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EVENT SCHEMAS REVISITED – A FEW COMMENTS ON RADDEN AND DIRVEN (2007)

The aim of the paper is to discuss a few points of Radden & Dirven's (2007) proposal regarding the main event schemas and their formal representations in the grammar of Modern English. It is argued that some of R&D's proposals, such as the inventory of participant roles and the ordering of the "worlds" presented in their monograph should be modified while others require more serious revisions and/or extensions. In particular, it is suggested that schemas representing bodily and complex cognitive states should be added to the Psychological World and the number of the worlds should be extended to include the Social World with its own set of event schemas based on the experience of verbal communication.

Keywords: event schema, participant role, argument, material world, force-dynamic world, psychological world, social world.

1. Introduction

The aim of the paper is to discuss a few selected points of Radden and Dirven's (2007; henceforth R&D) proposal regarding the main event schemas and their formal representations in the grammar of Modern English. I will argue that some of R&D's proposals need revising or modifying, while others should be extended.¹ In Section 1 I present briefly the essential aspects of R&D's proposal and address the question of the inventory of participant roles they use in

¹ In fact R&D's (2007) chapter on event schemas is itself a modification and extension of Verspoor, Dirven and Radden's chapter on syntax in Dirven and Verspoor (2004). A detailed comparison of the two accounts is beyond the scope of this paper, but it is worth pointing out that the latter distinguished seven basic event schemas, i.e. "being", "happening", "doing", "experiencing", "having", "moving" and "transferring", without relating them to the concept of "worlds".

their representations of particular event schemas. In Section 2, I consider the problem of the ordering of the “worlds of human experience” and give arguments why I believe we should first discuss the Material World and the Force-Dynamic World, and only then present the Psychological World. In Section 3 I argue that R&D’s account of the Psychological World should be extended to include the schemas representing bodily and complex cognitive states. Finally, in Section 4 I suggest that alongside the three worlds in R&D’s account we should distinguish the Social World with its own conceptually and structurally unique set of event schemas based on the experience of verbal communication.

2. Radden and Dirven’s account of event schemas

Let us begin with two quotes from R&D:

„Event schemas are defined by a small set of thematic roles. These conceptually prominent roles, which are typically associated with the conceptual core of a situation, are known as participant roles. The participant roles include the agent, the experiencer, the cause and the theme; less central participant roles are those of ‘location’ and ‘possessor’. The thematic roles that are not part of conceptual core of a situation are non-participant roles. Non-participant roles typically specify the setting of a situation” (p.270). „These peripheral roles describe notions of space, time, circumstance, reason, purpose” (p.303).

R&D argue that event schemas apply to three worlds which jointly constitute our human conceptual reality. These are the Material World, the Psychological World, and the Force-Dynamic World.² The event schemas represent various categories of situations in those three worlds which are grammatically coded by means of seven basic English sentence patterns presented and exemplified below, where S stands for subject, P – predicate, C – complement, O – object, and IO – indirect object.

- i. Copulative: S P SC, e.g. *We are an average family.*
- ii. Intransitive: S P, e.g. *None of us works.*
- iii. Transitive predicate-complement: S P PC, e.g. *We live in Venice Beach.*
- iv. Transitive: S P O, e.g. *We have three cars.*
- v. Transitive object-complement: S P O OC, e.g. *Our friends consider us successful.*
- vi. Ditransitive: S P IO O, e.g. *He is writing us enthusiastic letters.*
- vii. Transitive predicate-complement: S P O PC, e.g. *We have sent our son to Harvard*

² Since the concepts of worlds and participant roles play an important role in the R&D’s account, I will capitalize their names throughout this paper.

The above syntactic patters are deployed in one way or another in various event schemas which occur in particular Worlds. The three Worlds and their most common event schemas and examples of expressions given by R&D are presented below (based on R&D: 298), where the capital letters stand for the participant roles: T – Theme, G – Goal, P – Possessor, L – Location, E – Experiencer, C – Cause, A – Agent, R – Recipient.

I. The Material World

It is the structured world of entities as they exist, change or undergo processes. The material world also includes humans who do not take an active part in shaping it.

A) Occurrence schemas:

states T — (T), e.g. *be true, resemble sth.*

processes T — (T), e.g. *go wrong, shine*

B) Spatial schemas:

location schema T — L, e.g. *be here*

motion schema: T — G, e.g. *go somewhere*

C) Possession schema: P — T, e.g. *have, acquire*

II. The Psychological World

It is the internal world of people's sensations, emotions, perceptions and thoughts. It is the world as experienced and conceptualised by sentient beings, particularly humans.

A) emotion schema E — C, g. *like sth.*

B) perception/cognition schema E — T, e.g. *see, notice sth.*

III. The Force-Dynamic World

It is the external world of action, force, and cause and their effects. In this world, human agents figure prominently as instigators of events.

A) action schema A — T, g. *break sth.*

B) self-motion schema A — G, e.g. *go somewhere*

C) caused-motion schema A — T — G, e.g. *send sth. somewhere*

D) transfer schema A — R — T, e.g. *give someone sth.*

3. Sentence patterns

There are two controversial aspects of R&D's presentation of sentence patterns. The first one is conceptual and terminological and it pertains to pattern III, namely the pattern R&D refer to as "Transitive predicate-complement:

S P PC”, exemplified by *We live in Venice Beach*. Without going into a complex issue of the concept of transitivity, there seems to be no reason to claim that the locative phrase *in Vanice* should be interpreted as a grammatical object (R&D’s label PC makes it quite clear) and a constituent of the transitive relation with the subject nominal.³ Nor can it be construed as an “energy sink” or effected or affected Patient typical of transitive relations (see Section 3 below). All in all, it seems that the traditional labelling of this pattern as “complex intransitive”, i.e. the one which involves an intransitive verb and a complement, is more appropriate and should be retained (cf. e.g. Huddleston and Pullam 2002).

The second doubtful aspect of R&D’s presentation is the infelicitous choice of examples for patterns (IV) and (VI), i.e. the transitive and the ditransitive. The problem is that although sentences *We have three cars* and *He is writing us enthusiastic letters* are indeed, respectively, examples of the transitive and ditransitive patters, they are so non-prototypical that, to my mind, should not be used as illustrative examples of these construction. If it is accepted that the direct object of the transitive relation prototypically denotes the affected Patient of an active dynamic relation, which, in addition, can easily occur as subject of the passive counterparts of this relation, then the nominal *three cars* can hardly be considered as a prototypical object: even if it is viewed as a Patient rather than Theme (or Theme rather than Patient), it cannot be used as a passive subject, so sentences like e.g. *Three cars are had by most our citizens* are usually considered unacceptable. A simple example involving a prototypical action verb like *repair*, *cut*, *break*, *paint*, etc. with a prototypical Patient, e.g. *The mechanic repaired my car in half an hour* or *My wife cut some bread* would serve much better.

Likewise, the example *He is writing us enthusiastic letters* is far from being a prototypical ditransitive. The prototypical ditransitive verbs, e.g. *give*, *hand*, *show*, etc., differ from the verb *write* in that they require two objects as their complements. Therefore, they can only be used with single objects in the contexts where the Recipient is determined contextually as a “definite null complement” (Goldberg 1995:58). Otherwise, they are unacceptable or at least incomplete, as the three sentences below compared with their full, “complemented” versions demonstrate:

- 1) ? Joe has given a gold watch vs. Joe has given his dad a gold watch
- 2) ??? Suddenly, a stranger handed a gun vs. Suddenly, a stranger handed Joe a gun
- 3) ? The chemistry teacher showed Mendeleev’s periodic table vs. The chemistry teacher showed her students Mendeleev’s periodic table.

³ One argument that may support R&D’s analysis is that in some cases prepositional locative complements occur in passive sentences, e.g. *This bed was slept in by George Washington himself*. This reconceptualization of location as affected Thing is indeed possible but does not change the basic locative meaning of those complements.

In contrast to those verbs, the verb *write* is prototypically a monotransitive verb, which requires a single object, so R&D's example is perfectly acceptable and complete without the Indirect Object: *He is writing enthusiastic letters*. Furthermore, the contrast between truly ditransitive verbs and transitive verbs which occasionally occur in the ditransitive construction shows in their versions where the second object participant (for discourse reasons) is introduced by two different prepositions indicating two different roles: the preposition *to* introducing Goal with ditransitives (sentences 4 and 5 below) and the preposition *for* introducing Benefactive with monotransitives (sentences 6 and 7).

- 4) Joe has given the gold watch to/*for his dad
- 5) The chemistry teacher showed Mendeleev's periodic table to/*for her students
- 6) He is writing poems for/*to Jane
- 7) I've just caught you a nice fish for/*to our kids.

These familiar facts are indicative that for expository purposes the ditransitive pattern in English should be illustrated with a truly ditransitive verb rather than the basically transitive verb *write*.

4. Participant roles

As we saw above, R&D propose a list of participant roles which consists of the "central" roles, namely, Agent, Experiencer, Cause and Theme and two less central participant roles: Location and Possessor.

The problem with R&D's discussion of event schemas in terms of participant roles is, first, that they are inconsistent because in their descriptions they use more roles than they specify in their introduction, second, their distinction into participant and non-participant roles seems to be arbitrary, and third, their list of participant roles is simply too short to account for the event schemas they discuss.

Thus, the approach to participant roles proposed by R&D raises at least two basic theoretical issues, which are discussed below. One has got to do with the terminology, the other with the number and kinds of participants which should be postulated in order to describe the conceptual structures of particular event schemas.

4.1. Terminology and number of participant roles

The term "participant role" as well as its close synonyms such as "semantic" or "thematic role" and "predicate argument" all take their roots in Fillmore's (1968) "deep cases" defined as "semantically relevant syntactic relationships involving

nouns and the structures that contain them” (p. 5). The partly modified and extended list of cases proposed by Fillmore (1971) included Agent, Experiencer, Instrument, Object, Source, Goal, Location, and Time. The number of “cases” gradually increased to include Patient and Recipient (instead of Object), and quite a few more, depending on the theory which used them, starting from generative grammar, through Fillmore’s frame semantics and the development of FrameNet and Role-and-Reference Grammar (cf. Van Valin and LaPolla 1997), to cognitive grammar and various strands of construction grammar. According to Evans and Green (2006: 675),⁴ the standard most common thematic roles are the following:

- a. Agent – volitional initiator of action
- b. Patient – entity which undergoes effect of action; change of state
- c. Theme – entity moved by action or whose location is described
- d. Experiencer – entity which sentient and aware of action/state but not in control
- e. Beneficiary – entity for whose ‘benefit’ action is performed
- f. Instrument – means by which action is performed
- g. Location – place in which event takes place
- h. Goal – entity towards which something moves
- i. Source – entity from which something moves

However, the number and kinds of participant roles depends on the theory and the level of analysis. Using Van Valin’s (2001) continuum, at least three levels can be distinguished:

- I. Semantic Macroroles: Actor and Undergoer
- II. Thematic relations: Agent, Experiencer, Recipient, Stimulus, Theme, Patient.
- III. Verb-Specific Semantic Roles: Agents like Giver, Killer, Speaker; Experiencers like Believer, Feeler, Lover; Recipients like Given-to, Sent-to; Stimuli like Seen, Heard, Liked; Themes like Located, Moved; Patients like Broken, Killed, Destroyed, etc.

Since the macroroles Actor and Undergoer were proposed in order to account for the prototypical aspects of the grammatical relations of Subject and Object (see Dowty 1991), they are irrelevant to the considerations of event schemas, which are meant to represent much more specific conceptual structures. Likewise, the verb-specific semantic roles like Killer or Feeler are irrelevant too, but for the opposite reason: since they are restricted to the arguments of individual verbs, so they are simply not schematic enough. Thus the level of event schemas should be the level of thematic relations, specified in terms of participant roles, which, therefore, may

⁴ Another attempt to provide such a list can be found in Van Valin and La Pola (1997), Van Valin (2000), Huddleston and Pullam (2002) and Bierwiazzonek (2016).

be called basic (level) participant roles. The problem is that the neat distinction into the level of verb-specific semantic roles and the basic level of thematic relations fails to do justice to the semantic roles in between, which should be distinguished if we do not want to miss important linguistic generalizations. For instance, Van Valin (2000) points out that there are three types of Experiencer: Cognizer, Perceiver, and Emoter, which group together verb-specific roles, such as Thinker, Believer, Knower, Presumer (Cognizer), Hearer, Smeller, Feeler, Taster (Perceiver), and Liker, Lover, Hater (Emoter). In the same way, in Bierwiazzonek (2016) I suggested that there are different linguistically relevant types of Cause, including Agent, Effector, Force, and Stimulus. These roles may be termed “subordinate” thematic relations. Such subordinate thematic relations are also common in Dixon’s (2005) account of various types of English verbs and in FrameNet. For instance, Dixon distinguishes different kinds of Agent like Donor (in the Giving type), Causer and Moving (thing) (in the Motion and Rest types of verbs), different kinds of Patient/Theme like Target (in Affect type), Gift (in Giving type), Substance (in Corporeal type) etc., while FrameNet distinguishes Lexical and Non-lexical frames and uses different participant roles, depending the relative generality or specificity of the frame. e.g. Abuser (kind of Agent) and Victim (kind of Patient) in the Abusing frame are quite specific; Perpetrator (kind of Agent) and Crime (kind of Theme) in the frame Committing Crime defines a more general frame since there are different kinds of Perpetrators (e.g. robbers, rapists, smugglers) and Crimes, while Transitive Action frame uses the most general roles like Agent/Cause and Patient.

These observations and suggestions seem to be relevant to R&D’s discussion of participant roles in event schemas. They lead to the conclusion that R&D’s list may be insufficient and that a more satisfactory account of event schemas requires not only basic thematic roles but also subordinate thematic roles.

One important role not distinguished in Evans and Green’s and Van Valin’s lists but used by R&D is Cause.⁵ In R&D’s account this role occurs in Emotion Schema to refer to the thing or situation which causes an emotional response in the Experiencer, as in R&D’s examples (17b and 18b, 17c and 18c), in which Cause is underlined.

8) I like Chopin

9) Chopin is a pleasure to my ears

10) We’re shocked at his antics

11) His antics shock us

In Van Valin’s terminology this type of cause is designated as Stimulus, but in Huddleston and Pullam (2002) it has a broader sense of “direct or immediate causation of an action or event” (p.230).

⁵ Huddleston and Pullam (2002) use the term “Causer” for this role.

4.2. Inconsistencies

The inconsistencies in R&D's account have to do with the use of two roles missing in the list of central roles, which are, nevertheless, deployed in the discussions of particular event schemas. The roles are Recipient and Goal. It is hardly surprising that these two roles figure in Evans and Green's list and are also used extensively in Goldberg's (1995) analyses of argument structure constructions, although the role Goal is not mentioned in Van Valin's list.

4.1.1. Recipient

This omission seems to be an obvious oversight since in the discussion of the Transfer Schema, R&D follow the common practice of referring to the entity (usually human) which receives the transferred object as Recipient. For instance, in sentences (12) and (13) below the underlined nominal *his wife* is classified as Recipient.

12) Phil gave his wife everything

13) Phil gave everything to his wife

In addition, there are verbs in which the Recipient argument occurs as subject, as in sentence (14) below.

14) Phil's wife received everything from him

Thus, it would seem desirable to add the role of Recipient to the list of central participant roles.

As demonstrated above, numerous studies of ditransitive constructions suggest that Recipient should be contrasted with Beneficiary. For example, it is because the nominal *his wife* is a Beneficiary in sentence (15) below, its paraphrase requires the prepositional for-phrase, rather than to-phrase as shown in sentence (16) above.

15) Phil bought his wife a bracelet

16) Phil bought a bracelet **to/for* his wife.

4.1.2. Goal

Another omission or oversight is that R&D do not list Goal as one of the central participant roles and at the same time include it in three event schemas in their discussion: the motion schema, self-motion schema, and caused-motion schema, represented respectively as Motion Schema T — G, classified as a subcategory of Spatial Schema in the Material World, and Self-motion Schema A — G and Caused-motion Schema A — T — G in the Force-Dynamic World. The particular schemas are illustrated below (Goals are underlined):

Motion Schema:

17) The ball rolled into the goal⁶

Self-motion Schema:

18) We drove to Bristol (R&D's 32a)

Caused-motion Schema:

19) Santa Clause puts sweets in children's stockings(R&D's 34a).

There is no question that Goal is part of the conceptual structure of all the three schemas. In fact, to make the spatial relations complete, we should probably add Source and Path too (see Fn 6). What is less obvious is whether it is justified to consider Motion Schema and Self-motion Schema as separate schemas and discuss them in two different worlds. Since most Force-Dynamic schemas presuppose the existence of the Material World and space, what makes these schemas special is their force-dynamics, so, in my view, they both should be classified as Force-Dynamic.

4.3. More participant roles

As mentioned above, even with the added roles of Recipient and (Source-Path-)Goal, R&D proposed a highly restricted set of more or less “central” participant roles, such as Agent, Experiencer, Cause, Theme, Location, Possessor, and non-participant roles, which specify the setting of a situation, such as Space, Time, Circumstance, Reason, Purpose. The problem is that there are more semantic roles, some of them subordinate thematic roles, not mentioned by R&D but used by them in their discussions of particular schemas, which cannot be defined as non-participant roles simply because they often function as participant roles, as we shall see below. Therefore, it would be probably more appropriate to say that various semantic roles may be used as participant roles in particular event schemas.

This raises the question of the theoretical status of allegedly non-participant roles as opposed to participant roles. Since both groups may function as both participant and non-participant roles,⁷ perhaps they should be conflated and considered as a single category of basic event schema semantic roles.

⁶ Although the motion schema is described as T-G, R&D's another example *The bottle rolled down the slope* (R&D's 10a) profiles Path (*down the slope*) rather than Goal. Source (*the police station*) is profiled in R&D's example (34b) *The storm blew the roof off the police station*, which illustrates the Caused-motion Schema (cf. Goldberg 1995).

⁷ Note that even such a prominent participant role as Agent may be “shaded” (or “deprofiled”) and function as a non-argument in the so-called short passive, e.g. *That door is never locked* and in causative *have/get* construction, e.g. *We're having our car serviced*. See Goldberg (1995: 57-58) for discussion of concepts of “shading” and “cutting”.

4.3.1. *No Patient?*

R&D's list of central participant roles and the ensuing discussion show that they do not distinguish the role of Patient and consider it as a kind of Theme. Thus, instead of those two roles, R&D argue that Theme may exhibit different "degrees of transitivity" (p.287). Admittedly, the distinction between Theme and Patient has always been rather fuzzy and controversial,⁸ but there is no shortage of clear cases, where it seems to be useful and uncontroversial, as in the case of *tearing the letter*, where *the letter* is clearly a Patient, and *reading* or *sending the letter*, where *the letter* is clearly a Theme. More importantly, however, the distinction is relevant to some constructions and non-transitive relations too. For instance, the Resultative Construction requires its direct object to be a Patient, underlined in examples (20) – (21), whereas most subjects of the copulative construction, illustrated and underlined in sentences (22) and (23), are Themes (*The Sahara*). Furthermore, the role of Theme should also be postulated for the prototypical "material possession" argument of the Possession Schema illustrated by sentence (24) (R&D's 14a, p.280).

20) The burglar forced the door open with a crowbar

21) Dorothy tore the letter into pieces

22) The Sahara is actually quite fertile

23) The Sahara is a vast desert

24) Marcellino has a Maserati sports car

4.3.2. *No Instrument and/or Means?*

R&D discuss Instrument as a component of the energy chain "alienable possessions which can be used in performing an action" and they claim that Instruments "have a peripheral status in situations and are typically expressed as optional adjuncts" (p.285). It is no doubt true, however, it should also be mentioned, that Instruments may also be profiled as subjects of a great deal of action verbs, which we have known ever since Fillmore's (1968) subject selection rule. Thus, to give Dixon's examples (2005:110), due to discourse factors, instead of prototypical sentence (25), we may prefer to choose Instrument (underlined *the stick*) either as ordinary direct object of *hit* (fused with Patient, in sentence 26) or as the Topic and produce sentence (27), in which it functions as subject.

⁸ For instance, Verspoor, Dirven and Radden in Dirven and Verspoor (2004) use only the role of Patient, whereas Dixon regards most Patients as "Targets" and does not distinguish Theme at all, although some of his "Moving" or "Resting" things could be classified as Themes. On the other hand, Huddleston and Pullam (2002) distinguish Patients alongside "primary", "secondary" and "factitive" Themes.

- 25) John hit the vase with the stick
- 26) John hit that stick on/upon/against the table
- 27) The stick hit the vase

These examples show that the transitive Action Schema cannot be adequately described without the participant role of Instrument.

Another omission we should mention is the role of Means, which according to R&D “describes a thing or a situation which helps or enables an agent to bring about an event” (p.289), illustrated by the nominal *experiment* in R&D’s example below:

- 28) The experiment shows that rats can learn the difference between Dutch and Japanese

Means is not included in Evans and Green’s or in Van Valin’s lists. However, R&D’s definitions of Means and Instrument indicate that in fact Means is more general of the two as it includes both concrete things and situations, thus Instrument may be classified as a kind of Means. A frame that could be used as a test for the Means (and Instrument) role may be [X *use* Y *to do* Z], where X stands for Agent, Y for Means/Instrument and Z for action, e.g. *John used a stick to hit the vase, John used the experiment to show that rats can learn the difference between Dutch and Chinese*. The frame also works for the fixed adverbial expressions denoting means of transport, such as *by bus, by train, by air*, etc.

4.3.3. Roles in the Copulative Construction – Property, Category, Identity

Another omission is less obvious and raises more serious questions. In their discussion of Occurrence schema R&D distinguish a number of constructions involving qualities, categories and definite descriptions functioning as identifiers. R&D illustrate them with the following examples:

- 29) The Sahara is actually quite fertile
- 30) The Sahara is a vast desert
- 31) The Sahara is the world’s largest desert

According to R&D, sentences (29) – (31) represent, respectively, “property assignment”, “category inclusion” and “identification”, so the question arises how their formal exponents should be classified in terms of participant roles for descriptive purposes. For instance, in Fillmore’s Framenet, Attribute (=Property) is classified as one of the core elements of the frame of Aesthetics. Let us recall also that in most cognitively and/or semantically based accounts of copular constructions (from Langacker (1987) to Jackendoff (2002) and Dixon (2005)) the copular verb *be* is considered as a two-place (or two-argument) verb with a subject argument NP and a subject complement in the form of a nominal (NP)

or a relational predication (AdjP, PP or clause).⁹ Thus, it seems that these constituents should be assigned the appropriate semantic roles.¹⁰ In the case of sentences (29) – (31) above the good candidates are Property, Category, and Identity, but, as pointed out by Dixon (2005), they do not exhaust other possibilities shown in sentences (32) – (34) below.

32) That car is Peter's (Possession)

33) This bouquet is for the President (Benefactive)

34) The meeting is in the garden/tomorrow (Place, Time)

Thus, all these roles are simply necessary to show the polysemy of the copulative *A is B* constructions and Change-of-State *A become B* construction (p.275f) in the same way as the distinction between Recipient and Beneficiary is necessary to account for the polysemy of the ditransitive construction.

The decision to classify Property as a participant role is also motivated by the CG conceptual approach to ontology, whereby even the representation of the Material World consists of conceptual entities and categories rather than objective entities and categories. As Langacker (2008:98) defines it, an entity which enters various kinds of conceptual relationships is "anything that might be conceived of or referred to in describing conceptual structure: things, relations, quantities, sensations, changes, locations, dimensions, and so on." Clearly, properties and categories, as well as particular instances of categories are conceptual entities too. For instance, adjectives designating properties like *tall* or *yellow* designate atemporal relations between a Trajector and a region in some domain functioning as Landmark. In this case the two relevant domains are respectively VERTICAL domain and the domain of COLORS, as shown diagrammatically by Langacker in Fig.7.3 (p.187) and Fig. 4.4c (p.102). Furthermore, what Langacker has shown is that although properties (qualities) are prototypically coded as adjectives, i.e. relations, they are often construed as THINGS and hence coded by nominal expressions, as in Langacker's examples (4a) and (4b) (2008:102), repeated here as (35) and (36).

35) Yellow is a nice colour

36) This yellow would look good in our kitchen.

In both these examples *yellow* profiles a region: in the domain of COLOUR in (35) or in the domain of YELLOW in (36).

⁹ Not without reason Dixon (2005: 28) classifies the clausal complement in *The point is that it is unsafe* as Identity. However, I will follow Schmid's (2000) analysis in which *the point* is considered a "shell noun" complemented by Content.

¹⁰ In their (2004) account, Verspoor, Dirven and Radden proposed the role Essive, which was supposed to denote any "state of being" (p.80). I find this description so general and abstract that it seems to be semantically vacuous.

Categories (or types, as Langacker 2008 often calls them) and instances are conceptual entities as well, and as such they participate in relations too. For example, an instance is defined as “having a particular location in the domain of instantiation”, while category (or type) profiles “the abstracted commonality” (p.268), i.e. a schematic representation of instances. Thus, categorizing and identifying sentences like (30) and (31) may easily be construed as involving participants, i.e. conceptual entities such as categories and instances. This, in turn, implies that subject complements of copular verbs are syntactically independent constituents, but semantically dependent entities, elaborated by the *THING* designated by the subject nominal. So, paradoxically, on the conceptual level, it is the subject, as an autonomous entity that complements the meaning of the relation or category or instance of the predicative adjective or nominal. In other words, it would be more appropriate to talk about “complement subject” rather than “subject complement”, as in those sentences the subject nominal should be analysed as the complement, or “elaborator” of the Trajector of the predicative adjective or nominal. In this sense, copular sentences are different from ordinary transitive event schemas, which feature autonomous, independent entities. It also shows the crucial difference between adjectival complementation (i.e. the predicative use of adjectives) and modification (the attributive use of adjectives): in terms of profiles, modification may be described as based on a single profile, since it only profiles the nominal head, e.g. *wall* in *yellow wall*, whereas complementation may be defined as a two-profile relation, since it profiles both the Trajector and the Landmark related by the copula, e.g. *wall* and *yellow* in sentence (37) below.¹¹

37) The wall is yellow.

4.3.4. Reference point?

One more concept that I think should be considered as a possible participant role in event schemas is that of Reference Point (RP).¹² There are at least two reasons for that. First, it helps to adequately account for the cases of verbs which involve two Themes, as the verb *resemble* illustrated by sentence (38) below shows, in which Jim is described in terms of similarity to his father-in-law, serving as RP. The second reason is that the role of RP is needed anyway as an obligatory participant in the conceptual representations of all constructions based on comparison, such as e.g. comparative construction, exemplified

¹¹ See Evans and Green’s (2006: 597-600) discussion of the copular construction along similar lines.

¹² See Langacker (1990, 1999, 2008) for discussion of the concept of Reference Point in the possessive construction and topicalization. Bierwiazzonek (2020) analyses eponymous metonymy as based on Reference Point - Target relations.

by (39), equative construction exemplified by (40), and similitive *like*-construction in (41).¹³

38) Jim resembles his father-in-law

39) Jim is taller than his father-in-law

40) Jim is as clumsy as his father -in-law

41) Jim eats like his father-in-law.

The Comparative schema represented by sentences (39) and (40), which might be added to the Occurrence schemas in the Material World, is Theme – Property – Reference Point.

Furthermore, the role of RP in relation to its Target may be considered as a generalization over a number of more specific relations, such as ownership (or, more generally, possession), part/whole, and kinship relations (cf. Langacker 1990: 337ff), so the roles of Possessor, Theme designating Whole or focal family member, which I call Kinship RP, may be considered as special cases of RP, as illustrated below. Note that in example (45) the Kinship RP schema consists of three participants: Theme (*this guy*), RP (*Joe*), Relative (*cousin brother*)

42) I have a bar of gold

43) This car has a powerful engine

44) Joe has three cousin brothers

45) This guy is Joe's cousin brother

If this is accepted, the Possession Schema in the Material World may be replaced by a more general Reference Point Schema defined in terms of two participant roles, namely, RP and Theme (or Target), which subsumes such relations between basic level roles as Possessor – Possession, Whole – Part, (Theme –), and Kinship RP – Relative.

4.4. Participant roles as categories – fuzzy boundaries and fused roles¹⁴ vs. taxonomy of roles

The final question concerning participant roles is what kind of categories they are. The partial answer we have already suggested is that, on the whole, participant roles of event schemas should be regarded as conceptual basic level roles, although event schemas themselves represent a rather abstract level of categorization of events. Another important aspect of the categories of participant

¹³ Haspelmath and Bucholz (1998) call the three components of the equative and similitive constructions COMPAREE, PARAMETER, and STANDARD, which is equivalent to REFERENCE POINT. See Musik (2023) for discussion.

¹⁴ This kind of fusing must be distinguished from the relation between the participant role and verb argument in construction grammar (cf. Goldberg 1995: 65).

roles is their fuzzy boundaries. For instance, R&D observe that “the transitive construction does not only apply to typical participant roles, but may also involve non-participant roles” (p.288). Thus, in the examples below (R&D’s 28 a,b,c), Theme functioning as the direct object is “fused” with other roles, specified in brackets:

- 46) The driver honked his horn [Theme + Instrument]
- 47) We climbed the Matterhorn [Theme + Location]
- 48) Let’s talk business [Theme + Subject matter]

They also argue that there are two kinds of Cause – Agent-like Causes and Enabling Causes, exemplified below.

- 49) Katrina devastated New Orleans
- 50) The strike closed down the railway system
- 51) Metaphors we live by sold 50,000 copies
- 52) That gun could kill ten people in two seconds.

These conclusions are less clear because we need to distinguish between fusing the roles and using different subordinate categories of roles, which may be more or less prototypical. Some of those subordinate roles are discussed in Section 3.1. Here we may add that roles like Cause and Agent also seem to have subordinate kinds, e.g. Cause may be subcategorized into Natural Force, Stimulus, Causative Event, while Agent may be subcategorized into Doer, Creator, Mover, Speaker, etc. It remains to be seen which ones are prototypical. Another problem which needs examining is to what extent participant roles and event schemas are subject to transfers of meaning typical of metonymy and metaphor. For instance, it may be argued that the subject noun *Katrina* in sentence (49) is used metaphorically, based on the personification (which could be also called “agentivization”) metaphor CAUSES ARE AGENTS, whereas the noun *guns* in example (52) is used metonymically, based on metonymy INSTRUMENT FOR USER. Thus, such cases should be distinguished from true fusions where two distinct roles merge into one. For instance, Taylor (2002:422) compares clear cases of Experiencers in sentences (53a) and (54a) with sentences like (53b)-(54b), which, he argues, show “an increasing Agent-like role for the Experiencer”.

- 53) a. I saw the movie
b. I watched the movie
- 54) a. I know the answer
b. I worked out the answer

It seems to me that it would be more appropriate to say that in the above (b) examples the two roles are combined and co-occur, since they lose their

Experience-like properties: in (53b) the subject role of Agent is combined with the role of Perceiver, in (54b) Agent is combined with Cognizer.

The fusion of Patient and Experiencer roles can also be postulated to characterize the concept of Victim in Fillmore's analysis of Causing Harm Frame. Clearly, *the mother* in sentence (55) is not only "an energy sink", which characterizes all Patients, but also Experiencer of the activity performed by the Agent (*his father*).¹⁵

55) Rod saw his father beating his mother

We may note in passing that the above example also shows that fusion must not be confused with the double role of some participants resulting from the syntactic structure of sentences. In that example, NP *his father* has such a double role: Stimulus of Rod's seeing (or at least a salient part of the Stimulus event of father beating mother), and Agent of beating in the subordinate clause.

5. The human conceptual WORLDS

There are three objections I wish to raise concerning the conceptual "worlds" proposed by R&D. The first one has to do with their ordering, the second with the structure of the Psychological World, and the third with the number of Worlds.

5.1. Order of the Worlds

As mentioned above, R&D discuss the Worlds represented by different event schemas beginning with the Material World, then the Psychological World, and finally the Force-Dynamic World. Although R&D do not explicitly explain the reasons behind this order, I think it is not trivial and I wish to suggest that, both developmentally (ontogenetically and, perhaps, phylogenetically too) and cognitively, a more natural order seems to be: the Material World – the Force Dynamic World – the Psychological World. The developmental argument in favour of this order is based on the studies of cognitive linguists (particularly G. Lakoff, M. Johnson, E. Sweetser, Ch. Johnson, and J. Grady)¹⁶ and developmental psychologists like J. Mandler (2004), who demonstrated that formation of concepts and basic image schemas is based on perceptual experiences and manipulating material objects, and Force is one of those schemas. The cognitive argument is based on the cognitive work on metaphor, which has

¹⁵ This may lead to the generalization that all sentient Patients are fusions of Patient and Experiencer roles. Consider the roles of objects of verbs like *kiss*, *pinch*, *caress*, etc.

¹⁶ Their contributions are exhaustively discussed in Lakoff and Johnson (1999).

shown that by and large “psychological” abstract domains are construed in terms of material domains rather than the other way round. Not surprisingly, the same direction of mapping occurs also between event schemas. For instance, R&D themselves show that psychological (intellectual, emotional, perceptual or communicative) interactions between human participants are often described in terms of the Transfer Schema, using the prototypical transfer verb *give*. Here are a few R&D’s (p.279) examples with the relevant correspondences.

- 56) a. He gave me an idea. [TRIGGERING THOUGHTS IS TRANSFER]
 b. He gave me a fright. [TRIGGERING EMOTIONS IS TRANSFER]
 c. He gave it a look. [DIRECTING ATTENTION IS TRANSFER]
 d. He gave us a speech. [PERFORMANCE IS TRANSFER]
 e. He gave a cry. [VOCAL OUTBURST IS TRANSFER]

R&D point out that “the logic of these metaphors resides in our understanding of events and states as (reified) things, which can be possessed. Since I can “have” an idea, I can also “give” it to someone” (p.297). Another salient area of the Psychological World, which is construed predominantly by material and force dynamic concepts, is the domain of EMOTION, which are metaphorized as fluids in containers, physical or natural forces, burdens, and vertical orientations (cf. Kövecses 2000). Even if emotions are personified, their sources are people involved in force-dynamic relations, e.g. Kövecses discusses various studies of emotions which show that they are construed as opponents or social superiors.

5.2. Psychological World

According to R&D, the Psychological World consists of emotions, perceptions and cognition, which involve different kinds of Experiencers and Cause or Stimulus. I suggest their account should be extended to include the domain of BODILY STATES, BODILY PROCESSES and BODILY SENSATIONS and more cognitive states.

5.2.1. Bodily states, processes and sensations (BSPS)

The omission or oversight of bodily states, processes and sensations is all the more surprising as most of them are crucial for our bodily, emotional and mental well-being. While it is true that humans share most of those states and sensations with other animals, nevertheless they are conceptualized on the basis of our own experiences and become an important part of our Psychological World and it comes as no surprise that they are studied by the scientific discipline we call “psychology” along with other “higher” functions such as emotions and thinking. Their importance is reflected in at least four conventional ways of describing them in language, which in turn reflect their deeply entrenched cognitive models.

- a) They are denoted by a number of adjectives occurring in the copulative constructions, e.g. *I'm hungry, Joe is cold, The kids are sleepy, We are all tired, etc.* The particular kind of Experiencer found as subjects in such sentences may be called Sensor (cf. Bierwiazzonek 2016).
- b) Since BSPSs are often experienced and conceptualized as parts of larger scenarios, they evoke their own remarkably fixed event frames (based on the behavioural stimulus-response schema), where they are associated, as causes, with a more-or-less fixed behavioural reaction designated by appropriate verbs or verbal expressions, e.g. *hungry – eat; thirsty – drink; full – defecate, excrete, shit, poo; sleepy – sleep, doze, take a nap, go to bed; cold – warm up, turn up the heating device, put on extra clothes; tired, exhausted – rest, ill – take medicine, see o doctor, recover, etc.* These verbs constitute a separate semantic category which Dixon (2005: 125) calls “corporeal verbs” and which includes such verbs as intransitive *sweat, cry, ache, faint, starve, etc.* and mainly transitive *eat, suck, taste, swallow, etc.*
- c) There are a number of conventional constructions describing BSPSs:
- S have C, e.g. *Mare has flue again, I've had anaemia all my life*, with a subcategory E *have a X-ache*, e.g. *Bill has a toothache, She had a headache, etc.*, where BSPSs are metaphorically construed as Possessions, while Sensor is construed as Possessor, so the category may be classified as a metaphoric extension of the Possession schema.
 - Intransitive S P-BSPS, where P-BSPS stands for the predicate denoting BSPS), e.g. *starve, freeze, faint, sleep, perspire, urinate, etc.*, with a subcategory X's Body Part, as in sentences (57) and (58) below.
- 57) My arm is still hurting
- 58) There's a mosquito bite on my ankle that is itching like crazy!
- Cause (Sensation) is often denoted by an object of the generic verb *feel*, which refers both to BSPSs and emotions, e.g. *Eve felt the pain/desire/thirst/a prick in my foot, the heat, etc.*
- d) Arguably, because they are based on deeply embodied bodily experiences, BSPSs constitute the most concrete and conceptually accessible psychological domain and hence may successfully serve as the source for more abstract and hence less accessible psychological domains, as in the Primary metaphor *DESIRE IS HUNGER* in the sense of Grady (1997) and Lakoff and Johnson (1999). Other familiar examples are metaphors *EMOTIONAL SUFFERING IS PHYSICAL PAIN, LOVE/SADNESS IS AN ILLNESS, etc.* (cf. Kövecses 2000).

5.2.2. *More cognitive experiences*

Probably because of lack of space, R&D have reduced the cognition schema to the cognitive sense of *I see your point*, motivated by the metaphor UNDERSTANDING IS SEEING and cognitive states like the reversible *familiarity* illustrated in sentences (59) and (60), where the two participants Experiencer (*I, me*) and Cause (*the song*) change their positions.

59) I'm familiar with the song

60) The song is familiar to me

Of course, this is hardly satisfactory in view of the fact that there are a lot of "cognitive predicates", or, to use Levin's (1993) classification and labels, e.g. *hope, imagine, remember*, etc., which are based on other event schemas. Therefore, we may suspect that there is another, more serious reason for this surprising reduction. The reason seems to be that most of our cognitive mental experiences and a large number of emotional experiences pertain primary to contents of our cognitive states and processes, which are formally coded by verbs and clausal complements, which are not considered by R&D to have a legitimate participant role, although other researchers (e.g. Schmid 2000, Dixon 2005) specify it as Content. Various kinds of such clausal complements are underlined in the two sets of examples below.

Mental experiences: Experiencer (Cognizer) – Content

61) I think Joe is in London now

62) Father wants you to wait outside

63) I still remember my mum combing her long red hair every evening

64) The girl keeps dreaming that she's a mermaid

65) I hope our team wins at last

Emotional experiences (psych-verbs¹⁷)

A. Dixon's LIKING verbs: Experiencer (Emoter) – Cause (Stimulus)

66) The bosses feared that the prices of our shares might plunge

67) I hate travelling on the tube

68) Bill just loves to give us a lift every now and then

B. Dixon's ANNOYING verbs: Cause (Stimulus) – Experiencer (Emoter)

69) The planes flying so low frighten the inhabitants of those villages

¹⁷ The term "psychological verbs" ("psych-verbs") has a long history in linguistics. See Rozwadowska (2005) for a brief account of this history and the problems the category of psych-verbs has caused in generative linguistics. Levin (1993: 188f) classifies them into AMUSE (Dixon's ANNOYING), ADMIRE (Dixon's LIKING), MARVEL and APPEAL verbs.

70) Bill winning the game pleased his dad

71) Seeing the Russians enter Ukrainian towns depressed them

Dixon (2005) divides the verbs denoting mental cognitive experiences into THINKING (with such subtypes as THINK, ASSUME, PONDER, REMEMBER, KNOW, CONCLUDE, SOLVE, and BELIEVE, where the subject has the role of Cogitator), DECIDING (with two subtypes RESOLVE and CHOOSE, where the subject has the role of Decision-Maker), and WANTING (such as *want, wish, hope, demand, need, expect, intend, plan, mean*, etc., where the subject has the role of Principal). For the sake of simplicity, in our presentation the roles of Cogitator, Decision-Maker, and Principal are all subsumed under the role of Cognizer. These verbs describe our basic mental experiences and we cannot describe the cognition schema adequately without allowing for clausal complements of those mental verbs in event schemas and postulating one more participant role, namely, Content of those mental experiences.

Similarly, it is impossible to account fully for psych-verbs without allowing for clausal complements of those verbs, although in the case of psych-verbs there is no need to postulate a new participant role since the clausal participant role is the same as the role of nominal objects of those verbs, which are usually referred to as Cause or Stimulus. Examples of those verbs with underlined nominal Causes corresponding to the sentences (66) – (71) are given below.

A. Experiencer (Emoter) – Cause

72) The bosses feared the Chinese competition

73) I hate this form of transport

74) Bill just loves her presents

B. Cause – Experiencer (Emoter)

75) The planes frighten the inhabitants of those villages

76) Bill always pleased his dad

77) The sight of ruined Ukrainian towns depressed them

6. What about the Social World?

The final objection to R&D's theory of event schemas in terms of "Worlds" is that their list of the Worlds is too short. In particular, I suggest that the Psychological World of intelligent human individuals, who have their thoughts, decisions and desires should be extended to the Social World of human interactions. Admittedly, some aspects of this world can be described in terms of

the Force-Dynamic World, e.g. sentences (78) and (79), or in terms of the Psychological World, e.g. sentences (80) and (81).

78) The students pushed their teacher out of the classroom (caused motion construction)

79) Father gave me his old watch

80) Jack is crazy about Jill

81) Jill is dreaming of Jack

Thus, a considerable number of human interactions are coded by various kinds of event schemas typical of the Force-Dynamic or the Psychological Worlds, represented by what Levin (1993) calls VERBS OF SOCIAL INTERACTION, in which she distinguishes three subtypes:

a) MARRY VERBS: *court, cuddle, date, divorce, embrace, hug, kiss, marry, nuzzle, pass, pet*

b) MEET VERBS: *battle, box, consult, debate, fight, meet, play, visit*

c) CORRESPOND VERBS: *agree, argue, banter, bargain, bicker, clash, coexist, collaborate, collide, communicate, compete, concur, confabulate, conflict, cooperate, correspond, dicker, differ, disagree, dispute, dissent, duel, elope, feud, flirt, haggle, hobnob, jest, joke, joust, mate,*

Although the three sets differ a little in their syntax, as some of them take ordinary objects, while others take prepositional complements, what they have in common is that they all can occur in intransitive sentences with plural subjects which denote plural participant roles of the same relation, either of same kind, e.g. plural Agents or of two complementary kinds, e.g. plural Agents and Patients. Hence the schema may be called “reciprocal” (Bierwiazzonek 2016). For instance, in Levin’s sentence (82) both *Brenda* and *Molly* are Speakers, while in (83) they both may be construed as acting as Agents and Patients at the same time, if they took turns kissing.

82) Brenda and Molly bantered

83) Jill and Joe kissed

Although this kind of event schema involving plural “reciprocal” roles is typical of interpersonal relations, it may describe inanimate participants as well and, therefore, should be included in other worlds too. Corpus sentences (84) and (85) below, taken from Bierwiazzonek (2016), illustrate this reciprocal event schema in the Material World and the Force-Dynamic World, respectively.

84) His preliminary findings and those of the hospital differed

85) Three men and a boy died yesterday after two cars collided on a village road

In example (84) the two participants (preliminary findings and the findings of the hospital) are Themes in the Material World, while in sentence (85) the two

cars may be construed as two Movers or as fusions of Mover-Patient of this particular type of Self-Motion Schema. Thus, the general reciprocal schema may involve different roles but has the same semantic structure of plural entities in reciprocal relation.

However, there is one domain in the Social World which has no counterpart in the event schemas in the other worlds: the domain of INTERPERSONAL COMMUNICATION represented by the verbs which Levin (1993) refers to as “verbs of COMMUNICATION” and Dixon (2005) calls the SPEAKING type. This unique event schema has its own unique participant roles. Thus, following Dixon, we may distinguish four participant roles in this event schema: Speaker (speaker or writer), Addressee, Message, and Medium linked by various speech act predicates, which Dixon divides into eight subtypes, whose names are the most prototypical or representative verbs of the particular subtypes: TALK, DISCUSS, SHOUT, REPORT, INFORM, TELL, ORDER, FORGIVE. Without going into a detailed description of each subtype, let us just point out that the REPORT subtype, which is further subdivided into another eight sets, consists of transitive verbs which have Speaker as subject and Message designated by a *that*-clause. The examples in (86) below represent seven of those sets, while example (87) illustrates the eighth set of the REPORT subtype, taken from Dixon (2005: 152f):

- 86) She said/stated/announced/remarked/boasted/suggested/proposed that New York is the finest city in the world
 87) I promised that I would transfer Mary

The REPORT subtype differs from the INFORM and TELL subtypes in that the INFORM and TELL verbs have Addressee as their object (underlined) and a *that*-clause as a complement, as in (88) and (89) below (taken from Dixon 2005: 155).

- 88) I informed/reminded John that there will be a picnic tomorrow
 89) I told John that the bus had crashed

These rather familiar observations clearly show that the Social World consists of event schemas which have clausal complements representing the role Message and two further participant roles of Speaker and Addressee, which, therefore, should be added to the inventory of participant roles used in the full description of the event schemas describing the four Worlds we have discussed. Given those participant roles, the two main SPEAKING (or COMMUNICATION) schemas which should be postulated are as follows:

- I. Speaker – Message, e.g. (78) and (79)
- II. Speaker – Addressee – Message, e.g. (80) and (81)

Conclusions

Our brief survey and analysis of the event schemas of Modern English proposed by R&D shows that R&D's account should be extended in three ways.

First, a number of participant roles should be added in order to specify more adequately the semantic structures of the proposed event schemas. The final list of participant roles and their subordinates (in parentheses) should include: Cause (Causative Event, Stimulus, Sensation, Emotion), Agent (Speaker, Doer, Mover), Experiencer (Sensor/Sensor's Body Part, Perceiver, Emoter, Cognizer), Theme (Possession, Subject matter), Patient, Recipient, Benefactive, Content, Addressee, Means (Instrument, Vehicle), Property, Category, Identity, Source-Path-Goal, Location, Reference Point (Possessor), Message.

Second, the number of event schemas in the Psychological World should be increased. In particular, at least two schemas should be added: the Sensation Schema, involving Sensor/Sensor's Body Part and Sensation, and one more cognition schema, involving Cognizer and Content.

Third, R&D's theory of event schemas based on conceptualisations of three kinds of Worlds, namely the Material, Force-dynamic, Psychological Worlds should be supplemented with the Social World with its at least two more event schemas, which can be described as Speaker – Message and Speaker – Addressee – Message.

Finally, there are important cognitive reasons to present the event schemas based on the idea of worlds starting from the Material, through the Force-Dynamic and Psychological, to the Social. The main reason is that the more abstract Psychological and Social worlds are often partly construed in terms of the more concrete and cognitively accessible Material and Force-Dynamic Worlds and not the other way round. Therefore, in order to adequately describe the most important event schemas of the Psychological and Social Worlds, it is often necessary to refer to the schemas characterizing the other two Worlds, which involve physical objects and physical interactions.

The proposed final list of the event schemas in the four worlds consists of the following schemas:

The Material World

A. Occurrence schemas:

States: Theme — Property/ Category/ Identity/ Reference Point, e.g. *The story is be true, Joe is an actor, Joe resembles his father.*

Processes Theme — (Property), e.g. *The plan has gone wrong, The sun is shining, It rained again.*

B. Spatial schemas: Theme — Location, e.g. *Eve is in Warsaw*

C. Reference Point schema

Possession schema: Possessor — Theme (Possession), e.g. *Joe has a new car, He acquired his car in Sweden.*

Whole – Part, e.g. *The car has four wheels*

Kinship RP – Relative (- Theme), e.g. *Bill has a cousin brother, This guy is Bill's brother.*

The Force Dynamic World

A. Action schema Agent (Doer) — Theme, e.g. *Joe often breaks plates.*

B. Self-motion schema Agent (Mover) — Source/Path/Goal, e.g. *Eve went to Paris.*

C. Caused-motion schema Agent — Theme — Goal, e.g. *Joe sent his books to New York.*

D. Transfer schema 1 Agent — Receiver — Theme, e.g. *Eve often gives her kids presents.*

Transfer schema 2 Agent — Benefactive — Theme, e.g. *Joe wrote a poem for Eve.*

The Psychological World

The schemas involve different kinds of Experiencer: Sensor, Emoter, Perceiver, and Cognizer.

A. Sensation schema 1: Sensor/Sensor's Body Part, e.g. *My back is hurting.*

Sensation schema 2: Sensor — Sensation, e.g. *Bill is sleepy, Bill feels disgust.*

B. Emotion schema 1 Emoter — Cause, e.g. *Joe likes frogs, Frogs frighten Eve.*

Emotion schema 2 Emoter — Property (Emotion), e.g. *I'm furious, Eve is happy.*

C. Perception schema: Perceiver — Stimulus, e.g. *Eve sees her dog now, Joe heard that song before.*

D. Cognition schema 1: Cognizer — Theme (Subject Matter), e.g. *Eve still remembers that day, I'm dreaming of the white Christmas.*

Cognition schema 2: Cognizer — Content, e.g. *Eve hopes Joe wins, Joe believes that his dad never lies.*

The Social Word

- A. Speaker – Message, e.g. *Eve said she was ill, Joe complained that he'd been cheated.*
- B. Speaker – Addressee – Message, e.g. *Eve told us that she was ill, Joe warned us that it might rain*

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