin preposition BA, in the construction G-ATTR→«AFFECT»-II→L and is the result of Possessor Raising; the G is V_{(trans)FIN}, and the D is a BA→N phrase; Mel'čuk 2014a)

(6) Mandarin

[Wǒ]	bǎ	← aff-obj	-[John]-	<i>bǎng-le</i>		[<i>liǎngzhi</i>	<i>jiǎo</i>]
I	«AFFECT»			tie.up	PERF	two	foot

lit. 'I John tied.up two feet'. = 'I tied up John's two feet'.

Here, JIǎO 'foot' is the Direct Object; cf. No. 7.

14. **Indirect-objectival** (either expresses DSyntRel **III** or is the result of a raising; the G is a $V_{(trans)}$, and the prototypical D is a PREP→N phrase or an N_{DAT}).

The IndirO is the third most privileged clause element (after the Subject and the Direct Object).

give–indir-obj→*John* <*him*> [some money]

[France] offers–indir-obj→*Christians* [asylum after Mosul threat.]

give–[some money]–indir-obj→*to* [John, who needs it]

In French, an IndirO often is a raised Possessor of the DirO – under specific conditions:

Fr. [*Le bandit*] *lui*←indir-obj–*a* [*cassé le bras*] lit. ‘The bandit to.him broke the arm’.

Fr. [*Va*] *te*←indir-obj–*laver* [*les mains*] lit. ‘Go to.you wash the hands’.

The same situation is found in some other Romance and Slavic languages:

Sp. *Le*←indir-obj–*han* [*robado la cartera*] lit. ‘[They] to.him have stolen the wallet’.

Serb. *Proučavali*–[*smo*]–indir-obj→*mu* [*život*] lit. ‘We.were.studying to.him life’ = ‘... his life’.

Rus. [*Ona*] *porvala*–indir-obj→*mne* [*rubášku*] lit. ‘She tore to.me shirt’ = ‘She tore my shirt’.

Rus. [*Ja*] *tebe*←indir-obj–[*ne*]– \emptyset_{BYT} [*mama!*] lit. ‘I to.you not mum!’ = ‘I am not your mum!’

NB: In some languages, under specific conditions, the **direct-objectival** and **indirect-objectival** SSyntRels are also repeatable just twice, like the subjectival SSyntRel, No. 1, More precisely, an object can or must (depending on the language) be repeated (= “resumed”) by the corresponding clitic. As indicated above, this does not contradict Criterion C3 of syntactic dependency, since the resumptive clitic is not another Dir/IndirO, but an additional marker of the same object.

(7) a. Spanish

(i) *La*←dir-obj–*veré*–dir-obj→*a* [*María*] lit. ‘Her I.will.see to María’.

(ii) *Le*←indir-obj–*di*–indir-obj→*a* [*María este libro*] lit. ‘To.her I.gave to María this book’.

b. Bulgarian

↓
dir-obj

(i) *Kniga+ta ja*←dir-obj–*četa več cjal mesec* lit. ‘The.book it I.read already whole month’.

(ii) *I*←indir-obj–*stana*–[*lošo*]–indir-obj→*na* [*Marija*] lit. ‘To.her became badly to María’ = ‘María became sick’.

Now we come to **oblique-objectival** SSyntRels. Two (or more) **oblique-objectival** SSyntRels are needed for two reasons:

1) In order to control the linear disposition of different OblOs in the absence of communicative indications.

2) For languages where different OblOs are marked by different grammatical cases (rather than by prepositions), in order to determine the corresponding case.

All OblOs have the same or almost the same syntactic properties; they are distinguished according to their correspondence to DSynt-actants.

15. Oblique-objectival-1 (expresses one of DSyntRels II–VI; the G is a V with a corresponding Government Pattern, and the prototypical D is a PREP→N phrase or an N in an oblique case).

The OblO is the fourth (fifth, sixth, ...) most privileged clause element.

help–[*her*]–**obl-obj-1**→*move* [*to London*]

help–[*Mary*]–**obl-obj-1**→*in* [*her studies*]

McGuire weighed–[*in*]–**obl-obj-1**→*on* [*what is wrong with our school.*]

[*They*] *proposed*–[*Alan*]–**obl-obj-1**→*as* [*director.*]

[*They*] *held*–[*Alan*]–**obl-obj-1**→*for* [*a poet.*]

old enough–**obl-obj-1**→*for* [*this book*]

old enough–**obl-obj-1**→*to* [*understand*]

held–**obl-obj-1**→*in* [*contempt by colleagues*]

translate–**obl-obj-1**→*from* [*Hungarian into Greek*]

sentenced–**obl-obj-1**→*to* [*death for his crimes*]

agreement–**obl-obj-1**→*between* [*Stalin and Hitler*]

[*with no*] *objections*–**obl-obj-1**→*from* [*the Minister*]

- The synonymous phrases *the Minister's objections* and *objections by the Minister* have different SSyntSs: *the Minister's*←**possessive**–*objections* and *objections*–**agentive**→*by* [*the Minister*].

Down–**obl-obj-1**→*with* [*the Mullahs!*]

[*ten*] *feet*←**obl-obj-1**–*high*

[*fifteen-thousand*]–*foot*←**obl-obj-1**–*high* [*peak*]

too–[*tired*]–**obl-obj-1**→*to* [*go out*]

too–[*sweet*]–**obl-obj-1**→*to* [*my taste*]

[*John was*] *clever*_(GP1)–**obl-obj-1**→*to* [*leave.*] ~

[*To leave was*] *clever*_(GP2)–**obl-obj-1**→*of* [*John.*]

NB: These sentences contain the adjective CLEVER with two different Government Patterns [GPs].

[*travel to several European cities,*] *such*–**obl-obj-1**→*as* [*London, Paris and Florence*]

Fr. [*Il*] *en*←**obl-obj-1**–*ressort* [*que les dépenses n'ont pas augmenté*]

lit. 'It from.this follows that the expenses have not risen'. = 'This indicates that expenses ...'.

16. **Oblique-objectival-2** (expresses one of DSyntRels III–VI; the G is a V with a corresponding Government Pattern, and the prototypical D is a PREP→N phrase or an N in an oblique case)

translate–[from Hungarian]–**obl-obj-2**→*into* [Greek]
sentenced–[to death]–**obl-obj-2**→*for* [his crimes]

(8) Hungarian ——— **obl-obj-2** ———→
fordítás–**obl-obj-1**→*magyar* + *ról* *orosz* + *ra*
 translation Hungarian DEL(ative) Russian SUBL(ative)
 ‘translation from.Hungarian into.Russian’

17. **Possessor-oblique-objectival** (is a result of the Possessor Raising; expresses DSyntRel I headed by the G’s DSynt-actant II or III. The G is a V, and the prototypical D in Russian is U ‘at’/K ‘to’→N)

Rus. [*Stul*] *stoiť*–**poss-obl-obj**→*u* [*Maš+i v komnate*]
 lit. ‘Chair is at Masha in room’.

Rus. [*Ja*] *otnēs*–[*stul*]–**poss-obl-obj**→*k* [*Maš+e_{DAT} v komnatu*]
 lit. ‘I carried chair to Masha into room’.

NB: The choice between the prepositions U *vs.* K is determined by the meaning of G: if this verb denotes localization, then U; if it denotes direction, then K.

• But: [*Ja*] *otnēs*–[*stul*]–**indir-obj**→*Maš+e_{DAT}* [*v komnatu*].

18. **Infinitival-oblique-objectival** (expresses DSyntRel II or III that correspond to Sem-actants 2 and 3; the G is a verb with a corresponding Government Pattern, and the prototypical D is a (PREP→)V_{INF})

[*He*] *ordered*–[*his platoon*]–**inf-obl-obj**→*to* [*hide behind growth nearby*.]
 [*John was*] *forced*–**inf-obl-obj**→*to* [*leave*.]

Fr. [*Je me*] *hâte*–**inf-obl-obj**→*de* [*partir*] lit. ‘I hurry to leave’. = ‘I am in a hurry to leave’.

19. **Infinitival-copredicative-objectival** (expresses DSyntRel III that corresponds to a “part” of Sem-actant 2, the other part being expressed by DSyntRel II; the G is a semantically biactantial verb with a corresponding Government Pattern, and the prototypical D is a (PREP→)V_{INF}).

This SSyntRel describes the *Accusativus cum Infinitivo construction*:³
See–[*them*]–**inf-copred-obj**→*waltz*,

see–[*them*]–**inf-copred-obj**→*dance*!

[*Ximénez*] *observed*–[*the animals*]–**inf-copred-obj**→*to* [*cross waters more than 250 m wide*.]

The test was determined–[*by the UN*]–**inf-copred-obj**→*to* [*be in violation of a UN resolution*.]

[I] *like*–[*her*]–**inf-copred-obj**→*to* [*be slim.*]

♣ But: [I] *like*–[*her*]–**obj-attr-obj**→*slim* (No. 25).

Lat. *Ceterum censeo*–[*Carthaginem*]–**inf-copred-obj**→*esse* [*delendam*]
 ‘Moreover, I.consider Carthago to.be which.must.be.destroyed’ [Cato the Elder].

20. **Infinitival-agentive-objectival** (expresses DSyntRel I; the G is a V, and the prototypical D is either a FOR→N phrase or a bare N).

An **Agentive Object** is a transform of a Subject with a V_{INF}.

[*His thumb is too sore*] **for**←**inf-agent-obj**–[*him to*]–*play* [*next week.*]

[*He asked*] **for**←**inf-agent-obj**–[*the British to*]–*stay* [*longer.*]

┌────────── inf-obl-obj ───────────┐
 └──────────────────────────────────┘

♣ But: [*He*] *asked*–[*the*]–**dir-obj**→*British to stay longer.*

Me←**inf-agent-obj**–*worry?*

Sp. [¿*Qué estaba haciendo antes de*] *empezar*–[*los*]–**inf-agent-obj**→
problemas?

lit. ‘What was [s/he] doing before to start the problems?’ = ‘... before the problems started?’

– The G is a so-called personal infinitive, which agrees with its Agentive Object:

(9) Portuguese

O guarda fez *sinal para os* *motoristas*←**inf-agent-obj**–*par+ar* + *em*
 the guard made signal for the motorists stop INF 3.PL

‘The guard made signal for the motorists to stop’.

21. **Passive-agentive-objectival** (expresses DSyntRel II; the G is a V_{PASS}, and the prototypical D is a PREP→N phrase or an N in an oblique case)

written–**pass-agent-obj**→*by* [*McGuire*]; *baffled*–**pass-agent-obj**→*by*
 [*quantifiers*]

[*She was*] *sent*–[*a letter*]–**pass-agent-obj**→*by* [*McGuire.*]

Fr. [*Il a toujours été*] *aimé*–**pass-agent-obj**→*des* [*femmes*]

lit. ‘He has always been loved of [= ‘by’] women’.

Rus. [*On vseгда byl*] *ljubim*–**pass-agent-obj**→*ženščin+ami*_{INSTR}

lit. ‘He always was loved by.women’.

The SSyntRels 22–26 describe different **Attributive Objects**, which appear with verbs of a particular semantic type – namely, copular verbs (a copular verb is a copula or a verb whose signified includes the semanteme ‘be’).

22. **Copular-attributive-objectival** (expresses DSyntRel II; the G is a copula V (‘be’ or ‘become’), and the prototypical D is an ADJ, which semantically bears on the Subject and can agree with it)

- If the G is a copula that means ‘be identical’, the prototypical D is an N:
[It ⟨This person⟩] *was*–**cop-attr-obj**→*John*.

be–**cop-attr-obj**→*easy*; *become*–**cop-attr-obj**→*easy*

be–[a]–**cop-attr-obj**→*teacher*; *become*–[a]–**cop-attr-obj**→*teacher*

[To read] *is*–**cop-attr-obj**→*to* [empower.]

[He has the right to] *be*–**cop-attr-obj**→*it*.

– The copula can be a zero wordform (e.g., in Russian):

[On] \emptyset_{BYT} –**cop-attr-obj**→*student*+ \emptyset_{NOM} ‘He [is] a student’. ~

[On] *byl*–**cop-attr-obj**→*student*+*om*_{INSTR} ‘He was a student’.

23. Copular-genitive-attributive-objectival (expresses DSyntRel II; the G is a copula V – ‘be’ or ‘become’, and the D is an N_{GEN}/PREP→N)

Rus. *byl*–[*takogo že*]–**cop-gen-attr-obj**→*tipa* ‘[It] was of the same type’.

NB: *Glavnoe prepjatstvie* \emptyset_{BYT} –[*ego solidnyj*]–**cop-attr-obj**→*vozrast*_{NOM}
‘The main obstacle [is] his advanced age’.

vs.

On uže \emptyset_{BYT} –[*solidnogo*]–**cop-gen-attr-obj**→*vozrasta*_{GEN} ‘He [is] already of an advanced age’.

24. Subject-attributive-objectival (expresses DSyntRel II or III; the G is a copular V, and the prototypical D is an ADJ, which semantically bears on the Subject and can agree with it)

[This task] *seems*–**subj-attr-obj**→*easy*.

[This task was] *found*–**subj-attr-obj**→*easy*.

[This task] *seems*–**subj-attr-obj**→*to* [be easy.]

[This task was] *found*–**subj-attr-obj**→*to* [be easy.]

French

[Le problème] *semble*–**subj-attr-obj**→*intéressant*+ \emptyset ‘The problem seems interesting’.

[La tâche] *semble*–**subj-attr-obj**→*intéressant*+*e* ‘The task seems interesting’.

[Il] *s’appelle*–**subj-attr-obj**→*Alain* lit. ‘He calls himself Alain’. = ‘His name is Alain’.

Élu–**subj-attr-obj**→*directeur*_{III}, [Alain partit en Inde] lit. ‘Elected director, Alain left for India’.

Élue–**subj-attr-obj**→*directrice*_{III}, [Helen partit en Inde] lit. ‘Elected director, Helen left for India’.

25. Object-attributive-objectival (expresses DSyntRel III; the G is a copular V, and the prototypical D is an ADJ/AS→ADJ, which semantically bears on the DirO and can agree with it)

consider–[him]–**obj-attr-obj**→*happy* ~
consider–[him]–**obj-attr-obj**→*to* [be happy]
consider–[him a]–**obj-attr-obj**→*fool* ~
consider–[him]–**obj-attr-obj**→*to* [be a fool]
believe–[him]–**obj-attr-obj**→*to* [be dumb] ~
believe–[him]–**obj-attr-obj**→*dumb*
John finds–[this task]–**obj-attr-obj**→*easy*.
make–[it]–**obj-attr-obj**→*possible* [to neutralize the consequences]
judge–[him]–**obj-attr-obj**→*guilty*
[They] want–[him]–**obj-attr-obj**→*in* [jail.]
identify–[this element]–**obj-attr-obj**→*as* [vital / a suffix]
 Fr. [*Je trouve*–[le problème]–**obj-attr-obj**→*intéressant*+Ø ‘I find the problem interesting’.
 Fr. [*Je trouve*–[la tâche]–**obj-attr-obj**→*intéressant*+e ‘I find the task interesting’.
 – The object-attributive D can be a participle in an *Accusativus cum Participio* construction, see Endnote 3):
I heard–[them]–**obj-attr-obj**→*stomping* [out of the cabin.]
 Lat. *Nemo audiebat*–[*eum*_{SG.ACC}]–**obj-attr-obj**→*querentem*_{SG.ACC}
 (<–[*eos*_{PL.ACC}]–**obj-attr-obj**→*querentes*_{PL.ACC}) lit. ‘Nobody heard him complaining <(them complaining)’.
 Anc. Gr. [*Hē gynē*]–*eporāi*–[*min*_{SG.ACC}]–**obj-attr-obj**→*exiōnta*_{SG.ACC}
 ‘The woman saw him going.out’.
 Fin. *Pekka kuuli*–[*junan*_{SG.GEN}]–**obj-attr-obj**→*saapuvan*_{SG.GEN}
 lit. ‘Pekka heard train arriving’.

26. **Predicate-attributive-objectival** (expresses DSyntRel II or III; the G is a copular V, and the D is an ADJ, which semantically bears on the predicate itself)

smell–**pred-attr-obj**→*good*; *feel*–**pred-attr-obj**→*miserable*
playing–**pred-attr-obj**→*small* [to] *win*–**pred-attr-obj**→*big*

27. **Comparative-objectival** (expresses DSyntRel II; the G is a comparative word, and the prototypical D is a CONJ_(compar))

This SSyntRel describes all cases of comparison: ‘X is more/less L than Y’ and ‘X is as L as Y’.

more–[important]–**compar-obj**→*than* [Peter]
older–**compar-obj**→*than* [Peter]
as–[important]–**compar-obj**→*as* [Peter]
 [*Beliefs are*] *so*–[important]–**compar-obj**→*as* [to have people been killed for them.]
 [*John loves Mary*] *more*–**compar-obj**→*than* [Peter.]

Rus. *sil'nee*←**compar-obj**→*Ivana*_{GEN} lit. 'stronger of.Ivan' ~
sil'nee←**compar-obj**→*čem Ivan*_{NOM} 'stronger than Ivan' ~
bolee←[*sil'nyj*]←**compar-obj**→*čem Ivan*_{NOM}
 lit. 'more strong than Ivan'

I.1.2 Non-Valence-Controlled SSyntRels: 28–42

I.1.2.1 Actantial SSyntRels: 28–29

28. **Dative-ethical-objectival** (expresses the fictitious lexeme «DAT_ETH»; the G is a V_{FIN}, and the D is a PRON_{(pers)DAT})

Ger. *Lieb'*←**dat-eth-obj**→*mir* [*nur keinen Hippy!*] lit. 'Love to.me only no hippy!' = 'Don't you love a hippy on me!'

Fr. [*Marie*] *te*←[*m*]←**dat-eth-obj**→*a* [*donné une de ces gifles !*]
 lit. 'Mary to.you to.me has given one of those slaps.in.the.face!' = 'Mary gave me such a bloody slap in the face!'

Bulg. [*Ex, da*] *ti*←**dat-eth-obj**→*pipna* [*az mitnica!*] lit. 'Oh, that to.you I.seize I customs!' = 'Oh, if only I could become the master of the customs!'

– The Ethical Dative can be the masculine substitute pronoun of 3SG
 Bulg. [*Ja*] *mu*←**dat-eth-obj**→*udari* [*edna rakija!*] lit. 'It to.him hit one vodka!' = 'Have one vodka!'

NB: *Ja* 't_{ACC}' is a resumptive clitic repeating the DirO *rakija* 'vodka'.

– Two Ethical Datives are possible in the same clause, at least, in Romanian:

Rom. [*Luând pe băiat de urechi*] *mi* *ți*←**dat-eth-obj**→[*-l*]←*bătea*
 lit. 'Grabbing to boy by ears, [he] me you him beat.up'

29. **Modal-objectival** (expresses the fictitious lexeme «SHOULD», «WILL_BE» or «BE_ABLE»; the G is a V_{INF}, and the D is an N_{DAT})

Russian

Mne←**mod-obj**→*ostat'sja?* lit. 'To.me to.stay?' = 'Should I stay?'

Emu←**mod-obj**→[*by*]←*obratit'sja* [*k vraču*] lit. 'To.him "should" see doctor'. = 'He should see a doctor'.

[*Nu,*] *byť*←**mod-obj**→*skandalu!* lit. 'Well, "will_be" to.be to.a.scandal!' = 'Well, there will be a scandal!'

Tebe←**mod-obj**→[*ëtogo bylo ne*]←*ponjat*] lit. 'To.you this was not "be_able" to.understand'. = 'You couldn't understand this'.

I.1.2.2 Copredicative SSyntRels: 30–33

A **Copredicative** is a non-valence-controlled non-actantial dependent of a verb that semantically bears on an actant of this verb.

30. **Subject-copredicative** (expresses the fictitious lexeme «BE»: Subject-ATTR→«BE»-II→D; the G is a V with the corresponding syntactic feature, and the prototypical D is an ADJ, which semantically bears on the Subject)

[John] returned-subj-copr→*rich*.

[John] returned-subj-copr→*in* [a new uniform.]

[John] arrived-subj-copr→*third*.

[Visitors] returned-[*fervent*]-subj-copr→*admirers* [of Mao.]

[They] parted-subj-copr→*enemies*.

[The fighting] continued-subj-copr→*unabated*.

[He] served-[Mary the salad]-subj-copr→*undressed* ['he was undressed'] (Wechsler 1995: 93).

Rus. [Ja] *vstretil*-[eë]-subj-copr→*starikom*_{INSTR} 'I [male] met her an.old.man'.

31. **Object-copredicative** (expresses the fictitious lexeme «BE»: DirO-ATTR→«BE»-II→D; the G is a V with the corresponding syntactic feature, and the prototypical D is an ADJ, which semantically bears on the DirO)

[They] sent-[John home]-obj-copr→*rich*.

[They] buried-[her]-obj-copr→*alive*.

[He] served-[Mary the salad]-obj-copr→*undressed* ['the salad was undressed'] (Wechsler 1995: 93).

Rus. [Ja] *vstretil*-[eë]-obj-copr→*staruxoj*_{INSTR} 'I [male] met her an.old.woman'.

Rus. [Ona] *vstretila*-[menja]-obj-copr→*starikom*_{INSTR} 'She met me [male] an.old.man'.

32. **Object-resultative-copredicative** (expresses the fictitious lexeme «BECOME»: DirO-ATTR→«BECOME»-II→D; the G is a V with the corresponding syntactic feature, and the D is an ADJ, which semantically bears on the DirO)

wash-[the floor]-obj-result-copr→*clean*

hammer-[the box]-obj-result-copr→*flat*

push-[the door]-obj-result-copr→*open*

beat-[the prisoner]-obj-result-copr→*dead*

wash-obj-result-copr→*clean* [the inside of the cup]

33. **Floating-copredicative** (has no correspondence in the DSyntS, but is introduced by DSynt-to-SSynt-structure rules; the G is a V_{FIN}, and the D is a pronominal adjective such as ALL or EACH)

[Such sentences] contain-float-copr→*all* [a negative word.]

• But: *All*-determ-[such]-sentences contain a negative word.]

[John and Mary] **both**←**float-copr**→*were* [expelled.]

[These phonemes] *have*→[two allophones]←**float-copr**→**each**.

- But: *Terrier dogs closely resemble*←**dir-obj**→*each other*; 「EACH OTHER」 is a nominal idiom.

I.1.2.3 Circumstantial SSyntRels: 34–37

34. **Circumstantial** (expresses DSyntRel ATTR; the G is a V, and the prototypical D is an ADV)

walk←**circum**→**fast**; *delve*←**circum**→**deeply**

[He] *works*←**circum**→**there** (<*in* [this office]).

[He] *works*←**circum**→**abroad**.

In general←**circum**→[he]→*is* [happy.]

- NB:** The underscoring of a space (“_”) between two words means that they form in fact “one word” – that is, in spite of its official spelling as two words, IN_GENERAL is actually one word (its internal structure does not correspond to syntactic rules of English: no *PREP→ADJ).

[He will] *write*→[next]←**circum**→**week** (<*tomorrow*).

[A new store] *opened*→[three]←**circum**→**miles**←**circum**→**West** [from here.]

– A circumstantial can be an absolute construction:

[He] *went*→[out, his]←**circum**→**gun** [in his left hand.]

With←**circum**→[her paper finished, Helen]→*can* [afford this trip.]

[The sellers] *offered*→[500 tons,]←**circum**→**delivery** [to be made in October.]

Lat. [Mortuo] **Caesare**←**circum**→[bella civilia orta]→*sunt* (Ablativus Absolutus) ‘With Caesar dead, civil wars have started’.

– A circumstantial can be an (accusative) N:

Circumstantial of duration

[He] *worked*→[three]←**circum**→**days**.

Rus. [On] *rabotal*→[celuju]←**circum**→*nedelju*_{ACC} ‘He worked the whole week’.

Circumstantial of relation: Ancient Greek

Athēnaïos→[tō]←**circum**→*gēnos*_{ACC} ‘Athenian with respect to [= ‘by’] birth’

Kámnō→[toús]←**circum**→*ophthalmoús*_{ACC} ‘I.suffer with respect to [= ‘from’] eyes’.

[John] *kissed*→[her three]←**circum**→**times**.

[Don’t] *waste*→[time]←**circum**→**playing** [computer games!]

Having←**circum**→[rushed off, he]→*forgot* [his umbrella.]

When←**circum**→[summer approaches,]→*start* [preparing your car.]

Had←**circum**→[John been here, he]→*could* [have helped us.]

Holidays←**circum**→[or no holidays, I]→*have* [to finish my paper.]

[She] *received*→[John]←**circum**→**as** [a queen.]

[She] *received*→[John]←**circum**→**as** [a king.]

[She] *sang*←**circum**→「**as if**」 [she knew me.]

NB: The raised semibrackets denote an idiom.

[*Sometimes animals*] **act-circum**→*like* [*us*].

Fr. «*Une fois*»←**circum**–[*son travail terminé, Jean*]–devra [*retourner à Nice.*] lit. ‘Once his work is. over, Jean will.have to.return to Nice’.

Fr. [*Jean*] *travaille*–**circum**→*Place* [*de la Nation*] ‘John works at the Place de la Nation’.

Fr. [*Jean*] *mange*–**circum**→*beaucoup* [*et voracement*] ‘John eats a lot and greedily’.

• But: [*Jean*] *mange*–**dir-obj**→*beaucoup* [*de fruits*] ‘John eats a lot of fruit’. Cf.: *On le fait manger beaucoup* vs. *On lui fait manger beaucoup de fruits*.

In the French causative construction FAIRE ‘make’ + V, the Causee must be a DirO (or in the accusative, if a clitic), if V has no DirO, and an IndirO (in the dative, if a clitic), if V has a DirO. The example shows that the adverb BEAUCOUP ‘a lot’ is not a DirO, but a Circumstantial, while the noun phrase BEAUCOUP *de* Ns is a genuine DirO.

– The circumstantial can be a Cognate Object:

Rus. [*On*] *umer*–[*užasnoj*]–**circum**→*smert’ju*_{INSTR} lit. ‘He died with. a.terrible death’ [cognate object].

NB: In the DSyntS, a Cognate Object often corresponds to a deep circumstantial of manner (‘died in.a.terrible.way’).

– The circumstantial can be an infinitive of purpose:

To←**circum**–[*simplify the procedure, Dr. Copulati*]–has [*recourse to the following technique.*]

Rus. [*On*] *uexal*–[*v Kanadu*]–**circum**→*učit’ sja*_{INF} ‘He went to Canada to.study’.

The SSyntRels 35–37 are of circumstantial type, their governor being necessarily a V_{FIN}. Their triple distinction is parallel to the distinction between the three adnominal SSyntRels:

modificative (*elegantly solve* ~ an *elegant*←**modif**–*solution*)

appositive (*An old man, the officer told us ...* ~

The officer,–[*an old*]–**appos**→*man, told us ...*)

attributive (*Abroad, an American is always preoccupied ...* ~

An American–**attrib**→*abroad is always preoccupied ...*).

35. Modifier-circumstantial (expresses DSyntRel **ATTR**; the G is a V_{FIN}, and the D is an ADJ/ ADV)

[*As always*] *elegant*,←**mod-circum**–[*John*]–walked [*away.*]

[*As always very*] *elegantly*,←**mod-circum**–[*John*]–walked [*away.*]

36. Apposition-circumstantial (expresses DSyntRel **ATTR**; the G is a V_{FIN}, and the D is an N)

[*An old*] *man*,←**appos-circum**–[*John*]–works [*less.*]

37. **Attribute-circumstantial** (expresses DSyntRel ATTR; the G is a V_{FIN} , and the prototypical D is an ADV)

Abroad, ←attr-circum–[Alan]–works [less.]

Without ←attr-circum–[his computer, Alan]–feels [lost.]

I.1.2.4 Extra-structural SSyntRels: 38–42

38. **Parenthetical** (expresses DSyntRel APPEND; the G is a V_{FIN} , and the D is (the head of) a parenthetical expression)

Oddly, ←parenth–[Alan]–works [less.]

[Alan,] *naturally*, ←parenth–accepted [the offer.]

• But: [Alan] accepted–[the offer quite]–circum→*naturally*.

As ←parenth–[we have known for some time, Alan]–works [less.]

To ←parenth–[give an example, I]–will [consider nominal suffixes.]

[It] was, ←parenth→*as* [Alan said, a very hot day.]

39. **Quasi-parenthetical** (expresses DSyntRel APPEND; the G is (the head of) a Direct Speech expression, and the D is a V_{FIN} , the head of a Direct-Speech Introductor)

[“Alan” will–[visit us,” John]–quasi-parenth→*shouted*, [“next Friday.”]

[“I” am–[not going there!”]–quasi-parenth→*shouted* [John.]

[“I” am–[not going to kill the project,” McGuire]–quasi-parenth→*declared* [in front of cameras.]

Rus. [“Kak vy” smeeete–[!”]–quasi-parenth→*vspxynula* [Elena]

lit. ‘«How you dare!» – flared.up Elena’.

• Many verbs that appear as the head of a parenthetical Direct-Speech Introductor, are impossible in the superordinate Direct-Speech Introductor:

Fr. « *C’est un secret!* », *élude* Isabela Ono ‘This is a secret! », *élude* Isabela Ono’ vs.

**Isabela Ono élude*: « *C’est un secret!* » ‘Isabella Ono eludes: «This is a secret! »’ (see Danlos *et al.* 2010).

40. **Adjunctive** (expresses DSyntRel APPEND; the G is a V_{FIN} , and the prototypical D is an interjection/a proper name)

OK, ←adjunct–[John]–will [go.] | *Mary*, ←adjunct–[where]–are [you?]

41. **Proleptive** (expresses DSyntRel APPEND; the G is a V_{FIN} , and the D is an N, as a rule, the expression of a Focalized theme or rheme)

[This] *Collins*, ←prolept–[we]–hate him.

This [film], ←prolept–[I]–find [it gorgeous.]

Prolepses are quite typical of French and of many South-East Asian languages.

French

[Ma] *mère*, ← **prolept** – [mes amis, elle les] – *adore* lit. ‘My mum, my friends, she them adores’.

(10) Korean

John + *i* ← **prolept** – [k^ho + ka] – *kil* + *ta*
 SUBJ nose SUBJ be.long DECL(arative)
 ‘[It is] John [whose] nose is long’.

42. **Presentative** (expresses DSyntRel **APPEND**; the G is a V_{FIN}, and the D is the particle *ÈTO* ≈ ‘this’)

Russian

Èto ← **present** – [Vanya tam] – *sobiraetsja* lit. ‘It Vanya there is.packing’.

• But: *Èto* ← **restr** – Vanya [tam *sobiraetsja*] lit. ‘It [is] Vanya [and not somebody else] [who] there is.packing’.

Èto ← **present** – *stučit* [dožd’ po kryše] lit. ‘It is.drumming rain on roof’.

Notes

¹ (1) It is absolutely impossible to compare the proposed SSyntRels list with Stanford Universal Dependencies: de Marneffe & Manning 2008/2015. The framework and the methodology are so different that a comparison would require a serious special study.

² (4, No. 7) **Clitics**. As is well known, there are two major types of clitics: second-position, or Wackernagel, clitics (Slavic languages) and syntactically-positioned clitics (Romance languages). In the SSyntS, they are treated differently.

Notations: G’ is the SSynt-implementation of G; L’_(clit) is the clitic implementing the noun L at the SSynt-level; **r**’ is the SSynt-relation expressing the DSynt-relation **r**.

– A second-position clitic L’_(clit-2nd.pos) syntactically depends on the SSynt-implementation G’ of the DSynt-governor G of L’_(clit-2nd.pos)’s source L, rather than on the lexeme that will eventually be the clitic’s phonological host:

$$G\text{-}\mathbf{r}\text{-}\mathbf{L} \Leftrightarrow G'\text{-}\mathbf{r}'\text{-}\mathbf{L}'_{(\text{clit-2nd.pos})}$$

L’_(clit-2nd.pos) can form a syntactic phrase with G’, but is linearly positioned after its phonological host (which is the initial syntactic phrase in the clause), quite irrespective of the host’s syntactic function; generally speaking, a second-position clitic cannot form a syntactic phrase with its host (although it forms a phonological phrase with it). For instance:

Serb. NATERATI_{PAST} ‘[to] compel, force’ – **II** → JOVAN ↔

BITI_{PRES} – **perf-analytical** → NATERATI_{PAST.PART} – **dir-obj** → ON ‘he’

Mama ga ← **dir-obj** – [je jedva] – *naterala*... lit. ‘Mother him has hardly forced...’

In the SSynt-structure, the clitic GA (the accusative clitic form of ON ‘he’) syntactically depends on NATERALA, the lexical part of a complex past tense form, but is linearly placed after MAMA, the Subject of the clause, with which the clitic has no syntactic link.

– A syntactically-positioned clitic $L'_{(\text{clit-synt.pos})}$ syntactically depends on its phonological host, rather than on the SSynt-implementation G' of the DSynt-governor G of $L'_{(\text{clit})}$'s source L :

$$G \rightarrow L \Leftrightarrow L'_{(\text{clit-2nd.pos})} \leftarrow G_1 \cdots \rightarrow G'$$

G_1 is a finite verb syntactically dominating G' ; it can be an auxiliary of a complex tense or a modal verb. $L'_{(\text{clit-synt.pos})}$ can form a syntactic phrase with G_1 , but cannot with G' , and is positioned with respect to G_1 . For instance:

Sp. FORZAR_{PERF.PRES} ‘[to] compel, force’ – II → JUAN ↔

ÉL ← dir-obj – HABER_{PRES} – perf-analytical → FORZAR_{PAST.PART}

Madre le ← dir-obj – ha [apenas forzado]... lit. ‘Mother him has hardly forced...’

In the SSynt-structure, the clitic LE (the accusative clitic form of a human ÉL ‘he’) syntactically depends on HABER, the auxiliary part of a complex past tense form, and is linearly placed before it. To put it differently, during the pronominalization of the DSynt-structure, a syntactically-positioned clitic “climbs” to its new host together with the corresponding branch – that is, with the corresponding SSyntRel.

3 (4, No. 19) **Accusativus cum Infinitivo/Participio**

The *Accusativus cum Infinitivo/Participio* construction appears with semantically bi-actantial verbs whose SemA 2 is a statement P : ‘ X knows that P ’ or ‘ X says that P ’. ‘ P ’ itself means ‘ Y Z -es’, so that in the construction under discussion, the lexeme $L(Y)$ becomes a DirO (\approx “accusative”) and $L(Z)$ is implemented as an **inf-obl-objectival** SSyntRel (“infinitive”) or an **obj-attr-objectival** SSyntRel (“participle”). The particularity of this construction is that, contrary to other actantial infinitives/participles, its Ds do not directly correspond to SemAs of their G , but realize on the surface each a “part” of its SemA 2.

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Syntactically Incomplete Clauses

On the morphological surface, a clause may lack the Main Verb or an equivalent element that could be the top node in its SSynt-structure; therefore, it is

impossible to associate a well-formed SSyntS with such a clause. This situation obtains in one of the two cases:

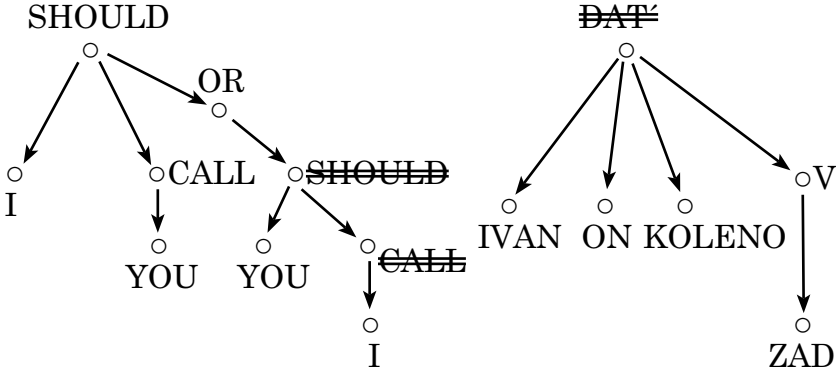
- The Main Verb is implemented by a zero wordform, as in Russian: *Ivan* \emptyset_{BYT} *doktor* ‘Ivan is a doctor’. This zero wordform alternates with non-zero forms (*Ivan budet doktorom* ‘Ivan will be a doctor’); it simply has to be added to the SSyntS as its top node. See examples in SSyntRels Nos. 1 and 22.

- The Main Verb is elided; these ellipses are of two types:
 - 1) either in the context of coordination (Conjunction Reduction, Gapping), where the linearly second occurrence of the verb is elided;
 - 2) or in the context of governed complements.

In both cases, the elided component is shown in the SSyntS (indicated as such by ~~striketrough~~):

1) *Should I call you or you me?* \Leftarrow
Should I call you or ~~should~~ you ~~call~~ me?

2) Rus. *Ivan emu kolenom v zad*
lit. ‘Ivan to.him with.knee in butt’. \Leftarrow
Ivan ~~dat~~ emu kolenom v zad
‘Ivan hit him in his butt with knee’.



The elided component is physically eliminated in the transition SSyntS \Leftrightarrow DMorphS.