CONSTRUAL AND LINGUISTIC CODING OF NARRATIVE EVENTS



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Table of contents

List of figures	
List of tables	
Transcription notation	
Introduction	11
PART I. Theory: Construal, events, events in narrative	
Chapter 1. Construal operations revisited and reconsidered	
1.1. Construal views	
1.2. Reconsidering construal	
1.2.1. The role of attention in construal	
1.3. More on salience and attention	
1.3.1. Philosophy and psychology on attention	
1.3.2. Attention, salience, consciousness in language and cognitive linguist	
1.3.3. Attention and consciousness – relations	
1.3.4. Summary of attention and construal	
1.4. EFL perspective and linguistic construal	
1.5. Summary and conclusions	64
Chapter 2. Events	6:
2.1. Objective	
2.2. Defining events	
•	
2.4. Event classification	
2.5. Event, scenes, situation models and event schemas	
2.6. Other schemas of events compatible with CG and CL	
2.6.1. Complex events	
2.7. Summary and conclusions	
2.7. Summary and conclusions	11.
Chapter 3. Events in narrative context	
3.1. Introduction	11:
3.2. The narrative and events	
3.3. Structure of events in a narrative	
3.4. Event organization in memory	
3.5. Conversational narratives CA	13
3.6. Summary and conclusions	13

PART II. Researching narrative events in EFL context

Chapter 4. Narrative events in video segmentation and oral video description	
of foreign language users	
4.1. Introduction	14
4.2. Introduction to the pilot study of video unitization non-linguistic task	14
4.2.1. Task one – video segmentation	14
4.2.2. Task two – video retellings	1:
4.2.3. Summary and conclusions	10
Chapter 5: Constructing causality: The use of subjective, objective and	
evaluative events in a nattative	1.
5.1. Introduction	10
5.2. Study one: Story production task	10
5.3. Study two: Story comprehension task	17
5.4. Conclusions and discussion of narrative production and comprehension tasks	1′
Chapter 6. Retelling of a video and picture sequence in Polish and English	
6.1. Introduction	18
6.2. The task and its unit – sentence	18
6.3. Data coding	18
6.4. Analysis one: Sentences in story retellings, questions, hypotheses, results, discussion	18
6.5. Analysis two: Type of sentences and events in Polish and English retellings of story, introduction	19
6.6. Study three: Events in story retellings	19
6.7. Summary and conclusions of the quantitative analyses of Bolek and Lolek cartoon retellings	20
6.8. Multiple construals of selected scenes: Qualitative analysis	20
6.9. Summary and conclusions	2
Conclusions	2
References	22
Appendices	23

List of figures

1. Table under lamp
2. Talmy's linguistic and conceptual distinctions relevant for linguistic construal
3. Attention, aspects of conceptualization and repertoire of linguistic-formal devices to communicate them
4. Action chain
5. Canonical event model
6. A fraction of possible schematic network of SVO construction
7. Prototypical narrative
8. An example of event organisation that is in agreement with the view that people select activity as a memory clue
9. Examples of captured images representing marked off breakpoints in the video
$10. \ Folder \ with \ sub-folders \ that \ contain \ captured \ images \ of \ different \ participants \ .$
11. Captured images in a single participants' folder with milliseconds
12. The 5 th captured image at 5249 ms (5 s. 249 ms)
13. Frequency distribution in video segmentation task
14. Participants' reasons to segment video sequence
15. Tables and their relations in the dBase of sentences that were used in story retellings
16. Events in different sentence types in English and Polish
17. Screenshots from <i>Bolek and Lolek: First day</i> of summer holidays, a silent cartoon video (Cartoon studio in Bielsko Biała, director: Władysław Nehrebecki/Alfred Ledwig)
18. Screenshots from <i>Bolek and Lolek: First day</i> of summer holidays, a silent
cartoon video (Cartoon studio in Bielsko Biała, director: Władysław
Nehrebecki/Alfred Ledwig)

List of tables

1. Comparison of categories of construal operations	
2. Theories of attention	
3. Attention and consciousness	
4. Types of attention	
5. Event classification	
6. Elements of a situation (and event)	
7. Types of bounded events	
8. Types of unbounded events	
9. Natural paths and starting points of events	
). Example schemas	
1. Table and grid for coding events (Taylor and Tversky 1997)	
2. Descriptive statistics of video verbalisation tasks in English-foreign and	
Polish-native conditions	
B. Events from beginning to end in Polish and English	
4. Numbers of different types of events and material in retellings	
5. Numbers of objective and subjective events as well as evaluative units in	
blame-husband condition from the previous study	
6. Numbers of objective and subjective events and evaluative units in be	
objective condition from the previous study	
7. Raw data from Polish-pictures-video and English-pictures-video study	
3. Summary of descriptive statistics in study comparing number of sentences in	
Polish-pictures-video and English-pictures-video conditions	
9. ANOVA results of the study of sentences in pictures/video vis à vis	
Polish/English conditions	
). Sentence types across the experimental conditions	
1. Raw numbers of sentence types in four experimental conditions	
2. Events and sentences in English and Polish retellings	
3. Table analyzing English verbalization of a video sequence	
4. Table analyzing English verbalization of a video sequence	
5. Events in English verbalization of a scene	
6. Events in a scene verbalized in Polish	

Transcription Notation

(.) or (..) (...)

(^), or (^^) one line in transcription (,) at the end of a a line

(.) at end of line

(=)

short pause longer pause

stressed word or syllable

intonation unit

non-falling intonation contour

falling intonation contou

anacrusis

Introduction

Meaning becomes rather than is. This statement makes an indirect reference to the concept of *construal*, or construction, which is the main theme of the present monograph. It is placed at the very heart of Cognitive Linguistic theorizing about language, meaning and communication. Consisting of both phonological (segmental) and conceptual poles, a linguistic expression provides a special optics, to use a metaphor from vision, on the reality that one intends to describe. The so-called objective reality is never really objective for a language user, who is bound to make conscious, but also subconscious choices regarding language form, both grammatical schemas, and lexis. This, in turn, reflects how entities have already been ranked for cognitive salience in conventional conceptualizations.

The term *construal* has been identified with both mental processes and their products, whereas the term *coding* in the present monograph is preferentially used to denote configuring or configurations of language form. In terms closer to Cognitive Grammar, the semantic pole of an expression is associated with *construal*, whereas its segmental content with *linguistic coding*, though sometimes it is called *linguistic construal* in cognitive linguistics literature.

Despite numerous attempts at classifying processes involved in constructing an expression (which by definition involves both semantic and segmental poles), no single categorization has been proposed. However, despite this pluralism of options, the very frequently recurring themes are *cognitive salience*, or *cognitive prominence*, also *attention*. Hence, in agreement with this observation, but also with the so-called *principle of converging evidence*, the theoretical position accepted in this book is that proper adjustment of *cognitive salience* of entities in conception is the ultimate goal of construal operations. This is made possible via the operation of multiple strands of attention. In sum, attention is the complex mental ability that ranks the salience of entities in conception, including the well known process of *thinking for speaking* (cf. Slobin 1996).

But what is attention. Although the term has been used in psychology and cognitive linguistics, it is still not clear how to treat it. This work tries to bridge this gap by providing a discussion of the philosophy and psychology of attention, its theories, kinds, features, and relations to consciousness. In the remaining parts of the book the author decided to understand it after Baars (1997), Chafe (1994) and Jackendoff (1997), who draw a dividing line between

attention and consciousness. They treat attention as a number of implicit processes that constitute the contents of consciousness. The author wishes to stress, however, that he remains neutral with regard to which specific model or theory of attention should be accepted as the dominant one, though he grants endogenous attention a greater role in linguistic functioning.

Mental processes, however, are usually fed by some representations. The present volume adopts the representational format that is not abstract symbolic, but modality specific and analogical to the original experience that created it, hence the name *modal* and *analogic*. It has been described in psychological literature by Barsalou (1988, 1999, 2008, 2009), Zwaan (1999), Penfield (1958), Stanfield and Zwaan (2001), Zwaan, Stanfield and Yaxley (2002), but also in many linguistics works of, e.g. Bergen and Wheeler (2006), Bergen et al. (2007), Richardson et al. (2003), Glenberg and Kashak (2002), Tettamanti et al. (2005), Buccino et al. (2001), Taylor and Zwaan (2008), Bergen (2012) to mention only a few studies.

The speculations that attentional mechanisms give rise to heightened cognitive prominence of selected entities at the expense of others has been expressed, though sometimes only indirectly in cognitive linguistics and discourse literature. By way of example, one can mention Langacker's (1987, 1991, 1999, 2001, 2008) distinctions in this respect: profile/base alignment, figure/ground distinction, mental scanning operations, windowing in discourse, designation, reification, cognitive definitions of grammatical categories (noun, verb, adjective, adverb, etc), temporality/atemporality, grounding, attentional frame, Autonomy/Dependence (modification/complementation), e-site, prominence asymmetry, foregrounding/backgrounding (e.g. in the choice of grammatical voice construction), but also Chafe's (1994) model of discourse described by the flow metaphor, where a single intonation unit is a correlate of a single act of consciousness. Though such linguistic coding of intonation units that corresponds to the single-clause format is typical, speakers can in essence distribute the content of a "thought" and code it in two or three consecutive intonation units, thus rendering their components more salient. Moreover, at the higher, discourse level, speakers have a choice to regulate cognitive salience of events and scenes, causes and effects of what happened by carefully selecting only some objective events, and additionally coding in language some subjective events and evaluative material (cf. Labov and Waletzky 1967; Labov 1997, 2001, 2006, 2011).

We hypothesize that the tight fit between construal operations and linguistic coding may be idealized and that it should be loosened, especially with regard to situations of highly conventionalized contexts of language use, i.e. the answer to the question whether any, even the smallest, change of form leads to some measurable change in the corresponding conceptualization is probably exaggerated.

Everything in language is construed, and this comment applies perfectly well to the second variable in this book, i.e. events. Their definition has been accepted after Zacks and Tversky (2001: 7). It says that an event should be understood as "a segment of time at a given location perceived by an observer to have a beginning and end", which implies change, and an active role of the observer. Change in time can refer to location, character, goal, instrument and other features of dynamic situations. The observer subjectively construes causes, participants, their roles, etc. By analogy to objects, there are parts, and kinds of events; hence, partonomy and taxonomy of events are proposed. The former refer to event components. To exemplify parts of events, one can refer to the event of hand shaking, which can be broken down to stretching a hand, shaking a hand, bending your body forward, and so on. By comparison, sprinting is a kind of running, not the other way round. These two levels of organization of events are related. Tversky and Hemenway (1984) conclude that "taxonomic organization promotes reasoning about intrinsic properties", whereas the partonomic ones "promote reasoning from physical structure to function and cause". So particular scenes and behavioural episodes belong to event partonomies, whereas the basic level of event categorization is situated in event taxonomies.

Numerous classifications of events have been proposed, and they are described in chapter two. The applied criteria usually refer to intentionality, portion of time that an event involves, or phase of event that is designated, in profile, or still in other words in focus and attended to. Besides, an event, sometimes also referred to as *situation* (Radden and Dirven 2007: 176) is understood to consist of: *conceptual core* with participants and their relations, time schema, grounding elements with time, reference and reality status, as well as setting.

This chapter also attempts to shed light on the terminology used to describe representations of events. These are especially *event schema* and *situation model*. The former term is used to refer to an abstract level of conceptualization and thinking about events, whereas the latter term (situation model) has been used to refer to online, dynamic, mental representation of evolving situation, either perceived or invoked via language. Situation models are similar to mental simulations (cf. Bergen 2012) inasmuch as they are not abstract, but very concrete mental models of ongoing, and developing scenarios either invoked perceptually (e.g. film, cartoon pictures), or in a top-down fashion, also by language (e.g. reading a story). The author pays the readers' attention that the terms used by Langacker (e.g. 1991), *chain model*, or *canonical event model* should be treated as abstract and closer to the term *schema*.

Other schemas that are theoretically compatible with both Cognitive Grammar and Cognitive Linguistics were proposed by Clair, Rodriguez and

Events in language are not communicated without context, but they are always accompanied by other events of larger discourse coherence, which in this work is the whole narrative. It has been discussed by Labov and Waletzky (1967) as comprising sub-parts of abstract, orientation, complicating action, or resolution, which appear in actual narratives to various extent. In conversational storytelling the actual narrative can be shortened and only its complicating action is coded in language to make a special point. Events within a whole narrative structure do not have the same status. Whereas some of them embrace the whole temporal scope of the story, some others are restricted to its limited region, and even to a single moment within a narrative temporal profile. Defined in this way, the temporal displacement set of an event tells us whether it is: free and embraces the whole narrative, restricted, or narrative, i.e. limited to a single "place" in the sequence of events that constitute a given story. More precisely, two events form a narrative if there is a temporal juncture between them, and no temporal overlap. In his analytic procedure, Labov (2001) shifts the free events to the beginning of the story, the restricted events as early possible within a story, whereas the narrative events have to remain where they had been used and it is they that constitute the core narrative content. Most importantly, the author claims that this is still another aspect of construal, albeit one that refers to the discourse level. Interspersed across the whole narrative are evaluative comments, e.g. it was silly of him to have done it, or subjective events, whose truthfulness cannot be verified, e.g. I thought she was not inside the bathroom and that's why I shot (both invented examples). Some other events have been termed ordinary because they describe something that one can easily predict; they are uneventful, unsurprising and seemingly unimportant within a narrative structure. And yet, their role in the construal of the causal structure of a story is invaluable. The particular example from Labov (2004) involves an accident that happened to a disabled man after his wife had left him to do some shopping. On her return from the shops, time as if slowed down, and after realizing what had happened she described almost every ordinary detail, i.e. that she opened the door, hung up the coat, and opened a tin of fish, cut a slice of bread, made some tea, and so on. This helps construe the causality structure of this story.

In the present work the author does not propose any single theory of causality; instead he adopts a view also accepted in the cognitive linguistics literature that causality is construed. Related to this topic is the term *most reportable event* (Labov 2006, 2011). This is the event for which the whole story

is worth telling, so one expects it to be surprising, unexpected, in general worth presenting. The question of which event one should start from as the earliest in the story is answered in such a way that it should be the event that is the earliest and still connected causally to the most reportable event.

Still another theoretical question related to narrative event construal is how people remember events, what memory indices they use preferentially. Research suggests that the memory indices are arranged on a cline from best to worst in the following way: characters, locations, objects, activities, and last, time (cf. Lancaster and Barsalou 1999; Zacks, Tversky and Iyer 2000).

The chapter on events in narrative structure finishes the part of theoretical prerequisites. It has a goal of proper literature review, and creates a context for the chapters in the second, research-based part. What emergies of the theoretical considerations is that prominence is the ultimate goal of construal, which is multi-aspectual, refering both to the level of a single scene, and the whole discourse. In general, it involves the so-called conceptual, mental level, while the term coding is reserved to denote the choice and configurations of language form. Where this is important the reader is reminded of the distinction.

The research part is based on data gathered from Polish learners of English as a foreign language. It has been founded on two traditions, the first of which is broadly speaking Cognitive Linguistics. The other is the tradition of studying foreign language use, not its learning-acquisition. Hulstijn (2007: 197) distinguishes psychological and linguistic SLA literatures, and they can be contrasted as follows. Whereas the linguistic tradition is characteristic of focusing on the representation of L2 information, the psychological tradition foregrounds "the way L2 learners *process* ... information". It is the psychological, cognitive, processing tradition that this work can be identified with, especially if one asks about the data used in the empirical studies. L2 is considered in them to be an independent and legitimate object of study, though comparisons between L1 Polish and L2 English data are naturally made. The author also claims that this research is at least partly compatible with questions asked by research into psycholinguistic variability of learner language, some aspects of transfer, cognitive accounts of SL production, status of knowledge, or controlling access to L2 and L1, all dealt with in appropriate chapters by Ellis (2008), but not in the present monograph for lack of space, and because they do not directly fit the goal of dealing with construal processes during narrative production or comprehension.

Three studies have been presented in chapters four, five and six with the general goal of referring to the construal of *narrative events* on discourse level. In other words, because *construal* is such a broad category, the author decided to discuss its operations on the level of the whole narrative. This limitation is in keeping with the topic of the monograph and its goal. Narratives are made of a batch of events that are not haphazard, but carefully selected to construe

temporality, causal structure, blame, and other pragmatic goals. Although a discussion of how language users configure single scenes is interesting as well, the general question that is more important in the present work is how the whole set of narrative events are selected and arranged.

The studies in chapter four begin with an important, preliminary nonlinguistic task of video unitization. The participants were asked to divide a short silent video into meaningful units without being instructed what the size of the units should be. This perceptual task did not use language on purpose to show that the *event* category is psychologically real. The effected event units were of variable sizes. However, the participants can be seen to have divided themselves spontaneously into two groups, with the mean of 28 breakpoints per recording as the selected borderline between fine-grain coders and coarse-grain coders. The strategy reported in the post-task survey was to use change of activity, end of activity, beginning of activity, change of movement, place (in this order) to signal event boundaries. This shows that this perceptual task was clearly not only a perceptual task and that top-down processing, i.e. matching the video input to the already existing categories of action took place spontaneously as expected. Also, both groups reported the events in chronological order, and they were observed to distribute information about a single event in different ways, with the default of one event per single intonation unit. Where this option was not selected, e.g. one event – a few intonation units, the components of a single event become more cognitively prominent. The event descriptions in both groups of speakers also tended to be person-object pairs. Interestingly, even if the video was not hard to talk about as it showed mundane, everyday activity performed at home, it turned out that both groups, both native and non-native speakers produced a considerable amount of pauses and hesitations testifying to the effortful character of construal-coding operations. Both groups' verbal interpretations of the visual input were often creative, not re-creative. Some speakers even commented that the task required creativity despite the instruction to retell the video content.

The fifth chapter deals with the construal of causality. The whole narrative can be viewed as a personal theory of how something happened (cf. Labov and Waletzky 1967). This book, and in agreement with cognitive linguistics theory, does not put forward any particular theory of causality, but accepts the understanding that it is construed. Generally, the following can become causes of what happened:

- a) Events are causes,
- b) Emotions are causes,
- c) Lack of impediment can be a cause,
- d) Instrument may be a cause.

Certainly, this list is not exhaustive, but in general, one should remember that CAUSE is a radial category with some determining factor and human agency. Two studies follow this brief theoretical introduction. The first is a language production task, whereas the other a language comprehension one. In the language production experiment the author wished to test if foreign language students would be able to manipulate the content of their story retellings such that they would put blame for what had happened in the story on the person clearly designated for this role in the task instruction. The input story was provided as a list of simple clauses that represented objective events, i.e. the participants were supposed to accept that they did indeed take place. This was done purposefully in order to control for the content of linguistic reproductions. The speakers had no complete freedom what to say. However, because they had been instructed to either put blame on the husband in the story for what had happened or be as objective as possible, they construed their renditions of the input version differently. The experiment sought to answer the research question of what they would do if they had to polarize participant roles. The operational definition of the strength of causal connections within a narrative was the amount of the so-called objective events in comparison to the amount of evaluative material, and subjective events. The only instruction given in the "blame-husband" condition was, retell what had happened in such a way as to put blame on your husband, and in the "be objective" condition the instruction was, be as objective as possible. The two independent groups' versions differed significantly as regards the number of objective, subjective events and evaluative comments. The author concludes that foreign language learners spontaneously used evaluative comments and subjective events as the major construal strategy. The study is innovative inasmuch as it corroborated Labov's (2011) results of discourse analysis in experimental conditions, with important variables controlled for.

The follow-up, language comprehension task in this chapter had the goal of testing if language users (readers) would be sensitive to the differences between different versions of the story discussed above, one in the be objective condition, and the other in the blame the husband condition. Though a little repeatedly, in the former condition more objective events were effected at the expense of evaluative material and subjective events in a statistically significant way. This, in turn, was interpreted in such a way that if a story is construed with the use of objective events, it takes care of the causal structure of a narrative better than a story full of evaluative material and subjective events. Two independent groups of participants were asked to read selected stories (of equal length) that differed only with regard to the amount of objective events used in them. They ranked both stories on a cline of credibility, which was an indirect measure (operationalization) of story coherence, and hence its causal structure. Indeed the story that presented more objective events was ranked more credible

in a statistically significant way, and hence better construed with regard to cause-effect links. Construal operations were shown to operate on the whole narrative structure.

Last, chapter six undertakes the task of analyzing written retellings of a story for children. The main units that the author scrutinizes are sentence and event. The former was granted a special cognitive status as the so-called *centre of interest*, for it is a language user's attempt at overcoming the limitation of his/her limited focus of consciousness. The format of a single clause is selected to code one event, but there are multiple possibilities. In general, compound clauses code two events of equal cognitive status, and hence also equal as regards their cognitive prominence. Subordination, on the other hand, allows ranking for cognitive salience different entities that a language user decided to use.

Apart from the relation between sentence types and events in Polishnative and English-foreign retellings of the story, the other variable that was taken into account was input type: either static in the form of pictures, or dynamic visualisation in the form of video. The first analysis demonstrated that there was no significant effect of language on the number of sentences, hence also centres of interest in story retellings against the prediction that the Polish versions of the story would contain more sentences due to greater ease, fluency and freedom with which one uses a native language. However, the choice of video over pictures resulted in greater number of sentences regardless of language used, and this effect was explained by the observation that the video condition allowed more freedom during construal-coding, i.e. the participants were able to choose any moment from the video they felt was important. Task choice turned out to be related to how content becomes construed (cf. Skehan and Foster 1999). Most interestingly, there was significant interaction between language and input-type, such that it was the choice of Polish coupled with the video presentation that resulted in the greatest number of sentences written per one retelling.

The second analysis in this chapter undertook the task of testing relations between different sentence types in either Polish or English versions of the story. No significant effect was shown to exist, but the reader is reminded that the author did not take into account the criterion of grammatical correctness, and L2 data was treated on a par with the data set of Polish retellings.

Still another quantitative analysis in this part looked at the between groups comparison of Polish-English data sets regarding the number of events actually construed and coded (regardless of their salience level). The obtained results induced the author to accept the experimental hypothesis that indeed there were more events per sample on average in the Polish retellings of the story regardless of input type and in a statistically significant way. This effect was small for single clauses, small for coordinate sentences, but especially big for subordinate

and more complex structures. It was concluded (and this conclusion was further corroborated by a qualitative analysis of the data sets) that the users of Polishnative language were able to "pack" more events within a single sentential frame, in this way additionally ranking their cognitive prominence by such cognitive-syntactic operations as *reification*.

In general, chapter six demonstrated again how effortful construal and linguistic coding processes are regardless of whether one used his/her native or foreign language. In the process of recruiting conceptual content from memory and coding it in language both groups (PL-ENG) exhibited similarities but also differences discussed in the proper chapter.

What is this book not about? The author wishes to stress that this work does not propose didactic implications that could be drawn from the discussion of how language users, both native and non-native, construe and code events to form a narrative. Neither does it try to supplement the existing theories of second language acquisition. Its major contribution and different but related foci are placed on language processing, the theoretical perspective described by Hulstijn (2007: 197), but also represented for example by Cieślicka (2006). Moreover, it is the whole narrative, the discourse perspective that was the author's focus throughout the presentation of experimental studies in part two.

PART I

Theory: Construal, events, events in narrative

Chapter 1

Construal operations revisited and reconsidered

1.1. Construal views

The term that is central for the purposes of this work is *construal*. It is situated at the very heart of cognitive accounts of language and communication. It is also an umbrella term for other variables involved in the topic of this monograph. The proper understanding of its sources, senses and implications for language, in particular for linguistic coding of events, is required as the first step towards demonstrating their dynamism, subjectivity, multi-modality and scope.

In his introduction to Language and the Cognitive Construal of the World, Taylor (in Taylor and McLaury 1995) first mentions Austin (1979) and his hypothetical world in which there are some entities and their categories, such that each entity belongs to one category, and the syntax of this hypothetical language only allows sentences of the following format, Entity-10632 is a type of x-type. Such a world would not leave room for creativity. In the real world language users construe the intended conceptualization by sending verbal instructions in speech or writing. This view represents the position of conceptual semantics, which claims that categories are functions of our cognition and embodiment.

Subjectivist-conceptual semantics had its proponent in Jackendoff (1986: 487-488 in Taylor and McLaury 1995), who spoke of the so-called *projected world*. The term implies that the world reflected in language is not objectively portrayed, but gets interpreted by our cognition. Langacker shares the view, but defines *construal* for the first time in 1987/1991 as a relation between the *conceptualizer* and the *conceptualized*, a process that is partly reflected in already existing linguistic conventions that an individual is bound to use and partly controlled by a conceptualizer. The former situation can be exemplified by the choice of particular schemas, e.g. SVO—TRANSFER, as well as their particular elaborations, e.g. *It was nice to meet you, Can I have a coke*. In other words, Langacker (ibid.) argues for a more active role of the conceptualizer in the process of linguistically communicating the intended conceptualization.

Langacker's (1991) publication and work on *construal* is embedded in the chapter on *cognitive abilities*. Mind is viewed as consisting of a great number of

running processes in multiple domains of knowledge, and the imposition of structure on this flux runs according to the rule that the old experience is interpreted in terms of the new one.

Importantly, there is a difference between *conceptual structure* and *semantic structure*. The former is considered common to all people, and the latter is language specific. In other words, "semantic structure is conceptual structure shaped to the specifications of a particular language" (Langacker 1991). This idea is also convergent with what Slobin (1996) called *thinking for speaking*. A language user is relatively free to construe her/his intentions because her cognitive functioning, even if based on embodied experience, is largely autonomous. For example, having experienced elephants and birds, it is easy to imagine an elephant with some wings (cf. Coulson 2001, Fauconnier 1995 and 1997, Fauconnier and Sweetser 1996). One can also imagine different perspectives, vantage points relative to the ground, and the context against which the speaking and writing take place.

To introduce order in the various possibilities regarding *linguistic* construal of the world, Langacaker (1991) categorizes the phenomenon into three related processes with sub-categories:

- a) selection: of domain, scale and scope,
- b) perspective: figure/ground organization, viewpoint, subjectivity and objectivity,
- c) abstraction.

Selection involves the choice of a knowledge domain that a language unit brings to a special level of prominence. For example, the word, buy points to our conception and understanding of how things are in the world when it comes to commercial transactions in shops. By contrast, the word steal activates the domain of knowledge that represents human understanding that products and services must be paid for, and it is illegal to refrain from paying. More precisely, a given language unit in context (simple or complex) is said to invoke a matrix of knowledge domains, and it conventionally ranks the salience of their different aspects in conception. The second option listed under selection is the scale, which may be associated with a given lexical unit, e.g. close to the ground (regarding airplanes), close to expiry (a possible comment about a visa), or close to nothing (designating quantity). The first of these expressions activates the domain of physical distance as regards flying airplanes; the second expression's domain in which the expression gets instantiated is time, and the proper understanding of the third lexeme depends on the co-activation of the domain of quantity, and related domains of making a living, working and earning money as in, He works a lot but earns close to nothing. Last, the selection of scope is connected with the choice of the substructure of a predication (semantic pole of expression) that constitutes its immediate context. By way of example, the

immediate context for the semantic characterization of *finger* is *hand*; for *hand* it would be *arm*, and so on. In effect, chains of *domains* can be listed with subordinate substructures contained in the super-ordinate ones, as in, *letter>word>phrase>sentence>paragraph>chapter>book*. The selected scope for the instantiation of a predication is context dependent. The scope for the verb *employ* as in the sentence, *He employed a new waitress*, is different than in the sentence, *He employed statistics to obtain these results* (Cambridge Advanced Learner's Dictionary). The polysemy of the verb type *employ* rests on the observation that in the latter example *employ* "selects" the physical domain of people and their relations in a specific business-work environment, whereas the scope for the other sense of *employ* is an abstract scenario of using something to achieve a goal.

Perspective is the second category of construal. Its first manifestation is the distinction between the *figure* and *ground*. Both terms were first introduced in the Gestalt Psychology (Wertheimer 1923, Koffka 1935, Köhler 1929). The former term describes a stationary or moving entity that achieves the highest level of prominence in a described event. A sentence subject is typically associated with the *figure*, or else the *trajector*, whose relation can be described relative to the *secondary figure*, the *landmark* of a scene defined abstractly as the reference point entity. The following examples help illustrate the point (trajector marked in bold type).

- 1) **The cat** is chasing the mouse.
- 2) That it is hard to get to university did not surprise anybody.
- 3) the school of dancing
- 4) dog's tail

(adapted from Langacker 1991)

A language producer can pick up any entity or relation within a scene/event/ or whole narrative and bring it to a special level of cognitive prominence.

Next, *viewpoint* in Langacker (1987/1991) is understood as the vantage point or orientation assumed in space or in some other domain. For example, the sentence *Łódź* is south of *Plock* selects the viewpoint of a person who is in Plock, and who decides to speak about geographical relations with the use of absolute terms: *north*, south, east, west. By contrast, here in *It's cold here* said in a telephone conversation does not designate the same region as in the situation in which both speakers are next to each other. Linguistic expressions code canonical *viewpoint* arrangements. In *The lamp is over the table*, the prototypical viewing arrangement is the one in which the speaker is in the vicinity of the hearer. Moreover, regardless of the assumed body postures (vertical or horizontal), it is the vertical axis against which the positions of the lamp and table are described. Interestingly, linguistic units always underspecify the

intended conceptualizations. All the drawings presented below represent legitimate interpretations of the sentence *The table is under the lamp*. However, only one is symbolic of the canonical viewing arrangement.

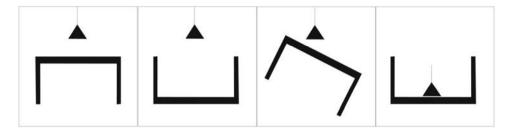


Fig. 1.1 Table under lamp

Under the term *perspective* Langacker (1991) also discusses *subjectivity* vs. *objectivity*. This tandem of concepts capture the understanding that any viewing arrangement involves the prominent participants and their interactions, relations as well as any ground entities (in the physical context or associated with them). One of such participants in any event is the speaker, who can receive direct mention as in *I saw the train*, *Can you pass me the salt?*, or it can be backgrounded when a language user avoids its direct, formal mention and linguistic symbolization, as in *Stand up*, *It's coming* (said to a friend at a busstop). In the former case the speaker, hearer or ground elements can be put in the on-stage or off-stage region, by analogy to a theatre performance, where the actors act in the beaming lights, whereas the audience sit in the dark.

The last facet of construal, *abstraction* refers to the level of granularity that is selected. Sometimes also called *schematicity*, it can describe a scene as if from a smaller distance or from a larger one, to use an analogy from vision. In the former case, the scope gets smaller, but there is more detail indeed; by contrast, from a greater distance the scope becomes larger, but the details get lost. The linguistic realizations of this general cognitive capacity are illustrated below with increasing levels of specificity.

- 5) I saw something doing something over somewhere. (in the dark, and it seemed)
- 6) I saw a dog digging a hole in the corner of the garden.
- 7) Yesterday at 5.00 a.m. sharp I spotted a rather large, brownish dog fiercely digging a deep hole in the wet sand of that bushy corner of our garden.

Schematicity also refers to variable levels of mentally representing knowledge, including linguistic knowledge. There are schematic constructions such as

¹ If no reference is provided in the title of a table or figure, the material (summary, data, graph, or other) is the author's.

SVOO—TRANSFER, and less schematic (partly filled) constructions, such as *If I were you*, *I would* + *VP*. In fact, it is not clear how many layers of schematicity one should propose and still be psychologically real. After all, maybe some of the especially abstract levels of representation are only present and real in the grammar books written by linguists (cf. Lieven and Tomasello 2008: 168-197).

The categorizations of *construal* phenomena discussed by Langacker (1991) and Langacker (2008) differ. The 2008 publication divides the phenomenon into: *specificity*, *perspective* and *prominence*. *Specificity* refers to the granularity and resolution of a conceptualization; the opposing concept is *schematicity*. The following two examples from Langacker (ibid., p. 56) below illustrate it:

- 8) rodent > rat > large brown rat > large brown rat with halitosis ...
- 9) hot > in the 90s > about 95 degrees > exactly 95.2 degrees

Both (8) and (9) refer to schematicity in slightly different ways. Whereas (8) illustrates successive levels of categorization of a nominal concept with a nominal *profile*, from schematic *rodent* through prototypical and basic-level *rat* to other more specific terms, (9) designates a relation with successively more accurate (precise) descriptions of a relational predication.

Next, prominence and focusing are argued to involve selection (previously a separate category) of conceptual content "for linguistic presentation" (p. 57) and placing it in the *foreground* or *background*. A lexical item by convention can activate a matrix of domains in a given context and ranks them as regards centrality. The central domains are foregrounded, and the peripheral ones get backgrounded (or gapped). A similar process is in operation in the case of more schematic and complex language units. Gestalt and cognitive psychology provide numerous discussions of this problem. Entities that are foregrounded are called the *primary figures*; they are often discussed with reference to the socalled secondary figures. Langacker (ibid.) aptly observes that any linguistic form in context induces elements of ground. With reference to metaphor, the entities in the source domain achieve greater levels of activation than the ones that belong to the target domain. The discussed distinctions are also real in narrative discourse, where static scenes serve the purpose of a background for dynamic events that appear one after another. In grammar, for instance, it is the Past Continuous tense that serves the back-grounding function relative to the event communicated in the Past Simple Tense as in The birds were singing and the Sun was shining when suddenly I heard a loud noise just behind our house. Foregrounding and backgrounding can also be achieved with proper phonetic maneuvering through language form. Anacrusis, acceleration, loudness, repetition or *intonation* are used to this effect. Foregrounding and backgrounding are also linked to the traditional distinction of information flow into the new and given

information. The new is foregrounded against what has been already said in discourse.

Still another aspect of foregrounding in the account of construal operations (Langacker (2008) is composition. Any complex expression with unit status consists of a certain number of sub-routines, e.g. lipstick maker (Langacker 2008: 60) can be analyzed into (lip+stick)+(make+er), but neither the profile of *stick* or *lip* is salient in the composite expression. It is the nominal and schematic profile of -er (its e-site) elaborated by make that is inherited by the composite expression *lipstick maker* (a kind of maker, not a kind of lip, or stick, or lipstic, or make). The whole is not a value that arises from the overlapping senses of contributory elements. It is often unpredictable, too. So also analyzability is a variable quality; it depends on whether an expression is newly created or old for a speaker. In everyday discourse language users have a choice of delivering a complex unit as one whole, without pausing or as chunked into smaller phrases. For example, Where have you been is different than Where / have you / been delivered in a different intonation unit each. One more example that Langacker (ibid.) provides here is the difference between pork and pig's meat that in objectivist terms renders no difference in meaning, but which involves alternative compositional paths and evokes different affective responses.

The last category listed under *focusing* is *scope*, used by analogy to vision. An entity can be presented with *maximal* or *immediate* scope. In the case of a lexeme like *elbow* (Langacker ibid., p. 63), the immediate scope (context) for its definition is arm, and the maximal scope is the concept of human body. In the case of an event e.g. *He passed the ball to Ronaldo*, the immediate scope is limited to a portion of the configuration of football players on the pitch, and the moment of passing the ball. The maximal scope would probably be the whole match, the understanding of its duration and length, the stadium, football fans present, cheering and football rules.

The categories which appear in the section on *prominence* are: *profiling* and *trajector/landmark alignment*. The first of them evokes the concept of *base* (a context, or immediate scope) against which the designatum of an expression becomes salient. For example, the word-type *uncle* profiles a schematic conception of a person related to other members of a family in certain ways. Some portion of the family network and relations constitutes the base for the definition of *uncle* as is evident even from its entry in the Collins Cobuild Advanced Dictionary – *someone's uncle is the brother of their mother or father* (p. 1997). Within a given matrix of activated knowledge domains, only a very limited portion is designated and most salient. That is why it is important to choose the right word and construction in the right context. The smallest change in form, cognitive linguists argue, results in some change of meaning. The salient property of *events* is their *temporal profile*, which, however, depends on the presence of the participants and the background.

As for the second option in this sub-category (trajector/landmark distinction), the term *trajector* is usually coded as the subject of an English clause and from the cognitive-psychological standpoint it refers to the most prominent figure of a conceptualization. It is the entity that is salient for different reasons, such as: colour, temperature, emotion, discourse goal, intention, brightness, movement, humanness, animacy and some other (cf. Levelt 1989). By contrast, *landmark's* most abstract characterisation is that it is a *reference point* entity with regard to its *trajector*. Among other grammatical phenomena, the contrast explains well the difference between active and passive sentences, or subordination. In *John made the table*, it is *John* that is the trajector defined by making of the *table* (landmark), reversed in the passive counterpart of the example. In (10a) below it is the first event that serves the function of the trajector, and in (10b) the second event is construed in the trajector role.

- 10) a) The other guests all left before we arrived.
 - b) We arrived after the other guests (had) all left. (Langacker 2008: 72)

Perspective is the last aspect of linguistic construal dealt with in Langacker (2008). It is also the one that is most similar to the category discussed earlier in Foundations of Cognitive Grammar (1991: Vol. 1 and 2). Here, though, it contains such sub-categories as *viewing arrangement* with multiple complications, for example involving *subjectivity/objectivity*, earlier an independent subcategory. The next subcategory of perspective listed in the 2008 book by Langacker is time or the temporal dimension, to be precise, and the well known distinctions made earlier, the so-called *summary* and *sequential* scanning operations active in visual and other modalities. Time has been divided into the so-called real, online processing time and conceived time. The first category describes time as it is ticking away and in which discourse unfolds. The second category of the temporal dimension, conceived time is the time as we think and talk about events. Language use provides indirect clues of human ability to compress it. In simulation semantics studies of Bergen (2012) and his associates it turned out that processing time is correlated with conceived time. It takes more processing time to mentally rotate an object three times than only once. The category of time figures prominently in the conception and communication of events.

Langacker's (1991, 2008) is not the only voice in the discussion of *construal*. Another important linguist and psychologist, whose work deserves great consideration is Talmy (2000). In fact, the two volumes of the *Toward a Cognitive Semantics* develop various themes such as: fictive motion, windowing of attention in language, figure-ground organization, events, force dynamics, semantics of causation, lexicalization patterns, event integration, semantic

conflict resolution or communicative goals and means. The basic idea voiced at the beginning to this work is that language should be regarded as consisting of grammar and lexis. Lexical items are what provides content (cf. Bergen and Chang 2005, Bergen and Wheeler 2006, also Bergen 2012), whereas grammar has a structuring role in the sense that it provides different coherences to the same elements of content signalled by lexis. Moreover, the distinction between grammar and lexis rests on the contention that the former contains the so-called closed class and the latter open class elements of language. This distinction, claims Talmy (2000: Vol. 1: 22), is made without reference to meaning, that is formally "in terms of the traditional linguistic distinction between open class and closed class language units". The closed-class forms, termed grammatical are overt type (bound and free morphemes), abstract (noun, verb or adjective categories), intonation patterns, sentence stress, syntactic structures, complement structures (Talmy, ibid., p. 23). Generally, it is the closed-class (the grammatical system in Talmy's terminology) that he analyzes and the semantic effects that it brings about in constructing an event.

Moreover, two "categories of grammatically specified notions" (p. 40) are schematic systems and schematic structures, both critical for the effected meaning. The schematic systems, claimed further to be largely independent of each other, are: configurational structure, perspective, attention, force dynamics with causation or cognitive state. Not limited to language, they can be thought of as general cognitive mechanisms that interact with grammar and its specifications. By contrast, the schematic categories are domains and can be thought of as knowledge systems of how things are in the world. The basic domains (principal domains in Talmy, ibid., p. 42) are the domains of time and space with cross mappings and analogies between them. For example, events typically possess a temporal profile and are instantiated in the domain of time (among other active domains ranked for the level of activation), but they can be reconstrued and thought of as if they were objects in the process called reification. Such a construal is exemplified by John gave me a call instead of John called me. In sum, Talmy (2000) builds his conceptual semantics by skilfully pointing at how language form divided into closed and open classes is used to code specific conceptualizations.

Open-class units outnumber the closed-class ones, but there is a qualitative difference too. Whereas lexis is precise as regards such concepts as material, colour and size, the closed-class grammatical units are topological, that is they deal with concepts of: time, space, boundary, closure, connectedness, and the like. In Talmy (ibid.) the topic of the linguistic construal of experience in language is to an important extent centred around the issue of *event* as well. The following presentation of terminology finishes the brief presentation of Talmy's (2000) work on *construal*:

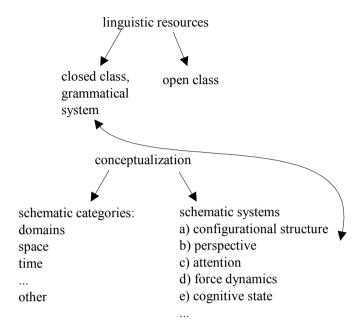


Fig. 2. Talmy's (2000) linguistic and conceptual distinctions relevant for linguistic construal

Quite a number of terms that are used in Langacker's works also appear here. These are: perspective, vantage point, bounding (in objects, matter and events), basic domains, plexity, extension, scene, windowing of attention, level of particularity (specificity in Langacker). They are understood in similar ways. The new elements include *attention* mentioned explicitly and treated as an aspect of construal, and the already discussed dichotomy between closed and open class linguistic elements.

In a more recent work, Talmy (2007) reminds us that *attention* has levels, centre/periphery, scope, network, and that it is used to frame experience. Without any deeper consideration of these features, the most important role of *attention* in linguistic communication correlates with building *salience* or *prominence*. The question that motivates his *Attention Phenomena* in language is *How and what language forms promote greater cognitive salience?* Ten categories were found with subcategories of linguistic factors that are employed together for a cumulative effect in context. This work is an important step towards systematizing relations between attention and linguistic coding (with open or closed class elements) for achieving particular prominence effects. Talmy's earlier work on the so-called *imaging systems* (Talmy 1977, 1978, 1988) includes the following classification that is in agreement with Talmy (2000) discussed above:

- a) structural schematization,
- b) deployment of perspective,
- c) distribution of attention,
- d) force dynamics.

Another important work on *construal* was presented by Croft and Cruse (2004: 6), quoted directly below:

I. Attention/Salience

A. Selection

- 1. Profiling
- 2. Metonymy

B. Scope (Dominion)

- 1. Scope of predication
- 2. Search domains
- 3. Accessibility

C. Scalar Adjustment

- 1. Quantitative (Abstraction)
- 2. Qualitative (Schematization)

D. Dynamic

- 1. Fictive Motion
- 2. Summary/Sequential Scanning

II. Judgement/Comparison (including identity image schemas)

- A. Categorization (Framing)
- B. Metaphor
- C. Figure/Ground

III. Perspective/Situatedness

- 1. Vantage Point
- 2. Orientation

B. Deixis

- 1. Spatiotemporal (including spatial image schemas)
- 2. Epistemic (Common Ground)
- 3. Empathy

C. Subjectivity/Objectivity

IV. Constitution/Gestalt (including most other image schemas)

A. Structural Schematization

- 1. Individuation (Boundedness, Unity/Multiplicity, etc.)
- 2. Topological/Geometric Schematization (Container, etc.)
- 3. Scale

B. Force Dynamics

C. Relationality (Entity/Interconnection)

The goal of such a classification, claim Cruse and Croft (2006: 3), is:

... to demonstrate the close relationship between construal operations proposed by linguists and psychological processes proposed by cognitive psychologists and

phenomenologists. If linguistic construal operations are truly cognitive, then they should be related to, or identical with, general cognitive processes that are postulated by psychologists. In fact, most if not all of these construal operations are special cases of general cognitive processes described in psychology and phenomenology. This view follows from the basic hypothesis of cognitive linguistics that language is an instance of general cognitive abilities.

Although the general meaning of this motto is hard to disagree with if one indeed wants cognitive linguistics research to converge with findings in cognitive psychology, the list of the so called general cognitive processes of: attention, comparison, perspective and gestalt seem somehow arbitrary. Necka et al. (2006) have two different chapters devoted to cognitive representations and *cognitive processes*. The list of processes includes: *attention/consciousness*, control, perception, memory, thinking and reasoning (various types), and problem solving. The only category on Croft and Cruse's (2004) list that can also be found in the quoted handbook list is attention, in fact. Similarly, in Levitin (2002) one can find chapters on categorization (under judgment and comparison in Croft and Cruse (ibid.), memory, attention, and decision making. As is easy to see, there is not much convergence with the categories found in Langacker, Talmy or Croft and Cruse. It is also quite disappointing that the only reference to previous research within cognitive psychology is to Chafe (1994), who is a cognitive linguist, rather than a cognitive psychologist as he is classed by Croft and Cruse (2004):

The process of attention is a well-known basic phenomenon in **cognitive psychology** [emphasis mine]. Attention appears to be the closest to what Chafe (1994: 26-30) calls the focus of consciousness. Attention comes in degrees and is usually modelled in terms of degree of activation of conceptual structures in a neural network model of mind ...

Nevertheless, the positive feature of this categorization is that it tries to be more comprehensive than Langacker's or Talmy's. Still, the descriptive categories selected for relevance in the topic of linguistic construal of meaning are not only arbitrary, but they form a collection of terms both from the field of cognitive linguistics, and psychology. Their application sometimes reflects one's commitment to look at the effected conceptualisation, e.g. *fictive motion*, the position of the observer relative to the effected conceptualization, e.g. *perspective*, or the coding situation, e.g. *categorisation*, *selection*, or even primarily (albeit not solely) the actual language form that is used, e.g. *metaphor*, *metonymy*. In sum, there seems to be no guiding principle that would introduce more order into these different categorizations. The table below summarises the above discussion.

Langacker (1987)	Langacker (2008)	Talmy (2000 and earlier)	Croft and Cruse (2004)
Selection	Prominence	Schematization	Attention
Perspective	Perspective	Perspective	Judgment/Comparison
Abstraction	Specificity	Attention	Perspective
		Force dynamics	Constitution/Gestalt
			Force dynamics

Table 1. Comparison of categories of construal operations

There are a few observations based on the comparison of the broad categories. First, nearly every category of sub-category discussed by one linguist is also present in the other one's categorization, with some differences of course. Second, perspective that a speaker takes and communicates in language form is present in each author's work, and so is some aspect of abstraction. Third, and most importantly for this work, attention, or the result of its operation, salience, is very important. In this work salience is treated not only as a feature of a sign as it is used in the context of other signs, but primarily as a feature of a conceptualization. The two possibilities co-exist harmoniously. Cognitive Grammar (cf. Langacker 1991, 2008) posits two poles of a language unit: conceptual and phonetic (segmental). In further sections the author discusses two distinct traditions regarding the format of a conceptualisation, either abstract symbolic, or analog and modal. It is the latter (modal, analogic) mental simulations and situation models, or conceptualizations of an event that this author will use as a theoretical background to discuss how events are selected and their aspects configured for the construal of the whole narrative.

Not included in this discussion, but in agreement with most *construal* views presented so far is the contention that *construal* (in this work treated as a conceptual, not necessarily linguistic phenomenon) can be *metaphorical*, as it involves the activation of two domains of knowledge, one source and the other target. Surely, any conceptual representation, a simulation of an event with various perceptual details present to variable degrees can be coded in language. An entity from the source domain gets selected to communicate something about the target domain. Hence, we can talk about LOVE in terms of JOURNEY, as in *They have drifted apart from each other*, or TIME is MONEY, as in *We are wasting our time. Construal* can also be *idiomatic*, see below:

11) The old sailors who talk to us about the sea must be **drawing the longbow** sometimes because their stories are so amazing.

lit. 'must be exaggerating'

In sum, there are many classifications of *construal* operations with overlapping categories. The term is frequently used in such phrases as: *linguistic construal*, *metaphorical construal*, *metonymic construal*, *cognitive construal*, *children's construal*, *cultural construal*, and *grammatical construal*. It is a question of how people code their conceptualizations with language.

1.2. Reconsidering construal

Having inspected just some literature on *construal*, one may wonder what else in the general sense can be added. In the task of 'reconstructing' the approach to *construal*, two issues need to be revisited: mental representations and processes. First, mental representations underlying cognition, and in particular language use, can be considered the material for mental processes.

But what is *representation*? According to Reber (2000: 623 in Necka et all. 2006: 61) it should be regarded as something that stands for something else and symbolizes it. Psychological positions in this regard are divided into those that favour amodal, *propositional representations* (Pylyshyn 1973), Anderson and Bower (1973), *modal representations* (Kossylyn 1975, 1981, 1983), Neisser (1976), Maruszewski (1996), Barsalou (1999), Bergen (2012), or *mixed representations* – both modal and amodal, depending on the goals and context. This last position would be representative of Johnson-Laird's (1983) theory of *mental models* theory of representation.

There is vast psychological and linguistic literature concerning this issue. The theoretical position regarding mental and linguistic representations that is foundational for the purposes of this monograph and which I find revealing is the so-called perceptual symbol systems presented and discussed by Barsalou (1999, 2008, 2009), Zwaan (1999), Penfield (1958), Stanfield and Zwaan (2001), Zwaan, Stanfield and Yaxley (2002), Gallese et al. (1996) and many others. This psychological literature has its linguistic equivalent evidenced by Bergen and Wheeler (2006), Zwaan et al. (2002), Stanfield and Zwaan (2001), Bergen et al. (2007), Glenberg and Kashak (2002), Tettamanti et al. (2005), Buccino et al. (2001), Taylor and Zwaan (2008), to mention only a few studies. The general argument is that the same brain regions activated in vision, audition, olfaction, touch, motor action, but also introspection provide natural neural grounding for knowledge structures. The proponents of the perceptual theory of knowledge representation provide experimental (behavioural, fMRI and other) evidence that features of original perceptual² experience are creatively reactivated with the help of selective attention to form multiple possibilities in

² Perception is endogenous or exogenous, directed outwards or introspective.

language and cognition. This creativity is a frequent topic of linguistic analyses, e.g. blending theory or metaphor theory. The critical aspect of the perceptual symbol systems is that they distribute traits of the original, gestalt, perceptual experience to their respective brain locations. Such features are attentionaly extracted because they are also cognitively salient. Their special salience, in turn, arises due to contrasting physical attributes, e.g. loudness, brightness, humaness, animacy, or particular pragmatic features, and extra-linguistic goals (cf. Levelt 1989). For example, Labov (2001) studied spoken narratives in which suspects of crimes retold their versions of an incident. Their construals were shown to foreground others' actions, and background their own role in the causality of events. Everyday language is full of examples in which one wants to foreground the effect, not the agent as in the Polish Szklanka się zbiła 'lit. A glass REFLEXIVE PRON-broke', or English Can I have a coke? The first example testifies to our ability to gap causality by backgrounding the agent; the other example concerns our ability to put event participants in the on-stage or off-stage region. Attention, however, is not only exogenous; it is also a crucial mechanism in selecting features in a conceptualization. In sum, the perceptual symbol systems are a representation format that together with the processes of attention are capable of inducing particular conceptualizations and semantic structures in the construal of events. They are the neural machinery that this work has no goal to discuss in detail, but they provide a natural format for hypotheses about *linguistic construal* operations used in communication about events

1.2.1. The Role of Attention in Construal³

The previous parts of this chapter sketched different categorizations of construal operations. Reading the appropriate source literature on this topic, one frequently encounters the term *attention* and a related one – *salience*. In fact, as the table on page 27 demonstrates (see above), sometimes attention is considered a separate category of construal. The present volume suggests that instead of treating it as a separate category, it would be better to treat it as the most superordinate mental process in the study of construal for the following two reasons. First, such an approach promotes a more general goal within cognitive linguistics of doing research in agreement with the so-called *convergence thesis*, according to which contributory sciences of *human cognition* should care for reaching the same conclusions, albeit by taking different routes. For example, if cognitive psychologists spoke of *primary figure | secondary figure* distinction, it

³ This presentation does not consider theories of attention, its definitions, problems and implications. This topic is discussed later in section 1.3.

was natural to hypothesize that language should reflect it. Indeed, as Langacker (1991, 2008) and others have demonstrated, the figure is mapped onto the subject of a sentence, whereas the secondary figure is coded as its object. The variable degrees of salience of event participants correspond to their variable coding options in syntax. Optional, more peripheral (in attentional terms) participants of a scene, or event might be coded as adverbials, e.g. Peter (primary figure – obligatory) went (process – obligatory) for a walk (complement - obligatory) to the park (adverbial - optional) on Sunday (adverbial – optional). Second, the author argues that any decision concerning the configuration of a linguistic form (either in speech or in writing) is coupled by, or even motivated by (albeit sometimes indirectly perhaps) by adjusting the appropriate levels of salience of entities in conception. This, in turn, helps achieve pragmatic goals. For example, if a speaker's goal is to be polite (cf. Leech 1983), one will foreground other's achievements or performance than her/his own, as in A: You danced very well, B: Yes, but it wouldn't have been possible without my partner. In other words, the selection of a language form in linguistic communication is motivated by external, pragmatic goals, which causes us to direct our attention in specific ways (in agreement with expectations, discourse clues, etc.), which, in turn, results in the appropriate configuration of the phonetic, morphological, lexical and syntactic aspects of verbal instructions. What naturally follows from this discussion is that attention is not just a sub-category of construal, but that it is a set of cognitive processes. It can be considered in process terms because when one deals with mental imagery in acts of mental simulations, it is dynamic, allowing us to shift focus from one participant to another, enlarge scope, or narrow it; we can assume alternative, imagined vantage points, and perspectives. Viewing it as a product allows a linguist to freeze the specific configuration of the linguistic pole, the semantic pole and their correspondences for detailed analysis. A dynamic event can receive a static-analytic construal.

As the uppermost node in construal operations, attention helps effect a particular conceptualization.⁴ Hence, it will be fruitful to list the functions and features of attention in order to compare them to the categories proposed in construal research so far. (Again, the more detailed treatment of attention, its

⁴ Conceptualization is understood here to be a situation model of an event, or its mental simulation; it is modal and analogue, not abstract symbolic. The reader will find more information on how situation models are built, and that they are also similar in nature to mental simulations. A conception of an event is associated with its construal; it is never modality neutral, and its variable entities are (sometimes automatically) ranked for cognitive salience. A more or less complex language unit can code such a conception, and its different parts are used to instruct about the details of the conceptualization. Hence, the author stresses the importance of understanding salience to be a property of both conceptualizations and linguistic units with specific features.

theories and implications comes in part 1.3 below). Attention can be of different kinds:

- a) voluntary/involuntary,
- b) focused/unfocused,
- c) selective/divided,
- d) reactive (exogenous)/ cognitive (endogenous).

The first category refers to the question of whether cognitive processing is performed deliberately or anyway due to the special salience of certain elements in introspection or physical experience. Muller and Rabbit (1989) demonstrate this by designing an experiment in which a subject is asked to concentrate on a moving arrow on the monitor screen, while at the same time on the periphery of the screen very bright little squares appear for only a few milliseconds. Despite the instruction to concentrate on the arrow, subjects did report having observed the squares as well. This ability means that in an act of physical perception people divide a visual scene into the focused and unfocused regions. The ignored regions are still processed, albeit peripherally, which can be interpreted as saying that salience within a physically perceived event or scene is also a gradient property.

The linguistic renditions of this effect are well known. As spoken discourse unfolds, the entities that are further away from the current window of attention (frame) are less focal, more difficult to recover from memory. Chafe (1994) showed that they can be in focus (central, and most salient), peripheral (but accessible), and peripheral (but inaccessible). The focused entities are the ones that a speaker is now instructing about in the current intonation unit. The ones that have already been verbalized are not forgotten, but stored with gradable salience relative to their importance and the temporal distance from the current frame. On occasion, a speaker might speculate that a given element has to be re-entered into the unfolding conceptualization with the use of a full nominal, instead of a deictic form such as a pronoun, or a definite article instead of the indefinite one.

But even within a single intonation unit that a speaker is verbalizing, different entities that belong in the same event are either foregrounded or gapped. Obviously, a host of lexical and grammatical strategies serve this purpose. For example, explicit mention (that is, explicit linguistic coding) raises the level of salience, and so does the use of the full nominal *my friend Pete* instead of the pronoun *he*. The choice between a coding in which a speaker uses a free morpheme, instead of a bound one, also raises the level of salience of the specific entity, as in *when he arrived, he met his friend Alex*, instead of *On his arrival he met his friend Alex* (both examples adapted from Talmy 2007). In a similar vein, the distinction in point (c) (previous page) between the selective

and divided kinds of attention is translated to the gradable level of entity salience as expressed in language. In saying *My uncle has sold his car for 860 dollars* a speaker has to activate a matrix of knowledge domains (cf. Langacker 1991), such as FAMILY, TRANSPORT, BUYING AND SELLING CONTRACTS, OWNERSHIP and a host of others. The entities belonging to these domains (very often one can speak of multiple affiliations of an entity to numerous domains at the same time) are ranked according to their salience in a conceptualization. In the example below the salient entities (things: objects and people, and relations: processes and attributes) are:

UNCLE, CAR, DOLLARS, SELL
AGENCY, TRANSFER
SUBJECT + VERB + OBJECT FOR QUANTIFIER
NOUN EMOTION (RELIEF)
CAUSES OF SAYING THE SENTENCE
NEWSPAPER AD, CLIENT, VISIT

expressed lexically expressed by the schema:

no direct ling. coding no direct coding accessible from semi-active domains, without direct linguistic coding

Even this very limited analysis points to the gradability of attention effects and effected salience within a conceptualization. Moreover, verbal instructions are accompanied by gestures, gaze, and other paralinguistic elements in communication. Last, point (d) says attention is reactive – directed outwards or cognitive – directed to knowledge structures, memories and mental images in a constructive way. People seldom have any reason in verbally commenting on what is otherwise accessible to everybody's senses, but the ability to schematize over almost limitless perceptual experiences is crucial for later linguistic functioning. Most linguistic communication involves topics removed from the here and now; speakers prefer to deal linguistically with the metaphorical, imagined, subjective, construed, past and future, hence potential.

Attention has the following features: scope, intensity, dividedness and changing focus, which relate both to endogenous and exogenous types of attention. Its scope is a correlate of schematicity/specificity distinction in cognitive grammar. Also, intensity describes the so-called level of granularity with which a speaker decides to construe a scene. The two features work against each other. That is, with enlarging scope, the intensity of processing of individual entities becomes smaller, and by contrast, if we narrow the scope to a smaller area (to use an analogy from vision), we can be more specific and process details more intensely. In the case of the larger scope, attention has to be more or less equally divided among the entities that are within it. The changing focus is important in order to properly deliver (language production point of

view) and understand (language comprehension point of view) the content of the successive intonation units, or sentences that appear in discourse one after another. The selectivity of attention is capable of accounting for figure/ground alignment, choice of trajector and landmark, scope, point of view, subjectvity/objectivity. In sum, the author puts forward a proposition that attention processes be understood as the basic mental set of mechanisms that speakers use in order to build cognitive salience translatable directly or indirectly into specific pragmatic goals. Moreover, where applicable and possible, these processes make use of the modal, analogical, and feature extracting, representational format of PSS's described by Barsalou (1999) and others (see above) that is amenable to innumerable configurations in acts of mental construal that language can reflect and instruct about.

Moreover, the model of linguistic construal in cognitive grammar should make it clear whether one talks of the so-called phonological pole (Langacker's term 1991), or the semantic pole of a linguistic unit. The formal, *phonological pole* involves the choice of words, constructions, intonations, phonations, but also gestures and facial expressions in order to instruct, whereas the *semantic pole* is a conceptualization tailored to the specifications of a particular language, the idea taken from Slobin (1996), and his thinking-for-speaking hypothesis.

In discussing construal operations and the workings of attention in language (Talmy 2007), it should be clear which pole is under scrutiny: the formal (verbal), the semantic one, or both. This requirement is motivated by the author's observations of various phrases that one can come across in literature on the topic: cognitive construal, linguistic construal, metaphorical construal, metaphorical construal, idiomatic construal, formal construal, construal of ... in (e.g. literature, linguistics, conversation), construing the world, cognitive construal of the world, but also some other from the BNC: construal of trust, construal of favourable terms, construal of the context, child's construal of adults' words, construal of time, parallel construals of an original painting, liberal construal of Rousseau. At least a few related senses of construal can be extracted:

- a) final conceptualization,
- b) process of conceptualizing (or thinkning),
- c) configuring linguistic forms in specific ways that grammar allows,
- d) talking about one thing in terms of another (metaphor),
- e) talking about one entity in terms another entity withing the same domain,
- f) using language forms in a way that is considered formal, or informal,
- g) subjectivity (e.g. construal of context),
- h) understanding (e.g. construal of a painting).

These examples incline us to speak of the two more general senses of this term:

- a) construal as a process of:
 - selecting language forms for speaking,
 - selecting material for a conceptualization for speaking or building a conceptualization in language comprehension incrementally,
- b) construal as an object, effect of:
 - using language forms,
 - specific conceptualization configured for speaking or effected in language comprehension.

The above distinctions refer to thinking of language as product or as process. Despite the fact that the term *language* is a noun, it is fruitful and insightful to think of languaging instead, i.e. as a number of related processes used in verbal communication. In this vein, Bergen (2012) and his associates reformulate the typical question that semanticists ask, What is meaning? Instead, in a version of the so-called Embodied Construction Grammar (cf. Bergen and Chang 2005), they ask, What do people do when they understand linguistic messages? The answer is that they mentally enact, or simulate, or construct current situation models of verbal instructions in comprehension. However, Bergen (2012) does not subscribe to an all-or-nothing view of the representational format that language comprehension uses. Some examples of language use might perhaps do without mental simulation, as when a verbal warning, Duck! is said, on hearing which a person just bends his/her head in order not to hit it against a low door frame instead of performing mental imagery; a clearer example is the use of language in its interactive function as in Hello, Hi. Nevertheless, mental simulations accompanying linguistic production and comprehension have been shown to be part and parcel of meaning construal. The role of attention in it is key, as I have been trying to show. If so, the re-parcelling of construal operations can be graphically presented in the following way (see Fig. 3).

The innermost circle represents the central processes of attentional selection, focusing and related processes of salience building. The middle circle denotes the effected conceptual parameters, whereas the set of concepts in the outer ring is a list of various formal devices that a speaker can use selectively to communicate in language. In this graphical presentation, however, I am not claiming to have exhausted whatever is relevant to conceptualization, and nor do I insist on the rigidity and a specific number or quality of the used terminology. Moreover, a reader is reminded that numerous correspondences and a myriad

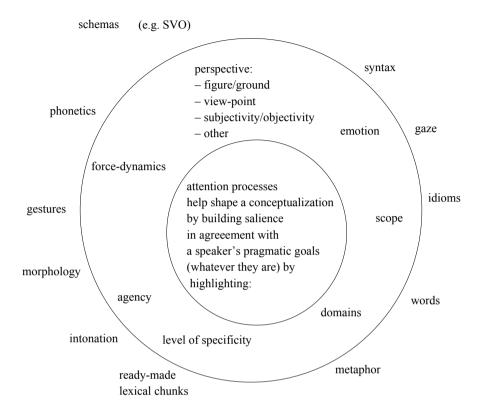


Fig. 3. Attention, aspects of conceptualization and repertoire of linguistic-formal devices to communicate them

of interdependencies exist between them on any level. The most important motivation for organizing the discussion of construal in this way has been:

- a) The contention that attention is not only a superordinate aspect of construal, but its central cognitive mechanism.
- b) That aspects of a conceptualization and linguistic form should be disentangled in the theory of construal as much as possible, while remembering at the same time that their proper understanding can only be reached when they unite (as indeed they do) in natural contexts of language use.

The goal that I have in presenting this monograph, however, is limited to the proper characterization of the above operations in communicating about events for a narrative. The definitions, categorizations and ways of delimiting as well as implementation in a foreign language narrative are dealt with in the sections to follow.

1.3. More on salience and attention

The previous section promoted the important role of attentional operations in construal, including construal as it is done in EFL. They lead to augmented salience of selected entities in a conceptualization, which in turn induces specific language coding. This work, however, does not have a goal of persuading the reader that any single theory or model of attention should be accepted for the purposes of linguistic coding for salience, nor will it try to build one.

Still, because explaining linguistic construction of salience for a narrative as effected in a foreign language is my goal, I feel committed to the task of presenting the major options as regards the understanding of the very concept of *attention* – even if a little repetitively – its various operations, models, as well as connections with *salience* building in language (i.e. with the use of sending and receiving linguistic / verbal instructions). Also, the question of possible connections between the concept of *attention* and *consciousness* must be discussed, eventually. These and other questions regarding the attention-salience issue and linguistic construal are presented below:

- a) What major psychological and philosophical models and theories are there that deal with *attention*, and how do they interact with proposals in this respect on the grounds of cognitive linguistics research?
- b) What are the relations between salience, conceptualization, linguistic coding and context in a foreign language?

I will deal with the above questions in turn. Some of the issues discussed below may have already been dealt with in passing, though here they will receive a fuller treatment

1.3.1. Philosophy and psychology on attention

The concept and the term *attention* have a long history both in philosophy and in psychology. According to Mole (2013, first published 2009), due to its fuzziness alone and difficulties with defining, attention "makes ... a topic in its own right".

Starting from the early modern period in philosophy, Descartes claimed that *attention* has a special role in epistemology. Namely, ideas become clear in our mind only when we pay attention to them, so this quality of mind has a mediatory role to play, allowing a "move from radical doubt to certainty". Berkley, in *Principles of Human Knowledge* (in: Mole, ibid.), rejects Descartes *abstract ideas*, but retains his dedication to the assertion that thinking involves dealing with *ideas* whose sources are in experience. The idea that abstraction

and attention must be linked was later taken up by William Hamilton (1987: 88, in: Mole, ibid.), according to whom the terms are two sides of the same coin. Another, though still brief account of attention is provided by the philosopher John Locke, who argues that attention is one of many so-called *modes of thinking* including intention, remembrance, recollection, or ecstasy, the implication being that we do not need a special theory of attention once a theory of thinking is in place. The eighteenth century, however, witnessed a new turn in this regard. On the one hand, there were views according to which attention is "that state of mind which prepares one to receive impressions" (Henry Home Kames 1769: 18 in Mole, ibid.), and on the other hand, attention as behaviour guiding mechanism. According to this source (Mole ibid., SEP), already in the 18th century attention is understood to be important and relevant to perception, memory and action. By the end of the 19th century it is claimed to have various meanings and roles to play, namely in:

- a) reception of sensory input (E. B. Titchner 1908, 1910 in SEP),
- b) action (Alexander Bain 1888),
- c) reflective thought (G.B. Stout 1891).

In conclusion, a state of complete chaos caused by lack of agreement and accepted methodology reigned supreme. The attempt at remedying the situation was made by William James in his famous book *The Principles of Psychology* (1890), who directed his interest at attention as a mental ability necessary in producing behaviour with two components:

- a) adjustment of sensory organs: looking in the right direction, adjusting foci of sensory organs, adjusting your "ears",
- b) conceptual preparation regarding the attended object (p. 411 in SEP): imagination, schemas, expectations, etc.

Following James (1890), Bradley (1886 and 1902 in Mole 2013) became closer to the Lockean view that there is not just one attention, but that the term describes 'modes of thinking', that "there is no single act of attention", and that attention refers to the 'how' of mental functioning, not the 'what'. So any mental function will require something we call attention. At the beginning of the 20th century the dominant tactic in explaining the term was behaviouristic, with almost total ignorance of the issue in question, which then gave way to cognitive psychology in the nineteen fifties.

Donald Broadbent's publication of *Perception and communication* happened in the era of developing telephone systems (Mole ibid.) and Broadbent became interested in what he called capacity limitations that engineers, but also psychologists and linguists should find relevant in studying attention in

language. The following theories, mainly psychological were developed in the twentieth century:

- a) Capacity Limitation Theories,
- b) Feature Integration Theories,
- c) Coherence Theories and Competition Theories,
- d) Spotlight Theories,
- e) Motor Theories (SAE).

Certainly, an exhaustive lecture on the details of these theories is far beyond the scope and goal of the work that is linguistic, and seeks to answer questions about constructing salience in narrative events in a foreign language. Nevertheless, a summary of views is important as the term *salience* to my understanding requires it.⁵

First, there are the so-called capacity limitation theories that come in two versions, which vary with respect to where the capacity limitation is effected in the human processing system. One of them claims that it is implemented early (Broadbent see above). This means that physical stimuli in the environment are processed without or on a low level of our awareness without attention, but when it is turned on, the semantic features of the beam of stimuli can reach awareness. One is aware of a conversation that is taking place at a nearby table, but we do not know what the conversation is about before we start attending to the semantics of the input. The rivals of Broadbent's early selection model claim that once perceptual features pass through the bottleneck, attention is the quality of mind whose task is projecting the relevant items of this early input to the system of working memory for more processing. Moreover, it was claimed that without attention, input is still processed albeit without conscious awareness, but with some semantic features being encoded (cf. Tripper and Driver 1988). This is now uncontroversial according to Mole (ibid.). There are different versions of the early and late selection models still agreeing that the capacity limitation exists, but that it is movable and operating as required by the system and context (cf. Johnston and McCann 2006 in SEP). The early-late dichotomy is at present considered problematic as the terms have no clear enough definitions, and that processing has been shown to be parallel, not serial. As a matter of fact, it is also said to depend on the task itself. The problems inherent in the early-late processing debate are attributable to the assumption that the workings of a human brain can be analogized to a certain engineering system. Instead, we now

⁵ In fact, many cognitive linguistic, but also pragmatic studies and monographs on *salience*, and *attention* never even try to take the trouble to answer the difficult question, which of the numerous definitions of attention will be base, and how salience will be understood, let alone measured. Hardly does any single cognitive linguist take the trouble to provide empirical criteria of salience or attention.

know that "the brain represents the physical properties of stimuli in multiple, parallel, somewhat overlapping systems, only some of which put the subject in a position to think about the properties that they represent" (SEP: 16, DOA 2011-01-23). This proposal sounds strikingly similar to the theory advocated by Barsalou (1999) of the *perceptual symbol systems*, whose constitution begins in attentional analysis, decomposition, analogical and modal storage that give rise to numerous, top-down creative simulations, similar in kind to the ones shown in the theory of mental spaces and blending as discussed by Coulson (2001), or Fauconnier (1997).

Feature integration theories were proposed by Treisman and Gelade (1980), and Treisman (2003: 97). They were meant to solve the problem the author called the *binding problem*, i.e. how the human brain combines numerous stimuli from physical perceptions into objects. One answer Treisman (ibid.) provides is that this is due to the operations of an attention window⁶ that we impose on a selected fragment of a special configuration. For example, given the scene of a kitchen with a red tomato and yellow banana in different locations, we place the window on only one of them; this mechanism of attentional selection achieves what Treisman called *binding* multiple sensations into objects. Some philosophers, however, think that the binding problem is artificial as perception of physical stimuli can do without cognition (e.g. cf. Pylyshyn 1973).

Still another group of theories of attention are called *coherence theories*. Represented by Neisser (1967, 1976) the theories claim that the capacity limitation of processing resources is in fact directly connected to our embodiment, and that attention serves the role of limiting the capacity excess. Neisser concentrated on how our attention seems limited because we have no choice but to direct our senses in just one direction. He demonstrated that with some training people can overcome this constraint and a subject can perform two attention-involving tasks. Allport (1987, 1993), in contrast, emphasised that this constraint is dictated by the need for selection-for-action, and maintaining relevance. A human mind runs a number of processes in parallel, and the function of attention is claimed to prevent interference during consecutive stages of goal implementation. Compatible with these views are the so-called competition theories of attention, which explain its effects in terms of a race, competition between various stimuli. Some stimuli are biased and receive more top-down control (cf. Desimone and Duncan 1995, Reynolds and Desimone 2001 in Mole 2013). A good example of this effect is also provided by Giora (2003) in an experiment that involved reading passages followed by questions about their contents. The experiment demonstrated that despite clear textual instructions, the readers still activated culturally salient concepts not only in the

⁶ (Cf. Talmy 2000, Chafe 1994, Langacker 2008) for the same concept used to discuss *framing* of experience in discourse, the so called *window of attention*.

total absence of explicit linguistic coding, but even in outright opposition to them

In another group of theories, attention is treated as a spotlight directed to certain locations rather than objects (Logan 1996). This view is further elaborated by experiments demonstrating that subjects are not able to shift the focus in three-dimensional but empty space without objects, but they can shift it foreword, backward and behind (cf. Yantis 1998). Problematic for such theorizing are observations that many attention phenomena are not connected with shifting the focus from one location to another, but that sometimes a task might require determining differences between the timbre vs. the pitch of a sound, or the time it takes for two different triangles to remain on the screen.

The last sets of theories of attention that SEP discusses are termed *motor* theories of attention (Rizzolati et al., 1987: 37, Bain 1888: 371, Moore and Armstrong 2003). They put forward a claim that the processes of directing attention are "truncated versions of the processes underpinning coordination of movements" (p. 23).

Apart from theories of *attention*, another problem that has been frequently raised concerns the relations between attention and consciousness. Three proposals have been put forward. One of them advocates a view in which in order to be conscious of something, a person must pay attention to it; in other words conscious experience requires attention. On another account different degrees of attending accompany consciousness, which also comes in degrees. Last, there are those who claim that some aspects of our experience do without attention, and vet we are conscious of them. Two phenomena are mentioned in this context: attentional blindness (Mack and Rock 1998, and others as quoted in SEP), where experimental subjects attending to one stimulus fail to notice some other, relatively salient stimulus (it would seem). By some contrast, attentional agnosia (Simons 2000) construes the same situation similarly but explains it not by denying that the subjects did not notice an item in the input, but that s/he has no direct memory of having perceived something. The difference is epistemic, and the issue still unresolved. Can we attend to something without being conscious of it? And, can we be conscious of something without attending to it? These questions are touching the metaphysics of attention; the former rings the bell of those like Koch and Tsuchiya (2007 in SEP), who claim that attention and consciousness are different processes; the latter question is positively answered in a tradition of John Locke, who proposed to understand attention as a mode of thinking without any explanatory power. Here attention is sufficient for conscious experience, in fact its sine qua non condition. Evidence from language acquisition (Tomasello 2001) shows that acts of joint attention between the caregiver and a child are necessary for the development of linguistic knowledge and skills. Experimental research appears to point to the conclusion,

true intuitively as well, that attention is necessary for the acquisition of knowledge. Finally, it is important to remind that most research that moulded the theories of attention has been based on physical stimuli, but *attention* is also endogenous (as I also pointed it out in the previous section), and then it concerns autonomous processing crucial for: action, knowledge structures, intentions and volition. It is this last concept (volition) that James (1984: 424) equated with attention. It is also necessary for language, its: acquisition, learning, production, and comprehension. What picture is emerging? The following tables attempt to capture the most important observations regarding theories of attention.

Table 2. Theories of attention

Attention							
Capacity limitation theories: limitation either – early, or – late (semantic)	Spotlight theories: major question: Maybe attention is to locations, not objects?	Motor theories: See the role of attention in maintaining action, and its management.	Coherence and competition theories: attention is performed by the same neural circuitry that is used in perception, but in a top-down fashion.	Feature integration theories: deal with the so-called binding problem – if we first extract features, how are they bound to achieve a representation of an object?			

Table 3. Attention and consciousness

Attention ←→ Consciousness

- 1) Consciousness requires attention (if one attends, one is conscious of an entity: person, object, or relation.
- 2) Consciousness is a gradable property and so is attention, which implies degrees of salience.
- 3) Consciousness and attention are independent, at least to some degree. That is one can attend to an entity without being conscious of it, and also one can be conscious of an entity without attending to it.

Table 4. Types of attention

Types of attention				
1) voluntary/involuntary 2) selective/divided	2) focused/unfocused3) reactive (exogenous) / cognitive (endogenous)			

The four types/kinds of attention presented above also coincide with the proposals voiced by the theories (see above) and relations with consciousness. Voluntary attention can be implemented by any of the four theories presented above, and it stresses the roles of volition, action, also implying that the entities attended to are available to consciousness. On the opposite extreme, there is involuntary attention, i.e. attention without consciousness, veiled processing of data that leads to implicit knowledge systems, but which nevertheless guide behaviour and action. But involuntary attention also has a different face. Otherwise called *reactive*, it is responsive in emergency situations: a loud noise, high temperature, high pitch noise, and other. Where the focused / unfocused attention is mentioned, one feels compelled to associate it primarily with the spotlight theories, but another possible interpretation is that the spotlight, the focus is a metaphor of humans' undeniable ability to narrow and enlarge the scope of interest. Next, the distinction between selective and divided kinds of attention highlight the model-theoretic discussion of the limitations superimposed on the mind as regards the amount of data it can deal with at the same time. On the one hand, there is the voice of capacity limitation theories stressing the restrictions, and on the other hand, one looks at coherence, and especially competition theories that explain the limitation as salutary because it ensures the mind will deal only with what is relevant to maintaining coherence; it protects it from being clattered with irrelevancies. Last, the exogenous / endogenous distinction is acknowledging the research tradition in psychology and language that treats attention as either a quality of mind that is used to deal with physical data, or with autonomous processing in thinking, imagination, blending, construal, conceptualization, metaphor, and language (in a very general sense at this point).

Attention then (like language) does not have a single face. Can we explain it using a necessary and sufficient set of features? This expectation would be unfair given the modern understanding Rosh (1973, 1978), Taylor (1995) of categorization offered for use by cognitive grammarians, lexicographers, or discourse analysts. Instead, it is better to use a set of *typical* and *essential* characteristics, which may sound bad because we are staring at a scientific term, but this is a fairer strategy than pretending that attention (as a term) miraculously falls outside language and the scope of modern research into its fuzzy categories. Rather than dichotomies, one should speak of continual scales relevant to attention:

voluntary	$\leftarrow \rightarrow$	involuntary
narrow scope	$\leftarrow \rightarrow$	large scope
divided	$\leftarrow \rightarrow$	non-divided
inward	$\leftarrow \rightarrow$	outward
long	$\leftarrow \rightarrow$	short (vigilance and intensity)
salient	$\leftarrow \rightarrow$	non-salient

The next sub-section will deal with the task of moving closer the ideas, theories and distinctions regarding attention presented above to studies of language.

1.3.2. Attention, salience, consciousness in language and cognitive linguistics

The following three goals will be foundational for the subsection to follow. First, I fill consider the question of convergence between (mostly) psychological and philosophical proposals discussed in the previous section and cognitive-linguistic studies of Langacker (1991, 2008), Talmy (2000), Chafe (1994) and Baars (1997) as regards attention and consciousness in language. Second, emphasis will be shifted from the operations of attention in general to attention in language, that is, attention as it accompanies language production and comprehension. Third, I will conclude this part by presenting my own understanding of attention, consciousness and their relations that will be foundational for the subsequent treatment of linguistic coding and construal of prominence within EFL narrative events.

Starting from Ronald Langacker's works (1987, 1991, 1999, 2001, 2008), there are numerous threads in the discussion of Cognitive Grammar to either attention directly, but also to prominence. The operations of attention effect heightened prominence (Langacker's term used to denote *cognitive salience*). More specifically, at least the following ideas are relevant and convergent with psychological discussions of attention: profile/base alignment, figure/ground distinction, mental scanning operations, windowing in discourse, designation, reification, cognitive definitions of grammatical categories (noun, verb, adjective, adverb, etc.), temporality/atemporality, grounding, attentional frame, Autonomy/Dependence (modification/complementation), e-site, prominence asymmetry, foregrounding/backgrounding (e.g. in the choice of grammatical voice construction), likelihood of an entity to be selected as a reference point. The list is not exhaustive. Attentional operations are understood to be endogenous (directed inwards) they are conceptually driven, top-down processes of selection and prominence build-up. What is stressed throughout, too, is the importance of the base, the context against which some entities are elevated to the special level of prominence. An example is *profiling*, a process that is frequently conventionalized and effected in communication by the selection of particular word form in context. In fact, different contexts may be inducing a different profile as shown by the following senses of the form *table*.

⁷ No entity, however important, can be salient if it has no background entities from which it springs out.

- a) piece of furniture,
- b) list, way of presenting data,
- c) in maths, measurements, variables presented in table form,
- d) present a bill, proposal, amendment,
- e) postpone (motion, bill, amendment) (PWN-Oxford Dictionary).

Apart from such conventionalized senses, a speaker is sometimes hesitant as to the exact form he should use in context and may say *a kind of table*. Regardless, however, of the level of conventionalization, each sense highlights a special substructure against a background of contextually relevant knowledge structures. This is remarkably similar to the second understanding (see page 17) of the relations between attention and consciousness, where they are both gradable properties, with information active, semi-active or inactive (cf. Chafe 1994). Many other Cognitive Grammar concepts can be discussed in this way, i.e. by understanding that attention selects a substructure within a conceptualization and grants it more prominence against some base. Spotlight and capacity limitation theories of attention are compatible with this view, but also the coherence and competition theory, as well as the feature integration one.

Is this wrong? Cognitive linguists have never decided which model, theory, or understanding of attention they will be using for their theorizing. This reflects the current state of affairs in attention/consciousness research, where we are dealing with at least the four or five theories, which however are not mutually exclusive because they develop complementary strands of understanding. Linguists want to know how linguistic systems are acquired from input (endogenous attention, focused attention), which clues are more or less relevant (competition, coherence theories) as well as how a linguistic system is used (control, automaticity), all issues are also present in attention research.

The result of the process called *reification* causes that the whole scenes and actions can be thought of as objects. This process renders the details within each such reified complex as less obvious by enlarging the scope of attention. The following complex sentence, *Before my children's weekend trip to Canada*, *I did some shopping at the local supermarket*, can be sketched as *Before Y, I did X at the local supermarket*. The sentence encompasses some two weeks perhaps, but only two events are shown as if in quick succession. The first describes *the shopping*, whereas the second refers to the *trip*. Language performs the role of a pointer to the scratch-pad on which the content of though is projected. The very content on Baar's (1997) account can be used for what we call consciousness in language.

Another example of a term from Langacker, the A/D asymmetry describes an observation that some sub-structures within a conceptualization (the dependent ones) cannot be projected on the "scratch-pad of thought" (to use a metaphor) without the accompanying (autonomous) structures. In the world of

physical perceptions one cannot pay attention to how someone is driving a car without him/her actually sitting in some sort of car. In a top-down fashion, one cannot imagine driving a car without also imagining a car. *Complementation* and *modification* in Cognitive Grammar receive interpretation concordant with attention accounts. The former (complementation processes) are autonomous (in conception and as far as language structure goes), and it is without the complements that other sub-structures are unthinkable and un-expressible in language as the following examples illustrate:

- 12) drive a car complement
- 13) He tried to annoy his mother complement
- 14) He cried to annoy his mother modifier (Langacker 2008: 204)

In (12) driving cannot be thought of without CAR; (13) exemplifies how the expression starting from *try* has to be somehow finished-off to be coherent and meaningful. By contrast, (14) is complete without the modifier, which codes the purpose of the event. In attentional terms, (13) invokes and highlights the goal of the child's behaviour, whereas a particular way in which the child behaves remains in the backgrounded, whereas (14) effects the salience of the child's expressive behaviour as well as the reason for doing so.

Last, the so-called *e-sites* are understood as structural elements of linguistic expressions or entities of a conceptualization that are understood to be present, but they do not receive enough detail, and remain schematic, e.g. *seem____*, where the underscore after the word *seem* represents an element that can be used to elaborate the whole partly filled schema. Another example provided by Langacker (2008: 199) is the *___ed Past Simple* tense ending. It has a schematic element that can be elaborated by a regular verb in English. In terms closer to attention research in psychology, we may know that something happened, but we don't know what exactly it was; that is, it is possible to narrow the scope of attention to the schematic temporal profile PAST without elaborating it, with numerous possibilities for mental imagery and simulation in context.

1.3.3. Attention and consciousness – relations

An interesting proposal regarding relations and functions of consciousness and attention on cognitive linguistics ground is the one put forward by Jackendoff (1997). In the epilogue to this work, the linguist considers the question of the *cognitive-unconscious* and *cognitive-conscious* entities and processes. The former are occupied by physical stimuli of variable modality. People do not have conscious access to the processes by which they become aware of say, a horse in

front of them, or a mountain in the distance. It is only the effects of the multiple operations of our senses (and also sometimes effects of co-temporal, top-down activation of schemata and other knowledge structures) that get "displayed" in our consciousness that we can directly experience. At the risk of being repetitive, I will stress again that this view is also in agreement with proposals voiced by (Baars 1997) on the grounds of psychology and Chafe (1994) on cognitive linguistics grounds (with some differences to be discussed later).

Jackendoff (ibid.) portrays this situation with four circles superimposed on one another. The outermost of the three rings represents eyes, ears, and other sensors, with the next cirle in standing for visual signals, or motor signal, that we are unconscious of, then the circle where the proper content gets "displayed", which epitomizes consciousness. Finally, the inner-most circle stands for what are called thoughts, conceptual structure that we never have direct access to, only via imagery (mental simulations) or language (in the case of non-imagistic content). There is of course interaction going on between these levels. Conscious attention can operate on:

- a) physical stimuli,
- b) mental imagery (simulation, enactment),
- c) phonetic images, e.g. language even without sound, the so-called sub-vocal speech.

The details of the very conceptualization processes are unconscious. Yet, they can give rise to a mental simulation expressible in language, e.g. *I met Peter yesterday*, or language without any imagery involved, e.g. *Be careful! Duck!*, as in the case of warning someone that s/he is about to hit his/her head against a low doorframe. The result of this last ability can be a heightened, augmented consciousness, foregrounding some entities and backgrounding some others with implications for long-term memory, learning, language acquisition, retrieval, communication, language production and comprehension. The processes just described are very fast, but for convenience they can be listed under the following four points (simplified language production perspective) without claims as regards sequence:

- a) Conceptualization processes (e.g. image schema selection) some unconscious lead to (b)
- b) Expression in language, or: simulation, at least some of it is conscious.
- c) Attention is applied (driven by motivation, pragmatic factors, other)
- d) Augmented prominence of selected processes is effected, giving rise to better storage, greater conventionalization, improved performance in the future, cognitive entrenchment, and other.

Concluding briefly, the view presented above respects the distinction between *attention* and *consciousness* by rendering the former the role of an implicit, unconscious process, which constitutes the contents of consciousness either endogenously of exogenously. Once in focus, or at least only in scope of consciousness, content can undergo further analysis and attentional transformations effecting qualitative or quantitative changes. At the same time, however, we are not excluding the possibility that some details of the physical stimuli (also linguistic input) get through unnoticed, and they exert influence later on in a top-down fashion.

Such a view is accepted by Chafe (1994) as well, who grants consciousness a more active role, however, and describes it as constantly moving, and changing its focus. This means that for Chafe (ibid.) there are no clear boundaries between consciousness and attention as well. The most important aspect of this view is that the content of what is called conscious experience has an active focus, semi-active periphery and inactive regions further away from the focus, to use a metaphor. The information in focus is also most prominent, whereas whatever is placed in regions further away from it in a conceptualization also becomes less salient. Data from spoken language production show that the active focus gets implemented in the format of an *intonation unit*. Most such units are relatively short (4-5 words), with a simple clause as the most frequent linguistic coding format, but NP, VP and other phrases are also numerous. Pauses most frequently appear before an intonation unit thus defined, and they testify to considerable effort in externalizing thoughts in language.

The intonation units come in a few types. Most of them are called *substantive* as they give a verbal attempt its aboutness; they are decisive in promoting the content of discourse. However, it would be erroneous to think they can do without a large (20% and more depending on topic difficulty, and other context features) amount of other types of intonation units, whose role is to ensure that communication will be smooth. Such units are used to manage the successful communication of the content expressed by the substantive units. Here, the examples are: *First*, *second* (textual units), *you know what I mean*, *you see*, *hey* (interpersonal units), *Aha*, *I understand*, *I don't quite understand*, *Do you understand?* (cognitive units). Also, there are some units in spoken discourse called *fragmentary*; they are begun, but not finished.

In general, there exist at least the following kinds of coherences within a discourse. The largest, called *episode*, denotes a communicative encounter that can include more than one topic. A *topic*, or *basic level topic* is defined as involving what Chafe (ibid.) identifies with the content of the semi-active consciousness, which is inactive but recoverable. In similar vein (Linel and Korolija (1997: 180) say that,

Topicality pertains to matters of continued sustained salience or importance. ... Therefore, episodes (trains of interactional events and actions (Schegloff 1990) rather than single utterances support topics... but coherence is for us not a property of ... text itself, but something that emerges in the minds of the conversationalists (and analysts).

Salience is construed incrementally; each intonation unit that is added to discourse updates it. But salience is also construed horizontally within each intonation unit as well as by the use of a particular word (e.g buy for sell).

A question emerges in this context. What is the relative salience of specific aspects of a narrative in conceptualization? Which of the three units (topic, intonation unit, word) within a story that a language producer is going to verbalize will figure as the one that speakers are most aware of and which less so in prominence building? The preliminary hypothesis voiced earlier in section was that the linguistic coding and construal of events and scenes in a narrative, arguably also in ELT narratives with some important differences between L1 and L2, is to a large extent motivated by a conscious goal to render in language what becomes salient in a conceptualization. On phenomenological grounds, the conscious-salient aspects of storytelling are:

- a) intention,
- b) whether it is a true story,
- c) how much time it involves,
- d) flashes of memory in which crucial events are remembered and mentally simulated from a certain perspective,
- e) extralinguistic context: background, place, time, participants involved,
- f) overall goal of telling a story (sometimes just having fun).

By contrast, an exercise in introspection tells us that we are unaware of the number of events that will be reported, which ones they will be (finally). The awareness of the exact words, idioms, and phrases is even smaller, let alone the awareness of the exact intonation contours, sentence rhythm and grammatical constructions-schemas for the implementation of long-term and current verbalization plans.

An interesting discussion of the relevant issues can be found in Talmy's (2007: 264-293) article on attention in language. The starting point is the contention that in a speech situation a language understander may attend to the linguistic expression a speaker has selected in coding his/her conceptualization, to the content that this expression evokes or the context. These different aspects of a speech situation "do not appear uniformly in the foreground of the hearer's attention. Rather, various portions or aspects of the expression, content, and context have different degrees of salience" (p. 264). According to Talmy, the effects are only partly attributable to a speaker's or hearer's interests. It is

language as a culturally embedded and sanctioned system that enables alternate construals that "assign different degrees of salience to the parts of an expression or its reference or to the context".

Talmy (ibid.) singles out a few categories with subcategories and factors. Attention and salience are gradient properties (see above); they are set not relative to some well known and stable zero point, but relative to current context and our ability to compare entities within a described scene or event. Third, attention is typically placed on a reference, the semantic content, the meaning rather than on the expression itself, on linguistic form per se. Moreover, it is placed more on the overall literal meaning of the whole sentence than on the particular words that it comprises, as well as more on the meaning of an expression in context than its literal interpretation.⁸ Talmy assumes a view according to which such previous cognitive-linguistic studies of attention that have dealt with: topic/focus division (Lambrecht 1994), focal attention (Tomlin 1995), activation (Givón 1990; Chafe 1994), prototype theory (Lakoff 1987), frame semantics (Fillmore 1982), profiling (Langacker 1987, 1991, 2008), deictic centre (Zubin and Hewitt 1995), figure and ground division, windowing of attention, closed/open classes in grammar, Agonist/Antagonist, fictive motion, foregrounding and backgrounding (Talmy 2000: Vol. 1 and 2) to mention some relevant concepts, in "pertain to the same single cognitive **system of attention** [emphasis mine]" and salience building (Talmy 2007: 267).

The linguistic factors relevant to salience building and attention are divided into eight categories with subcategories. They are:

- a) properties of a single morpheme,
- b) morphology and syntax,
- c) forms that set attention outside themselves,
- d) phonological factors,
- e) properties of the referent,
- f) relation between reference and its representation,
- g) occurance of representation and properties,
- h) temporal progression.

The discussions of attention in language including this one use a metaphor that **attention is on something.** A reader feels compelled by this metaphor to treat a complex set of mental phenomena called attention and effects of salience in a conceptualization as if they were a spotlight directed to a particular object, its carefully selected parts or a location. This, in turn, evokes the domain of space to comprehend what is by nature mental, so also covert to direct observation. Even our mental life must be understood, thought about and discussed by direct or only implied reference to human embodiment. For example, the contention expressed in different theories, but especially the spotlight theories of attention is that it moves (but also cf. Chafe 1994 and his moving focus) is amenable to the understanding in image schematic terms by analogy to physical motion.

This way of presentation is free of speaker's or hearer's bias. Language form performs a function both for the speaker and hearer, though in ways typical of the two different discourse perspectives.

The first group of factors are associated with a single morpheme defined as a "minimal linguistic form with an associated meaning" (p. 268), which involves both simple, e.g. run, dog, -ing, -ed and complex morphemes such as idioms and constructions, e.g. Has he, Is she, meaning 'if'. It is argued that on the prominence scale, it is the open class units that will produce greater salience than the closed class ones, the nominals outperform the verbs, and a free morpheme is more salient than a bound one in this regard, exemplified by ship in and ship out. The pair are argued to have greater salience than their equivalent import and export. Next, individual meaning components as in one of my parents' sister are more salient than in aunt, even if the two are objectively equivalent terms. Also referring to factors (a) on the list above are what Talmy (ibid.) calls meaning components that can be inferred from a morpheme. The case in point is his example of the verb pry as compared to the verbs pull, flip, pop, or peel. It is argued that language users pay more attention to their gestalt interpretations than individual components. This is supported by what Talmy (ibid., 270) calls "a vivid sense of ... meaning as a whole but [with] little conscious access to the particular components essential to that meaning". This description strikingly resembles models of simulation semantics in the PSS's (perceptual symbol systems) by Barsalou (1999). A speaker enacts an image (motor, auditory, tactile, proprioceptive, introspective, affective, other). Components of such a conceptualization are arranged on a salience cline according to how a language user attentionally profiles its substructures, which results in a given content of consciousness (a view concordant with Baars 1997, and Chafe 1994). The particular components are rendered imagistically, but due to temporal processing constraints in real online discourse, language users will prefer a broader scope of attentional profile; the gestalt will be more salient than particular components. However, given more processing time, nothing restricts a language user from applying a useful function of attention, its changing focus that can be instructed verbally. One technique that serves this purpose is a special segmentation of a conceptual material in language, which effects dynamic composition and constituency (cf. Langacker 1991, Vol. 1). In such a case attentional resources are distributed over a few intonation units (rather than only one) and a language comprehender is able to inspect the entire conceptualization sequentially rather than in a summary fashion (cf. Langacker 1991). Another possibility predicted by Talmy (2007) is that two or more polysemous senses of a morpheme can have variable "attentional weightings" (p. 271). For example, the word eat stresses the prominence of chewing over swallowing. Words exhibit variable lexicalization patterns and weigh their

multiple meaning components in a conceptualization. Words most often also evoke some associated concepts. Even if they profile a selected semantic substructure, it is placed in a larger base that constitutes its domain of instantiation, as Langacker (1991) says.

As syntax and morphology go, Cognitive Linguists in general, and Talmy (2007) as well claim that grammatical constructions do also help parameterize entities of an event on a scale of salience. One such technique in many languages is the position of a linguistic element in a phrase, or a sentence. This is illustrated by the following examples by Talmy (ibid., 275):

- 15) I can't stand this kind of music right now.
- 16) Right now I can't stand this kind of music.
- 17) This kind of music I can't stand right now.

The above sentences contain the same entities, building blocks of conception, yet the choice of different word order constructions renders them non-equivalent semantically. Different entities are selected to be the presupposed (old), starting points of the above sentences, and this has influence on which entities become the so-called new information. It is the new, syntactically in the last position in a string, and phonetically the strongest that are most salient.

Syntactic function that is used for designating an entity is the second parameter mentioned is this category (morphology and syntax). *Syntactic subjects* occupy the top position on a salience scale, followed by direct object and then oblique and adverbials. This comment actually echoes the discussion in Cognitive Grammar of the roles of trajector and landmark, circumstantials and ground (context), but it also agrees with traditional descriptive accounts of grammar (cf. Quirk, et all. 1972), according to which it is the subject that occupies the central position in a sentence followed by object and then adverbials. The so-called basic sentence patterns (Quirk, et all., ibid.) are basic by virtue of the fact that all their elements are logically (semantically) and syntactically indispensable and required by convention. The two functions: subject and verb are present in any sentence, that is, any conceivable situation requires an entity and some process it takes part in. Other participants are often optional and will or will not be used.

According to the principle that the whole is greater than the sum of its parts, the gestalt conception communicated by the whole phrase or a clause will be of higher salience than its individual components. This comment, in fact, refers to compositionality on any level of linguistic analysis according to Talmy (2007). Idioms evoke conceptualizations that agree with their conventional communicative values. For example, the idiom in the sentence *She doesn't do a hand's turn in the house* will arguably not render the meaning of the component

turn more salient than the established meaning of this idiom, which is 'to do no work; to help in no way at all' (Longman Dictionary of English Idioms). However, there is some evidence from simulation semantics that the use of metaphorical language does indeed cause the activation of motor and perceptual knowledge on hearing and understanding metaphors (cf. Wilson and Gibbs 2007). Still, the argument that Talmy (2007) puts forward is that the gestalt conception of an idiom reaches higher levels of cognitive salience. Under the category of syntax and morphology, Talmy (ibid.) also discusses deixis, which motivates a variety of well known forms such as: here, there, now and so on. The so called context with an attentional effect outside itself is also classed in this category. The main idea is that a morpheme as it is used in a construction has variable and context-dependent reference. The similar idea according to Talmy (2007: 279) is expressed by Langacker's (1991) active zone, or Fillmore's (1976, 1982) frame.

The next set of factors, point (d), see above, are phonological factors including morpheme length, with the longer morpheme coding or attracting greater salience in comprehension. A morpheme's phonetic similarity to other morphemes causes the co-activation of various related senses as well, sometimes undesirable. One can list under this rubric heavy stress, intonation and other suprasegmentals.

What Talmy (ibid.) calls the *properties of the referent* are cases defined relative to the level of categorization that a speaker chooses, with *hop* calling on greater attention and salience than a more general *walk*, or *drown* as opposed to *die*. This presentation is followed by an observation that sometimes we use expressions that directly signal a need for greater attention. These include: *pay attention, be alerted, you should note, never mind, disregard* and some other.

With regard to the next set of factors, the relation between reference and its representation, "more attention goes to the concept expressed by a linguistic form than to the shape of that form" (Talmy 2007: 284). This explains why we remember what people said, but fail to recollect the exact wording of a speech act. Under this rubric he also analyzes "windowing of attention" (Talmy 2000: Vol. 1, ch. 4), where direct linguistic mention foregrounds a referent, whereas lack of explicit coding in language backgrounds it, e.g. *Let's not talk about it*.

Attentional and salience effects also arise as en effect of what has been termed *temporal progression*. This applies to a number of situations. First, the form that is currently being expressed receives greater salience than the forms already expressed, the *prior forms*. Givón (1990) calls this phenomenon "referential distance", or "referential accessibility". And last, it remains to say that none of the factors that Talmy discusses operates in isolation; instead they play a concert of factors operating simultaneously.

1.3.4. Summary of attention and construal

The first chapter had the goal of presenting the main options as regards linguistic construal and attention. Construal is defined as a relation between the conceptualizer and the conceptualized. Its various types proposed in cognitive linguistics often contain salience or attention as one of many categories. In this work salience and the accompanying operations of attention are treated as superodinate for construal in general. This is because the author accepts a premise that attentional operations are primary in the sense that they effect a particular perspective, viewpoint, single out main participants, selectively foreground or background entities and relations, are necessary to adjust the level of granularity with which one chooses to look at an event. All in all, the starting stage in any set of construal operations must begin with multiple acts of attention.

But attention is hard to pin down. This work will eventually treat it in agreement with the writings of such psychologists and cognitive linguists as: Baars (1997), Chafe (1994) and Jackendoff (1987), who maintain the distinction between attention and consciousness; they treat the former as a number of implicit processes that constitute the contents of the latter. This is performed either endogenously (operating on mental representations), or exogenously (operating on sensory, physical data: sounds, smells, visual stimuli, etc.). This view remains neutral with respect to the: capacity, spotlight, motor, coherence or feature integration theories of attention (see above). This work **is not** committed to any particular theory listed above to the exclusion of other theories and models. They all respond to different research goals and questions.

My own needs require that we look at how attention in languages acts endogenously when EFL narrators try to verbally recreate past experience. If so, attention and the effected, explicit content of consciousness must be understood as a scalar property, more or less voluntary, divided, endogenous and with larger or narrower scope. Moreover, this thesis accepts the representational format of the so-called Perceptual Symbol Systems (e.g. Barsalou 1999), which is analogical and modal, and it is capable of endogenously recreating distributed modal features of past, embodied experience. People have no access to this process (mental simulation), only to its effects.

The term *attention in language* will be understood as specific verbal coding of a conceptualization, and a set of processes that lead to it. The tightness of fit between conceptualization (mental construal) and linguistic construal-coding remains an open question. It is only hypothesized here that the belief accepted in cognitive linguistics tradition that any change of form results in some change (albeit small) in meaning must be at least loosened, because it seems idealistic.

In sum, the following principles will be used to study the construal and linguistic coding of EFL narrative events:

- a) Operations of attention are treated as super-ordinate in construal; they lead to heightened salience of selected entities or effected gestalts, which might be pragmatically motivated.
- b) Attentional operations are largely unconscious and effect explicit contents of consciousness.
- c) This work remains neutral with respect to which theory and model of attention should be used, but it grants the so-called endogenous attention a greater role in linguistic functioning.
- d) PSS's (perceptual symbol systems /see above/) and *mental simulation* are used as the explanatory mechanism and general representational format to discuss experience as it is presented in oral narratives.
- e) We hypothesize that the tight fit between construal operations and linguistic coding is idealized and that it should be loosened, especially with regard to situations of highly conventionalized contexts of language use.

The next section will be devoted to the question of how the topics of construal, coding, attention, and salience in language refer to the EFL contexts. One of the guiding observations regarding the use of a foreign language for coding experience is that foreign language users face limitations that are unknown to native speakers. Even if generally true, also L1 users experience limitations and problems during linguistic coding depending on status, education, experience, or simply individual character features.

1.4. EFL perspective and linguistic construal

The following section has been motivated by the observation that the first and the second languages are qualitatively different. The commitment to EFL narratives in this work is also dictated by the author's professional interests and experience, which for many years has been the teaching of English as a foreign language to Polish learners of English. Since the present work has chosen to discuss aspects of linguistic coding and construal, a crucial, but general cognitive-linguistics term, I feel more than obliged to review the relevant literature regarding differences between processing L1 and L2. This is mainly because one can wonder if the construal operations as they have been presented and reviewed in this work so far can apply and to what extent to speakers of foreign languages. I will attempt to answer the question voiced on page (21): What are the relations between construal and linguistic coding in a foreign language?

An important up-to-date review of L1-L2 processing differences can be found in Paradis (2009) Declarative and Procedural Determinants of Second

Languages. What follows is a comprehensive summary of the most relevant issues.

The key concepts in this discussion are: acquisition, learning, knowledge appropriation (unconscious acquisition and conscious learning), explicit and implicit knowledge. Implicit knowledge can be inferred from a person's behaviour even if the person does not posses any conscious access to this procedural memory pool. One can perform even if she cannot describe what it is that allows her to act. The term implicit, we are reminded, refers to how knowledge exists and it is synonymous with the cognitive unconscious. Native language speakers without any schooling and formal language training cannot mentally inspect the action schemas responsible for language production. This implicit knowledge of language is acquired incidentally in natural contexts.

A language user, however, is only aware of the symbols produced and their meaning or pragmatic force. S/he has no mental access to the spontaneous processes of generalizations or their results. Speakers are only aware of initiating an utterance, which is a deliberate act. Its continuation, however, is claimed to be *automatic*. The grammar of a language is defined as all parts of implicit language system and the implicit components of the lexicon (p. 5).

But how can one be sure which knowledge pool a person is using when constructing a message? Paradis (ibid., p. 7) claims that fluency and accuracy with the use of certain language features is not enough; what counts most is systematic, a 100 per cent correct use. Automatic processing uses implicit knowledge, and it is juxtaposed to the controlled, conscious processing that uses the overt, meta-linguistic pool of knowledge. Most importantly, it is argued that these two knowledge systems do not communicate, and that consciousness is not interface between them, nor is the explicit linguistic knowledge. Moreover, the explicit linguistic knowledge does not become the implicit linguistic knowledge. The two knowledge pools coexist, and language speakers may switch from using one or the other, but there is no continuum in this regard according to Paradis (2009). Hence, production is either automatic-unconscious, or controlled and conscious with switching from one pool of knowledge to the other, if necessary.

Phonology is the hardest component for the foreign language learners to imitate and it is the one that most easily gives away their non-native origin, and they are least aware of its rules. By contrast, language users are most conscious of *vocabulary*, defined as the conscious aspects of *lexicon*.

Importantly, in foreign language acquisition implicit aspects of language are not consciously noticed, but "non-consciously registered" (p. 56). As Ellis (2006a: 114) says, "intake is the result of the unconscious frequency analysis". It is, however, not the actual expressions (tokens) that are tallied (registered) but the types.

Paradis (2009: 50) explains the so-called "perception without awareness" saying that "strictly speaking types of stimuli are not perceived but implicitly

registered by the brain". We consciously induce communicative intentions, and then specialised unconscious networks are chosen to carry out the details of a procedure. What one pays attention to and what s/he notices is not the same as what becomes intake, implicit knowledge.

In sum, the processing of L2 is different from processing of L1 at least in the following ways. First, in L1 all aspects of grammar (defined as implicit pools of knowledge) are processed automatically, without much or any attention, systematically, with the use of procedural memory of action schemas. By contrast, L2 speakers' output is less systematic, probably more hesitant with the details to be worked out. This is all due to the observation that L1/L2 performance "differs along the implicit-explicit dimension" (Paradis, ibid., p. 115). Second, the role of consciousness is excluded from both intake and automatic processing of language, and so is attention – used only for the output (the symbols) as such and meaning, but not for the actual procedures or grammatical selection processes that constitute the symbols. Third, an important contention is that foreign language learners usually know more about the foreign language they are learning than about their native language, or as Paradis (2010: 90) puts it, they "have a [sometimes considerable] baggage of explicit knowledge about L2". This knowledge, however, never becomes or interfaces the implicit pool of action schemas that allow the kind of systematic and automatic output observable in native production of L1.

This brief explanation based on Paradis (2009) shows why data from L2 learners may be qualitatively different than data obtained from speakers of their native tongue. Depending on their level of proficiency, foreign language speakers will rely more on their store of explicit linguistic knowledge, which involves attentional resources; it is controlled and conscious. Overburdened attention is limited, so it slows down language production and comprehension. Does it mean, however, that the construal and linguistic coding operations described so far by cognitive linguists and grammarians do not apply to foreign language contexts?

At this point it is necessary to return briefly to the very definition and understanding of *conceptualization* and *construal* in cognitive linguistics literature. *Conceptualization* on the one hand is a term that abstracts away from a particular language or communication system, and *construal* is almost synonymous with it, but additionally involves the conceptualizer's point of view, and implies dynamicity. The use of a foreign language does not exclude *construal* at all. The only reservation that we agree with and which has been explained in the section above is that L1 and L2 processing are qualitatively different. The present thesis proposes to treat construal processes as nonlinguistic, and reserve the term coding for the use of linguistic symbols at any level (phonological, morphological, lexical and syntactic-constructionist), gestures as well as other expressive behaviour.

This brief sketch of the topic only presents the so-called non-interface position as regards the relation between implicit and explicit knowledge pools,

and the present volume accepts it as a theoretical stance. Due to lack of space, the other theoretical options are not further discussed, and the reader is referred to other sources, for example Ellis (2008).

1.5. Summary and conclusions

The first chapter of this thesis has discussed different interpretations of the term and theory of construal. Its strong presence in Cognitive Linguistics is unavoidable because of the commitment to discuss linguistic phenomena in relation to human mind, and in agreement with the findings of other disciplines, especially cognitive psychology.

The mind is rightly considered the locus of processes that create a conceptualization, which in turn can be communicated in language. A conceptualization, and its linguistic rendition is not objective, but depends on the conceptualizer, and thus is subjective, dynamic and context dependent. The chapter discussed some attempts to classify construal operations by Langacker (1991), Croft and Cruse (2004), and Talmy (2000). Despite some obvious differences, the author nevertheless concludes that their common ground is *salience* or *prominence*, and *attention*. *Salience* is here understood to be not only a feature of language form, but more importantly, a quality of whatever it is that Langacker (1991) calls the semantic pole of the expression, i.e. *conceptualization* adjusted to the specifics of a language one uses (cf. Slobin (1996).

Attention as a term was shown to have a long history in philosophy and psychology. Any attempt to treat it in a unitary way fails, and no single definition looms out of this flux. Instead, one has to agree that the term attention reifies a multitude of processes that are relevant to language learning and its use. Moreover, attentional operations lead to heightened salience of selected entities within a conceptualization (and its linguistic rendition), and instead of treating it as one of many construal aspects, the author proposes to elevate it to the superordinate role in the process of conceptual construal and linguistic coding. Besides, attention operations are largely unnoticed, i.e. people are aware of a limited amount of the products of their operations, but not the process itself. Much terminology used within cognitive linguistics, Cognitive Grammar refer to different aspects of attention in language, e.g.: profiling, active zone, figure/ground distinction, to mention only a few of them.

Relations between the processes of *attention* and *consciousness* have also been discussed. There are various proposals in this regard as well. In this work the author follows the tradition in which operations of attention in language are largely unconscious, but they lead to possibly conscious experience of the so-called wondering focus (cf. Chafe 1994). The next chapter deals with the second important variable of this work, the event.

Chapter 2

Events

2.1. Objective

The present chapter has the goal of discussing the major variable of this thesis, the *event*. In narrative, events emerge of introspective effort to construct a conceptualization and code it in language with the salience of particular components appropriately adjusted. This view is fully compatible with the accounts that cognitive grammarians and semanticists propose. Moreover, it presupposes the cognitive processing of knowledge for narrative presentation, within which the construal of events and their linguistic coding are embedded. In this way language is studied as a process more than as a product, which means asking questions about what foreign language learners do when they attempt to produce and comprehend sequences of narrative events. Before we can deal directly with actual research questions regarding students' renditions and efforts to construe and code a narrative in a foreign language, there is a need to introduce and explain the concept of *event*.

2.2. Defining events

The reader is asked to remember that even if this section will be devoted to the characterization of the event level, it is necessarily only an idealization. This means that event representations depend on larger knowledge structures of narration that support it.

But what are events? In philosophy they were discussed by Davidson (1969, in Malpas: 2010), who treated them as logical particulars. If two events can be substituted because they lead to the same third event, they are taken to be identical. Such a categorization uses a conceptual criterion of causality to single out events from continuous activity. Kim (1975/1976 in Zacks and Tversky 2001: 5) treat events as features of an object at some location and time. The problem with this account is that while an object undergoes two different kinds of change, as for example in the case of a ball heating and rotating, the

philosophical insistence that there are two events involved seems at odds with a psychological inclination to treat the behaviour of the ball as a single event. Quine (1985/1996 in Zacks and Tversky, ibid.) presents a simpler solution. He treats and discusses events as objects, that is, as bounded regions of space-time. This idea was also present in Miller and Johnson (1976: 87-88) or Bach (1986). Like objects, events are either bounded or not, counted and retold. They yield multiple construals and linguistic codings, are extended in time, and have parts and kinds. What characterizes events are features, locations, objects and their temporal profile. An event, in other words is OBJECT + LOCATION + TIME, 'a segment of time at a given location perceived by an observer to have a beginning and end' (Zacks and Tversky 2001: 7). Such an understanding of event implies an active role of an observer, who subjectively construes events, their participants, causal structure, locations, or backgrounds. This general definition will be used throughout the present work.

2.3. Event partonomies and taxonomies

Given this understanding of the *event* concept, the natural question to ask is how people individuate events from ongoing activity. What criteria are used in this process? Is this solely a perceptual process or also conceptual, and a linguistic one? The segmentation issue was successfully dealt with by Newtson (1973), Newtson and Engquist (1976), Newtson et al. (1976), and Newtson et al. (1987). Because event segmentation depends on time, they asked observers to watch a film and press a key whenever one unit ends and another begins. The points on a film marked by the observers pressing a key were called *breakpoints*; they were also boundaries between events as perceived in the experiment. It turned out that the breakpoints appeared consistently across observers at moments of greatest change of physical features of the action performed on a film. Newtson et al. (1987) also argued that the segmentation of ongoing action can be explained by its perceptual characteristics without recourse to top-down processing as in the task of observing abstract geometrical figures moving around on the computer screen. If so, event segmentation is a universal process that does without cognition and already existing knowledge structures or categories. On the other hand, everyday human experience is full of activity whose perceptual characteristics comply with goal hierarchies, intentionality and causes, so the role of not only knowledge structures and hence cognition in perception, but also construal and linguistic coding, is enormous. This is why one can say that particular events as they are construed and coded in language are categories by analogy to objects, and like objects they exhibit partonomies and taxonomies.

The partonomies of events represent two different scales. On the one hand they refer to the resolution with which experimental subjects press a key to signal a breakpoint in activity, and on the other they pertain to the wandering focus of attention within a single event. One can say *I met Tom* + we talked for a while, which constitutes a sequence of events in time. The verb met can be understood as the very brief moment of encountering someone when you are walking along a street (for example), followed by a longer event of talking (perhaps for a few minutes). Alternatively, the sequence can be construed in such a way that the verb met designates the actual encounter and the talking. In this case met and talked refer to the same event, with talked as an elaboration of met.

The example just provided triggers a question about the temporal scales used for event construal. Zacks and Tversky (2001: 14) describe three temporal scales relevant to events. The first of these lasts from one to a few seconds, and is used for the shortest, and simplest "psychologically reified" events, such as grasping a hand, stretching a hand, bending, nodding, stepping down from a kerb, pressing a switch, releasing the clutch, looking to the right. Such "atomic events" can be best described without reference to intentions, only perceptually. They can be used in a number of higher-order events, where intentionality begins to play a part. Such longer events (10 to 30 seconds (Zacks and Tversky 2001, ibid.) are described by goals and plans of their participants, e.g. made some tea, shook hands. Longer time scales involve themes, e.g. wrote a book, war, learned English. In the same vein Barker and Wright (1954, 1966) provide an example of stepping down from the curb, the shortest, perceptually defined event, followed by walking to school, the second-order event, and last climbing to the top of life, the longest event. Only walking to school and climbing to the top of life can be analyzed with some regard to intentionality and planning (Zacks, Tverky and Iver 2000). Moreover, large unit boundaries were shown to coincide with small unit boundaries, while linguistic descriptions of activity and chunking it into events also coincided with ongoing tasks in observers' segmentations of activity into events. The results point to the conclusion that event segmentation depends both on statistical-perceptual and conceptual processes.

The term *event taxonomies* pertains to the 'kind of' relations between events. For example, *walking* is a kind of two-legged locomotion, as is *running*. In the case of taxonomy one subordinate category elaborates its superordinate relative (it is less schematic and more detailed). The following sentences,

- 18) He ran across the street
- 19) He sprinted across the street

construe the same scene differently. Whereas (18) uses the verb *run*, (19) has got *sprinted*. The event coded by *sprint* is an example of the type *run*. Miller and Johnson-Laird (1976) and Tversky (1990) warn us not to mix partonomies and taxonomies of events. The former describe a relation between the possible

components of *running* (in our last example); these would consist of raising a leg up while bending it at the same time (part 1), placing it on the ground or a running track in front almost straight (part 2) and then resting the body weight (part 3) in order to be able to shift it on the other leg (part 4). As was said before, experimental subjects set breakpoints in activity when most features change, too. Such moments are also characteristic of change in goals, causes and intentions. The latter term, that is event taxonomies, describe how two events relate, where the scale ranges from the most schematic to the most detailed.

However, even if the analogy between objects and events is generally useful, one must remember that objects and so also their features persist in time; two objects can be considered simultaneously. Events are different. Because the domain of their instantiation (Langacker's 1991 term) is time and space, they happen one after another in a sequence. At a given moment a person can only experience an event token while it lasts; of course event types are stored in the long-term memory. Construal and linguistic communication-coding of events allows the conceptual time to be suspended in order to effect a wandering focus from one component to another of the same event, or else speeded up, in which case an idea of dynamicity is created via language.

Regarding the categorisation of events, Barker and Wright (1954) propose associating the privileged basic-level with event taxonomies. By contrast, the term *scenes* and *behavioural episodes* refer to event partonomies (Zacks and Tversky 2001: 12). Tversky (1990) and Tversky & Hemenway (1984) conclude that 'taxonomic organization promotes reasoning about intrinsic properties", whereas the partonomic ones 'promote reasoning from physical structure to function and cause'. Let us apply this rule to events as they appear in a part of a narrative:

- 20) a) ... and we were ^^playing about with the ^thing,
 - b) and and we we ^messed ^^about with it,
 - c) and did .. the usu,
 - d) oh we put a ^^cross in it
 - e) and made a ^dum-^^dum of it,
 - f) and ^^fired it,
 - g) in the ^^shed.
 - h) ... at at at at the ^bit of ^^wood.
 - i) And this **'bullet went round** the 'shed about three '\times.

The choice of a taxonomic level of events is evident in the choice of verbs: played with it, messed about with it, did the usu(al) [things], put a cross, made a dum dum, fired it, [bullet] went round. A part of a conversational story was pruned of the textual, cognitive and interpersonal elements, and now only the substantive units are presented. The verbs written in bold type code three events.

The kids played with a gun (as usual) by putting a cross in a bullet and fired the gun with it inside; the making of the cross on top of the bullet (probably with something sharp, (e.g. knife) caused the bullet to go round the shed. The actual events and their chronological order is presented below:

WERE PLAYING WITH A GUN is a schematic event involving the following sequence:

- PUT A CROSS ON THE BULLET
- PUT THE BULLET IN THE GUN
- FIRED THE GUN
- BULLET WENT ROUND AND ROUND

In reference to event taxonomies in this example there is need to inspect the verbs. The phrases *put a cross*, *put the bullet* (*into the gun*), *bullet went round* are quite schematic. They could be more fine-grained. I prefer at this stage to remain neutral as to whether they are basic-level choices. If one presents events to an interlocutor who is his/her close friend and the whole encounter serves the purpose of reminiscing about the past they had spent together, the special bond between people and their common experiences allow for the choice of such relatively schematic terms.

By contrast, when describing event partonomies, one must ask how many intonation units, cf. Chafe (1994), have been taken to code this behaviour episode. The list of events in a sequence above can be presented with higher resolution too, e.g.:

PUT HIS HAND INTO THE POCKET
TOOK A BULLET OUT OF IT
REACHED FOR A KNIFE ON THE TABLE
HELD THE BULLET IN HIS LEFT HAND
HELD THE KNIFE IN HIS RIGHT HAND
SLOWLY APPLIED THE EDGE OF THE KNIFE TO THE BULLET
CUT A GROOVE ON TOP OF THE BULLET
TURNED THE BULLET BY 90 DEGRESS
APPLIED KNIFE EDGE TO THE BULLET

Such a description illustrates a construal in which the attentional scope is narrower, hence more conceptual time and real time is needed to code the same episode, but more detail is involved. In sum, both event taxonomies and their partonomies may reflect how detailed a construal is, but whereas the taxonomic levels regarding event construal and their respective linguistic coding typically involve the choice of a particular lexical item or construction, which can be viewed as a conventionalised way of looking at an event with attention frozen at

just one frame or window, event partonomies require for their description a portion of time in which an episode unfolds. In sum, events are either individuated automatically in perception or are thought about, construed in conception and talked about. They are structured representations analyzed into temporal and sequential sub-components, in which case we speak of their partonomies.

2.4. Event classification

Once events are understood as bounded regions of time-space with dynamic interactions between their participants, it is possible to look at how they are coded in language. Although any event can be perceived and thought about without reference to language form, in practice lexical items and grammatical schemas help their users structure experience by providing ready made categories sanctioned by convention. In first and foreign language acquisition, one task that a language user has is to recognize these conventional packages, and understand the limits of their application and relations to other conventional units. This section will review the relevant categories of events present in the literature.

The categorization that has gained wide popularity was proposed by Vendler (1957). It is the time schema that was used to classify verbs into the following four classes.

- a) activity, e.g. running,
- b) accomplishments, e.g. running a mile,
- c) achievements, e.g. reach the top,
- d) states, e.g. knowing.

Activities designate the expanse of time that is unbounded. Accomplishments designate a bounded period of time during which a participant performs an event. Achievements differ from accomplishments in that they profile (put in focus) a point-like event, e.g. catching a dog preceded by the activity of looking for one, or running after it. So accomplishments and achievements differ with respect to the observation that the events in the former category are not point-like, but continue over a certain period of time during which participants try to complete a plan. Hence, writing is an activity, but writing a book is an accomplishment, i.e. someone was continuously or discontinuously engaged in the event which led to the completion of a set goal in a typical situation. States are events that are homogenous and which do not require any special energy expenditure. Knowing, being, and feeling, but also thinking in the sense of being

of an opinion are examples of states. When thinking designates and is synonymous with considering, and/or brooding over something, it would be better thought of as an example of an activity event.

Lewandowska-Tomaszczyk (2011: 37) discusses various alternatives to this classification. For example, Kenny (1963) fuses *accomplishments* and *achievements* into one class of performances; Ingarden (1964 in Lewandowska-Tomaszczyk 2011) only uses the term achievements to refer to events, whereas the other events were called *processes*. Bach's (1986: 6) classification has *eventualities* as the most superordinate category broken down into *states* (*dynamic or static*), and *non-states* divided further into *processes* and *events*, which were further sub-divided into *protracted events* and *momentous* ones. Finally, the *momentous* events were either *happenings* or *culminations*. The table below is a useful summary in this regard.

Eventualities States Non-states dvnamic static processes events sit be drunk walk stand be in NY push a cart lie own x he mean (i.e. behave in love x resemble x a mean way) know x think (that) protracted momentous build x walk to Roston happenings culminations die recognize notice reach the top flash once

Table 5. Event classification (Bach 1986: 6)

Compared with Vendler's (1957) classes of events the following differences can be identified. Vendler's states are not further sub-divided. Clearly, though, Bach (ibid.) is right in keeping dynamic and static states apart. Bach's *processes* are *actions* in Vendler's classification, but *happenings* do not have a counterpart there. The so-called *protracted events* in Bach are called accomplishments in Vendler's classification. *Culminations* for Bach are what Vendler calls *achievements*. The common feature of these categories, however, is that they require a portion of time for their characterisation and instantiation, some

character or characters (participants) and their dynamic interactions in some domain (e.g. space, emotion). A further important thing to remember is that a single verb can change event class membership when it is used with different senses. An easy example is the verb *think*. When it designates what may be called CONSIDERING, the corresponding event is an *activity*, but when it is used to signify the RECKON sense, it is already a state kind of event that characterises the semantic pole of an expression. Similarly, *He pushed the pram away* is a happening, a point-like event, but *He pushed the pram for two hours* is an activity, and *He pushed the pram across the street and then into the shop* becomes an accomplishment. Again, these sentences testify to the ability of verbs and language form in general to focus on different designata (profiles of the semantic poles of expressions). It must be stressed that events are conceptual, dynamic entities whose primary domain of instantiation is time; they undergo construal operations, and prototypically are coded with the grammatical category of verb.

The classification of events was also undertaken by Radden and Dirven (2007: 171-332). In part III the scholars describe 'situations as temporal units'. The effected classification of events and their verbal coding, generally following the pattern suggested by Vendler (1957, see above), has an additional constructional element added to it. Verb meaning is an important parameter in classifying an event it codes, but it is additionally grammatical constructions in which a verb appears and their meaning that allow a fuller characterization of event types. Situations and events people describe with language have starting points, duration and end points. The very concept of *situation* is defined in passing (Radden and Dirven ibid.: 3.2: p. 47-51, and 346) as "events that happen or states that things are in ... situations can consist of a conceptual core, a time schema, grounding and setting elements". In fact, *event* is almost synonymous with *situation* for them. This is presented below:

Table 6. Elements of a situation (and event) (adapted from Dirven and Radden ibid., 176)

Situation								
Conceptual core		Time schema	Grounding		Setting			
relation	participants	situation type	reference	time reality status	place	time	circumstances	

It is the *time schema* that is used primarily for classifying events, but which also requires the other elements. Both verbs and grammatical constructions foreground the temporal profile of an event, which in turn allows its proper classification, as discussed below with some detail after Radden and Dirven

(2007). Before this, however, let us take a look at how the sequence of potentiality, time, aspect and finally the event itself are coded into a sequence of: modal, tense, aspect, and verb accordingly. This is a 'telescopic' A/D relation. First, a doubt (as an example of modality type) is expressed relative to some schematic event, next comes the coding of the time interval (past, present, future) in which it takes place, followed by aspect signalling the actual portion of this time. In attentional terms, the scope becomes still smaller, zoomed in, so to say, and finally the verb is used, which provides further detail about the actual time interval one is verbalizing, with additional information regarding result, manner, or both.

The first distinction that Radden and Dirven (ibid., 179) present is between *bounded* and *unbounded events*. The former are either *durational* or *punctual*, both of which can be *telic* or *atelic*, which effects four categories: *accomplishments*, *activities*, *achievements* and *acts*.

Bounded events				
Duration	Durational		Punctual	
Tellicity	Telic	Atelic	Telic	Atelic
	accomplishments	activities	achievements	acts
	She changed the nappy	She cuddled the baby	He fell asleep	He burped

Table 7. Types of bounded events (adapted from Radden and Dirven ibid., 179)

The categories presented at the "lowest" level are the same as those in Vendler (1957), except for the *atelic acts*, which are called *happenings* in Bach (see above). The events are referred to as bounded because their temporal profile includes a boundary. *Accomplishments* are events that profile a beginning stage and the successive stages towards the last stage, which leads to an expected resultant stage. This is also why accomplishments are telic. *Atelic activities*, like the example above (*change nappies*) are conceptualizations in which any stage during the event can count as its proper characterisation, but there is no definitive beginning or final stage or state. In *telic achievements* the build-up phase immediately prior to the actual final moment is salient. However, it is not the most salient entity. The most salient sub-event (with no clear boundaries in between) is the moment at which the baby's head just lay on the pillow and s/he was in his/her dreams. The atelic acts are moments without any salient build-up or follow-up phases; they take a brief period of time to think of or happen.

The unbounded events are only durational, but can also be either telic or atelic. The interesting thing in the discussed classification is that Dirven and Radden (ibid.) emphasise the differences that grammatical schemas used with

the same verbs can reclassify a given verb to a different sub-group. Let us look at the following figure that presents unbounded events:

Unbounded events				
Duration	Durational		Durational	
Tellicity	Telic	Atelic	Telic	Atelic
	accomplishing activities	unbounded activities	culminating activities	iterative activites
	She is changing the nappy	She is cuddling the baby	He is falling asleep	He is burping

Table 8. Types of unbounded events (adapted from Radden and Dirven 2007)

The verbal categories CHANGE NAPPY, CUDDLE BABY, FALL ASLEEP, and BLURP are the same. What then is responsible for the carving out of the different temporal profiles by the grammatical schemas? The sentences:

- 21) Ann changed the nappy
- 22) Ann has changed the nappy
- 23) Ann will change the nappy

are examples of accomplishments, but

24) Ann is changing/will be changing/was changing/ has(had) been changing the nappy

become accomplishing activities, because (21-23) profile a certain unspecified stage or phase of CHANGE NAPPY, and regardless of the 'portion' of the time schema being looked at (past, future, present), the sentences profile the understanding that the nappy is changed, and the event was, is, or has been completed (accomplished in other words). Moreover, Radden and Dirven (ibid.) propose using a formal test to check if one is dealing with accomplishments or accomplishing activities. The dependent variables the test uses are the verbs finish or stop. Thus, finished ('skończyła') changing the nappy is an accomplishment, whereas stopped ('przestała') changing the nappy is an accomplishing activity. In table 8 (above) the event coded by is cuddling the baby is unbounded by virtue of the observation that the scope of attention is narrow; it only encompasses one frame perhaps, which is a case of sequential mental scanning operation (Langacker 1991). The category culminating activities is synonymous with almost achievements, that is events whose resultant state is salient, and yet it is the immediately preceding phase that is in profile and is therefore the most salient.

Last, Radden and Dirven (2007: 191) divided states into: *indefinitely lasting states*, e.g. *Ann hopes to see her baby soon*, *habitual states*, e.g. *She always breast-feeds her baby*, and the so-called *everlasting states* such as, *Breast fed babies are happier*. Obviously *breastfeeding* is a different state than knowing or feeling or being. Perhaps a better idea would be to talk about particular event schemas of BEING, or KNOWING. We shall return to this point in another section on event schemas.

Going back to the types of states, Radden and Dirven (ibid., p. 191) provide a list of subcategories of *indefinitely lasting states*, directly quoted below:

- a) psychological states: want, desire, long for, miss
- b) emotional states: love, hate, like, detest, be happy
- c) mental states: know, believe, think, hope, be doubtful
- d) perceptual states: see, feel, (it) feels, smells, be aware of
- e) behavioural states: be good to someone, be mean, be a miser
- f) states of possession: possess, belong, own, have
- g) states of being: contain, consist, exist, be tall, be a millionaire
- h) positional states: stand, sit, lie, rest, extend
- i) various relational states: involve, be similar to, be

Some of these verbs that describe states can be re-conceptualized and used for coding *temporary states* and used in the progressive tense. This concerns the *emotional states*, as in the following example sentences:

- 25) The 28-year-old ... works alongside Selina Scott and he is loving it. (BNC)
- 26) How are you liking your new job? (Radden and Dirven 2007: 192)
- 27) He is hoping a local farm owner will rent him space to run a boarding kennels and rescue side by side one supporting the other. (BNC)
- 28) He said he was feeling sick and numb and had a crushing pain. (BNC)

Along with being temporary states, these sentences also code different pragmatic inferences (cf. Graesser et al. 1994, 2001). In (25) the speaker predicts his/her interlocutor has not yet formed an opinion about his/her job unlike in the case of the alternative structure in the present simple tense, *How do you like your new job?* The progressive form of HOPE in (26) has the additional semantic component of what Radden and Dirven (ibid.) call 'intensive expectation'. Similarly, (27) inclines an analysis which grants the progressive aspect an inference of the acuity of the pain, or other unpleasant bodily sensations. Another well known alternative that the progressive aspect brings about to *indefinitely lasting state* verbs and the related events they describe is what could

be labelled EXPRESSING TENDENCY. This situation is exemplified in the following example sentence:

29) He is resembling his father more and more (Dirven and Radden, ibid., p. 193)

Some verbs that describe *behavioural states*: 'be good', 'be kind' and some other can be used in progressive, which construes an event not as a state but an *activity*. In the case of 'be kind' the sentence, *You are being kind* is a compliment, whose illocutionary force is synonymous with *It's kind of you*.

What Radden and Dirven (ibid., p. 194) call *habitual states* are represented by such forms as the ones below.

- 30) Mary smokes a pipe.
- 31) Germans drink a lot of beer.
- 32) My son-in-law drinks a lot of beer.
- 33) But he lives in Paris.

The actual labels that are proposed for each for the above events-states are slightly different, however. (30) is a personal habit, (31) a social habit, (32) designates preferences, and (33) residence. The taxonomy is a little random and the related categories have unclear boundaries. However, for a cognitive approach to language this is not a problem. Cognitive grammar accepts such a view of categorization which accommodates the understanding of fuzzy categories, and prototypical and peripheral cases. Some publications and materials for foreign language users reserve the term *permanent activities* for the four different categories presented above. Last, the so-called *everlasting states* are events such as *Oil floats on water*, *A triangle has three sides*, *One and two is three*, and *Water boils at 100 C* and are events that are also known under the name *physical laws*.

The different classifications presented and discussed above use different labels. However, it is not the differences but the similarities that we wish to stress. The common denominator of the above classification is an understanding that, regardless of terminology, any event class requires a portion of the time schema for its characterization. Hence, the lesson from analysing different proposals regarding events is that grammatical schemas are used in response to particular choices regarding which fragment of the total temporal frame is to be carved out, and is to direct a language understander's attention to. Additionally, verbs instruct about other important details of the described events, such as manner, e.g. plod through the snow, as opposed to tiptoe across the room on the one hand, or result verbs, e.g. cut, passed his exam, clean, freeze (cf. Rappaport et al. 2010). The fusion of verb and its arguments together with a grammatical schema provides an event with a coding that instructs about the desired construal.

2.5. Events, scenes, situation models and event schemas

In the previous section, while discussing how people segment ongoing activity, it was argued that events are structured mental or cognitive representations. In a top-down fashion, during thinking, language use, its comprehension and production people activate event schemas and their models to comprehend and produce stories, make sense of actual scenes that happen in their daily lives, and organize the content of their working memories of autobiographical and other data. This applies to first, second and foreign language users. In particular, the last group on this list are winning more and more access to narrative events not only during foreign language classes (which increasingly tend to focus on the ability to communicate), but also due to easy access to newspapers, magazines, or TV channels that broadcast in English. Especially useful as well in promoting real life materials for reading and listening are internet services such as You Tube. Hence, narrative events are present in almost all genres, no matter whether one deals with politics, newspaper magazines, TV reports or everyday conversations.

Cognitive linguistic and psychological literature is full of proof that generalisation is a real process. It feeds on exemplars of events, scenes, behaviours, objects, language forms, sentences, and so on, whose result is an abstraction or abstract representation. Such abstract representations have been proposed for grammar as well (cf. Langacker 1991), where they are shown to arise if a language user and learner are provided with sufficient amounts of language input and opportunities for linguistic interaction. When grammatical schemas are formed in a bottom-up process, that is from experience to mental representations, they then begin to sanction new expressions in language production that a given language user has never heard before. Hence, on the basis of sentences such as *John kicked the ball*, *The man took a book*, one can form new sentences quite productively and say (all examples from British National Corpus):

- 34) He took a sip of tea.
- 35) I know it took a while to finish the book.
- 36) Yanto kicked the (motor)bike into life, did a quick turn and, exhaust roaring and rear tyre screeching, departed towards Purton.
- 37) He twisted and squirmed and kicked the air and went on yelling like a stuck pig, and Miss Trunchbull bellowed, 'Two sevens are fourteen!
- 38) ... more than 11 million smokers in Britain have kicked the habit of smoking.

These metaphorical uses of *kick* and *take* are sanctioned by their respective schemas and categorization processes that Langacker (1991) called *extension* and *elaboration*. In the case of extension, the prototype of a category, here the

prototype of an event schema, is used to categorise and code the metaphorical senses. Elaboration is a set of correspondence links between the elements of a schema and the elements of its actualized instantiation. It is important to remember that both schematic and elaborated representations are meaningful. For example, the expression in (35), He kicked the motorbike into life, relies on the grammatical schema SVOPrepO, which is capable of effecting such sentences as He pushed the apple under the fence, I put the book into the bag, or Dad shovelled the coal into the basement. The events that these sentences describe have an agent who performs the task of moving some physical object so that it is inside a container or area described by area of land on each side of the fence, bag, and basement respectively. The events are physical activities, as are the participants. If so, examples (34-38) represent meaning extensions from this prototype to various degrees, (34) because the taking was not performed with the prototypical body part (hand), but the mouth (took a sip); in (34) the event of taking refers to time, while in (36) the kicking was performed as a typical action of starting the engine, so bike is used metonymically for the kick starter (shaft). In (37) the extension from the prototype lies in the fact that nothing was kicked, save the person's swinging of a leg through the air. Last, the kicking of example (38) designates ceasing to perform a habitual activity.

But what are the abstract mental representations of events? The title of this section lists *scenes*, *events*, *situation models* and *event schemata*. How do they relate?

Let us first consider the most schematic category of *event schema*. There are different proposals. For example, Rumelhart and Ortony (1977) and Rumelhart (1980) also discussed by Zacks and Tversky (2001: 31) state that *schemas for events* arise in response to repeated experiences with event tokens. They have the following characteristic features:

- a) Schemas enable the so-called *binding*, that is, treating and categorizing as belonging together of numerous co-temporal features, objects and relations of a scene.
- b) They allow for *embedding* that takes care of the partonomic structures of events.
- c) Event schemas accommodate and support the possibility of various levels of *abstraction*, which refers to event taxonomies.
- d) Schemas are *knowledge structures* that are active both in *top-down* (conceptually driven) *processing* of events (e.g. telling a friend what you remember happened some time ago) as well as bottom-up processing, based on on-line, sensory information.

With the above features, schemata of events (goal-directed hierarchical knowledge representations) also guide the operations of attention and choices of language forms in communicating events.

Relating event schemas to language use, Rumelhart (1977), Schank and Abelson (1977), van Dijk and Kintsch (1983), and also Zwaan and Radwansky (1998) proposed different story grammars, scripts and situation models. Rumelhart and Ortony (1977) claimed event schemata first disturb the perception of an event, while its later recall is also reconstructive. In one experiment they found out that stories analyzed for their partonomic structures were recalled in such a way that subsequent attempts at summarizing ended up by pruning the details and presenting the content with the use of larger (more schematic and inclusive) event-units. Examples of event schemata are Bartlett's (1932) *schema*, Charniak's (1975), Minsky's (1975), Winograd's (1975) or Metzing's (ed.) (1979) *frame*, and Schank and Abelson's (1977) *script*.

Moreover, according to Carrel (1983: 84) schemata can be further broken into: *formal schemata*, i.e. the rhetorical patterns of texts, and *content schemata*, i.e. abstract representations of the contents or experience that texts activate. As an example, a *narrative schema* involves both content and formal aspects. The content aspect of the narrative schema involves participants and their interactions in time-space, whereas its formal aspects pertain to how a typical story expressed in a particular language begins, continues and finishes.

This and other work on event schemata is also tied up with the so-called *situation models*. According to Zwaan and Radwansky (1998: 162) up until the 1980s psychologists used to think that text processing (written or spoken) involved the "construction and retrieval of the text itself rather than the situation described by the text". Johnson-Laird (1983), and van Dijk and Kintsch (1983) claimed that together with representing a text, language users also build mental models of the described events. In this way the role of language forms was redefined as processing instructions, or clues for building a mental representation of a situation. Moreover, *situations* should be thought of as actualized instances of *event schemas*. For example, a script of a shopping situation and events is very general. It is schematic for a particular experience that we may remember and want to describe in language. The schema will guide the construction of a specific *situation model* or *mental simulation* (Barsalou 1999) of the described experience. Kintsch (1983) lists several reasons why we might need *situation models*. In his view they help:

- a) amalgamate information across sentences (and allow continuity of experience),
- b) show similarities in comprehension effected by different modalities (e.g. film vs. text),
- c) account for the differences in how experts and non-experts comprehend texts,
- d) understand translation processes and problems with equivalence.

In general, a *situation model* is a "mental representation of activity described by discourse" (Zacks and Tversky 2001: 35). However, both propositional-amodal

(Kintsch ibid., Johnson-Laird 1983), perceptual-embodied-modal (Barsalou 1999, Bergen 2012), or even mixed situation models (Zwaan 1999: 86) have been proposed.

To remind the reader, propositional models assume that mental representation of a text takes the form of disembodied and abstract symbols of the sort discussed by predicate calculus. For example, the sentence *John has a dog* would be represented by HAVE (John, dog), where HAVE is a two-place predication (i.e. it has two arguments). In essence, such representations can handle even complex texts, but there are doubts whether the limited capacity of human working memory and other cognitive constraints can handle the rapid speed with which texts are processed. Propositions, though capable of representing even complex texts, are blind to such semantic effects, as are illustrated by the following two pairs of sentences:

- 39) The carpenter hammered the nail into the floor.
- 40) The carpenter hammered the nail into the wall.

and

- 41) The ranger saw the eagle in the nest.
- 42) The ranger saw the eagle in the sky. (Zwaan et al. 2002)

The first pair of sentences differed with respect to the implied position of the nail. When people were asked to simulate the content of (39), they reported the nail was positioned horizontally, whereas example (40) induced the vertical position of the nail relative to the wall. Examples (41) and (42) illustrate the different implied shapes of the eagle's wings, depending on whether it is resting in a nest, or flying in the sky. Propositional accounts of the semantics of such sentences cannot explain such contrasts. Zwaan (1999: 85) argues together with Barsalou (1999) that "perceptual symbols [author's comment: situation models] can exhibit all the features of propositions". However, Zwaan (ibid., p. 86) declares a reservation, saying that the two representational formats "may not have to be mutually exclusive. Perhaps both are used. It may depend on the depth of our background knowledge to what extent our representations are embodied". The point is that the use of amodal representational format cannot be ruled out *a priori*. This may also depend on the richness of our interactions with the world, and the kind of experiences we have had with certain entities.

A case in point is an experiment that was designed and carried out as part of a workshop in Denmark supervised by Benjamin Bergen and Alan Cienki in which this author took part as one of the alumni. The question the experiment sought to answer was whether people would gesture differently depending on the quality of experience they have with a task. The task was to build a wall using

panels hanging loosely from a ceiling on a rail in a university lecture hall. One group of experimental participants actually built the wall, whereas the other group were only allowed to watch other people build it. It turned out that those who physically built the wall used more enacting gestures, while those who only watched how the wall was being built used more so-called representing gestures in their subsequent verbal reports. Enacting gestures had been defined as the ones which reported particular events from the point of view of a participant immersed in doing an activity, whereas the representing gestures reflected the perspective of a person external to the whole undertaking with the role of a passive viewer. The statistically significant difference in the number of enacting and reporting gestures in the two independent groups of experimental subjects motivated the conclusion that differences in experiencing events (only watching condition vs. doing condition) leads to qualitative differences in the use of gestures. This result in turn also allows a tentative conclusion that expert, vis \dot{a} vis non-expert (doing / watching conditions) knowledge of a task induces differences in how people simulate the task. The doers had much richer tactile, olfactory or muscular information about how it 'feels' to be building such a wall. They also had an opportunity to learn how it is when a group of people have to co-operate in the performance of the task, or what one has to be careful about (e.g. having to mind one's fingers as the movable panels were heavy, and when they came together, there was a danger of getting fingers caught between them). The viewers did not have this knowledge. Even this example, however, does not testify to either the propositional or embodied-amodal format of mental representations of events. The present work accepts the view that *event situation* models have perceptual, embodied and modal bases, especially as they (perceptual symbol systems and simulations of events effected by them) need not be accessible to conscious awareness.

Apart from the mental representational formats of *situation models*, another issue is how people remember events. However, because proper treatment of this issue is not possible without recourse to the structure of the whole narrative and its schema (with events as basic units of their organization, of course), this discussion is postponed to the section on narratives, their definitions, types, schemas and other problems.

2.5.1. Event in cognitive linguistics

The discussion of event and construal in this work has so far wavered between what Langacker (1987, 1991) called the semantic pole associated with conceptualization and the phonological pole related to variable aspects of form. This has been hinted at a few times, as when the author mentioned the distinction between formal and content schemata of events (Carell 1983). The

discussion of *event* concept in this section will also either approximate the semantic pole thus defined or the phonological one. Cognitive linguistics event models, schemas, frames, domains, construal and role archetypes are certainly abstract enough to be placed in the realm of the semantic pole, whereas the terminology of transitivity, construction, basic syntactic patterns, lexis, complex sentences (though motivated conceptually by models, schemas and embodied experience) had been used even before cognitive linguists put forward their hypotheses. That is why, whenever necessary, we will signal which pole of the conceptual-linguistic complex of *event* is under scrutiny.

The term *situation model* or *situation model of event* used in the psychological literature of the subject matter (see above) designates patterns of mental activations (conscious or not) that are co-temporal (or even isomorphic) with either thinking about an event, or also additionally using language about it. By contrast, Langacker's Cognitive Grammar (1991: Vol. 1: 283) uses the word-term *model* to refer to abstract, schematic representation of energetic interactions among entities in a physical world. The model is linguistically elaborated and symbolised by different patterns of a simple clause. These patterns are in turn elaborated by concrete clauses. The model itself, together with various interpretations in which particular entities are focused or backgrounded, provides an image schematic motivation for various metaphorical extensions. Langacker (1991: Vol. 1: 282) begins the discussion by stating that:

Meanings are characterized relative to cognitive domains, many of which are idealized cognitive models in the sense of Lakoff (1987). Cognitive models fundamental to our experience and our conception of the world are claimed to underlie the prototypical values of certain grammatical constructs pertaining to clause structure. **Grammatically significant as well is the structure of events** [emphasis mine] – or more precisely, the structure of our *conception of events* in terms of conceptual autonomy and dependence. Clausal organization is in large measure shaped by interaction of these factors.

One such model was termed the *billiard-ball model*. It represents our understanding that the physical world consists of such elements as space, time, material substance and energy. Physical entities (e.g. billiard balls) made from a certain substance not only occupy a certain region (space), but they also move and exert forces on one another. Such entities form the prototype for the noun category in language, while their energetic interactions give rise to prototypical verbs. Naturally, energetic interactions depend upon the existence of physical entities and some cause or the initiator of force. This understanding of forceful interaction in the physical world in turn motivates the model and structure of a simple clause in terms of what has been termed the *Action Chain Model*, with the head being the chain's force initiator (agent) and the tail the force receiver, or force absorber. Force is sometimes transferred via a third entity, like it would

in a game of billiards, where someone hits the first ball, which set to motion, moves and hits another ball that begins to move and so on, until energy is absorbed and the whole chain of moving balls comes to a standstill. The following graph illustrates the most important components of the Action Chain.

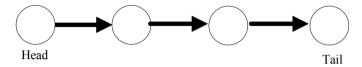


Fig. 4. Action chain (based on Langacker 1991: 283)

The second Cognitive Grammar model used for categorizing events was termed the stage model by analogy to a theatre performance with the audience sitting (usually in the dark) in front of the actors on stage. The stage is analogized to a viewing frame that a perceiver inspects, whereas the actors and their performance are analogous to physical entities interacting with each other. This particular interpretation invokes an active and subjective role of the viewer (perceiver) in detecting as well as interpreting events organized on a temporal axis and in space (on stage). Some other, additional models are defined against the so-called semantic roles of agent, patient, experiencer or instrument Langacker (ibid., p. 284). Their complete list is neither provided nor intended on the grounds that it would depend on the degree of the level of schematicity one decides to accept, and there are many such levels, i.e. "schematization can be carried to any degree". Moreover, semantic roles are pre-linguistic categories referred to as role archetypes. The combination of the various models gives rise to the third complex conceptualization of an event, termed the canonical event model (CEV). It results from superimposing portions of the action chain and stage models.

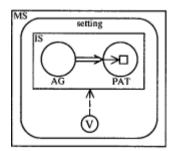


Fig. 5. Canonical event model (after Langacker 2008: 357)

The Agent initiates the energetic interaction in the model. The arrow symbolizes energy or force, which is "directed" at the Patient, an entity that absorbs the energy (signalled by the arrow inside the circle symbolizing the patient role.

Moreover, the solid line of the rectangle represents the viewing frame, or the context (else ground and the immediate scope of predication) for an event. The broken circle placed outside the rectangle signifies a viewer who is non-salient within the whole conception of an event; the broken arrow directed at the viewing frame (the setting) represents the viewer's perceptual and attentional focus directed at the frame, similarly backgrounded (broken line). This third model is meant to symbolize the typical situation of someone observing action without the observer's direct involvement.

Such fusion of possible participants (people, animals, objects) and relations (features, processes) in a single gestalt conception is foundational for a model that is abstract enough to categorize concrete events. Additionally, the model of events involves Autonomy/Dependence (A/D) relationships inherent in it.

First, event participants are autonomous in the sense that they can be thought of, imagined and mentally manipulated without recourse to the actions they perform. By contrast, an activity can only be described with reference to its participants, however abstract they may be. Secondly, events can be broken down into their component parts, and each of them can be thought of and attended to with the salience of the other components seriously reduced or backgrounded. However, one component sometimes depends on the occurrence of the other. The case in point is Langacker's (1991: Vol. 2: 287) example of the verbs blink and wink. Only wink necessarily involves intentionality and hence is a signal, whereas blinking may be involuntary. Event taxonomies are similar to this illustration. For instance, the superordinate verb run codes an event (activity) that is like jogging, but jogging comprises the additional component (run slowly), so it is possible to say that jogging is a kind of running, but not the other way round. The conception of jogging depends on the definition of running. Regarding event partonomic structure, if we break down the event drank tea into component parts, each of the resulting sub-events is independent. Langacker (ibid.) also shows how the idea of causality is inherent in the conception of an event by the following example sentence:

- 43) a) The wind caused the tree to fall over.
 - b) The tree fell over.
 - c) *The wind caused.

It is (43a) in which the semantic role (role archetype) CAUSE figures prominently and is salient due to the observation that it receives direct linguistic coding by the lexical item *caused*. In (43b) this is absent, whereas (43c) is anomalous because it only tries to code CAUSE without the affected participant. The above example also illustrates the A/D layering; CAUSE depends on the induced change, which in turn presupposes some active agent.

The question that arises in this context is what is the nucleus, independent element of an event. Langacker (ibid.) promotes the so-called THEME to this role, or else called the THEMATIC RELATION. We also learn that the thematic relation (the theme) can assume any of the following semantic roles: ZERO, MOVER, PATIENT, EXPERIENCER, but also some other. The following definitions are used for the described roles:

- a) ZERO "relationship in which a participant ... occupies some location or exhibits some static property".
- b) MOVER "changes position with respect to its surroundings".
- c) PATIENT "undergoes an internal change of state".
- d) EXPERIENCER "is the locus of a mental process" Langacker. (1991: Vol. 2: 289)

The term *theme* is most abstract and subsumes the other autonomous categories of the event conception. It provides a clause with its aboutness, and it is essential to stress that *construal* plays a major role in how a speaker wishes to code a given event, so the particular sub-components of the CEV (Canonical Event Model) can be foregrounded and backgrounded selectively. In other words, attention can be selectively paid to them or they can be defocused and hence become less salient as a result. As Barsalou (1999) says, selective attention to an entity becomes a semantic feature of a predication (semantic pole of expression). However, when it comes to how lexical units manage to code experience, Langacker (ibid., p. 290) reaches the conclusion that usually some gestalt representations are semantically effected, as in:

- 44) My balloon (burst, broke, popped).
- 45) Jason (burst, popped, broke) my balloon.

(44) describes a non-energetic change of state because the Action Chain's head, the Agent, is backgrounded by a lack of direct linguistic coding, whereas in (45) it is present. In other words, the bursting, popping or breaking of a balloon in (44) gets coded as an autonomous theme, and the cause is non-salient. This is why, with regard to the above examples, the A/D alignment of entities within a clause is further divided into either *intrinsic* and *experiential*. The need for the intrinsic type follows a question whether event components are "thinkable" so to say, independently of each other. For example, one is capable of conceptualizing solely the sound of balloon breaking, or its fast subsequent disintegration into many pieces, but experientially it forms a gestalt and no linguistic form exists that would only describe one component to the exclusion of the others.

Hence, there are two aspects of event organization, the Action Chain and the A/D layering. Whereas the Action Chain structure begins with the head as

the force initiator, and the entity that finally transfers the force to the head (the theme), the A/D layering points to the affected entity and induces backwards scanning towards the process initiator. Langacker (ibid., p. 292) nicely illustrates the whole idea by a set examples of an ice-cracking event.

- 46) a) The ice cracked.
 - b) A rock cracked the ice.
 - c) A waiter cracked the ice with a rock.
 - d) The manager made a waiter crack the ice with a rock.
 - e) The owner had the manager make a waiter crack the ice with a rock.
 - f) ? Bad luck caused that the owner had the manager make a waiter crack the ice with a rock.

The chain of causal agents involved in the thematic relation of finally cracking the ice is made longer from (a) to (f). In fact (f) attributes the cracking of the ice (finally) to bad luck. The *energy source*, or *the starting point*, is the agent, and the head of a clause, whereas its tail is referred to as *energy sink*. Cognitively natural orderings of elements within a clause conception have been called *natural paths*. They are enumerated together below with a term that is their respective natural starting point (Langacker: ibid., p. 293).

Table 9. Natural paths and starting points of events (Langacker 1991, p. 293)

Natural paths of events	Starting points in linguistic expression
1) flow of energy along an action chain 2) temporal sequencing of events of their components 3) temporal order of words at the phonological pole 4) core to periphery sequence of event components based on A/D layering 5) relative prominence of clausal participants in terms of F/G organization	1) energy source 2) the initial event 3) first word in a clause 4) thematic relationship 5) clause trajector

Hence, the more starting points co-occur and co-align, the more natural is the coding as well. An effort towards this effect would mean, for example, that in an attempt to present a narrative, one starts from the temporally initial event, with the first word of the opening clause being its trajector and energy source, e.g. *Peter turned up for the meeting at last. Peter* can be considered as the energy source, the agent, the clause trajector, and the thematic relationship coded by *turned up*. There are two axes of this, however. The first of them, let us call it *horizontal*, describes how the components of a single event get distributed over a single clause or a single intonation unit (Chafe 1994); the other axis, the vertical one, is used in the description of the actual events selected for linguistic coding and their sequential presentation.

At this point Langacker (1991: Vol. 2: 7.2.1) is concerned with the relationship between *construal* and *coding*. As was already signalled, the former term refers to conceptualization, whereas the latter is used for the decisions regarding the choice of linguistic material in verbal communication. One can think of an event in a great number of ways independent of the event's objective parameters. Linguistically, a language user has at his/her disposal "a variety of ... devices, each with multiple values clustered around a prototype" (p. 294) to code a given conceptualization.

In coding a particular event a speaker must at least consider its participants, level of specificity and scope of predication. First, prototypical participants are people, animals and physical objects, especially if they are additionally salient because of their contrast, bright colours, the fact that they are in motion, or due to some other intrinsic features or features that a speaker attends to because they relate to the goal s/he has. However, due to the already mentioned subjectivity and unpredictability as to how a speaker will construe and code a scene, abstract entities can also be recruited to function as event participants. This was exemplified by an invented set of sentences (based on Langacker 1991: Vol. 2: 296) all coding the same event event.

- 47) a) Floyd broke the glass with a hammer.
 - b) The force of the hammer hitting the glass caused shards to fly in all directions.
 - c) Floyd's actions generated fragments of glass.
 - d) Floyd's arm brought the head of the hammer into contact with the glass.
 - e) Floyd's strength overcame the structural integrity of the glass.

(46a) is probably the most typical coding of the event with example sentences from (b) to (e) representing grammatically correct, albeit strange and atypical codings; (a) testifies to the choice of the Action Chain Model, the canonical event model, where the speaker is backgrounded and non-salient, and Floyd is nominated to the subject position; it has trajector status and serves as both the starting point entity, and force initiator. Sentence (b) is more explicit as regards the cause of the breaking of the glass as it mentions the force of the hammer, but on the other hand it backgrounds the active agent, here Floyd. By contrast, the agent in example (c) is the abstract, schematic and linguistically reified process coded as Floyd's actions that can be treated as the action chain head and force initiator. The process in this example is construed schematically and coded by the verb *generated*. It is only by the proper activation of background knowledge that a language user is capable of understanding that the clause describes an event of breaking glass with some tool. Example (46d) uses metonymies hand for Floyd, and brought the hammer into contact for broke. In particular, brought the hammer into contact with the glass is a sub-event that is logically prior to

breaking, which nevertheless is easily inferred from this context. Finally, (46e) is most unusual as the action head, force initiator, and abstract subject nominal *Floyd's strength* serve the purpose of the main figure (trajector) and cause of the whole event. Equally abstract and very unnatural (but possible) is the second affected participant here coded as *structural integrity of the glass*.

Having selected participants, a language user must to decide on the specificity level, i.e. the amount of detail with which s/he construes and codes his/her conceptualization of an event. More exactly, decisions must be taken regarding the specificity level of the event participants, processes, and causes, as well as temporality, the setting, or location. The question how foreign language learner makes such choices during narrative production must be postponed. Meanwhile, let us consider an existing narrative in English L1 and analyze the choices that have already been made as well as some possible alternatives. Below, there is a brief fragment of a narrative concerning childhood memories divided into intonation units according to the methodology devised by Chafe (1994, 1996, 1998, 2003) with the regulatory units left out (Badio 2012). The substantive units give discourse its aboutness, whereas the regulatory ones (cognitive, textual, interactive) serve the managerial function in discourse and help ensure that communication and understanding is possible.

- 48) a) Erm ... 'my cousin 'Mervin,
 - b) that was in the ^^REME,
 - c) ... er $^\circ$ got me a $3^{^\circ}$ 8.
 - d) ... and ^Benny,
 - e) ... ^knew his dad had some .. ^^ammunition,
 - f) from the ^^war.
 - g) ... and he ^found it,
 - h) and $^{\text{they}}$ were 3^{h} 8s,
 - i) . ^so we erm ... ^took it over the ^^marshes.

(based on McCarthy and Carter 1997)

The participants are coded as *cousin Mervin*, *gun*, *Benny*, *Benny's dad*, *ammunition*, (38s – calibre) and *we* (i.e. the whole group). The settings and locations are coded as: REME (Royal Electrical and Mechanical Engineers – a corps of the British Army), *war* and *marshes*. The events are coded by *got me*, *knew* (*had*), *found*, *were*, *took*. This coding of participants, locations and events represents a certain level of granularity. Because the participants of this narrative episode are good friends, the speaker assumes large amounts of shared knowledge. Linguistic forms only serve the purpose of providing access and trigger much richer mental simulations of their designata.

The following more detailed codings (in a different context) are probably possible. For example, the phrase *my cousin Mervin* signals the speaker's

relation to the person, the participant's gender. Many details are missing because they are irrelevant or inferable. These include the colour of Mervin's eyes, his height, body posture, likes and dislikes, his address, and that they had met before. The expression 38 is an elliptic and also schematic coding of the object entity GUN, with which the boys played in the marshes - setting. Other participants are referred to by their names, or how they relate to a member of the group of boys directly involved in the episode. Other participants' involvement is indirect: Benny's dad, cousin Mervin. Because this fragment belongs to the orientation (cf. Labov and Waletzky 1967) phase of the narrative schema, their frequent use is justified; the speaker introduces a context, the background against which the major theme of the narrative (DANGEROUS CHILDHOOD PRANKS) unfolds. The processes coded as, e.g. got and found remain salient with respect to how someone bought the gun, who he bought it from, how much he paid, or whether he paid cash or by credit card; similarly, nothing is known about how long the boys had been looking for the ammunition before they found it. The reason for the very schematic it that refers to ammunition is that the referent participant of this pronoun is active due to prior mention with the use of a full nominal – some ammunition from the war. In sum, schematicity involves decisions regarding the level of detail with which a speaker wants to construe and code (present verbally) his/her plan. A different construal of events in this respect will either effect a zoom in or out of the participants, activity and setting or locations. The proper treatment of larger narrative coherences is postponed to chapter three.

The third aspect of an event a speaker must consider, *scope of predication*, is defined as the "amount of the overall situation the speaker selects as the intended coverage of the expression" (Langacker 1991: Vol. 2: 297). This is analogized to *scope of attention*, a more psychological term but directly relevant to language. The selected scope of predication, e.g. direct coding of portions of the action chain, can be used to effect different profiles, and within them trajectors and landmarks. Within this thus defined and delimited region (scope of predication), the event participants, its setting, location, processes, actions, and other relations are portrayed.

Additionally, construals and codings can be either unmarked or marked. The unmarked coding (and construal) refers to such arrangements of event parameters that conform to natural, expected and prototypical values, the standard being exactly the image schematic conception of event, the complex formed by superimposing the billiard-ball, action chain, stage, and semantic-role-specific models. Tesnière, (1959 as quoted in Langacker 1991: Vol. 2: 299) shows how the form-meaning iconicity principle works with regard to settings – more global and locations – with much smaller scope.

- 48) In Louisiana (SETTING), a hurricane destroyed several small towns.
- 49) **In July** (SETTING), a major hurricane struck Louisiana. (PARTICIPANT) (Ibid., p. 300)

In the above examples, settings, which are peripheral to events in the sense that they are the theatres or backgrounds against which events take place, are also placed on the periphery (here the initial position) in a grammatical structure. As the above examples testify, an entity can be construed as a setting and coded by an adverbial of place, a circumstantial (example 47), or a participant and direct object in (48). In the next example,

50) I chopped the onions **on the counter** with a cleaver. (Ibid., p. 300)

the prepositional phrase *on the counter* is a location coded as an adverbial, hence it is used more centrally in the structure. Syntactic behaviour is explained with reference to semantic considerations, which is one of the central features of cognitive grammar in general. The setting for chopping the onions in example (50) above might be some kitchen. Location, defined by a narrower attentional scope, is also physically closer to the event's focal participants coded by subject and object.

Not every possible scene and event has a prototypical linguistic coding attached to it in a one-to-one manner. For many coding situations linguistic categorising decisions must be made in such a way that a speaker selects from a handful of clause patterns available in a language. This comment also refers to events that are highly conventional and do not raise doubts. The case in point includes verbs of sensation, e.g. *see*, *smell*, *taste*. They are categorised as transitive and appear in such sentences as:

- 51) She saw him coming down the street.
- 52) The chef was tasting soup.
- 53) Mary was smelling roses.

She, *chef*, and *Mary* are in the EXPERIENCER roles. The entities designated by the objects of these sentences are not affected in any way by the acts described by *saw*, *was tasting* and *was smelling*.

It is doubtful that language users are aware of the prototypical value attached to a transitive clause construction, which is derived from the archetype of the Action Chain Model and its components arranged on a temporal scale with the causal structure implied. If not, then the SVO1 must be understood as an extension from the prototype SVO. The schematic network might look in the following way:

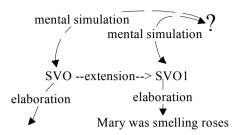


Fig. 6. A fraction of the possible schematic network of SVO construction

While producing *Mary was smelling roses* a speaker activates the whole network consisting of the prototype SVO, its extension SVO1, and actual expressions together with all correspondences. It is argued, however, that not all components of the network are equally salient in a conceptualization of this event. Many aspects of the network are also absent from it, e.g. the fact that each component node in the network has its phonological as well as the semantic pole.

In sum, different portions of the action chain can be profiled, i.e. can undergo attentional focusing, the AGENT, INSTRUMETN, THEME and other roles. Language structures provide the conventional repertoire for implementing these variable salience effects. The presence of an entity in a conceptualization is a matter of degree. Langacker (1991: Vol. 2: 335) shows this by listing the following sentences in the passive voice:

- 54) He opened the door.
- 55) The door opened very easily.
- 56) The door suddenly opened.
- 57) The door was opened.

Only (57) is a true passive in the sense that the conception of an agent is unnecessary to its semantic characterization, whereas in (55) the adverb *easily* indirectly makes reference to the amount of effort needed to open the door, and so also to some agent that must have acted upon the door. By contrast, the use of the adverb *suddenly* in (56) seems to result in a considerable backgrounding of the AGENT. Kemmer (2003: 112) calls this linguistic and conceptual capacity the *degree of elaboration of events*. The direct quotation below concludes this section:

... the degree of elaboration of events [emphasis mine] is a broadly significant linguistic and conceptual parameter. It is a subcase of the general human propensity for the grammatical systems of languages to conventionalize specific construals and potentially contrast such construals. Elaboration of events is a specifically attentional phenomenon, relating to the possibility for viewing situations at different levels of detail, or granularity, dependent on relevant communicative and contextual factors [emphasis mine].

In summary, cognitive linguistics uses of the term *event model* abstract away from particular activity, action or states. Unlike the so-called *situation models* in psychology, which are defined as on-line mental representations that represent activity and guide it, they are abstract. The common denominator is that both constructs help explain how linguistic systems are formed on top of the biological ones rather than against them. The situation models described in this section cater for modal and analogic representational format of events. The particular machinery discussed by Barsalou (1999) includes the so-called Perceptual Symbol Systems. The cognitive linguistic models of events as discussed by Langacker (1991), but also Talmy (2000) and Lakoff & Johnson (1999: 170-232) reach for a still higher level of abstraction; this level can be called *image schematic* or *topological*.

2.6. Other schemas of events compatible with CG and CL

Two terms: model and schema are used sometimes interchangeably to the effect that a reader may often hesitate which one is which. Hence, to remind the reader, the term schema or schemata is used to signify a mental structure which abstracts away from recurrent experiences with event instances, i.e. with particular events (Heine 1997). Apart from this, as the term is used in cognitive linguistics, it implies that linguistic regularities and so also schemas originate and have their motivations in embodied human experience (Merleau-Ponty 1994), Damasio et al. (1993, 1996, 2001), Lakoff and Johnson (1999), and Lakoff (1987). Other linguists, e.g. Heine (1997) and Dirven and Verspoor (2004) as cited by Clair, Rodriguez and Irving (2010: 3) also give examples of event schemas, claiming at the same time that they are metaphorical rather than biological in nature. The present work considers this difference unimportant. After all, the primary schemas may be biological, but they are then creatively extended for metaphorical contexts. As Langacker argues, even if we consider a sentence I am taking Mary with me, the target sense becomes most salient in context, whereas the salience of the source schema X TAKES Y (ACTION) (AGENT VERB-OF-MANIPULATION OBJECT) is unclear. In different cases and contexts it is probably salient to variable degrees. In highly conventional, routine situations that require a great amount of automatic control of language, the possibility that this schema motivates I am taking Mary with me probably passes unnoticed, whereas in other contexts, where there is need and time to reflect on what language form may involve, the schema reaches consciousness and can reach the level of introspective analysis.

This second effect is well known from anecdotal evidence as when a foreign language student learns the basic, physical sense of the word *put*, as in *My mum put the vase on the table*. Later, when the same student tries to

comprehend a metaphorical expression such as *She put a lot of herself into her novels*, the students often cannot help but activate the primary sense, which was learnt prior to encountering the metaphorical sense.

This is not to say that foreign language learners or native speakers have complete freedom regarding how they extend the primary, basic senses of verbs in describing events. These are matters of linguistic convention that one has to learn to use. Once in use and established, the primary sense that led to their creation only lurks in the background, sometimes totally inactively. Two mechanisms must be disentangled that relate to schemas for events. The first is responsible for motivating linguistic schemas by metaphorical extension from the biological schemas. The second mechanism and question, related to the first, is to what extent the primary source schemas should figure saliently in the synchronic semantic description of an expression.

Clair, Rodriguez and Irving (2010: 12) provide the following list of linguistic sub-schemas of events, together with their respective source schemas and labels.

Table 10. Example schemas (Clair, Rodriguez and Irving 2010: 12)

Source	Label	English examples
X takes Y	Action	I am taking Mary with me.
		I seized him by the arm.
		AGENT + VERB OF MANIPULATION + OBJECT
Y is located at X	Location	The mail carrier is here.
		I am at home.
		AGENT + EXISTENTIAL BE + OBJECT
X is with Y	Companion	Mary is with child.
		AGENT + COMPANION + VERB
		I will go with Mary.
		PERSON + VERB + with ACCOMPANIAMENT
		Mary and I are going.
		PERSON AND ACCOMPANIAMENT VERB
Y exists from Y	Source	Mary came from Louisville.
		PERSON + VERB.OF MOV. + fromPLACE
As for X, Y Verb	Topic	As for Mary, she saw the event take place.
		AGENT(topic) + V. OF PERC. + OBJECT
Y is X's (Y)	Equation	
Being schema	Identification	You are Mr Smith.
	Class	SUBJECT + be + PREDICATIVE NOMINATIVE
	Membership	He is a student.
		SUBJECT + BE + MEMBERSHIP CLASS
	Attribution	Fruit is expensive.
		SUBJECT IS PREDICATE ADJECTIVE
	Location	John is here.
		$PERSON + LOCATIVE\ BE + LOCATION$
	Existential	God is!
		ENTITY + EXISTENTIAL 'BE'

Tab. 10 (cont.)

Source	Label	English examples
Happening schema	Eventing	The sun is shining. It is raining. It is snowing. SUBJECT + EVENT VERB BE + NATURAL
Doing schema	Agent	EVENT Mary is reading a book. They are doing the tour. AGENT + VERB OF MAKING OR DOING +
Experiencing schema	Patient	EVENT or OBJECTD Harry saw a snake. He knows that it is dangerous. He thinks that he feels better. He feels happy. S (EXPERIENCER) + VERB + OBJECT EXPERIENCED
Having schema	Material possession Mental possession Whole-part	Do you have a cat? KINSHIP RELATION AGENT + VERB OF POSSESSION + OBJECT John has an idea. AFFECTED PERSON + VERB OF POSSESSION + AFFECTION The table has four legs. John has two sisters. MOVING SCHEMA SOURCE PATH GOAL
Spatial schema	Spatial Temporal	The apple fell from the tree. They searched the room. The weather went from dark to sunny. The events turned ugly. STATES SUBJECT or AGENT + VERB OF MOTION + from SOURCE to GOAL
Transferring schema	Transfer from X to Y Receiver and Goal	John gave a cake to Mary. John gave Mary a cake. AGENT + VERB OF TRANSFER + RECEIVER John gave the door a coat of paint. (as above)

A few comments are in order regarding this work on event schemas. The term *source* in the left column is a label for the embodied origin of the schemas expressed in the right column. It expresses the participants abstractly only as X or Y. The processes, states, activities or actions are referred to with a verbal predicate: *is located*, *takes*, *being*, *do* and other. Given the limitations imposed on text, this is unavoidable, but at the same time something of the universal character of such schemas is lost. The other labels in the source category refer to such terms as: *space*, *transfer*, or *experiencing*. Space is a basic domain and it serves the source for the conception of TIME (and many other), e.g. *Christmas*

is coming or We are approaching Christmas. The term transfer designates what Goldberg (1995, 2003) calls the prototypical meaning of the construction SVO—TRANSFER. Constructions or constructional schemas are meaningful in cognitive grammar, even if their meaning is more schematic than the meaning of lexical, content units of language. By way of example, the CAPACITY sense of SVO is represented by the following two sentences:

- 58) The classroom sits ten. CAPACITY
- 59) The tent sleeps four. CAPACITY

(58) means that it is possible for ten students to be seated in the classroom, i.e. there are 10 chairs; (59) similarly designates the possibility of maximally four people sleeping in the tent, or that the tent is for up to four people who can sleep in it. These and other sentences testify to Langacker's (1991: Vol. 2) observation that the number of possible situations and events in the world is limitless, and that linguistic structure does not provide a separate construction for each situation. Instead, there are prototypes, e.g. SVOO—PHYSICAL TRANSFER, and their extensions, as in:

60) EMIT INTENTIONAL SIGNAL (SCHEMA)

The Duke gave him a squint grin.

He gave me the thumbs up sign then disappeared into his trench.

She gave him a level look, understanding that he must be working, as they say, on information received.

Mrs Parvis gave Gloria a pat on the shoulder and for once seemed almost friendly.

He gave an ironic smile, content that Montgomery had been taken in.

The constructional schema of physical transfer, but also the metaphorical one, e.g. *She gave the door a coat of paint*, naturally fuses with the verb GIVE, which has three participant roles that can be filled: the giver, the receiver, and the entity transferred. The verb *give*, however, is not the only verb that can be used to designate transfer, e.g. *hand in, throw, kick, send, e-mail* (verb sense), *present* (v), and many other. Whereas the schema and its extensions remain silent with respect to the manner and/or path of transfer, the verbs are more specific.

The middle column of the above classification attempts labels that are really semantic roles. As the discussion of the cognitive model of the event proposed by Langacker (see above) showed, they are treated as additional models beside the CEV (canonical event model) that fuses the billiard ball, the stage and the action chain models. The status of the right column is somewhat unclear. On the one hand, it gives English sentences as examples of the categories in the left and middle columns, but on the other, it includes schemas

that fuse labels from syntax, semantics, general cognition and embodiment. For example, this is true of the following schema STATES SUBJECT or AGENT + VERB OF MOTION + from SOURCE to GOAL. The subject is a syntactic category, whereas the agent is a semantic one; the prepositions from and to are English words; the remaining categories: source and goal represent abstract entities, concepts in fact, which are however spatially grounded, i.e. their primary sense refers to space, albeit one can easily conceive how they can be extended and used metaphorically, as indeed they are in the examples provided in the table: The weather fell from dark to sunny, and The events turned ugly. Changes of state are described metaphorically as changes of position from one point to another. The falling and turning can be simulated as gradual.

It is the fusion of the verb together with the construction in which it is used that provides a gestalt conception of a described event. Whereas Lakoff and Johnson (1999) classify verbs linguistically and only then do they "infer their biological transducers", Clair, Rodriguez and Irving (2010: 5), prefer to begin with biological systems to classify verbs, which renders the following categories:

- a) "The olfactory system and verbs of smell
- b) The auditory system and verbs of hearing
- c) The motor cortex and verbs of manipulation
- d) The somatological system and verbs of space
- e) The limbic system and verbs of emotion
- f) The visual system and verbs of seeing
- g) The gastronomical system and verbs of ingesting"

These categories are sensory channels that a body uses to communicate with the world; hence they are referred to as biological.

A partially overlapping classification of event schemas was also proposed by Dirven and Verspoor (2004: 77-86). They begin by stating that language producers select entities of an original, remembered event that are most salient. This is an attentional process that is also most relevant to event construal as has been signalled a few times so far. As one of their sentences proclaims,

The relationship between a whole event and the sentence we use to describe it is a way of filtering out all the minor elements and focussing on one, two or three participants only.

According to this view language forms are pointers triggers of the important parameters of the described event. A schema is here (ibid., p. 78) said to combine a "type of action or state with its most salient participants, which may have different roles...". As predicted by Langacker (1991, see discussion above), the remaining semantic roles constitute the additional, less schematic

models (Langacker's term for a schema of an event) that are most typically coded by verbs. This is why their categories are expressed by most prototypical verbs used not only in English, but also in other world languages. These verbs are: *be*, *happen*, *do*, *feel*, *see*, etc., and they consequently provide labels for the respective main schemas Dirven and Verspoor (2004: 77-86).

BEING SCHEMA
HAPPENING SCHEMA
DOING SCHEMA
EXPERIENCING SCHEMA
HAVING SCHEMA
MOVING SCHEMA

All of the above mentioned schemas are complex categories with a central prototype, and numerous metaphorical as well as idiomatic extensions. The extension patterns and possibilities in different languages are different.

The Being Schema in English and Polish

First, the prototypical function of the *Being Schema* is to bind one entity to another entity, which can render the following sub-classes:

61) a) identifier (children playing) This hat is the island and the floor is the sea.

b) class membership This is a bowler hat, wooden floor, etc.

c) attribution The bowler hat is black. d) location Your hat is on the rack.

e) *existential* There is some on the shelf over there.

The above categories are sometimes subsumed under the *essive* type, that is a semantic role that is connected to a patient via some 'being' association. The main participant of *essives* is the *patient* and *theme* at the same time.

The Polish-English Oxford-PWN dictionary based on corpus data lists all the above senses-constructions as well. Instead of quoting them all, let us inspect the differences between the patterns that Polish and English exhibit. The *tertium comparationis* that is adequate for this section is the English verb *be* and the 'Being Schema' associated with it vis à vis the Polish counterparts. It is the differences that we are more interested in here as they are potentially difficult for a Polish learner leading to negative transfer.

62) a) Let him **be**. '**Daj** mu spokój'.

b) Who is in the movie? 'Kto jest or better gra w tym filmie' (acceptable)

c) Who **is** it? 'Kto Ø to?' d) It'**s** me. 'To Ø ja'

e) How old **are** you? 'Ile **masz (have)** lat?', *lit. Ile jesteś lat?* 'Masz (have) to zrobić teraz' *lit. Ty jesteś to zrobić teraz*.

g) I **am** working. 'Ø pracuję', *lit. Ja jestem pracujący*.
h) How **are** you? 'Jak się **masz (have)?**', *lit. Jak jesteś ty?*

i) The room **is** 2m long. 'Pokój **ma** 10 metrów długości' *lit. Ten pokój* **jest** 10 m długi.

j) How much are the eggs? 'Ile kosztują jajka?, lit. Jak dużo są jajka?

k) The large ones are Ł15 each. 'Duże są po 15 funtów sztuka.'

l) Don't **be** too long.
m) She **is** right.

'Pośpiesz się.' *lit. Nie bądź (be) zbyt długo.*'Ona **ma** (have) rację', *lit. Ona jest słuszna.*

n) He is able to swim. 'On potrafi pływać', lit. On jest zdolny plywać.

o) He was able to stand up. 'Zdołał wstać.'

p) He was born ... 'On się urodził', lit. On był urodzony.

q) He **is** going to learn. **'Ma** zamiar się urczyć', *lit. On jest idący do uczyć (się)*. PLAN or **'Będzie** się uczyć/uczył' CONCLUSION

r) You **are supposed** to work. 'Powinieneś' ... (should). *lit.* ... *oczekiwany pracować*

(PWN-Oxford English-Polish Dictionary 2004)

Generally, Polish converges as to how events of the English *Being Schema* are coded, i.e. also with the use of the verb *be*. However, the above examples show that there is no complete isomorphism. The Polish phrase in (62a) uses the verb $da\acute{c}$ 'give' to express somebody's plea to leave her alone. Because the Polish expression employs the verb $da\acute{c}$, 'give', it must be categorized as a metaphorical extension of the doing schema, in which an active agent intentionally acts on a patient in such a way that he (metaphorically) acquires peace 'spokój'. The syntactic pattern employed is a transitive clause with all the above semantic consequences discussed in the section on Langacker's Cognitive Model of Event.

Cognitive Grammar (Langacker 1991, 2008) and other cognitive linguists assume that such a difference in form to code the same (or similar intention) must also be associated with a different pattern of activation. In other words, different language structures employed to code the same (objectively speaking) event should lead to measurable differences in the effected conceptualization, however small they may be.

The Polish learners of English as a foreign language are likely to find learning of the formal pole of this unit (*Let him be* instead of lit. 'Give him peace') difficult. In CG, units are defined as complex, mentally entrenched, well practiced and automatized routines with a formal pole and a corresponding semantic pole, whose components may be selectively activated on any occasion of their use.

Moreover, even if the learners have learnt to code an event correctly in English, there remains the question as to whether aspects of the semantics of the Polish expression, in this case the use of the verb $da\acute{c}$ 'give', not be- get activated, and whether there is any competition going on in the learner's mind between the different codings in English and Polish.

Likewise, in examples (62 c, d) the lack of direct use of the verb be in the Polish expressions-constructions can be hypothesized to result in differences attributable to the direct presence of be in the English expression, and its lack in the Polish expression. The (62e) English question about age uses is, whereas one finds *mieć* 'have' in the conventional Polish version. The remaining sentences in example (62) are becoming increasingly metaphorical. This is true of (f), which is about expressing an order with be to do sth in English and mieć (have) coś 'something' zrobić 'do' and other forms. Interestingly, some of these do make perfect sense when translated directly from English, even if they sound odd and unconventional. For example, Don't be too long, can be translated into Polish as lit. Nie bądź zbyt długo, but on the other hand, it is possible to say Hurry up, and Pośpiesz się lit. 'Hurry-IMPER. + self'. A more general question then (also relevant to the use of other schemas) is how language users process idiomatic expressions in production and comprehension; in particular, since the present study deals with construals and codings of events in English as a foreign language, we are obliged to explain different positions in this regard.

In a study of the relations between conceptual metaphors (Lakoff and Johnson 1999: 149) and idiomatic expressions, Gibbs et al. (1997: 150) found evidence that "conceptual metaphors are quickly used and accessed in idiom processing". This, however, does not mean that people routinely activate a given conceptual metaphor that motivates the semantics of an idiom. For example, if the idiom is *burn the midnight oil*, and the corresponding conceptual metaphor that motivates it is BURNING OIL IS STAYING UP LATE (as people used to do in the past living without electricity), then, according to the study by Gibbs et all. (ibid.), the activation of the conceptual metaphor is not always cotemporal with using an idiom. They consider it to be much more likely that the computation of metaphorical mappings depends on: level of conventionalization, speed (rate of speech), how typical (old and everyday and/or new the topic is) or place of speaking.

At this point one hears the echo of Langacker's discussion of *domains*, where the author says that a single expression is a trigger to activate a matrix of cognitive domains in context ranked for salience. If so, it may well be that only some of them 'surface' in conscious experience, mostly in linguists' analyses (cf. Tomasello in Robinson and Ellis 2008: 168-197).

Cieślicka (2004, 2006, 2007, 2010: 155) put forward the *Literal Salience Resonant* model of idiom processing in a foreign language using a cross-modal priming paradigm to reach the understanding that in the literal-or-metaphorical

meaning scholarly dispute, it is the literal meanings of idioms that achieve higher salience levels in L2 comprehension. This is because individual lemmas of an idiomatic expression, such as e.g. *until the cows come home* (take a lot of time to do something) are first usually known to a language learner before the whole idiom gets learnt. The salience of individual lemmas: 'until', 'cows', 'home', etc., is higher than the meaning of the whole idiom. Surely, the situation can be changed and the activation of the idiom's form-meaning in language production and comprehension can become automatized if enough practice is provided. The same prediction was voiced by Sprenger, Levelt and Kempen (2006) in a study of lexical access during the production of idiomatic phrases. Sprenger (2003) proposed the so-called *superlemma theory of idiom production* which predicts that idioms are both *holistic* and *compositional*.

Hence, in a similar vein Cieślicka (2010: 156) explored the "degree of activation of literal meanings of L2 idiom constituents" using a completion and naming task. Her subjects were asked to silently read an incomplete idiom, e.g. kick the and on the appearance of a question mark below the empty slot in the fragmented idiom, they were instructed to say the required word out loud. Alternatively, just before they were about to pronounce the last word, a semantically or a phonologically related word or an unrelated one to the word that completed the actual idiom in the displayed sentence on the monitor screen appeared, and the experimental subjects had to read it then. It was predicted that if individual lemmas (abstract representations of words) of an idiomatic expression are activated regardless of the co-activation of the metaphorical meaning of the idiom, then the experimental participants should name a related last word more quickly than an unrelated one. Longer reaction times for unrelated words (both phonologically and semantically) induce an interpretation that idiom comprehension in L2 requires the experimental subjects to analyze the idioms as consisting of component lexis. Participants took statistically less time to react (read, name) the words (prompts) that were related either semantically or phonologically. No significant effect was reported as regards the distinction that is made in the literature between the so-called compositional idioms (e.g. play with fire) and non-compositional ones (e.g. shoot the bolt). Here we must remind the reader that compositionality in cognitive grammar and linguistics (as in most other traditional linguistic concepts) is a matter of degree and depends on context.

This work provides evidence that the activation of individual idiom lemmas is a universal process in L1 and L2. What at least partially explains this process is that the schema organizes instances around prototypical values, which are usually most basic experientially and refer to the physical sphere and sensory perception, which in turn motivates extensions. Correctly or not, the L2 learner will activate the individual components of an idiom s/he is using (and learning) because they are better entrenched and more salient as they (in most cases) are

learnt earlier. For example, in the case of the idiom, *kick the bucket*, a learner already knows the words *kick* and *bucket* when he encounters the idiom. Of course these comments apply equally well to the *Being Schema* as to the other schemas

The Happening Schema

The "Happening Schema" involves a patient role that undergoes a process, rather than instigates it. In other words, the main participant in this schema, the theme, is not the initiator of the energy for the process. In some cases this focal participant is devoid of any agenthood whatsoever, as in *The water is boiling*, and in other cases, as in *The cat is miaowing*, the theme (cat) might be miaowing intentionally because it wants to leave a house. The type of linguistic structure typically elaborated by the happening schema is the intransitive clause (SV, SVC, or SVA). These clause level constructions are in fact definitional for the *Happening Schema* as they schematically code a subject-patient in a process.

An observation that is important from the point of view of cognitive grammar (Dirven and Verspoor 2004: 81) is that this schema involves examples with themes that exert variable degrees of control over the processes in which they participate (below presented from less to more control):

- 63) a) It is raining.
 - b) The weather is clearing up.
 - c) The stone is rolling down.
 - d) The kettle is boiling.
 - e) The dog is whining.
 - f) The boy is getting better.

The subject choice (primary figure) in such events is an entity undergoing a certain process. Other, uncoded and hence backgrounded participants are often their agents, or instigators. These sentences focus attention on the middle, most salient part of the whole *action chain*; by defocusing agency, one also defocuses causality and at the same time augments the salience of effect, or the process itself.

Having said that, it is the middle part of the energy action chain that is focused on, we remind the reader that the traditional name for expressions and sentences that elaborate this schema is the *middle*. Radden and Driven (2007: 289) also apply the term *enabling* in the sense that "some internal quality makes them apt to let a situation occur" (p. 289). Let us inspect some more example sentences:

- 64) This item won't scan.
- 65) The book sold 400 copies.

- 66) The plane blew a tyre.
- 67) A leak sank the ship.
- 68) Our stadium seats 50,000.
- 69) The cave is dripping water.

(all examples adapted from Radden and Dirven 2007)

In all of the above examples the subject-theme is an object, a mark on paper in (64), a vehicle in (66), a reified process in (67) and a setting (location) in (68) and (69). In (64) one can imagine a scene in a room where a person is trying to scan a document and there is a mark, a picture perhaps, or a logo which is not clear enough. The scene needs about 1 minute to film, especially because the example codes a negative event, one that in fact does not happen. What would have to be filmed are a person's attempts at scanning, which fail, and the secretary shows the bad scan to the viewers or also says the scan is bad. (65) – probably more frequent too – would require a much longer time scale of at least one month at least and a host of other background events and situations are also required for its proper characterisation: the writing of the book, the advertising campaign, the actual selling of the book in some bookshop or through an internet website. By contrast, (66) takes a few milliseconds of a plane taking off or landing, where all of a sudden some "enabling" condition appears that causes the tyre to burst; (68) is only a potential statement, but language users can nevertheless simulate it.

On such occasions, first the scene has to be activated in order to be negated or understood as possible in the future (cf. Bergen 2012: 143-144). The construal of the last example, i.e. *The cave is dripping water*, is force dynamic in fact because the syntactic structure employed for its coding masquerades as a fully transitive event, i.e. one where the whole energy action chain is in focus, from the energy source (here *cave* – only a theme not an agent in the discussed example) to the entity through which the energy is transmitted (water) to the understanding that the *dripping* water moves and falls on the floor of the cave (backgrounded in the sentence). The non-agentive subjects of these examples have the common property of coding focal thematic (passive, enabled) participants.

The whole category of the HAPPENING SCHEMA that we are dealing with in this section, as proposed by Dirven and Verspoor (2004) also subsumes a number of other schemas proposed by Radden and Dirven (2007). They are at least to some extent the OBJECT MOTION SCHEMA (especially self-motion without apparent agent), CHANGES OF STATES (where Polish uses *się* [reflexive] construction), WEATHER PROCESSES, and perhaps also the EMOTION SCHEMA to some extent.

The SELF-OBJECT-MOTION SCHEMA is exemplified by *The bottle rolled down the slope*. Generally, the motion schema is quite complex and

involves the source, path and goal, which can be selectively attended to or also backgrounded. In the example provided at the beginning of this paragraph, it is the middle phase that is construed and coded. Furthermore, changes of state can be agent-less and only caused (as indeed they have to be) by some enabling physical condition, process, bad luck or wear, as in:

70) The (electric) bulb **went** just after he had screwed it in. (BNC)

In summary, the happening schema just described focuses on the middle phase of the energy action flow, where the theme is coded as a subject, because it is meant to be portrayed as most salient. Without the agent and patient, it is the actual process together with an entity that undergoes it (theme) that are placed in focus.

The Doing Schema

As opposed to the happening schema, the *Experiencing Schema* allows questions *What is X (theme) doing?* or *What does X do?* (Dirven and Verspoor 2004: 8) rather than *What is happening/happened/has happened* (and so on) *to X?* This results from the appearance in the doing schema of an entity that serves the role of the energy source. The energy source, typically a human agent, entertains a relatively large control over the process (event) and the agent typically transmits the generated energy to the energy sink, or the patient, semantically speaking. However, the actual instantiations of this schema, depending on an event and a chosen verb to code it, have the potential of selectively distributing attention over event components, see examples from Dirven and Verspoor (ibid., p. 81) below:

71) John got up [from where?] early.	no object mentioned
72) He painted all morning.	what he painted is backgrounded or
	obvious
73) He painted the dining room.	affected object (new coat of paint)
74) He painted a picture.	effected object (a picture started to
	exist)
75) He destroyed the picture.	patient (the picture ceased to exist)

As these sentences show, only (75) codes the typical patient role, i.e. an entity that is affected physically (here destroyed). (71) uses a verb in an intransitive frame where some *bed* is presupposed. The person's getting up can perhaps be also regarded as self-propelled motion. Anyway, no third participant is involved. In the process of painting in (72) the very activity is put in focus, and the object painted is defocused by lack of direct linguistic mention. This changes in (73)

and (74), which differ however with respect to whether the third entity is affected as in (75) and changes as a result of the event or whether it is effected (74) and comes to existence as a result of the event of painting. Grammatical constructions that can be used to instantiate this schema are: SV, SVO SVOiOd and SVOd{to or, for}Oi. They show prototype effects and exhibit multiple senses. The important parameter that identifies this schema is that the agent performs action or activity intentionally, which is frequently concomitant with the appearance of the secondary participants such as: transferred entities, physical objects in general, creations, and other people.

The Experiencing Schema

Next, the EXPERIENCING SCHEMA suggests the major participants are in the semantic experiencer role. The verbs that describe events relating to the functioning of our senses will instantiate it. These include: see, know, want, think, or feel. As already noted, the first participant role in the schema is the experiencer, whereas the other role is usually an entity seen, felt, heard and so on, or another event introduced in a sentence by a that-clause, as in He knows that boys will arrive soon. The schema can be divided into two sub-schemas referring to the senses directed outwards from the human body to some entity in the physical world, or inwards to our memories, motor representation, or introspection. Mental experiences may be more abstract, but they are as real as their physical counterparts, and/or sources.

The Having Schema

Another schema subsumed in the categorization by Verspoor and Dirven (2004: 82) is the HAVING SCHEMA. It describes possession with the verb *have* standing as its main label. Like in the case of other schemas, the having schema also has a prototypical value connected with material possession, with extensions.

76) a) *material possession* I have a cat.

b) *mental possession* He has good memories of life in New York.

c) affected-affection Mary has flu.

d) whole-part The book has fifty pages.

e) kinship relation I have a brother.

There are many more metaphoric, or idiomatic possibilities and senses of have, naturally, so the sub-categories proposed by Dirven and Verspoor (Ibid.) are surely not exhaustive. It suffices to look these up in a dictionary for different conventionalised constructions and options in this regard: *have a nap* – affected-affection, *have a shower*, *have dinner*, *have a go*, *have to go*, *have sb over*, *have*

one's tooth out, have it in for sb. Some expressions with the word have are perhaps better analyzed as belonging to the experiencing schema. For example, having a shower is actually experiencing warm water flowing down your body, feeling clean and fresh. Idioms can undergo linguistic analysis and interpretations along these lines, but whether native speakers and foreign language learners routinely activate the having schema on hearing have a go, or have it in for sb is dubious.

The Moving Schema

The last schema in the presented classification (Dirven and Verspoor 2004) is the MOVING SCHEMA. The authors propose treating it as a combination of a happening schema or a doing one with a SOURCE, PATH and GOAL, which describe the original location, route, and terminal location. The following sentences exemplify the schema's literal senses:

- 77) a) The apple fell from the tree onto the grass.
 - b) I climbed from my room up the ladder onto the roof.

The metaphorical senses and domains in which they are instantiated are presented in the next example:

- 78) a) The meeting continued from early morning till late afternoon. TIME
 - b) The parents worked from morning, through noon, till evening. TIME
 - c) His humour changed from sad to happy in two minutes. EMOTION
 - d) The student changed from hardworking to lazy. CHARACTER
 - e) Christmas is coming / We are approaching Christmas. SPACE / TIME (Based on Dirven and Verspoor 2004: 83)

As testified by even these few examples, the *Moving Schema*'s primary domain of instantiation is physical space, but other different metaphorical domains such as time, emotion, or character can also be chosen. It is to be understood that what counts at a certain level of schematization is the possibility of mentally scanning an entity in the trajector role, either moving physically or metaphorically. The metaphorical motion, by analogy to motion through space, is primarily characterized by gradual evolution and change from a beginning set of attributes to the terminal one.

Apart from selectively activating such components of motion as its *source*, *path* and *goal*, a language user is also confronted with the choice of *manner of motion*, and *Figure/Agent* as discussed by Talmy (1985, 2000), Aske (1989), Rappaport Hovav and Levin (1992), and Slobin (1996). According to Talmy (ibid.), as a Germanic language, English has motion verbs that normally

encode manner of motion (e.g. *sneak*) and code PATH by using propositions (e.g. *into*). By contrast, in Spanish and other Romance languages, as well as Turkish and Hebrew, verbs of motion express Path (e.g. Spanish *entrar*, *salir*) with optional adverbial phrases indicating manner of motion (e.g. Spanish *caminando* 'walking') (cf. Gennari et al. 2002: 53).

This difference led to a hypothesis also relevant to this work that conventions and peculiarities of syntax and lexis of a language influence its speakers' conceptualizations of the described events. Slobin (as cited in Genneri et al. 2002) analyzed Spanish-English translations, elicited narratives cued by picture sets, and found that:

- a) There is a greater variety of motion verbs in English than in Spanish.
- b) There are more contrasts in English than in Spanish for coding manner of motion.
- c) English speaking narrators (children, adults, novelists) mention path and manner details more often than Spanish ones.
- d) Spanish narratives reduce information concerning manner of motion unless it is relevant to context. (That is, it is codable in ways that are different from English, but Spanish users refrain from doing so more often than users of English).
- e) Spanish users / narrators select static frames (shown by descriptions of their mental images).

Another study that shows conceptual effects due to choices of language form was run by Billman, Swilley and Krych (2000), who demonstrated better memory for those aspects of described events that language coded directly. For example, in the case of the verb *entered*, experimental subjects' memories of PATH (into a room) were better than in the case of *walked into*, which must have directed their attention more to manner coded by the free morpheme *walk*, than path coded with the closed-class morpheme, the preposition *into*.

This research was done in response to a more general state of the art position within cognitive science and cognitive linguistics, where there are three views of how conceptualization and language relate. According to one view, people's conceptualizations are not in any way affected by the peculiarities of the language they speak belonging to a community. This view, often referred to as the *universal approach*, is represented for example by Jackendoff (1986, 1990), Greenberg (1966) and Comrie (1981 as cited by Gennari et al. 2002). The opposing position can be labelled the *language-based view*, claiming that language does affect and effect different conceptualizations. Within this approach two sub-positions have been formed, one represented by e.g. Brown and Lennenberg (1954), Lucy (1993), Bloom (1981) and Levinson (1996) as cited by Gennari et al. (2000: 52), who conclude that non-linguistic processes of

conceptualization "will be closely linked to the form or the content of the language spoken". In between these two extremes there is a middle ground for claims that linguistic forms do influence conceptualizations, which however are free if a person does not perform what Slobin (1996) called "thinking for speaking". This is referred to as the *weak language-based view*. Last but not least, another *language based view* referred to as *language as strategy view* holds that "speakers should be influenced by linguistic characteristics only when performing certain tasks in which language could plausibly mediate performance" (Gennari, ibid., p. 55).

This question being open, Gennari et all. (ibid., p. 64) asked "whether different lexicalization patterns of motion events in English and Spanish have significance for how speakers of these languages perform on non-linguistic tasks". Without going into the details of the study, their conclusion was that, generally, linguistic and conceptual representations are dissociable, with a possibility that, in tasks inviting linguistic processing, the choice of language (English or Spanish) results in responses that are consistent with linguistic patterns. So, in the case of motion, the schema specifies its source, path, goal and manner, while the physical motion provides the baseline prototype for numerous extensions.

However, even the physical motion itself, is a complex category. The contemporary cognitive linguistic and psychological literature provides increasingly more compelling evidence that language use involves mental simulations already partly discussed. The components of verbal meaning (here components of motion verbs) are naturally represented in an act of mental simulation with the Perceptual Symbol Systems (Barsalou 1999) as the "neural machinery" that implements it. The *Motion Schema* dealt with in this section, like other event schemas, combines verbal meaning with the meaning that is contributed by the construction.

Goldberg (2003: 219-224), and especially Goldberg (2010: 31-58) explain how grammatical linguistic schemas fuse with verbs. She argues that a grammatical schema and a verb are only stopped from being welded into a single gestalt conceptualization if they represent different semantic *frames*, a concept introduced by Fillmore (1977a, b), later also called an *Idealized Cognitive Model (ICM)* by Lakoff (1987) or *knowledge domain* by Langacker (1987, 1991, 2001, 2008). Any such frame will consist of a profile, an entity a verb designates, and a background that constitutes its context. For example, a verb such as *drive* profiles the person who steers a vehicle, the vehicle itself (more precisely its steering wheel more than an exhaust pipe perhaps), a particular perspective of the driver or of an outside observer, and the driver of course together with the process that one mentally scans in a sequential or summary fashion. The verb will also activate some background context (the road, black asphalt, mountains in the background, a motorway and so on). The richness of detail in the act of

mental simulation of a scene cued by the verb *drive* will probably differ from person to person and from context to context. The minimal number of elements, however, which a verb selectively designates, are its DRIVER (agent) and VEHICLE (entity), SOURCE and/or PATH, DIRECTION OF MOVEMENT (or RESULT). This is stated more formally by Goldberg (ibid., p. 40) in the following way:

word's semantic frame = profile + background frame profile = what a word designates, its designatum background frame = what a word takes for granted

Again, even if somehow repeatedly, in terms closer to psychology, the verb together with a construction in which it appears cue a language user's attention to select a portion of a scene which is most salient and raises this portion to the level of conscious awareness, whereas the background achieves lesser levels of activation, salience and conscious access.

Golberg (1995) explains how the fusion of verb and construction is possible. Each verb is posited with a single *general sense*. Its extensions and other 'shades' of meaning are motivated by particular constructions in which a verb appears. This led Kaschak and Glenberg (2000) to hypothesize that the following three processes are involved in sentence understanding: *indexing*, *deriving affordances* and *meshing. Indexing* matches words to event participants. *Deriving affordances*⁹ (Gibson 1977, Norman 1999) explains what actions can be performed by or with the participants that a sentence codes and mentions directly, and finally *meshing* leads to the final, gestalt fusion of general verbal and constructional components.

This proposal was tested experimentally with sentences containing denominal nonce (non-existing) verbs, e.g. radioed, shoed, crutched, and so on. The actual sentences used in the experiment were:

- 78) a) Jeb minivanned Brenda the sculpture.
 - b) Rachel chaired the scientist his mail.
 - c) Fred moused Bob a message.
 - d) Kate waitered John some water.

These caused-motion sentences and constructions used the nonce verbs: minivan, chair, mouse, waiter. The authors argued that if the verbs are nonce, and because they have no established sense, the actual semantic interpretations

⁹ "An *affordance* is a quality of an object, or an environment, which allows an individual to perform an action. For example, a knob affords twisting, and perhaps pushing, while a cord affords pulling" (http://en.wikipedia.org/wiki/Affordance, date of access: 2012-03-08).

were attributable to the semantics of the constructions in which they were used and the affordances derived from the nominal referents in the particular scenes described by (78: a-d).

Coming back to the example verb *drive*, dictionaries usually list many senses, and the verb *drive* is surely not exceptional. A small portion of them gets listed below for illustration after the modern PWN-Oxford English-Polish Dictionary based on corpora (British National Corpus and Korpus Języka Polskiego PWN, 'Corpus of Polish Language PWN').

a) drive a vehicleb) transport somebody homeHe drives an Opel.He drove me home.

c) carry sth to a location The wind drove dead leaves into the pool.

d) strike (literally) He drove the nail into the wall. (metaphorically in understanding).

He drove the phone number into his head.

e) bore They drove a tunnel through the rock.

f) drive game (animals) in hunting

g) motivate

He was driven by jealousy; drive sb mad

h) wind, rain, sand

The sand had driven into every nook ...

Applying the one-verbal-sense hypothesis put forward by Golberrg (1995), the question arises as to how to define *drive* in a way that would be general enough to accommodate these (and many other) related senses. My tentative suggestion is that what remains are: ABSTRACT DRIVER (the AGENT in an even more general sense), ABSTRACT VEHICLE (ENTITY DRIVEN), SOURCE, PATH and GOAL as also hypothesized in the section above. It is also recommended in agreement with the embodiment thesis in cognitive linguistics as well as with the models of linguistic categorization it advocates that the prototypical conception that the form *drive* induces is (CONTROL OF) MOVEMENT, VEHICLE, ENTITY, SOURCE, GOAL, ROUTE. This level of schematicity is high enough to accommodate metaphorical extensions and other nuances of meaning.

Radden and Dirven (2007: 291-294) discuss the motion schema under two sub-headings: the *self motion* and *caused motion*. Self motion, as a special case of motion, in general also involves sources, paths and goals realized by human or animal agents. English allows selective encoding and windowing of the components mentioned above as the following example sentences illustrate:

79) We drove to Bristol [agent, process, goal]
We drove via Oxford. [agent, process, path]
*We drove from Bristol. [agent, process, source]
*We drove from Dover via Bristol. [agent, process, source, path]
We drove 200 miles from Dover. [agent, process, distance, source]

There are numerous verbs in English that describe manner of motion. They can be further sub-classified into the ones that describe motor pattern (*crawl*, *march*, *run*), the speed (*dash*, *hurry*, *dawdle*), the attitude (*stroll*, *promenade*, *wade*), or the instrument (*bike*, *ski*, *kayak*). The caused motion involves active human agents (typically) effecting motion of an abject to some location with the use of some energy and force. The actual examples that Dirven and Radden (ibid.) quote are:

- 80) a) Santa puts sweets in children's stockings.
 - b) The storm blew the roof off the police station.
 - c) The farmer loaded hay on the truck.
 - d) The farmer loaded the truck with hay.
 - e) Fred sneezed the napkin right off the table.
 - f) The discussed the problem away.

In (80a) the agent coded as Santa is said to put sweets in children's pockets, which can be associated with the initial phase of the whole action chain with the prepositional expression in children's stockings encoding the final location, the goal. By contrast, (80b) focuses on the source, here the roof was on top of the police station building, where roofs belong, but after the storm it is not. (80b and 80c) are different with respect to the choice of theme, the hay in (a) and truck in (b) resulting in different interpretations. Whereas loaded the truck with hay triggers the inference that the truck was full of hay in the end, loaded hay on the truck does not contain such an inference. (80e) contains a verb sneeze which is not typically used in a transitive, double object clause, yet, conceptualizing the event of someone's sneezing, it is not hard to understand its components. First, there is the sneezer, but also some objects in the background, or in the location which can be affected by the movement of air that sneezing creates, which in turn may cause a napkin to be blown off a table. The cause of this movement is attributed (rightly) to the act of sneezing. The final location of the napkin is backgrounded. Because both events, i.e. sneezing (directly encoded in language by the verb *sneeze*) and the event of the napkin being raised up in the air (coded by off the table) as well as its landing (not directly coded in language form, but inferred) belong to the same situation, the use of a common construction SVintr.PrepO suits the purpose. Both the construction and the verb refer to and activate the same knowledge frame to use Fillmore's (1976, 1982) term, or domain (Langacker 1991) or ICM (Lakoff 1987).

2.6.1. Complex events

The concept and term *event* as described so far has mainly meant a simple event. An event is simple if it "possesses one or more focal roles, a number of accidental roles and a single temporal dimension for a change of a state of art" (Lewandowska-Tomaszczyk 2011: 46). One can notice that the crucial parameter in the above definition is change as it becomes in time. Such a change involves attentional scanning of a participant or a few participants¹⁰ against a background. For example, one can watch a bottle roll along a table, a child opening the door, or a woman sitting on a bench in the park. The event defined as simple indeed has a single temporal profile. By referring to the "temporal extent" Goldberg (2007: 43) states that a verb codes two events iff e1 and e2 do not overlap temporally. This means for example that *sauté* is a simple event even if it consists of *stirring* and *heating* at the same time. *Stirring* and *heating* share the temporal profile and hence are not considered as distinct sub-events. It could be argued, of course, that though these two events share the temporal profile, they are distinct enough to be recognized as different. After all, one can perform them independently of each other.

However, referring to sub-events only means that we employ event partonomy for our discussion. Event simplicity or complexity is not related to this notion. This is because events can be construed and presented in language as simple or complex regardless of the selected level of granularity (detail). Even selecting the same level of detail in two different sentences, one can construe and code events as simple or complex.

- 81) a) John stood up (e1). He came up (e2) to me.
 - b) John stood up and came up to me.
 - c) After standing up, John came up to me.
 - d) Once up, John came up to me.

The complexity of the sequence of event(s) in example (81) lies in the way e1 and e2 are not co-temporal. However, (81ab) present the events as a succession of independent events that follow one another, whereas the (81cd) suppress the importance of e1 in conception by rendering them less salient and focusing attention on e2 as more important. Structurally, this lesser salience is coded with the use of a subordinate time clause *After standing up*, and by a verbless subordinate clause *Once up* meaning 'once he had stood up'.

¹⁰ Pylyshyn (1973) demonstrated that people can attentionally scan up to five moving objects at the same time. This was demonstrated in a laboratory experiment in which people had to follow the haphazard movement of up to five circles on a monitor screen. The circles appeared on the screen together with other circles which looked exactly the same as the moving ones.

Lack of temporal overlap between events is one reason for suspecting that we are dealing with simple events rather than complex ones. The other criteria are: autonomy vs dependence, symmetry vs asymmetry, and summary scanning versus sequential scanning. Autonomous conceptual structures are thinkable; they can become the object of conceptualization and imagination, whereas the dependent structures rely on the presence of another entity to be properly activated in conception and implemented in language. Objects, people and other participants can be activated independently (autonomously) of the processes or actions in which they participate. By contrast, relational predicates (semantic poles of simple semantic structures), but also predications (complex semantic structures (cf. e.g. Langacker 2008) can only be activated together with the participants of events and situations in which they take place. For example, the activity and event of HORSE-RIDING cannot be isolated from HORSE and (though perhaps less so) from some background against which the activity is taking place. Similarly, to be able to mentally simulate walking, one has no choice but to refer to some representation of a person who performs the walking together with the background. Also, relational predications are dependent because they rely on the co-activation and co-presence of entities they refer to. For instance, colours always belong to an entity; this also applies to other adjectival and adverbial predicates. Predicates designated by prepositions induce uneasiness at least if they do not refer to and describe the position of some objects.

The central linguistic form that codes events is surely the verb, especially used in the context of a basic syntactic structure (cf. Quirk et al. 1972, Goldberg 1995, Langacker 2008). As argued above, its arguments prototypically fuse well with a more schematic syntactic construction if they both refer to the same culturally established frame of knowledge. They are both polysemous, which means that the relation between the basic syntactic patterns and verbs is many to many (of course there are far more verbs than syntactic patterns). The latter are what Goldberg (1995: 5) calls "structures which reflect scenes basic to human experience". They have been traditionally called simple clauses by virtue of the fact that they contain a single personal form of a verb. Such a form has tense, person (e.g. have vs has) and mood. These three characteristics ground a linguistic predication in context. Tense limits the scope of the temporal profile to focus on; The -s on a verb form (e.g. likes) shows which event participant and construction argument serves the role of the trajector and primary figure, whereas indicative, imperative or subjunctive moods refer to the factual or nonfactual status of events

In sum, simple events have one temporal profile, whereas complex events may have more depending on the degree of elaboration of more or less central sub-components of a situation. Downgrading or upgrading the prominence of processual components co-occuring with the most salient (conceptually main)

event is characterized relative to: *mental scanning – personal, fully grounded verb forms* vs *reduced forms* (e.g. participles, *He broke the window* vs. *a broken window*), *co-ordination, subordination, autonomy – dependence* and *symmetry – asymmetry*. The proper variable in distinguishing simple from complex events is temporality and its attentional scanning in search for the most important (from the speaker's perspective) sub-region. Complex events will have one active temporal profile with *setting* parameters elaborated well enough to include their own temporal sub-profiles within this larger perceptual gestalt.

The author mentioned *mood* as one of the parameters of factuality or non-factuality. Co-operating with *modality* it can be used to code what Lewandowska-Tomaszczyk calls *potential events* (Lewandowska-Tomaszczyk 2011: 56), and which she exemplifies with the English and Polish expression *be afraid of*, Polish: 'bać się'. Usually used at the beginning of a complex sentence such as *I am afraid (that) he is going to fail the exam*, it invokes a potential space in which one conceptualizes the occurrence of the potential event expressed in the second part of the sentence. On occasion, this expression can also be used to refer to repetitive occurrences of a certain event, e.g. *I'm afraid of cars*, whose reading can encompass a number of different potential events involving pedestrians or car drivers interacting with other car drivers in traffic. The conceptual complexity is in both cases connected with the activation of AFRAID mental space, and superimposes the other space of the main event that is expressed in the subordinate clause. The two events can be argued to co-exist in the construal, or in other words their profiles become superimposed.

On top of this, there is also a class of *complex* and *negative events*. The latter do not exist, and yet require a conceptualization of some positive state of affairs before they can be negated and thought about as such. This was already pointed to in part by Wittgenstein (1953) and Ingarden (1964), but also in recent mental simulation literature.

2.7. Summary and conclusions

There are numerous knowledge structures that among other things are also dedicated to event representation and event online construal as well as linguistic encoding. This part provided a description of the term *model* as regards events. In psychology the so-called *situation models* are associated with online representations of ongoing action or language use. Barsalou (1999) and others apply still another term *mental simulation* to refer to the same idea. In Cognitive Linguistics, the term *model* was used by Langacker (e.g. 1991). In this context the term was closer to the term *schema* or *schematic representation*. It consisted of *the billiard ball* and *the stage models* superimposed on one another, which

resulted in the proposal of the so-called *canonical event model* including the speaker's viewing frame, the stage with participants interacting according to the rules generally known from physicists' description of motion and its dynamics. Such a highly abstract description encompasses both physical as well as metaphorical motion. The description was supplemented with a number of additional models isomorphic with the so-called semantic roles such as agent, patient, theme, recipient and so on. Moreover, literature is full of examples and their discussions of how the different stages of *cognitive models-high-level-schemas* and psychological *online models* motivate the linguistic encoding of selected stages of events to the effect that they become most salient in conception. Their salience is also connected with the level of granularity, perspective, and other construal aspects discussed earlier.

Schematic representations of events have also been proposed by Driven and Versppor (2004) as well as by Radden and Dirven (2007). However, these schemas and their names were shown to be language-specific. The task of a language user is to learn the differences of the conceptualizations they evoke. This writer wishes to stress that, throughout the discussion of event schemas, the dominant and recurring sub-theme was attentional foregrounding of selected entities (objects, people, relations: processual or other), figure on a ground, scope and hence the amount of detail, frame, viewpoint, perspective and other aspects of construal. Certainly, this discussion can be seen as a continuation and an addition of important aspects of construal and coding of events. Moreover, event definitions, partonomies and taxonomies as well as negative and complex events have been discussed and analyzed against the concept of cognitive prominence.

Chapter 3

Events in narrative context

3.1. Introduction

So far we have been dealing primarily with theoretical issues around the concept of an *event*: its definition, salience of subcomponents, delimiting from discourse and action, types (kinds) and parts, some aspects of construal, psychological status and relation to attention and consciousness phenomena.

This chapter will consider further theoretical issues of construal and coding of events against the concept of a narrative (itself requiring a separate presentation and discussion). This is in harmony with the ultimate goal of this work to look at aspects of construal and coding of events as they appear in stories of EFL Polish students of English. This endeavour necessitates proper characterisation of at least the following topics:

- a) the narrative schema and narration (stories),
- b) causal structure as presented in language and events in a narrative.

The characterisation of construal and coding operations of events as they appear in a narrative has what I will call the *horizontal* and *vertical* dimensions. These terms are connected with one of the organizational features of natural language in general, namely the existence of syntagmatic and paradigmatic relations. Regarding the level of a single event a language user has many choices of construing a scene according to his/her current discourse purposes. A single scene contains a number of parameters that compete for attention resources. These parameters are: participants and relations between them, perspective, as well as features discussed in chapter one that a person uses to encode in language. But any single event is seldom, if ever, literally single. Even if not followed and / or preceded by other (especially linguistic events, i.e. events coded in language) of some larger discursive whole, an event always appears after and before a larger action plan or scenario and even attempts to quote it without context will activate a matrix of knowledge domains that constitute what one calls context, or frame. For example, on hearing a sentence completely out of context (one might argue), such as:

82) John has returned the book to the library,

we activate the understanding that he must have borrowed it from the library some time ago, what library is, what it does, and so on. In fact, a schema is activated, which guides the construction of a rich and proper situation model after reading the sentence in (82), and the elements of the event described in this sentence become aligned and are graded for salience and importance.

Linguistically, attention foci in discourse are coded into intonation units (cf. Chafe 1994) of variable linguistic appearance, with single clauses as the most convenient encoding format. This is what I call horizontal dimension of event construal; it denotes a single scene by default. The other dimension of construal is vertical; it involves the choice, and temporal arrangement of events into a larger coherence of a narrative schema and its components. The horizontal, i.e. the single-scene and the vertical, i.e. the sequential dimensions both constitute legitimate aspects of event construal. The horizontal dimension is also a metaphor for the observation that a single event is coded in language in time incrementally from the components of a scene. The appearance of events in succession (the vertical dimension) is also incremental. Both the construal-coding of a single event, and the sequence of events rely on the physical (online) as well as conceptual time (time as we think about it).

3.2. The narrative and events

It is exactly the discourse perspective, in which selected events appear in a sequence construed by the narrator that will become the main focus of the present section.

The study of narrative has at least a few traditions with their specific foci. For the purposes of contextualizing events and accounting for their construal and coding in the present work, I shall make the primary dividing line between what has been termed *conversational story telling* (cf. Ervin-Tripp and Küntay 1997, or Norrick 2003¹¹) and *narrative* research tradition of Labov and Waletzky (1967), Labov (1997, 2001, 2011).

Most works on narration, narratives or storytelling do quote the work of Labov and Waletzky (1967) as a convenient starting point. It is worth reporting it here because this work undertakes the task of a functional analysis of narrative.

Labov and Waletzky (ibid.) used two types of context to collect their data. In one of them the interviewer only listened to the narrator after s/he had asked him a question of the following format and content: Were you ever in a situation where you thought you were in serious danger of getting killed? In the other type

¹¹ This apect of narratives is discussed in sectin 3.5.

of context the interviewer took part marginally in the narrator telling a story to his/her primary group. None of the narrators finished high school, and they came from white and black communities in urban and rural areas, and their ages ranged from 10 to 72. However, in the article that is quoted in this section (Labov and Waletzky 1967) issues of class membership and other sociolinguistic variables were set aside (as far as possible), and focus was on the narratives themselves, and on the events in them. Two questions were posed after the presentation of the data (narratives) that entered the analysis:

- Q1: How do we know how many narratives are contained in a single example (retelling, episode)?
- Q2: What is the structure of a narrative? → What is the relation between the sequence of clauses and the sequence of events inferred from the narratives?

The following section summarizes their major conclusions.

First, the authors note that not all recapitulation of experience is narrative, but only such in which the sequence of clauses follows the sequence of actual events. This means that narrative (narrowly defined) is only one way of construing and representing experience, and that the term *story* is not a 100% synonymous with *narrative*. Another possibility of recounting (or construing) the past is offered by syntactic embedding. Both options are illustrated by the following example based on Labov and Waletzky (ibid., p. 12-13).

83) Narrative events

Sequence of events = sequence of clauses

- a) Well, this person had a little too much to drink
- b) and he attacked me
- c) and the friend came in
- d) and he stopped it.

Syntactic embedding

Temporality and event sequentiality are signalled by the position of a clause in the sequence and e.g. Past Perfect tense, After ..., Before, and other linguistics devices

- c) A friend of mine came in
- d) just in time to stop
- a) this person who had had a little too much to drink
- b) from attacking me

There is also an example of a sequence construed in such a way that runs literally backwards from the last to the first event.

- 84) d) A friend of mine stopped the attack.
 - c) She had just come in.
 - b) This person was attacking me.
 - a) A friend of mine stopped the attack.

Apart from limiting the scope of the term *narrative* in this way, Labov and Waletzky (ibid.) consider only the independent (syntactically) clauses as being able to be the narrative ones as they can stand in only one position in the sequence of clauses and any move causes that the semantic interpretation of a narrative changes. By contrast, subordinate clauses can be used almost anywhere in the sequence with some linguistic modifications.

This preliminary discussion leads us to prepare the term *displacement set*, which is understood as a temporal range of an event, or the event's temporal-semantic scope, or else (more structurally) a set of clauses before which it can be placed without changing the semantic interpretation. All clauses which are locked in their positions (and are unmovable) are also *narrative clauses*; on the other extreme there are clauses called *free*, whose range equals the number of all clauses in a given retelling of experience. Clauses can have variable freedom, and hence temporal scope.

On the other hand, the temporal scope of two predications may overlap. They often refer to the same event, but construe it differently. Labov and Waletzky (ibid.) provide the following example:

- 85) a) [and the rock] came down
 - b) and smacked him in the head
 - c) and say [slap], (p. 15)

where (b) and (c) code different construals of the same objective event, the reason being that (c) has a different active zone (the sound), whereas (b) arguably profiles the participant's head and moment the rock actually "came down" on him. Labov and Waletzky (ibid.) call such clauses *coordinate* on account of their temporal overlap and the same displacement set just described. The fourth category of clauses is *restricted clauses*; they are neither free nor strictly temporally ordered.

Two clauses that cannot be rearranged describe different events, and their displacement sets do not completely overlap are said to be *narrative clauses* with a *temporal juncture* between them. Also, minimally any such two clauses already constitute a *narrative*.

Within a *narrative clause* thus defined there is an element called the *head*, which is the linguistic unit used to code the main processual relation (main event) involved in it. As can be expected, the grammatical category amenable to this function is the verb, either in the present simple, past simple, but also in the past perfect tense, without modals. This is expected because the use of modals effects possible, or future events. According to the same authors (ibid., p. 23), the present perfect does not appear in narrative either, but this is not necessarily true of the past perfect as their example illustrates:

- 86) a) I walked over there
 - b) And there he [dog] was;
 - c) one of my tame ducks that I **had tethered** out there had got the strap off her leg,
 - d) and **had gone** out there,
 - e) and when this fellow shot he hadn't hit the duck.

As a matter of fact, (b, c, d) can be sequentially rearranged without any semantic difference of interpretation, so they are not strictly speaking narrative clauses. They could have been used in sequence, but the narrator decided to use a different order to achieve a surprising effect; the reasons are explained later, at the end. Labov and Waletzky (ibid., p. 23) make an interesting note concerning this fragment. Namely, it must have been retold by an experienced storyteller for many occasions, and so it is well practised. Such narratives were not considered as primary data for their analyses.

The so-called related sequences of clauses are claimed to be related to some single underlying form of the story. In terms closer to Cognitive Grammar there are different ways to construe a single representation of past experience. The different construal / coding choices involve the selection of events, their temporal sequence, but also different options available to the language coder at the level of a single event (see chapter 1 of this work). The prototype, however, is a sequence of narrative clauses isomorphic with the temporal sequence of events in the original experience. Thus, the following sequence:

- 87) a) John left the shop,
 - b) he crossed the street,
 - c) and then disappeared round the corner. (invented example)

would be considered primary (prototypical) since the events these clauses code have a zero *displacement set*, appear in temporal sequence, and they do not overlap. An alternative is easy to think of, e.g.:

- 88) a) John disappeared round the corner,
 - b) after he had left the shop,
 - c) and (had) crossed the street. (invented example)

Another issue considered in this work is how to isolate the so-called *primary sequence* clauses and events. The following four-step procedure is used:

- a) assign displacement range (set) to each clause,
- b) move free clauses to the beginning of the narrative,
- c) move restricted clauses as early as possible,
- d) coordinate clauses are coalesced to single units.

Let us apply this original analysis to the following excerpt from a story in Evans (2000: 68) Successful Writing – Intermediate. This written sample is presented below in its original version with a single line representing one clause in Labov's (ibid.) terminology. However, as a matter of fact, one such line is more closely associated with an event. In the original examples one finds many "clauses" that are just words, e.g.: racing, or phrases, e.g.: and grabbed me. The following example, ... and for no reason at all there was another guy, who had just walked up that minute, is classed as a single clause, but in fact it consists of two clauses in fact. This narrative utilizes the third person narrator, who is omniscient: realizes the intentions of characters. Labov and Waletzky (1967) collected story samples, where the narrator was in the first person.

The numbers to the left and right of the letters signal the *displacement range* of a clause. For example, 5f32 means that clause [5] could have been used in any of the five preceding positions in the story, and also anywhere later in the story. Hence, because 5 + e + 32 = 38, the total number of clauses of the story in this analysis, this clause is said to be free. Another example, [0k0] means that we are dealing with the eleventh, or: *k-th* clause in the sequence, and that the position of this clause within this story cannot be changed at all.

```
89) 0a1. "Are you sure it's safe?",
```

1b0. Josh asked his friend Marty,

2c6. who was just about to step into the little rope bridge.

0d0. Josh looked at the river far beneath them,

0e0. and swallowed hard.

Any of the above clauses can be permuted without changing interpretation.

```
5f29. Unfortunately, it was the only way to reach the other side,
```

6g28. "Look, it's safe as houses", said Marty confidently,

0h0. he [Josh] put his foot onto the bridge,

0i1. Once Marty was safely on the other side,

1j0. Josh began to cross.

0k0. The little bridge creaked under his weight,

010. making him even more nervous,

1m0. than he already was.

0n0. He was almost half way across the bridge,

000. when suddenly one of the ropes snapped.

0p1. Josh screamed,

1q0. as the bridge fell to one side,

0r0. leaving him hanging,

2s0. Terrified [he was],

0t0. he clung to the other rope.

```
0u0. until he was close enough,
```

0v0. for Mary to grab him.

0w0. Safely on the other side [he was],

0x4. Josh lay,

1y3. panting [Josh] on the ground.

2z2. He [Josh] felt exhausted,

3aa1. but he was glad,

27bb7. to be alive,

0cc0. Marty asked him if he felt he could go on.

0dd1. Yes, I'm OK,

1ee0. he replied bravely,

0ff0. "We'd better go",

35gg2. "It will be dark". [future in the past event]

0hh0. They both set off,

0kk0. Leaving the bridge and the terrifying incident behind them.

As is clear from this analysis at first glance, the sequence of clauses is not isomorphic with the actual sequence of events as they did indeed happen in real time. Having established *displacement sets* for each clause, the next step is to shift the free clauses (the sum of the numbers to the left and right plus the clause itself equals the total number of clauses in a sample) to the beginning of the narrative. This is done below with the author's notes and comments:

90) 5f29, 6g28, 27dd7, 32ii2

5f29. Unfortunately, it was the only way to reach the other side,

6g28. "Look, it's safe as houses", said Marty confidently,

27bb7. to be alive, 12

35gg2. "It will be dark". [future in the past event]¹³

^{12 [}He was indeed alive before and after the whole story took place. This unit is dependent on the earlier *He was glad* ... to be alive, and it is not clear whether to include it as a free clause or whether one should collate it with the previous unit in the analysis. According to Labov and Waletzky (1967), only the independent clauses can function as narrative ones. In this example, however, we are dealing with a free sentence in fact, *He was glad to be alive*, consisting of Finite Clause + Non-finite Clause. The latter serves the syntactic function of a verb complement, a unit defined by Cognitive Grammar as the most dependent conceptually (here on the preceding verb phrase was glad)].

¹³ The characters realized the task of crossing the footbridge had been performed before it got dark. The coding of this future event introduces a time span within which the crossing was necessary. At the same time, one can argue that it is used as a temporal sign-post defining attentional scope in the so-called future in the past. The other sign post in the past is the event from which the narrator decides to begin the story, i.e. from the earliest event that is connected causally to the rest of the events in this narrative, including the most reportable (climactic) event.

In the second step of this analysis, L&W (ibid.) advocate moving the restricted clauses as early as possible in the narrative. We are reminded that the restricted clauses have the range of displacement that is smaller than the whole set of clauses in the narrative, and yet they are not strictly speaking temporally ordered. The following clauses in the analyzed sample are considered restricted. They are also moved as early as possible in the narrative.

91) 2c6. who was just about to step into the little rope bridge,

2s0. Terrified [he was],

0x4. Josh lay,

1y3. panting [Josh] on the ground,

2z2. He [Josh] felt exhausted,

3aa1. but he was glad.

The third step is to combine the so-called co-ordinate clauses into single units. Co-ordinate clauses are so-called by virtue of the observation that their displacement sets are the same, yet also different than zero on each side. This formal definition can be matched by its semantic counterpart, and one can say then that co-ordinate clauses are clauses that code events with full, or considerable temporal overlap; they often present different construals of the same event. This is true of the following:

- 92) a) 0a1. "Are you sure it's safe?" 1b1. Josh asked his friend Marty,
 - b) 0i1. Once Marty was safely on the other side 1j0. Josh began to cross,
 - c) 010. making him even more nervous 1m0. than he already was,
 - d) 0p1. Josh screamed 1q0. as the bridge fell to one side,
 - e) 0dd1. Yes, I'm OK, 1ee0. he replied bravely.

Example [92-0a1] above represents the same event but coded and sequenced as direct quotation followed by a commentary on it; next, [91-0i1] begins with the temporal conjunction *once*, which activates the understanding that one event is completed and another commences. In fact, in the case of event coded by clause [0ij0] we deal with a punctual, though atelic state of *BEING IN A PLACE*. In other words, *Once x was*, *x began*, so *was* occupies the same span of time as *began*. This conclusion renders the decision to treat the two clauses as coordinate in L&W's (1967) terminology. As for [91-010], *making sb more nervous* is subsumed by the temporal profile of *being [already] nervous*, hence the two clauses are analyzed as coordinate. Last, the event of screaming is also temporally synchronized with the falling of the bridge. In fact, it is its direct effect. This cause \rightarrow effect relation between the events coded by the event head *fell* \rightarrow *screamed* is coded by the use of the conjunction *as*, meaning *at the same time*. The first clause uses *scream*, and the next one contains *fell*, which reverses

the original sequence of events. The first event coded as *Josh screamed* directs our attention to the character's emotional response, which naturally must have been caused by something that had occurred milliseconds prior to it, here the falling of the bridge. Applying the procedure listed on page 101 renders this story in a version in which the so-called primary sequence of narrative events (i.e. events with temporal juncture) is clear. The numbers on the left and right of the small letters that signify originally established displacements sets of a given clause. They are not interpretable here, and are left for reference. For example, the restricted clause [c] was the third clause that could have been moved two places earlier or six places later; in other words, the numbers are left to remind the listener of the displacement range of a given clause, and its temporal extension. [c] is here moved as early as possible in the narrative, which is calculated as c (3rd) clause minus 2, is one, the first narrative clause in fact.

93) FREE CLAUSES

5f29) Unfortunately, it was the only way to reach the other side,

6g28) "Look, it's safe as houses", said Marty confidently,

27bb7) to be alive [He was alive],

RESTRICTED CLAUSES==

2c6) [Marty] (who) was just about to step into the little rope bridge,

PRIMARY SEQUENCE (sometimes interspersed with clauses whose DS is different than 0x0, coordinate clauses, and restricted ones),

- 0a1) "Are you sure it's safe?" 1b1. Josh asked his friend Marty, →COORDINATE CLAUSES (a-b).
- 0d0) Josh looked at the river far beneath them,
- 0e0) and swallowed hard.
- 0h0) he [Josh] put his foot onto the bridge,
- 0i1) Once Marty was safely on the other side 1j0. Josh began to cross, → COORDINATE CLAUSES (i-j)
- 0k0) The little bridge creaked under his weight,
- 010) making him even more nervous 1m0. than he already was.
 - → COORDINATE CLAUSES (1-m)
- 0n0) He was almost half way across the bridge,
- 000) when suddenly one of the ropes snapped,
- 2s0) Terrified [Marty was] → RESTRICTED CLAUSE
- 0p1) Josh screamed 1q0. as the bridge fell to one side.
 - → COORDINATE CLAUSES (p-q)
- 0t0) he clung to the other rope,
- 0u0) until he was close enough,
- 0v0) for Mary to grab him,
- 0w0) Safely on the other side [he was],
- 0x4) Josh lay,

```
1y3) panting [Josh] on the ground.
2z2) He [Josh] felt exhausted,
3aa1) but he was glad,
0cc0) Marty asked him if he felt he could go on.
0dd1) Yes, I'm OK, − 1ee0. he replied bravely,
→COORDINATE CLAUSES (dd-ee)
0ff0) "We'd better go",
0hh0) They both set off,
0kk0) Leaving the bridge and the terrifying incident behind them.
```

The above analytical exercise is instructive on a few things. First, events in narration are construed and conceptual content is properly selected. The very process of selection is dynamic. Moreover, presenting some events rather than other foregrounds them, which is connected with construing causality within a narrative, or self-praise. Second, the sequence of events within a presented story seldom mirrors the original experience. Third, the presented events have variable temporal scope. Some are free, and their scope extends over the entire narrative, some other's temporal profile extends over a few events backward and forward, whereas still others are narrative and their position in the sequence of a story is rigid. The above exercise also shows how a particular coding of an event makes us either enlarge the scope of attention, or narrow it, especially in the case of narrative clauses-events with a temporal juncture and hence zero-leftright displacement. The reader should also bear it in mind that the shorter events are included in the temporal scopes of the larger events, and that the events are bound by at least the following indices: time, characters, setting, location, or cause (discussed in grater detail in another section).

A narrative can also be expected to contain the following sub-stages: *orientation*, *complicating action*, *evaluation*, *resolution*, and *coda*, each with specific structures and functions. Like any linguistic and non-linguistic category, the parts of a narrative show prototype effects.

As for the *orientation*, it is typically used at the beginning of a narrative and realized by free clauses, but other positions are possible as well. One example is the ELT, written narrative presented above, in which the free orienting clauses are used only after the five initial clauses surprise the reader because they abruptly (no prior context) construe a scene that took place before crossing over the line bridge. Such narratives are unlike many oral narratives because they require reflection (time) and more skill. The orientation phase introduces characters, objects, or settings, e.g.:

- 94) Erm ... my <u>cousin Mervin</u>, . that was in the REME, ... er got me a 38 (calibre of gun),
- 95) it was Rick ^^Holman's ^shed.
- 96) ... and 'Benny, ... 'knew his dad had some .. '\'ammunition,

L&W (1967) say that orientation is limited to the initial phase of a story in a prototypical case. However, it can also be dispersed across the entire narrative sequence. The stage that follows is termed the *complication* or *complicating action*, and consists of a series of clauses that code narrative events. Several cycles of orientation and complication have been reported. At the end of this phase there is some result. In the case of the above analysis it is be the moment Marty managed to get across the line bridge on the other bank of the river.

97) ... 0v0. for Mary to grab him. 0w0. Safely on the other side [he was].

The narrative could have been over at this stage, but it continues and we are told about how tired the two people were subsequently, how they gasped and lay on the ground and then continued walking. This section could be termed *evaluation*. In fact, evaluation is often hard to disentangle from *result* in the *complicating action* section, and is frequently found distributed across the entire narrative, especially when it is more interactional and more people create it, when it is less monologic. Labov and Waletzky (ibid., p. 32-33) provide 5 different ways in which evaluation is construed and coded as:

- a) direct statement: I said to myself: this is it.
- b) lexical intensifier: He was beaten up real, real bad.
- c) suspension of action (e.g. through repetition of the same clause and event): And he didn't come back!, And he didn't come back!
- d) through coordinate and restricted clauses (see above analysis and comments).
- e) symbolic action, especially culturally defined: I crossed myself, You could hear the rosaries clicking.
- f) judgment of a third person: that is when a person who did not take part in the events reported in the narrative makes an evaluative statement.

The two remaining sections of a narrative schema are *resolution* and *coda*. The former is sometimes coalesced with *evaluation*. The *coda* is a "functional device for returning the verbal perspective to the present", the most famous example of which is perhaps the well-know cliché, *And they lived happily ever after*. Labov and Waletzky (ibid., p. 36) provide an interesting example of how the use of deictic demonstrative pronouns *this* vs *that* can be hypothesized to involve imaginary, and metaphorical temporal distance from the events in the past that one is retelling. *This* is used as a resolution, whereas *that* signals coda.

98) And that – that was it, you know. That was it.

99) and they was on me, [the main protagonist had been chased by a gang] And I said, like, "**This** is it, man." I pulled a knife

Other interesting examples of codas in this outstanding article involve codas in which the narrator follows the life of the main character up to the present moment (time).

100) And you know that man who picked me out of the water?He's a detective in Union City.And I see him every now and again.

Events expressed in codas do not in any way help answer the question essential for every narrative, i.e. *What happened?* This is why one can identify a temporal juncture between resolution (result) and codas.

Last, even if slightly repetitively, the narratives exhibit prototype effects. According to the article just discussed, the following diagram probably describes a prototypical narrative:

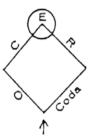


Fig. 7. Prototypical narrative (Labov and Waletzky 1967: 37)

The figure shows is that a prototypical story begins with the *orientation* phase, continues through the main section of the *complicating action* as far as the moment it reaches the point where some evaluation is expressed, then the *result* or *resolution*, to be finally rounded out by the *coda* that returns the temporal perspective to the moment of speaking.

Labov and Waletzky's (1967) original work on narration did not terminate at this point, but developed into a fuller analysis and understanding of verbal narrative reports, the selection and function of events. In particular, Labov (1997) deals with the *reportability*, *credibility*, *objectivity*, and *causality* of narrative events as well as the *assignment of praise and blame* connected with event selection and verbal presentation. Labov (2001) uses the events presented by the speaker to draw inferences about the actual (real) events that took place. In Labov's (2004) one finds the discussion of the so-called *ordinary events*, that

is events that are unimportant for the structure of a story in the sense that they do not answer the question why something happened, but they contribute commentary or invite desired inferences of the *evaluative* type.

3.3. Structure of events in a narrative

By the *structure of a narrative* we mean the relation between events presented in language and actual events as they took place. Of course, one must remember that the events presented by a narrator can only be compared to another narrator's version of the same past experience, or, if it exists, to some objective record of that experience. This idea points to the most general observation that events in a narrative are construed.

Apart from the aspects of linguistic construal discussed so far, which can be labelled horizontal as it deals with a single scene, a single *window of attention*, Labov (2011) looks at discourse coherence that is larger than a single event. Any story teller is confronted with a question as to the so-called *most reportable event* (Labov 1997). Its *reportability* is inversely proportional to *credibility*, i.e. the more reportable an event is, the less credible it also becomes, and it is unusual things that people prefer to talk about. However, a single event must not be too incredible at the same time unless a story teller is capable of accounting for the causes that had led to it.

Moreover, *reportablity* depends on such context parameters as: age, gender, or social situation (Labov 2001: 5). The most reportable event is the one that the story is about. A speaker who wishes to tell a story must select this crucial event, and then s/he goes back to the previous event and then to the previous one in a recursive way. Each event that had happened before leads to the following event and is causally connected with it. In this way the whole cause-effect chain of events is created that constitutes any given speaker's theory of how the most reportable event was brought about. "A narrative is therefore created as the narrator's theory of causality" (Labov 2001: 6).

But events in a narrative are seldom presented for their own sake. Instead, there is typically some (sometimes hidden) agenda that underlies a presentation. The particular options in this process of linguistic construal-coding of a narrative that Labov (2011) identifies are generally speaking: backgrounding (e.g. omissions, avoiding linguistic coding), or foregrounding (e.g. direct linguistic coding).

Apart from the main narrative events (whose displacement range equals 1, see above) that constitute the main causal chain of any narrative, there are also events that elaborate the main events. Labov (2004) provides an illustration of this possibility in a narrative about a wife who was looking after a sick husband

unable to walk. One day she decides to go to town quickly and do some shopping, but when she returns, she finds the man dead. The narrative was told by a daughter, who under the circumstances, tried to mitigate the sense of guilt that the mother felt for having left the husband at home while she went shopping. Her retelling also tries to integrate various possible positions as to the assignment of guilt and creates a theory of causality that most people who are involved will wish to subscribe for in this situation. In other circumstances, speakers are ready to put blame for an outcome of some action on another person, and as much as possible, in ways that are not always easy to discern, they polarize participant roles of a certain experience.

Zooming in on certain events that are not causally connected with the most reportable event (here the man's death) is dictated by a wish to stress the fact that the wife did things as usual, that she did not do anything that directly led to the man's death. Labov (ibid.) calls such events *ordinary events*; they are ordinary exactly because they do not belong in the main causal chain, and they receive ordinary, non-literary linguistic coding.

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101) She took off her coat, hung it up, put away her shopping bag, ... and she made coffee, and she went through. (Labov 2004)
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The reader's attention is focused on the fact that the woman actually said *she made coffee*, rather than, e.g. *steaming pot of good*, *strong java* (ibid., p. 17).

Concluding the last two sections on narrative analysis from the point of view of Labov and Waletzky (1976) and Labov (2004, 2006, 2011), we wish to stress what is important in this work on construal and coding of event. First, any past (or present) experience presented in language is construed anew in agreement with the current discourse goal. Second, narrators stick to the prototypical schema of narration to various degrees. The schema specifies the following sub-schemas: abstract, orientation, complicating action, evaluation, resolution, and coda. They do not have to appear in succession though, but can be linguistically distributed across the entire narrative sequence, a comment especially true of the *evaluation* part. Third, events that appear in a narrative are not necessarily temporally arranged, i.e. the sequence of clauses in a narrative often does not match the sequence of events as they did indeed happen. Moreover, their temporal scope varies from the whole narrative to a restricted number of events, and finally to a single event that is presented. This is used to categorize clauses that code events into the following groups: free (maximal temporal scope), restricted (temporal scope larger than a single event), primary

(clauses that code events belonging to the primary chain of events) – their different sequence will produce a serious difference in interpretation of casual links within a narrative. For example, *She pressed the button, and the coffee maker exploded* is a different story from *The coffee maker exploded and she pressed the button*. Fourth, in the process of pre-construction (planning phase), narrators begin from mentally activating the *most reportable event*, that is an event a given narration is about, and they then activate the memory of the previous events, one after another that led to it. The effected chain of causally related events of the primary sequence can be and often is interspersed with various other events presented as part of the evaluation. They are either negative events, or possible events or other events in irrealis mood.

The next section deals with proposals concerning events and their representation in memory. It is important for the online process of constructing narrative events into a coherent whole of a story.

3.4. Event organization in memory

This section deals with how speakers organize events in memory. It was inspired by the two studies: Taylor and Tversky (1997) and Lancaster and Barsalou (1997).

It is important to remember that due to selective attention different modality-specific properties of both objects and events become stored independently, and are later creatively recalled. This idea has been expressed by many scholars who studied general cognition as well as language, for example: Barsalou (1999), Fauconnier (1995), Lakoff and Johnson (1999), Langacker (1991) and Rappaport et al. (2010).

A brief exemplification and explanation of specific contributions is in order. Barsalou (1999) has already been mentioned in the context of the discussion of the perceptual symbol systems, situation models and mental simulation. His *perceptual symbols* arise in physical experience, and are modal as well as analogic in nature. As an example, when a person experiences a visual image, s/he does not recode it into some abstract symbolic format; the same neuronal groups that perform the visual task are later active if a person wants to represent the memory of the experience of looking at a chair. Only selected traces of this experience will be memorised. The lesson to learn from this is that our gestalt experiences are decomposed, and then committed to memory in a selective way. Fauconnier (1995, 1997) proposed the theory of *cognitive blending* and *mental spaces*. Linguistic creativity is accounted for by the mental activation of variable knowledge structures (mental spaces) coupled with their creative and selective blending into a new gestalt. Similarly, Langacker (1991)

discusses *profiling* that requires attention focus and background. For instance, the category of ARC implies the concept of CIRCLE for its mental implementation. As larger discourse units go, one can make an obvious observation that in a given discourse, language clues, expressions, idioms, phrases and sentences may receive sometimes disparate interpretations. Depending on context, any linguistic expression selectively activates variable matrices of knowledge and ranks them for salience.

Lakoff and Johnson's (1999) theory of conceptual metaphor is another exemplification of selectivity of mental processing. Here, two knowledge domains, *source* and *target*, co-create a metaphor. For example, the metaphor *their marriage was on the rocks* activates the domain of our knowledge of voyage by sea. The MARRIAGE relation is analogized to a ship that went on the rocks and cannot continue its voyage. Importantly, only selected aspects of the source domain correspond to particular aspects of the target (marriage relation).

Last, Rappaport et al. (2010: 21) discuss how different verbs (selectively) encode manner of motion or its result, e.g.: manner verbs: *nibble*, *rub*, *scribble*, *sweep*, *flutter*, *laugh*, *run*, and result verbs: *clean*, *cover*, *empty*, *fill*, *freeze*, *kill*, *melt*, *open*, *arrive*, *die*, *enter*, *faint*. These example verbs refer to different aspects of events. In conclusion, selectivity of attention is a psychological as well as linguistic fact.

The phenomenon of selective attention leads to the decomposition of events and committing their different components in memory. There are two aspects of event organization: *sequencing* and *indexing*. Whereas *sequencing* describes recall order of events from memory, the term *indexing* signifies a "system of cues or tags based on event components", such as: *activity*, *participant*, *location*, *feature*, or *cause*. Otherwise called *indexes* by Taylor and Tversky (1997: 510) as well as Lancaster and Barsalou (1997: 569-599), they are one level of the organization of narrative events in memory. The other level may be termed *temporal* for it pertains to the dimension of time.

Different studies as reported by Taylor and Tversky (ibid.) have shown the relevance of TIME dimension to the description of narrative events and their organization in human memory. For example, (Tulving 1983, Whitten and Leonard 1981 cited in Taylor and Tversky, ibid., p. 510) found evidence that people best retrieve autobiographical data in chronological order, instead of the reverse order, or the order of decreasing importance. In addition, events were shown to activate other temporally neighbouring (close) events, for example Friedman (1987), or Conway (1992) were able to demonstrate that amnesic patients stored adjacent events together.

On the other hand, other researchers argue that temporality is not directly stored in memory, but that it becomes reconstructed on the basis of different strategies, such as *a week cycle* during which an event occurred, or the event's relation to other events, *causality* or *centrality* (Taylor and Tversky, ibid., p. 511).

The question how people index invents in memory was in this paper analysed with the use of *retrieval speed* and *accuracy* coupled with the so-called *subjective reports of organization*. Moreover, three hypotheses relevant to this research task must be mentioned:

- a) Combined Index Hypothesis,
- b) Index Dominance Hypothesis,
- c) Equipotential Index Hypothesis,
- d) Narrative Index Hypothesis.

The Combined Index Hypothesis claims that "two or more event components meaningfully combine into a single index ... [leading] to more accurate access recall" (Taylor and Tversky, ibid., p. 516). The Index Dominant Hypothesis argues that some components to the exclusion of others are more effective in guiding recall, whereas the Equipotential Hypothsis has it that any event component can be as good as any other to access memory of events. Last, according to the Narrative Index Hypothesis, it is the structure of the narrative that experimental subjects are presented with that causes the particular recall order (and implied memory structure) of presented events. The researchers used artificial narratives, which were preceded by a context.

For details, the interested reader is referred to the original article. Here, we will present the major conclusions from this work. First, the authors of the discussed work found evidence that subjects preferred to use a single index for later recall of the events presented by the experimental narratives, and they showed flexibility in their choice of a single index depending on context. This correlates only partly with the work of Barsalou (1988), or Wagner (1986), who claimed that different indexes or cross-indexing is possible. The strategy of using a single index puts smaller cognitive load on recall procedures, but is perhaps less successful than using multiple indexes, which again may create unnecessarily heavy cognitive load on the experimental subject.

Second, it turned out (ibid., p. 536) that *characters* are the the dominant index. They are most often human, vivid, have intentions, instigate actions, are dynamic, in motion, etc., which makes them exceptionally salient within any single narrative event. The second best index is *location*, often concrete and tangible, and *time* turned out to be the worst index of all. People seldom know when exactly *events* took place. Instead, time is much better used for *sequencing* events. In sum, index dominance (the choice of one index over another) is situationally determined. In the cited study, if a narrative presents information that favours a single index, say, *location*, in later recall (depending on context) people might copy the organization of events because it seems (e.g. in time pressure condition), a preferable strategy. Re-organizing events presented in agreement with one component (e.g. character) to another component (e.g. location) bears cognitive costs.

As an example, I am presenting a table / matrix that Taylor and Tversky (1997) used to analyze action into events. Appropriate narratives were constructed according to variable indexes:

		Arnold	Conrad	Marvin	Jerry
	morning	wrote letter	painted picture	sang ballads	baked cookies
	after lunch	made ceramics	called friend	played bingo	watched tv
	before dinner	took walk	read novel	talked politics	practised piano
	evening	met attorney	petted cats	did aerobics	delivered mail

Table 11. Table and grid for coding events (Taylor and Tyersky 1997)

After the context had been introduced, as shown by the following paragraph,

Cedar village is a retirement centre designed for senior citizens who still enjoy an active lifestyle. The grounds in the community have many walking trails, tennis courts, and even a golf course. Planned activities go on all day in the many different recreation areas. Not too long ago, the planning staff noticed differences in the attendance at planned activities. Some had extremely low attendance while some others attracted almost everyone. So the staff decided to revamp the recreation program so that the planned activities occurred when the residents wanted them. To determine when residents preferred to do what, the staff decided to note which activities four of their newest residents chose on a specific day. The planned recreational activities occurred in the morning, after lunch, before dinner and in the evening. The residents they chose to follow were Arnold, Conrad, Marvin and Jerry. The staff noted there residents' activities for one day and then gave their notes to the planning staff.

the authors prepared a description according to the index of *time*. I am quoting important temporal parts of the text in bold type; the other text elements used for sustaining cohesion are written in italics. Of course, these features were absent in the original texts used as experimental input texts.

To best determine when residents preferred to do what, the staff organized their notes on their residents' activities by time. First, they looked at the schedule of morning activities. Arnold wrote a letter to his son. His son is stationed in South Korea with the Air Force. During the morning, Conrad painted a picture of a bird. This particular bird regularly perches on a tree outside the cafeteria. Marvin sang ballads at a group sing-a-long. A different resident organizes the singalongs each week. That morning, Jerry baked cookies in one of the kitchenettes. Although the residents eat meat in the dinning hall, the kitchenettes are available when a snack attack hits (not finished) Taylor and Tversky (ibid., p. 518)

Following the same procedure, one can easily imagine how descriptions according to location or character could be organized with some necessary modifications to make them sound cohesive.

Lancaster and Barsalou (1997: 569-599) investigated the question whether activity is the sole index that people use to retrieve memories of events. The diagram quoted below summarises such a view.

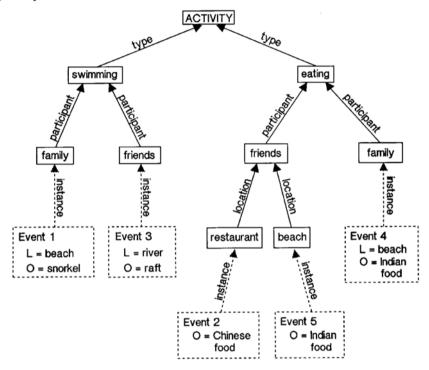


Fig. 8. An example of event organisation that is in agreement with the view that people select activity as a memory clue (based on Langacker and Barsalou 1997: 569-599)

The foundation of this as well as other proposals, in general, is many decades of research into mental organisation of knowledge leading to the conclusion that people encode random lists of words into well-known categories, such as *birds*, and *furniture*. In the retrieval process, they activate a *chunk*, list as many of its members as possible, and only then do they move on to the second chunk, and then to the third and so on, instead of reporting items in a random order (c.f. Barsalou and Sewell 1985, Chase and Ericsson 1981, Mandler 1967, Tulving 1966 cited in Lancaster and Barsalou 1997: 574).

The process is not limited to objects and nouns, but it also applies to *events* as expressed in language. This contention underlies the study reported in this part in that,

the critical measures in these experiments concern the clustering of events during recall. We [the authors of the article] assume, like many previous investigators, that clustering reflects underlying memory organisation (Lancaster and Barsalou, ibid., p. 574).

As presented in the diagram on the previous page, events are subordinated in memory to activities, with the implication that if someone wished to recall the memory of different events sharing a participant, for example *his daughter*, it would only be possible via the different activities (e.g. swimming, driving a car, having a meal, etc.), because different events are only grouped in memory around activities. This view also predicts that no chunk of knowledge exists that incorporates events belonging to different activities, so if one wanted to recall an event from memory, s/he would first have to identify an activity. As Lancaster and Basalou (1997, ibid., p. 574) say, "search is [would be] constrained [in such a case] to the cluster of events that all involve eating". Moreover, neither *location* nor *participant* could be used to access events in memory, and from experience, we know this is possible.

By contrast, according to Lancaster and Barsalou (1997), or Barsalou (1988), people can directly access any event as a direct consequence of events being cross classified in multiple systems, including *participants*, *objects*, *locations*, *time*, *emotion*, *goal*, or *temporal structures*. The last category is exemplified by the so-called *extended events* that occupy a long period of one's life. People often begin a story saying, e.g. *When I was at school*, *When we still lived abroad*, *When my son worked for Ford*, etc. These extended periods of time are filled with and provide access to shorter events and situations, with a dominant one, usually the *most reportable event*.

To test the cross-classification hypothesis the above authors (ibid.) describe the logic behind their study in the following way, "...if subjects only form global chunks according to activity, then every high-level cluster [of events] during recall should share an activity". The control over *chunking procedures* was exercised in a lab. The researchers hypothesized that after participants were presented with a number of unfamiliar events, they would recall them in the same way that they recall natural events, and that they would use different indexes mentioned before: characters, locations, objects, activities, or maybe also time. Hence, one independent variable controlled for in this study was organisation of events into one of the above indexes. The other independent variable was the kind of learning of these events: either *incidental* or *intentional*. The procedure was as follows:

- a) Participants were exposed to events and at the same time, they performed an orienting task.
- b) Participants had unexpectedly to recall the events; this was used to observe organisational tendencies.
- c) Participants were presented with the same events, but in a new order, and tried to memorize events again.

This first experiment was used to assess the subjects' preferential use of activity, participant, location and time during recall. Clustering of events in recall was operationalised as any "contiguous sequence of two or three remembered events

with a common value for at least one event characteristic" (Lancaster and Barsalou 1997, ibid., p. 581). These are the essential technical aspects of the study.

The study tells us to doubt the strong activity view of event organization in memory. Participants did indeed cross-classified events with the use of different indexes; they also alternated between different indexes during recall, as exemplified by the following example set of recalled sentences:

102) Paul Newman sorted clothes into light and dark piles.

Carl Sagan hung the laundry to dry.

Margaret Thatcher loaded the washing machine.

Margaret Thatcher painted a picture.

Margaret Thatcher pruned the tree.

The first three events concern events connected with laundry, and they share an activity, whereas the three last events share the same character. The mention of Margaret Thatcher, though, in the third sentence, triggered a set of events index around the same character.

As for the preferential use of any single index, participants did show interest in classifying according to the activity index. However, the authors also stressed the important role of context. More precisely, different people, with different interests may focus on different things (indexes). Cross-classification did indeed occur, and participants preferred to index events in the following ascending order of importance: character, activity, location, time. This finding, by the way, converges with the results of the study by Taylor and Tversky discussed earlier.

The section on event organization in memory is an important addition to the theory of construal within cognitive linguistics. Any discussion of the construal of narrative events must by necessity commit itself to questions regarding mental representations. Apart from the physiological, and psychological mechanisms of *perceptual symbol systems* and *mental simulations* with implications for language use (discussed earlier in a separate section), the studies of how events get organized in human memory systems help understand and explain the chunking or clustering of events in language narratives. I argue in turn that this process is relevant to the general discussion of construal and coding of narrative events. One could even go as far as claiming that conceptual and linguistic (segmental or phonetic) clustering of events around an index is itself another construal aspect, though operating over and across, rather than within a single intonation unit, or sentence.

3.5. Conversational narratives CA

Labov & Waletzky (1967), and Labov (2001) elicited their narratives in an interview, where a narrator sat in front of the researcher, and delivered his story in response to a question, such as, *Have you ever been in a dangerous situation*?

First, the obtained data was used to reach most valuable conclusions about the *narrative schema* and its parts: *abstract*, *orientation*, *complication*, *resolution*, *coda*, denomount. Second, it was demonstrated that events in oral narratives are not used in the temporal order in which things actually happened. Third, they have variable temporal scope, sometimes as large as the whole narrative itself, and on other occasions limited to a few adjacent events (as expressed by intonation units), or they are restricted to a single position within the narrative sequence. Moreover, the causal structure has been shown to be connected with selecting only some events and excluding other events. In sum, a lot of information has been learnt about how people narrate events.

However, there is also another line of research into narration, which looks at how stories are occasioned, i.e. how they are motivated and embedded in a conversation (Ervin-Tripp and Küntay 1997: 132-166, also c.f. Norrick 2003).

Ervin-Tripp and Küntay (ibid.) list the following occasioning contexts for narrative construction: *chidren's dramatic play, elicited/prefaced narratives, rounds of stories, environmentally cued narratives, narratives presenting problems, narratives as performances,* and *tactical narratives*.

The first category of *children's dramatic play* refers to contexts in which they play and invent future actions, act them out assuming different roles. The scenarios that they invent are often elaborate and detailed. There is, at the same time, relatively little talk about the past. Instead, what counts are the events thought out and enacted now. The following extract is quoted in toto for illustration. Even without access to the original recording, I am providing my own interpretation of the possible intonation units along the lines sketched by Chafe (1994). The dashes represent pauses (sometimes filled by hesitations, e.g. *um*).

- 103) Kit: a) pretend there is something wrong with my leg.
 - b) my leg.
 - c) let's pretend that I tell you that my leg's
 - d) um let's pretend that I tell you
 - e) first, you operate on it.
 - f) um, but before you operate on it,
 - g) let me tell you something,
 - h) okay nurse?
 - Jill: i) um, 'kay.
 - Kit: j) um, when I was walking down the street,
 - k) I saw this piece of glass, and I picked it up,
 - 1) then I didn't see too well,
 - m) then it goes way up to here.
 - n) see now. It's now it's over there.
 - o) can you can you operate on it, nurse?

Andy:p) I can.

Kit: q) can you not – I said – um

r) Somebody has to operate on- on it.

The first few lines (a-h) are directions to the other participant of the play. These directions are used to plan the actions that the children are next going to enact, and in this way the *most reportable event* of operating on his leg, as well as the prior event that had caused it (k-m) are introduced. The setting is explained, as well as the gestures that are used extensively. The whole is an example of spontaneity of children's stories. In this example the story is as follows:

104) A boy was walking down the street,

And he saw a piece of glass on the ground (pavement),

Then he decided to pick it up,

And it (the glass) got stuck in his leg,

So he had to be taken to hospital and a doctor had to operate on his leg.

Each line in this more formal rendition of the events enacted by the children represents a single event. It is interesting to note that the event of *taking the boy to hospital* was not directly coded in language as the children acted out the sequence. It did not take them a lot of time to get to the gist of the story, either, which is very frequent in conversational stories.

The next category of the so called *elicited/prefaced narratives*, as Ervin-Tripp and Küntay (ibid.) admit, are stories prompted by the listener. In the example they provide (p. 142) a feature of the conversational context attracts attention and triggers a question from the listener that needs a brief narrative to be answered. As the authors note, Turkish children that they studied never produced narratives unless they were prompted and supported by an adult's questions of the sort, *is that so?*, *what happened?*, *my gosh?* Such questions are important interactional, textual or cognitive discourse management clues.

The third category of narrative occasioning situations, termed *rounds of stories*, arises when a few speakers present related past experiences. Umiker-Sebeok (1979 cited in Ervin-Tripp and Küntay, ibid., p. 144) found out that providing one's own narrative was the most favourite response to another speaker's narrative. In the educational contexts cited by the authors, Turkish children tried to exceed the performance of their peers by providing their own stories usually on the same topic. The stories in rounds often need to be limited to the bare essence. Moreover, a previous story can be used as a model, 'scaffolding' for other stories in a round of: jokes, or funny personal narratives.

Environmentally cued narratives are exemplified in the quoted article by two conversations involving children. In one of them, two girls spot a dead bird in a garden, and 'conspire' what can be done about it. The sequence of

alternative, possible events in the future forms the imaginary narrative coproduced, so to say, by the two girls. The other example presents two boys in a room. As they spot a microphone hanging above their heads, they begin their imaginary narration.

105) Sam: What's this for?

Jer: It's a microphone.

S&J: [start to sing into the microphone]

Sam: [laughing] I was screaming!

Hey ... I'll be acting like this

Hey hey Jeremy I'm gonna be laughing at this

And the light falls down [laugh]

What would you do if the light fell down?

Jer: I'll be under the table.

Sam: [laugh] no ... and you did it! Jer: You know what I'd do,

I'd be superman and catch it.

Be Superman and get squashed like a pancake.

Sam: I'll be Flash and get the fuck out.

The two participants invent potential scenarios in a collaborative way.

In *narratives presenting problems* participants discuss a problem, and while doing this, they provide a story to illustrate a point or exemplify it. For instance, if the problem is getting back home too late, and parents wish their daughter returned home earlier, the father could present a brief story of something bad that had happened to someone, and they had heard it on television.

Still another possibility of occasioning a narrative comes under the term *narratives as performances*. This category covers narratives that are accompanied by vivid gesticulation and body movement to foreground a variety of evaluative information, e.g. a way somebody walks, or moves his/her head, even speaks, especially if constructed speech and animated intonation are used. Language users in such situations "have reciprocal relationships and shared norms of evaluation (Cortazi 1993 as cited in: Ervin-Tripp and Küntay 1997: 154).

The last category on the list of narrative occasioning is *tactical narratives*, which "are produced to support requests, claims, position in an argument, or gossip about the character of others". The authors of *Conversational Stories* (Ervin-Tripp and Küntay ibid.) provide two example narratives of this sort, one from a boy of 9, and the other from a female student. The first of them discusses horror movies with an adult who says he is not afraid of them, and the boy wishes to challenge this opinion by telling a story of how one day he was scared so much by a horror movie that he had to go to his mum in the kitchen to console him. The

second character, the girl, discusses how men sometimes harass them sexually, and she remembers an incident of this sort that happened to her one day. This triggers a narrative. Both examples illustrate how a narrative is used to challenge, or exemplify a point. In addition, both of them depart from the prototypical narrative schema in that they do not elaborate its every part. Instead, the speakers proceed straight to the *complicating action* and present a fragment around the *most reportable event* that illustrates a given point in context.

In sum, the *narrative schema* as it was presented by the original paper by Labov and Waletzky (1967) constitutes the prototype. The essential and typical conditions of narration are tentatively suggested below in a list form:

- a) a goal, some intention events are not presented for their own sake, but to make a point. At times listeners ask, why did you tell me that?
- b) narratives contain events which are sequenced not necessarily in agreement with how events happened in the past.
- c) events have variable temporal scope; the ones that are called narrative events can only used in one position within a narrative.
- d) the climactic event has the status of the most reportable event; it is the event that constitutes the reason of telling the whole story.
- e) events are construed, foregrounded (for example by direct linguistic coding) or backgrounded (when they are omitted).

The different occasioning contexts for conversational stories reported briefly in this section demonstrate that the presentation of events in the form of a narrative is not restricted to the narrative genre, but that it is often embedded in other forms of speech.

3.6. Summary and conclusions

Events have unequal status, and variable functions within a narrative. Whereas some constitute its content, and can move the story forward, others are used to code background information either of the orienting, or evaluative type. The former are usually used in the Simple Past tense, whereas the latter in the Past Perfect tense, Past Continuous, irrealis mood, can be subjective and evaluative.

A prototypical narrative contains the following parts: abstract, orientation, complicating action, resolution, evaluation, and coda, but actual stories can diverge from this model and contain only selected components. A particularly good example of this observation was provided by the so-called conversational stories. Their occasioning is motivated by a host of contextual factors, and very often conversationalists have no time to say what had happened and hence they do not stick to the schema prototype. Instead, they often code the so-called most

reportable event. And language users have some freedom regarding different language choices at their disposal, with important implications for the effected conceptualization, or perlocutionary effect.

The terms syntagmatic and paradigmatic relations with regard to any narrative structure pertain to the structure of a given language unit that is used to code one event, and any sequence of such units, accordingly. A single event can, but need not be coded by a syntactic clause, though this is a default option. In spoken language, Chafe's (1994) intonation unit performs this function. The structure of a clause in writing or intonation unit in speech is a reflection of an attempt to code a specific conceptualisation of different entities ranked for salience. Psychologically speaking, it is the primary figure, trajector, and subject that confers the biggest attentional resources, and hence also cognitive prominence. The secondary figure or landmark often has the role of the so-called grammatical object, and is less prominent within a single event, or scene. The primary participants stand out against some background, either of temporal character, e.g. After he had returned, they ate, or spatial one, e.g. They stopped in front of the red building, or both, e.g. Having driven past the junction, they stopped. By contrast, paradigmatic relations as regards narrative structure describe the selection of particular events for direct linguistic coding and their sequencing in discourse. Selection is naturally bound up with foregrounding, more salience, whereas lack of linguistic coding has the backgrounding role. Hence, the choice of events for linguistic portrayal during a story presentation is connected inextricably with the structure of causality.

People first select the most reportable event, and then they go back in time, so to say, to the earliest event still causally (in their subjective view) connected with it. Causality, in other words, is also construed, not ready-made and given.

Events exist in an organized way in human memory. Research that was reported in this chapter suggests that people store events according to different indices. Preferences in this regard are listed from the best to the least preferable index: characters, locations, objects, activities, and last time. Moreover, the physiological mechanism that lays foundations for memory of events and later, selective, and creative re-construal are the so-callled *perceptual symbol systems*, which are true cognitive, conceptual systems (Barsalou 1999); they give rise to mental simulations (cf. Bergen 2012), whose format is analogic to the perceptual experience that it originated from, and modal (e.g. visual, kinaesthetic, motor, other), but not abstract symbolic. Part II of this monograph contains experimental research into how narratives are construed.

PART II

Researching narrative events in EFL context

Chapter 4

Narrative events in video segmentation and oral video descriptions of foreign language users

4.1. Introduction

The field of Second Language Acquisition is extremely large and encompasses numerous general research goals and perspectives. Trying to locate the empirical studies presented in this part in theory is not a straightforward task. On the one hand, as is clear from part one of theoretical prerequisites, one should look at Cognitive Linguistics, and in particular the theory of Cognitive Grammar (e.g. Langacker 2008), Construction Grammar (Goldberg 1995, 2003, 2007), Embodied Construction Grammar (Bergen and Chang 2005), language production theories of Goldman-Eisler (1958), Chafe's (1994) flow model of language production with conceptual and phonetic *chunking* procedures (also c.f. Badio 2004), the model of linguistic processing as mental simulation discussed by Bergen (2012). All these cited works are compatible with the Cognitive Linguistics tradition in which meaning is associated with conceptualization, it is dynamic, construed online, subjective and embodied. With construal as the pivotal concept in this work, the author understands that it refers both to language production as well as language comprehension, both on discourse level (i.e. the level of the whole narrative sequence of events) as well as the level of a single scene.

Such cognitive linguistic perspective, according to this author, needs to be supplemented by insights from related disciplines of philosophy, but even more so cognitive psychology in agreement with the so-called convergence hypothesis put forward by Cognitive Linguistics (cf. Evans and Green 2006). An important example of how this goal is attempted is the proposal to treat *attention* as the most superordinate process in construal. When it comes to language use, the author claimed that cognitive salience of language elements and in effect some aspects of a conceptualization is the ultimate task of variable construal operations. Another example of the attempt to reach converging evidence is the discussion of the mechanisms of online, dynamic processes of constructing situation models, very much along the lines discussed by mental simulation researchers.

The avenues of research into Second Langauge Acquisition that are compatible with the author's interests and goals can be grouped under two broad categories. The first of them is well represented by the seminal work by Ellis (2008) under the title *The Study of Second Language Acquisition*, and in particular the chapters that deal with psycholinguistic variability of learner language (ch. 4). some aspects of transfer (pp. 354-359; 366-379), cognitive accounts of SLA (ch. 9), cognitive accounts of second language production (chapter 10), involving aspects of language planning and communicative strategies, but also some parts of chapter 14 on the neurology of SLA, and especially status of knowledge. controlling access to L2 and L1. What all these different perspectives have in common is their interest in foreign/second language use, rather than in the processes of learning. Hence, the author wishes to stress that this monograph is primarily concerned with SL, or FL use, and the third letter, A, standing for acquisition is not dealt with at all. Such an interest is legitimate on the grounds that a foreign language system, though more variable, and more dynamically changing than any first language in an individual, is nevertheless as psychologically, neurologically, but also physically real as any other L1.

The topic of *psycholinguistic variability in L2* is mostly concerned with language planning and monitoring. Construal cannot do without them. Variation is either inter-learner, or intra-learner, free or systematic, sociolinguistic or psycholinguistic (Ellis, ibid., p. 129). When discussing events in narrative contexts, we are primarily concerned with variation, or between Polish and English-foreign codings in experimental conditions. Naturally, foreign language use is more variable between individuals than is their L1.

Cognitive accounts of SLA place emphasis on interlanguage, i.e. a system of foreign language developing in an individual, but also on the status of linguistic knowledge, either declarative or procedural, as well as macro, or micro-processes, with important discussions of the role of attention (p. 434), and especially N. Ellis's (1994, 1996, 1998, 1999, 2003, 2005, 2006a, 2006b) discussions of empiricist views of language and language learning. Whereas a lot of this work is concerned with language learning, the present monograph departs from this perspective in that the focus is on L2 language use.

Also subsumed in the general cognitive theories of SLA are the theories of second language production. They are especially relevant as their "focus shifts from how learners construct their L2 systems to how they use them in communication" (Ellis, ibid., p. 487), which is also a goal of this monograph, albeit even more narrowly limited to construal of events in narrative. The different sub-topics in this relevant territory are: knowledge types (procedural and declarative), speech planning, communication strategies. Speech planning researchers were interested in automatic as opposed to controlled speech, formulas, pauses, reformulations, hesitation, and the like. Planning was shown to be either pre-task or while task. Levelt's (1989) model proved useful as it

proposed three overlapping processes of conceptualization, formulation and articulation (also cf. Badio 2004). In particular, psycholinguistic definitions of communication strategies by Færch and Kasper (1980, 1983), Kasper and Kellerman (1997a, 1997b) shed an important light on how people use their L2 systems. In these works communication strategies were placed within a general model of speech production with the following phases: planning and execution (but also cf. Goldman-Eisler 1958). Communication strategies were seen as part of the planning process. The authors suggested that they are "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular goal (Ellis 2008: 504). Last but not least, the neurological aspects of SLA, as Ellis (ibid.) calls them, comprise both *neurolinguistic SLA* (cf. Paradis 2004, Lamb 1999) and *neurobiological SLA* (cf. Shumann et al. 2004). These two perspectives have shed new light on such important topics as: implicit and explicit L2 knowledge, attention and motivation.

The second avenue of research that is considered compatible with the studies presented in the present monograph can be termed *Cognitive Linguistics* and *Second Language Use / Acquisition* (cf. N. Ellis and Robinson 2008). In the first part the reader will find chapters written by Talmy on *attention in language*, Taylor on *prototypes in language*, Langacker on *grammar*, Tomasello on *construction learning*.

The first study in this part is concerned with delimiting the event category in a non-linguistic task and its subsequent verbalisation in narrative context.

4.2. Introduction to the Pilot Study of Video Unitization Non-Linguistic Task

This section begins with a pilot study into how Polish students of English delimit events and how they code them into English and Polish languages. The incentive and practical solutions are based on the work of Newtson (1973, 1976), Zacks, Tversky and Iyer (2001: 29-58). In a procedure called video unitization Newtson (ibid.) asked his participants to divide a video into phases that seemed meaningful and natural to them. Zacks' et all. (ibid.) work with the use of the same technique concentrated on the relationship between fine and coarse chunking conditions to demonstrate that they aligned more than by chance, which demonstrated that during perceptual segmentation people activated abstract schemata.

In the present study, a video was constructed, in which two girls acted out the following script prepared by the author, without sound:

- a) girl-1 is sitting in her room, leaves the room,
- b) goes downstairs /camera follows/,
- c) puts on shoes, C4: takes a ball, C5: opens door and leaves,

- d) goes downstairs into the garden,
- e) walks along the lawn,
- f) girl-2 is reading /no in-between camera cuts or zoom/,
- g) girl-1 signals to play,
- h) girl-2 stands up,
- i) girls play (throw ball) 10 sec.,
- j) ball lands in bushes,
- k) girl-2 goes to fetch the ball and enters the bush /camera follows inside the bush/,

after 10 s. camera follows,

- 1) girl-2 is not there,
- m) camera turns around,
- o) girl-2 sitting and reading [again] [as at the beginning].

The present work is concerned with relations between event units in the following two tasks:

Study one:

- 1) a non-linguistic unitization task, participants were not instructed to unitize a video with either a course grain or fine grain,
- 2) participants wrote verbal reports about the strategies used in the online-segmentation task.

Study two:

- 1) participants retold the content of the video in English, or:
- 2) participants retold the content of the video in Polish.

The video camera that was used to record the unbroken, continuous flow of action described in the script was a Panasonic NV-GS75. It was first placed on a tripod stand, 150 cm above ground, and then held non-stop until the very last scene. The important variable controlled for in this case was a continuous flow of everyday activity. The length of the video recording was 2 minutes and 20 seconds, (140 sec., or 140000 ms (1 s = 1000 ms, 1 minute = 60 000 ms)). Once the action video-material was recorded, the first task was carried out.

4.2.1. Task one - video segmentation

Method:

Ouestion and Goal:

The question which this study pursued was worded in the following way:

How do people perform the segmentation task of a continuous stream of uninterrupted and unedited video sequence? How will participants divide the video sequence (i.e. into what event units)? What will be the dominant strategy, if any?

The event category was operationalised to be a distance between any two consecutive breakpoints a participant decided to mark off in the video. The following captured images exemplify three such marked off breakpoints:



Fig. 9. Examples of captured images representing marked off breakpoints in the video

In picture [1] the girl was sitting still behind a desk, whereas picture [2] shows the same girl bending her body to the left a little, after which she closed the top cover display of the laptop that was in front of her. Picture [3] shows her as she was beginning to walk downstairs to the landing on the staircase in front of her.

Participants

The students (N=45) of the English Department of Łódź University on their master's programme took part voluntarily for partial credit on their master's and specialization TOEFL seminars. They are young women between 24-30 years of age. Most of them are studying to become teachers of English as a foreign language.

Materials

The participants were shown a 140000 ms long video of activity performed at home by two girls, who are sisters. The term *activity* is used as a subordinate term in comparison to the term *event*. *Activity* is understood as human and goal directed, whereas *event* need not be, e.g. if a leaf falls, it counts as an event but not an example of *activity*. This task is based on Newtson (1973), Newtson and Enquist and Newtson (1976), Newtson, Engquist and de Bois (1977) or Zacks, Tversky and Iyer (2001).

The specific choice of activity was purposeful. The study was interested in everyday mundane activity that could be performed by anyone at home, or around the home. Although the events can be retold and they are arranged into a continuous sequence, the whole does not have a clear cause-effect structure, and would surely be placed away from the narrative prototype, or from conversational stories as discussed by Ervin-Tripp and Küntay (1997).

Procedure

Every student (N=45) was sat in front of a computer screen, and read the following instructions in Polish:

Ten projekt ma na celu zbadanie jak ludzie postrzegają różne czynności i zadania. Obejrzysz film (nagranie) wideo który/e trwa około 2 minuty.

Czynności i zadania do wykonania można podzielić na pewną ilość etapów, kroków, faz, itp. Można takiego podziału dokonać w sposób bardziej lub mniej dokładny. Interesuje nas Twoje zdanie na temat tego jak można podzielić sekwencję wideo na istotne i znaczące części. Nie ma ani dobrych, ani złych odpowiedzi. Oglądaj wideo uważnie. W trakcie oglądania filmu (nagrania), kiedy sądzisz, że jakaś część, etap, faza aktywności, zadania się kończy a druga zaczyna, naciśnij lewy przycisk myszy na funkcji / przycisku CAPTURE. Zawsze naciśnij ten przycisk, kiedy według Ciebie jeden etap, faza, itp aktywności się kończy, a następna zaczyna. Oglądaj z uwagą, ponieważ po zakończonym zadaniu będzie test dotyczący tego, co zapamietałeś.

Translation:

This project has the goal of researching how people perceive different activities and tasks. You will see a film (video recording) that lasts approximately 2 minutes. Activities and tasks can be divided into a certain number of stages, steps, phases, etc. We are interested in how you will divide a video stream into meaningful units. There are no good or bad answers. Watch the video carefully. While you are watching the film (recording), click the left key of the computer mouse on the CAPTURE button of the video player GOM-player any time you think one part, stage, phase, etc., finishes and the next one begins. Watch carefully because after the task there will be a memory test of what you remembered.

Students left-clicked on the CAPTURE BUTTON and the captured *.jpg images were at that moment saved in a predetermined folder of the computer disk. Moreover, the programme default setting gave the name of the captured image as the exact time in milliseconds from the beginning to when the frame was captured. Thus, each student's captured images were saved in a separate subfolder with exact timings, see below.



Fig. 10. Folder with sub-folders that contain captured images of different participants

and:



Fig. 11. Captured images in a single participant's folder with milliseconds

Each captured image comes with a name automatically provided by the GOM-PLAYER. By way of example, the fifth image was captured at 5240-th millisecond (5 sec. and 240 ms.) of the recording, and it shows the main

protagonist of the video presentation as she was turning to the right in her chair and moving off the table a little to stand up and walk towards the door in the foreground.



Fig. 12. The 5th captured image at 5249 ms (5 s. 249 ms)

This helped record the exact timings of the unitizing decisions with images for easier analysis.

Results and analysis

The data from all the 45 participants that took part in this task were entered on the Excel spreadsheet. Horizontally, the frequency table represented *bins* of one second long, 140 bins altogether along the temporal scale. This discretization procedure was used after Zacks, Tversky and Iyer (2000) in order to compare individual segmentation decisions. These researchers were able to demonstrate that depending on the specific instructions given to the participants (either to find as fine (small, shorter) units as possible or coarse (large, longer units), the participants' effected divisions (breakpoints) overlapped in a statistically significant way. This led to the conclusion that there exist hierarchical structures in perception and conception. Moreover, the effect came out both in the within participant design (each participant was exposed to both levels of the independent variable) as well as in the between participant design (independent groups), although it was stronger in the former type of design than in the latter. This testifies to the observation that the effect (presence of hierarchies in a perceptual, non-linguistic task) is not trivial.

By contrast, the only instruction participants received in this study was to chunk the video into action segments that they thought made sense to them and were meaningful. They were not instructed to either segment coarsely or finely. The descriptive statistics measures from this first task are presented below. To recap, there were 140 bins, and 45 participants to mark the video recording.

Mean		18.97
SEM ¹⁴		1.61
Median		19
SD^{15}		10.83
Skewness:		1.03
Range:		46
Min.:		4
Max.:		50
Confidence interval	(95.0%)	3.25

The two measures of central tendency, the median and mean have very similar values, so at least in this regard, there is an illusion of normality of distribution. However, the value of skewness informs that the distribution of values (i.e. small or large numbers of breakpoints) is not symmetrical about the mean. Small values outnumber the large ones. Also, both SD=19 and range=46 point to large differences in how individual participants performed in this task. This view is illustrated by the following dispersion plot.

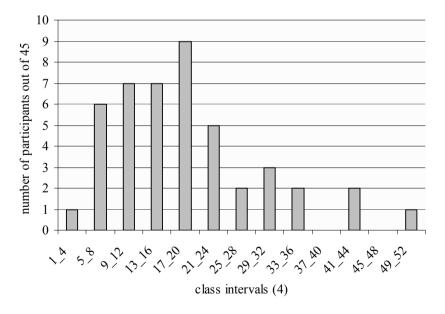


Fig. 13. Frequency distribution in video segmentation task

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¹⁴ Standard Error of Mean, "the standard deviation of the sample-mean's estimate of a population mean" (http://en.wikipedia.org/w/index.php?title=Standard error&oldid=600727901).

¹⁵ Standard Deviation, a measure of dispersion.

The largest "hump" in the dispersion plot falls between 5-8 and 21-24 long intervals followed by a fairly steady slope towards the large number of breakpoints in the video. After cutting off 2 standard deviations to the left and right of the distribution plot, all the values to the left would be included, but only some values to the right of the mean, approximately 40 breakpoints per recording. The others should be considered atypical, or ignored altogether. The second option is recommended in this study.

This conclusion is also corroborated by the results of the post-video-segmentation verbal reports obtained from the same pool of participants (N= 45) about the strategies that had been used. The analysis consisted of reading the descriptions of the participants' strategies. The categories that emerged are presented in the following figure with the numbers of times they were mentioned.

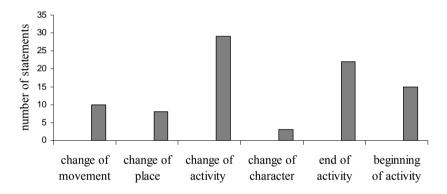


Fig. 14. Participants' reasons to segment video sequence

Analyzing this histogram, one easily notices that *change of activity* was the dominant reason that the participants reported using in the segmentation task. In order to notice an activity, one needs to activate its schematic representation. In other words, instead of saying *the girl sat down on a chair*, one would have to say something like, *the girl lowered her body towards the chair*. Whenever a schema is compared to what one perceives, the perceived event (or object) either matches the schema or not. Either way, an act of categorizing takes place, and the whole process is a good illustration of what could be called *perception via conception*, or *conceptually dominated perception*. An implication is that the perception of activity category and event triggers the understanding of causes, effects, and goals. Mere *change of movement*, i.e. without attempts to categorize the perceived activity scored only 10 statements from 36 subjects. Interestingly, the complementary categories of: *change of activity, end* and *beginning of activity* document a view that change of movement in general attracts attention and is salient; here the beginnings and ends of activity additionally signal that

a new goal has begun, and a previous goal has been accomplished. The *ends of activity* slightly outnumber the *beginnings of activity*. Some students reported that once an activity had finished, they felt more certain that a breakpoint should be inserted. This demonstrates a tendency to wait till the completion of a goal before you can be certain that the right category has been selected for it. However, both beginnings and ends of activity stand out as important signals to insert a breakpoint. Additionally, the participants reported having pressed the mouse button whenever a location or characters changed.

The participants reported the following comments in connection with the task, here paraphrased and grouped under the following categories:

- a) It was hard to predict what would happen next and segment.
- b) It was hard to follow the girl's movements.
- c) Sometimes I had a problem deciding when exactly one activity finishes and another begins.
- d) I followed attentionally the girl or an abject.
- e) I did not click the capture button every time I should have. Sometimes it was too late.
- f) The segmentation task would have been easier if I could do it again.
- g) At the beginning I marked off every movement (e.g. turning of a page), not treating a sequence of movements as belonging to one activity (event). Then as the movie continued I changed the strategy and began to subsume physical movements into larger categories.

Commentaries (a), (b), (c) and (f), demonstrate that the participants found it hard to predict the next move, action, or event, which was in agreement with the goal of constructing the video. It was not obvious to them when one activity began and another ended due to inherent continuity of experience. According to comment (d), the girl in the video was easily nominated to the role of figure, whose trajectory was scanned throughout the video presentation. The verbal reports also showed the important role of different objects (shoes, laptop, ball) that she interacted with, which resulted in the preferential use of SUBJECT ACTS ON OBJECT structure. As for (e), despite large individual differences in marking off the video with activity breakpoints, there was large (at least 50%) agreement at moments during which the girl did something that was associated with a change of goal, a change from one activity to another. Finally, [g] sounds very relevant to the topic as it demonstrates that as the participants watched the video, they also became less and less sensitive to mere physical change, which was accompanied by much uncertainty. They gradually became aware of the schemas activated in the background and used them.

Conclusions

This first study told us that there exists a rather strong bias in the strategy used during video segmentation to attend to change of activity, especially if this change is further inferred to signal change of goal. This effect was demonstrated in a non-linguistic task, suggesting that the *event* category may be universal. Language, a higher order human ability, should reflect this general cognitive capacity. The role of language in the verbal retelling of the video is discussed in the next section.

Even with the very limited number of participants, what strikes one first is the sheer difference between the minimum (13/140) and the maximum number (50/140) of bins in different observers. This is attributable to the fact that the participants did indeed decide to code the data with either coarser or finer units, i.e. broad categories or more detailed ones without receiving specific instructions to do so. Thus, two groups can be identified, the criterion being the mean. The actual results in the *coarse units* category were above the mean for the whole group (28.62), and below the mean for the *fine units* category. Of course, this is only a subjective division into two classes along the continuum of results.

4.2.2. Task two – video retellings

Question and goal

The second part of this study asked the question of how students of English as a second language, who were drawn randomly from the population of EFL students of the English Department of Łódź University, would describe the same video material that was analyzed in the non-linguistic, unitizing task. The students either retold the video in the Polish-native, or English-foreign language. The particular question this study tried to answer was formulated as follows: Will there be differences in the quantity of verbally coded events in the English-foreign condition compared to the Polish-native condition, and the hypotheses that followed it were:

 H_0 = speakers of Polish as a native language (in comparison to speakers of English as a foreign language) will *not* produce a larger number of events in the coding of the video-recorded activity.

 H_1 = speakers of English as a foreign language (in comparison to speakers of Polish as a native language) *will* produce a smaller number of events in the coding of the video-recorded activity.

The expectation that the English-foreign condition would generate fewer events in comparison to the Polish-native condition lies in the observation that it is harder to speak a foreign language than one's native language. In the case of retelling of the events presented in the video, one can speculate that speaking a foreign language generates higher cognitive demands for the task in comparison to the Polish-native condition, which in turn should result in coding more events in Polish than in English. One possible strategy L2 speakers were expected to use was failing to code problematic events, or coding at a more schematic level, without providing details for which they were expected to have insufficient linguistic resources.

Participants

Altogether 14 participants took part in the study, 7 in the Polish condition, and 7 in the English condition. They were all EFL students at the Institute of English Philology of Łódź University, Poland. They were asked to participate in this experiment for additional course credit, all were between 23-29 years of age.

Procedure and materials

Each participant was seated in front of a computer screen and watched the video, and then s/he was asked to retell its content in English or Polish. The exact instruction in Polish was worded in the following way:

Obejrzysz film, nagranie wideo, które trwa około 2 minut. Twoje zadanie po obejrzeniu filmu będzie polegało na opowiedzeniu wydarzeń prezentowanych w materiale filmowym po angielsku. Oglądaj uważnie. Interesuje nas jak ludzie pamiętają nagranie wideo. Nie badamy poprawności gramatycznej, słownictwa czy poziomu języka u studentów! Badanie jest zupełnie anonimowe a dane będą wykorzystane tylko w celach naukowych. Nagranie zostanie wykonane przy pomocy komputera i mikrofonu. Postępuj według instrukcji prowadzącego badanie. Dziękujemy za udział i pomoc.

'You will watch a film, a video recording that lasts about 2 minutes. Your task, after viewing the film, will be to retell the events presented in the video in Polish (English). We are not investigating grammatical correctness, vocabulary or students' proficiency level. The study is completely anonymous and data will only be used for scientific purposes. The recording will be made with the use of the computer and microphone. Follow the researcher's instructions. Thank you for agreeing to take part and for your help'.

The collected recordings were transcribed in agreement with the methodology used by Chafe (1994), (Du Bois et al. 1992), (also cf. Stelma and Cameron 2007). Every line in a transcript was reserved for a single intonation unit defined conceptually as a single act of attention and linguistically (phonetically) the following perceptual criteria were used:

- a) changes in fundamental frequency (perceived as pitch),
- b) changes in duration (**shortening** or **lengthening** of a segment, a syllable or word),

- c) changes in intensity (perceived as loudness),
- d) alternations of vocalizations and silence (perceived as pausing),
- e) changes in voice quality (accelerations) of various kinds and changes in turn.

Intonation units relate the construal-coding process directly to the operations of attention. It involves at least the following processes relevant to our goals: *selection, sequential organization* as well as *internal organization within each scene*. A speaker decides which phases of activity count as important enough to segment and categorize as belonging to a given event, which events to code verbally, and how to configure the elements within each presented scene. Presumably, only some of these processes reach the level of awareness, the other are more automatic.

The presentation of the stimulus (video) was performed with the help of the GOM-Player, and the recording of the participants' retellings was managed with a microphone connected to the laptop that used the Windows Vista operating system and its accessories for recording voice.

Results and analysis

The analysis begins with a presentation of a set of descriptive statistics measures of central tendency and dispersion. Fourteen (N=14) participants' recordings were transcribed and analysed. This quantitative analysis of Polish-native and English-foreign language descriptions of the video was further supplemented with a qualitative overview of the actual verbalisation decisions that the speakers made in the task.

In order to inspect the recordings, their transcripts were first written in a Microsoft-Access database with two tables: intonation units and speakers, such that a single speaker was represented by his/her own retellings of the videostory. As noted earlier, the retellings were segmented into *intonation units* by two coders. The Cohen-Kappa statistic was used to check if two coders' decisions to segment the recordings into intonation units reached the required (95%) level of agreement. The coders had to negotiate their decisions if it turned out that there was significant disagreement between them (i.e. less than 95% agreement).

After the recordings had been chunked into intonation units with pauses and other hesitation phenomena, they were categorised as belonging to one or other of the different event categories. Their names were not pre-determined but came up during the process of reading the data, incrementally. The following table summarizes the number of intonation units and events in both experimental conditions.

		_	_	_
	ENG-IntUnits	ENG-Events	PL-IntUnits	PL-Events
Mean	20.1	15.9	24.1	17.6
SEM	1.5	1.0	2.2	1.3
Median	22.0	15.0	23.0	16.0
SD	3.8	2.5	5.9	3.6
Variances	14.8	6.5	34.5	12.6
Min.	16.0	14.0	17.0	13.0
Max.	26.0	20.0	32.0	23.0

Table 12. Descriptive statistics of video verbalisation tasks in English-foreign and Polish-native conditions

More intonation units were produced in the Polish than in the English language condition, and the same is true of events. Though small, the difference invites the question of whether it is statistically significant as well. The same is also true of the number of directly coded events in Polish and English, i.e. the participants coded more events when they spoke Polish. However, the data also points to large individual differences in this respect. The question of such limited data can still be used to draw inferences about the entire population was nevertheless attempted, though the reader is reminded that the conclusions are tentative due to the small size of the sample of coded recordings.

A t-test for independent groups with unequal variances was applied (N=14, df = 11) in order to compare the means of the Polish and English groups. The value of t obtained in the test was t = 1.03 < t-stat = 1.80; p > .05, which led to the rejection of the experimental hypothesis, and acceptance of the null hypothesis. To remind, the H_0 claimed that the English-foreign condition would not bring about a statistically significant increase in the number of coded events between the two groups.

On the other hand, when one compares intonation units and events regardless of language (N = 14, df = 21), the obtained value of t was: t = 3.35 > t-stat = 2.07 in the two-tailed test, and 1.72 in the one-tailed test. This result demonstrates that speakers' preferred strategy in language production is to stretch, or distribute the semantic content of an event over a few intonation units. This view is corroborated in the qualitative analysis presented below.

Qualitative analyses of transcriptions

This section deals with the following aspects of the language production, videoretelling task described above: English vs. Polish events, dysfluencies, intonation units $vis \ \grave{a} \ vis$ events, objects-participants-events in verbal descriptions, as well as perception and interpretation.

Polish and English events on KALA timeline

The events coded in Polish and English bear many similarities, but there are also some important differences between them. They are shown in the table below, arranged chronologically along the temporal scale from top to bottom (earlier first).

Table 13. Events from beginning to end in Polish and English

GIRL SIT 10 15 GIRL WORK 0 4 GIRL CLOSE LAPTOP 3 6 GIRL STAND UP 1 1 GIRL LEAVE ROOM 2 4 GIRL WALK DOWNSTAIRS 8 3 GIRL OPEN WINDOW 7 2 GIRL LOOK OUT WINDOW 7 2 GIRL CONTINUE WALK DOWNSTAIRS 8 5 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL SYLAY BALL 8 9 GIRLS PLAY BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS FIND BALL 9 0	events arranged by time	Polish	English	
GIRL WORK 0 4 GIRL CLOSE LAPTOP 3 6 GIRL STAND UP 1 1 GIRL LEAVE ROOM 2 4 GIRL WALK DOWNSTAIRS 8 3 GIRL OPEN WINDOW 1 5 GIRL LOOK OUT WINDOW 7 2 GIRL LOOK OUT WINDOW 7 2 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS STOP PLAY 2 1 GIRLS STOP PLAY 2 1 GIRLS FIND BALL 4 5 GIRLS FIND BALL 9 0	events arranged by time	events	events	
GIRL CLOSE LAPTOP 3 6 GIRL STAND UP 1 1 GIRL LEAVE ROOM 2 4 GIRL WALK DOWNSTAIRS 8 3 GIRL OPEN WINDOW 1 5 GIRL LOOK OUT WINDOW 7 2 GIRL CONTINUE WALK DOWNSTAIRS 8 5 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRLS STOP BALL 4 5 GIRLS FIND BALL 9 0	GIRL SIT	10	15	
GIRL STAND UP GIRL LEAVE ROOM GIRL WALK DOWNSTAIRS GIRL OPEN WINDOW GIRL LOOK OUT WINDOW GIRL CONTINUE WALK DOWNSTAIRS GIRL PUT ON SHOES GIRL PUT ON HER LEFT SHOE GIRL PUT ON HER RIGHT SHOE OI GIRL TAKE BALL GIRL OPEN DOOR GIRL GO OUTSIDE HOUSE GIRL WALK ROUND HOUSE OIRL WALK ROUND HOUSE OIRL WALK ROUND HOUSE OIRL OTHER SIT GARDEN OIRL OTHER STAND UP GIRL STAND UP GIRLS PLAY BALL GIRLS NO CATCH BALL OIRL STOP PLAY GIRL LOOK OTHER GIRL OIRL STIND BALL OIRL STIND BALL OIRL STIND BALL OIRL SON ON OIR GIRL SON OTHER GIRL OIRL SON OTHER GIRL OIRLS FIND BALL	GIRL WORK	0	4	
GIRL LEAVE ROOM GIRL WALK DOWNSTAIRS SIRL OPEN WINDOW TO SIRL LOOK OUT WINDOW TO SIRL LOOK OUT WINDOW TO SIRL PUT ON SHOES GIRL PUT ON SHOES TO SIRL PUT ON HER LEFT SHOE TO SIRL PUT ON HER RIGHT SHOE TO SIRL STOPEN DOOR TO SIRL OPEN DOOR TO SIRL GO OUTSIDE HOUSE TO SIRL WALK ROUND HOUSE TO SIRL WALK ROUND HOUSE TO SIRL OTHER SIT GARDEN TO SIRL OTHER SIT GARDEN TO SIRL OTHER STAND UP TO SIRL STOP PLAY BALL TO SIRL STOP PLAY	GIRL CLOSE LAPTOP	3	6	
GIRL WALK DOWNSTAIRS GIRL OPEN WINDOW 1 5 GIRL LOOK OUT WINDOW 7 2 GIRL CONTINUE WALK DOWNSTAIRS 8 5 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 1 0 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL STAND UP	1	1	
GIRL OPEN WINDOW 1 5 GIRL LOOK OUT WINDOW 7 2 GIRL CONTINUE WALK DOWNSTAIRS 8 5 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL OTHER SIT GARDEN 3 1 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL LEAVE ROOM	2	4	
GIRL LOOK OUT WINDOW 7 2 GIRL CONTINUE WALK DOWNSTAIRS 8 5 GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL TAKE BALL 13 4 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL WALK DOWNSTAIRS	8	3	
GIRL CONTINUE WALK DOWNSTAIRS GIRL PUT ON SHOES GIRL PUT ON HER LEFT SHOE GIRL PUT ON HER RIGHT SHOE GIRL PUT ON HER RIGHT SHOE GIRL PUT ON HER RIGHT SHOE O 1 GIRL PUT ON HER RIGHT SHOE O 1 GIRL OPEN DOOR O 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE O SIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL O GIRL OTHER STAND UP O GIRLS PLAY BALL B GIRLS NO CATCH BALL B GIRLS STOP PLAY GIRL LOOK OTHER GIRL CIRLS FIND BALL O GIRLS FIND BALL O GIRLS FIND BALL O GIRLS FIND BALL O O O O O O O O O O O O	GIRL OPEN WINDOW	1	5	
GIRL PUT ON SHOES 6 5 GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL TAKE BALL 13 4 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL LOOK OUT WINDOW	7	2	
GIRL PUT ON HER LEFT SHOE 0 1 GIRL PUT ON HER RIGHT SHOE 0 1 GIRL TAKE BALL 13 4 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL OTHER SIT GARDEN 3 1 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL CONTINUE WALK DOWNSTAIRS	8	5	
GIRL PUT ON HER RIGHT SHOE 0 1 GIRL TAKE BALL 13 4 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL PUT ON SHOES	6	5	
GIRL TAKE BALL 13 4 GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL PUT ON HER LEFT SHOE	0	1	
GIRL OPEN DOOR 0 1 GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL PUT ON HER RIGHT SHOE	0	1	
GIRL GO OUTSIDE HOUSE 8 7 GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL TAKE BALL	13	4	
GIRL WALK ROUND HOUSE 0 5 GIRL OTHER SIT GARDEN 3 1 GIRL ASK GIRL OTHER PLAY BALL 10 5 GIRL OTHER STAND UP 0 1 GIRLS PLAY BALL 8 9 GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL OPEN DOOR	0	1	
GIRL OTHER SIT GARDEN GIRL ASK GIRL OTHER PLAY BALL GIRL ASK GIRL OTHER PLAY BALL GIRLS PLAY BALL GIRLS PLAY BALL B GIRLS NO CATCH BALL GIRLS STOP PLAY GIRL LOOK OTHER GIRL GIRLS LOOK FOR BALL GIRLS FIND BALL 9 0	GIRL GO OUTSIDE HOUSE	8	7	
GIRL ASK GIRL OTHER PLAY BALL GIRL OTHER STAND UP GIRLS PLAY BALL GIRLS NO CATCH BALL GIRLS STOP PLAY GIRL LOOK OTHER GIRL GIRLS LOOK FOR BALL GIRLS FIND BALL 9 0	GIRL WALK ROUND HOUSE	0	5	
GIRL OTHER STAND UP GIRLS PLAY BALL GIRLS NO CATCH BALL B GIRLS STOP PLAY CIRL LOOK OTHER GIRL CIRLS LOOK FOR BALL GIRLS FIND BALL GIRLS FIND BALL GIRLS FIND BALL GIRLS GIRLS FIND BALL GIRLS FIND BALL GIRLS GIRLS FIND BALL GIRLS GIRLS GIRL GIRLS FIND BALL GIRLS GIRLS GIRL GIRLS GIRLS GIRLS GIRL GIRLS FIND BALL GIRLS GIRLS GIRLS GIRL GIRLS	GIRL OTHER SIT GARDEN	3	1	
GIRLS PLAY BALL GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL ASK GIRL OTHER PLAY BALL	10	5	
GIRLS NO CATCH BALL 8 9 GIRLS STOP PLAY 2 1 GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRL OTHER STAND UP	0	1	
GIRLS STOP PLAY GIRL LOOK OTHER GIRL GIRLS LOOK FOR BALL GIRLS FIND BALL 9 0	GIRLS PLAY BALL	8	9	
GIRL LOOK OTHER GIRL 1 0 GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRLS NO CATCH BALL	8	9	
GIRLS LOOK FOR BALL 4 5 GIRLS FIND BALL 9 0	GIRLS STOP PLAY	2	1	
GIRLS FIND BALL 9 0	GIRL LOOK OTHER GIRL	1	0	
, ,	GIRLS LOOK FOR BALL	4	5	
GIRLS DO NOT FIND BALL 0 1	GIRLS FIND BALL	9	0	
ones so not this state	GIRLS DO NOT FIND BALL	0	1	
GIRLS GET BALL OUT 0 2	GIRLS GET BALL OUT	0	2	
GIRL OTHER SIT GARDEN – LAST SCENE 2 0	GIRL OTHER SIT GARDEN – LAST SCENE	2	0	
GIRL RETURN HOME 1 0	GIRL RETURN HOME	1	0	

The first observation is that the EFL speakers spent more time on presenting the context, the beginning, where the scene is set (19 English events compared to only 10 events in Polish that describe GIRL SIT and GIRL WORK events). It is

not clear how this observation can be interpreted, but one possibility is to suspect that such distribution of attention and IU-s favours planning what to say next, especially vital in the case of a foreign language.

On a more general level, the Polish-native language producers decided to create more events at moments at which activity is crucial for the causal structure of the videotaped story. To illustrate this point, the following events with the numbers signifying the quantity of IU-s are provided: GIRL WALK DOWNSTAIRS (PL-8, ENG-3), GIRL LOOK OUT WINDOW (PL-7, ENG-2), or GIRL TAKE BALL (PL-13, ENG-4). The EFL speakers showed a tendency to pay attention to the first available clue in a sequence of activities, and reported an event, e.g. *opened the window*, after which they surprisingly ignored the fact she also looked out of the window, and indeed it is the latter event that invites more inferences. This comment can be backed up by an example event GIRL FIND BALL, which was coded predominantly in Polish, but not English. Nothing in the video suggested that the girls looked for the ball, and yet it was somehow natural for most Polish speakers to say they did.

Two moments on the video were mostly coded by the EFL speakers, but not the Polish ones. They are GIRL WALK ROUND HOUSE and GIRL WORK. The former event represents a middle stage of an activity between leaving the house and playing, whereas the latter constitutes an inference from the scene described as GIRL SIT. The exact wordings are presented below:

```
106) speaker-1: a . and she was working . with her her laptop, speaker-4: ... and reading . books, speaker-4: nd y... I think that playing computer game, speaker-11: and y .. looking in some books,
```

The readers are reminded that event names are not word for word translations of the actual wordings the speakers used. Different speakers decided to use different words for what I called the event of GIRL WORK: working with laptop, reading books, playing a computer game or look in some books. These are acts of linguistic categorization relevant to the discussion of linguistic construal. Looking, working, reading are different kinds of events arranged on a cline from most to least schematic.

Events in time

All participants reported the videotaped events in strict chronological order. Whenever there were exceptions from this rule, they verbally signalled this fact. In the following example, a speaker forgot that the event in (c) happened before (a) and (b).

- 107) a) there . another girl was sitting,
 - b) and waiting for her,
 - c) oh sorry I forgot,
 - d) she picked the the ball,
 - e) and she took the ball yyy behind the ...y.. the house,

On other occasions, lack of chronology was occasioned by the fact that a speaker first communicated about a super-ordinate event, and then proceeded to talk about its subcomponents.

- 108) a) and .. put on her shoes,
 - b) . first she put on her left shoe,
 - c) . then the right shoe.

In the above example, (3b, c) are parts of (3a).

Intonation units and events

In theory a speaker has the following options regarding the relations between *events* and *intonation units*. A single intonation unit can be used to code the whole event, a few intonation units are sometimes needed to code a single event, or a single intonation unit can at times be used to code two, or more events, of equal or unequal status.

The first option, where a single event is coded by one intonation unit, is the default, most frequent choice. This possibility is exemplified by the following utterances:

- 109) a) she was sitting on a chai=r,
 - b) and on the corridor she opened a window,
 - c) and she went y .. behind the house,
 - d) bierze bierze piłkę ... pod rękę, 'takes a ball under her arm',
 - e) .. przechodzi przez podwórko, 'crosses the backyard',
 - f) .. w ogrodzie .. znajduje się dziewczyna. 'there is a girl in the garden'.

Within an intonation unit some components stand out as more prominent than others depending on the choice of grammar, and lexis, and other aspects of language form.

At times, components of a single event become distributed into a few intonation units. A single scene is then as if scanned sequentially

- 110) in a film I saw a girl,
 - e .. she was sitting in her room,
 - she was sitting on a chai=r,
 - a . and she was working . with her her laptop.

The first intonation unit puts on stage (to use a metaphor from Langacker) the girl, who all the speakers chose to be the primary figure throughout their retellings. The character is first introduced as *a girl*, but then the speakers continue to refer to her using the anaphoric pronoun *she*. With each intonation unit in the example above the speaker narrows the scope of attention. After learning about the *girl*, we receive information about location, *room*, and the event *sit*. It is only later that a time comes to code two objects with which the girl was interacting: *chair* and *laptop*. The last unit also narrows down the scope of attention by using the verb *work*.

To sum up, there are four moves in this event construal: girl \rightarrow girl sit room \rightarrow girl sit chair \rightarrow girl work laptop. Another example from this category, though from Polish, is quoted below:

- 111) a) woła ją następnie, 'she calls her then',
 - b).. y kiwając jej ręką, '... y waving her hand',
 - c) żeby . y ... podeszła do niej i zaczęła z nią grać,
 - 'so that she (the other girl) came up to her and began to play'.
- (a) is used to code a schematic event, followed by (b) which codes manner (reka 'with her hand'], and then goal in (c). In this case attentional zooming and windowing of attention does not refer to a location, but manner and goal. Still another example of how speakers distribute foci of attention by coding aspects of a single event in different consecutive intonation units is:
- 112) .. w ogrodzie .. znajduje się dziewczyna. 'there is a girl in the garden', jest to prawdopodobnie jej siostra, 'it is probably her sister', bo siedziała ... na . y fotelu, 'because she was sitting in the armchair'.

The first intonation unit says that *there is* a girl; the second unit codes her relation to the main character, and the last unit concentrates on the activity she was performing.

Event descriptions are often person-object pairs

The video material that the participants retold in Polish and English contained two human characters, some objects and locations.

characters: girl-1, girl-2

objects: chair, desk, laptop, window, shoes, left shoe, right shoe, ball,

door, deck-chair

locations: room (upstairs), stairs, staircase, hall (downstairs), garden,

bushes

There are numerous examples demonstrating that speakers tend to construe events in such a way as to show a character's interactions with objects and/or locations.

- 113) a) and she closed the computer, (SVO)
 - b) and she found this ..y.. ball ... behind the trees. (SVOAdv)
 - c) .. nie udało jej się złapać tej piłki. 'she didn't manage to catch the ball' (Neg-SVO)
 - d) bierze piłkę i wychodzi na dwór, 'takes a ball and leaves outside' (SVO+SVAdv)

Another important comment to make at this point is that the Polish speakers in particular refrained from mentioning the girl's referents; instead they only used verb phrases throughout: e.g.: schodzi na półpiętro 'walks downstairs onto the landing', zakłada sandałki 'puts on her sandals', zamyka laptopa ' closes the laptop. By contrast, the EFL speakers seldom used this strategy. English does not allow empty, linguistically uncoded, grammatical subjects, whereas Polish does. Even English, though in colloquial usage, does not code them sometimes.

Pauses and hesitations

In general, it was surprising to find out that both Polish-native and English-foreign samples are equally hesitant and contain large numbers of pauses. This observation may seem to run counter to Paradis' (2009) claim that native speakers of a language utilize non-conscious pools of knowledge, which causes their linguistic productions to be automatic, which is in turn manifested by fluency, and almost 100 per cent correctness. By contrast, non-natives are bound to use conscious pools of knowledge, and they often switch from the conscious mode of processing to the unconscious one. This generates additional cognitive costs, and is conducive to errors and mistakes.

The video verbalization task discussed here was not straightforward, and far from predictable. Despite a particular linguistic condition, speakers found it difficult to select, interpret and verbalize the content that seemed easy, mundane and everyday. It did not require specialized knowledge, and neither was it necessary to use language in what we often call literary fashion. A speaker was continually faced with a need to make categorizing judgments as regards objects, characters and activity. There were no ready-made answers or recipes. Instead, it was necessary to push the interpretation of remembered scenes in one or another direction, e.g. a girl was either learning or writing or just sitting. The other girl in the video was necessarily either her friend or sister, older or younger, and so on. In sum, the descriptions were subjective, and dynamically construed.

The pauses and hesitation take place before events and objects. As for the former situation, speakers found it hard to decide what kind of activity, or event

happened, or they hesitated over which phase of activity to embrace mentally into a single event and code in language. The following example illustrates this point:

```
114) y .. na dworze ...yyy .. czeka .. może nie czeka 'y .. outside ... yyy ... waiting ... maybe not waiting' y ... na dworze y ... na krzesełku widzimy . y .. w ogrodzie widzimy prawdopodobnie jej siostrę 'y...outside y... on a chair we can see . y .. in the garden we can see probably her sister' może koleżanka 'perhaps a friend' e ... która e któ któ która którą zachęca do gry w piłkę 'e ... who, e wh wh who whom she encourages to play the ball'
```

In sum, lack of fluency was a characteristic feature of both Polish-native and English-foreign renditions of the video content. Hesitations and pauses appear in both groups of speakers when they code objects, activity or characters. This demonstrates that the task of construing-coding the video sequence in language was an effortful task in both experimental conditions. The term *construal* or constructing is fully justified in this case. The experiment was able to tease out how difficult the verbal task was for both native speakers of Polish and EFL students of English. It had a fair amount of the so-called ecological validity. After all, this was not a task that would be unimaginable in an EFL context.

Speakers' interpretation of the video

This section provides further illustration of the effortful nature of linguistic coding of the observed events. Sometimes two speakers' memories were as different as in the example below:

- 115) a) the film presents a girl,
 - b) and it started with the picture of a person probably a boy.

In the next example, a speaker finds it hard to categorize activity.

```
116) u ... zakłada . a . sandałki, 'd(resses) ... puts on ..y.. sandals'.
```

The first letter u ... means that the speaker thought that it would be good to use the word *ubierać* 'put on', which is more appropriate with *clothes* in Polish. This verbalization plan was abandoned halfway through, and after a pause the verb

zakłada (better with shoes in Polish is selected). There are more examples of this sort:

117) y . więc y . koleżanka czy siostra ... wyruszają na poszukiwanie tej piłki,

'y. so y. a friend or sister ... set off to look for the ball'.

The reader will be surprised to find out that they do not, and that (117) above is miles away from what actually took place. Interestingly as well, the speaker felt she had to categorize the relationship between the acting girls without any direct instruction to do so

118) dziewczyna y .. zmęczona nauką .. postanowiła . odłożyła notatki, 'having enough of learning the girl decided . put away her notes' zobaczyła, że jest ładna pogoda, 'saw the weather was nice'

Neither of the above observations is justified by the video, so this specific construal is subjective; it shows a process of over-interpretation.

4.2.3. Summary and conclusions

This chapter presented design, analyses and results of two studies that were of an exploratory character. The first of them looked at how people segment a continuous stream of videotaped activity into coherent units, whereas the second asked about how people subsequently code it into either English-foreign or Polish-native languages.

The event category was theoretically defined as "a segment of time at a given location perceived by an observer to have a beginning and end" (Zacks and Tversky 2001: 7). The theoretical bases that motivated the study go back to Newtson's (1973) paper in which experimental subjects were asked to divide a continuous stream of videotaped activity into either coarse, or fine meaningful units by pressing a computer button to insert a bookmark (boundary). The effected units were either longer (coarse), e.g. lifted a ball, or shorter (finer), e.g. bent + stretched her arms out over the ball + put hands on both sides of the ball + etc. Newtson experiment had two conditions, coarse and fine, to show that they tended to align more than by chance, which in turn pointed to the conclusion that people activate background schemata for action during online video segmentation.

This chapter had two goals: analysis of units inserted in a videotaped activity and analysis of verbalisations. The first goal led to the production of an

approximately two-minute long, silent video that showed two girls performing mundane activities at home. The participants (N = 45) were then asked to unitize (divide) the video into chunks (segments) that seemed most meaningful to them. An event was operationalised as a portion of action that spans from one inserted breakpoint to the next.

Importantly, unlike in Newtson's (ibid.) experiments, the participants were not assigned to either of the two conditions of coarse vs. fine coders, but were asked to insert breakpoints at moments that they felt most comfortable with, and were most meaningful for them. This was purposeful as the author wished to test whether the participants would spontaneously divide themselves into two groups of coarse and fine coders (long units vs. short ones). As expected, it turned out there were not sharp divisions, but the participants who went by physical changes of body posture in the task were in the minority; most of them paid attention to what can be termed change of activity, as indicated by a post segmentation verbal report, again pointing quite strongly towards the conclusion that action schemas play an important role in the perception of physical activity, and that faced with uncertainty as to what will happen next, the participants preferred to insert finer (i.e. shorter) units.

The conclusion that action schemas motivate and guide verbalisation of activity was further corroborated by the qualitative analysis of linguistic (native v.s. foreign) codings of the same video. Both Polish and English conditions (first watch then speak) resulted in a similar number of actually coded events, and this number (approx. 19) was similar to the non-verbalisation condition discussed above. However, the speakers of Polish as a native language coded events at moments crucial to cause-effect structure of the story, whereas the speakers of English as a foreign language dwelt more on the intermediate phases of events, as if they waited longer to make a categorising decision.

Additionally, both groups showed considerable difficulties during the task of linguistic coding, with numerous pauses and hesitations. They all demonstrated, regardless of language used (native v.s. non-native), evidence of dynamic (and effortful) construal as well as a strong tendency to propose alternative interpretations of the videotaped activity, sometimes non-factual, hence linguistically construed, rather than only re-construed.

The next chapter is devoted to the question of how narrators, L2 students of English as a foreign language, construe causality. It is an experimental study, but the task that was used had a high level of ecological validity.

Chapter 5

Constructing causality: The use of subjective, objective and evaluative events in a narrative

5.1. Introduction

The present chapter deals with two experimental studies of language production and language comprehension. Like the previous chapter, it concerns events at the level of the whole narrative, i.e. the discourse level. Different aspects of linguistic construal and coding have the primary goal of foregrounding only selected events or their parts at the expense of other events and entities, which are considered unimportant, irrelevant, or inconvenient for reasons explained later.

The starting point in the production of any narrative is the proper choice of what Labov (2001) called the *most reportable event* (MRE). It is for the sake of this event that a speaker decides to tell a story. Having selected the MRE, though, one is confronted with the necessity to select an event that is the earliest, but still linked causally to MRE, and from which to begin to tell a story. The proper sequence of events from the earliest event causally linked to MRE, together with the intermediate events leading to MRE and bound causally to it constitutes a narrative.

Causation has received various interpretations in philosophy, but in this work it is defined in agreement with Lakoff and Johnson (1999: 170-235) or Langacker (1991). According to this cognitive linguistic tradition there is no single, objective concept of *causation*. Instead, causation is construed. Speakers have a variety of linguistic measures to present their versions of past events in agreement with their goals. The differences in construal options and decisions consist of adjusted salience of events, participants, locations, and settings.

To remind the reader, the prototypical and abstract concept of causation was shown to be motivated by physical motion, with abstract objects, force, and forceful interactions (c.f. billiard-ball model in sections above, stage model and Canonical Event Model). This prototype provides the basis for numerous extensions as evidenced in the metaphorical system of any language. Two examples are provided below:

- 119) She got rich from her investment.
- 120) The book is moving right along.

Needless to say, the system of expressions and related metaphors underlying causation is extremely complex, but the goal of this chapter is to attempt to answer whether EFL users can construe causation in written stories, and how they deal with it. To this end, two related studies of language production and comprehension will be discussed.

Cognitive linguistic work on causation (Lakoff and Johnson, ibid.) lists some types of causation relevant to this goal:

- a) Events are causes
- b) Emotional causation
- c) Enabling causation lack of impediment
- d) Instrumental causation i.e. instrument is cause

The list presents possible ways of construing causation within a story-world. The first category (a) can be exemplified with:

121) She lost her purse
So she could not buy her train ticket
So she had to walk

In this example, one event creates a condition for the next event, i.e. events are causes. The events in the above example are objective, i.e. their falsehood can be verified. Category (b) of emotional causation can be illustrated with:

122) She was in love, So she married him

Another possibility as regards the category of emotional causation is what Labov (2001) called *subjective events*. These are events whose falsehood cannot be verified because they describe what someone thought, wondered, believed, etc., e.g.:

123) I heard someone open a window and go inside the house – objective event As I thought it was a burgler – subjective event I shot – objective event

In other words, this category shows that people are prone to attribute cause-effect links to emotion-object event pairs. Things happen because of emotions. As for (c), non-existence of a barrier can also be understood as a cause of an event, as when a ball falls off a table.

124) He put the glass on the table, and it rolled, hit the ground and smashed.

The last category shows that sometimes we attribute causality to instruments: cars, hammers or chairs when we say things such as:

- 125) He had a car accident ← I had told him it was too old to drive.
- 126) My eyes are sore because of this computer.

This analysis surely does not exhaust all possibilities of causation, but it has been presented to make the point expressed at the beginning that causation is a radial category with two binding factors:

- a) determining factor,
- b) human agency (with extensions).

5.2. Study one: Story production task

This study aimed to investigate the role of different strategies used in reporting events within a narrative. It is based on the work on narrative analysis by Labov's (2004, 2011), who was able to demonstrate that criminal offenders polarize the roles of participants in killings by carefully selecting objective events, presenting evaluative material, and presenting subjective events in their verbal reports in court.

My own study is new in that it extends this analysis to an EFL context, uses experimental design, not a language analysis, and is ecologically valid as the students were asked to perform a task that can appear in a typical foreign language class.

Method

Question, hypotheses and variables

The language production task described in this section asks the following general question, *How will foreign language students handle a task of construing a narrative if they have to polarize participant roles in a story (narrative)?* A narrower, research question was:

Will speakers of English as a foreign language manage to manipulate the content of narrative in such a way that they will use more objective events in the BE OBJECTIVE condition, and more subjective events, as well as evaluative material, in the BLAME HUSBAND condition?

The related hypotheses were phrased in the following way:

H0: (null hypothesis)

Samples from the BE OBJECTIVE and BLAME HUSBAND conditions will be independent, i.e. they will not show the influence of the independent variable, so the amounts of objective, subjective and evaluative material in each condition will not be related to the different instructions that the experimental group and the control groups were given.

H1:

Samples will be related, and dependent, i.e. the BE OBJECTIVE and BLAME HUSBAND conditions will differ with regard to the amount of objective, subjective and evaluative material as a result of the application of the independent variable (different instructions to retell the input story).

To remind the reader, the independent variable in this study was the instruction to re-write the input story in such a way as to put blame on the husband for what had happened (blame-husband condition), as opposed to the control group, whose task was to re-write the input story objectively (as far as possible). The following instructions in Polish (translations provided below) were presented to the participants:

Etap 1: Dla każdej z dwóch grup

Przeczytaj zdarzenia, które składają się pewną historię Pana Lawrence'a. Staraj się jak najlepiej zapamiętać przebieg zdarzeń. W fazie następnej tego badania należy dokonać opisu tego, co się stało. CZYTAJ UWAŻNIE. NIE MOŻNA POTEM ODNOSIĆ SIE DO ZAPREZENTOWANEGO MATERIAŁU.

Etap 2: Warunek w grupie ekperymentalnej, zmienna niezależna: OBWIŃ MĘŻA

- 1. Ty jesteś Panią Lawrence (zdarzenia prezentujesz w pierwszej osobie z jej punktu widzenia.
- 2. Opowiedz całość ponownie tak, aby wyszło na to, że to NIE TWOJA (Pani Larence) wina, lecz jej męża.
- 3. Nie możesz kłamać, zwłaszcza **dodawać** zdarzenia, których nieprawdziwość łatwo by było zweryfikować, ale inne zabiegi są dopuszczalne.
- 4. Możesz przedstawić te zdarzenia w dowolnej formie, tj. zdania mogą być dłuższe, krótsze, różne czasy, chronologicznie lub nie.

Etap 2: Warunek w grupie kontrolnej, zmienna niezależna (BĄDŹ OBIEKTYWNY/A)

Napisz historyjkę ponownie w następujący sposób:

- 1. Ty jesteś Panią Lawrence (zdarzenia prezentujesz w pierwszej osobie z jej punktu widzenia)
- 2. Opowiedz całość ponownie jak najbardziej obiektywnie.

Translation:

Stage 1: For each of the two groups

Read about the events which make up a story about a Mr Lawrence. Try to remember what happened, i.e. the sequence of events. In the next step of this study you will be asked to describe what happened. READ CAREFULLY. YOU WILL NOT BE ALLOWED TO REFER BACK TO THE PRESENTED EVENTS.

Stage 2: Condition in experimental group, independent variable: BLAME HUSBAND

- 1. You are Mrs Lawrence (you must present the events in the 1^{st} person from her point of view).
- 2. Tell the story again in such a way as to show it was not your (Mrs Lawrence wife's) fault, but your husband's fault.
- 3. You must not lie, especially add events whose falsehood could be easily verified, but other techniques and ideas are welcome.
- 4. You can present the events in any form, i.e. the sentences can be longer, shorter, with different tenses, chronologically, or not.

Stage 2: Condition in control group (BE OBJECTIVE)

Re-write the story again in the following way:

- 1. You are Mrs Lawrence (present events in the 1st person from her (i.e. your point of view)).
- 2. Retell the whole story again and be as objective as possible.

Materials

As explained in the section above, in the first stage both groups (experimental [blame husband] and control [be objective]) were supposed to read the following input story. This is an adaptation of a story published in the highly readable collection of newspaper stories *Behind the Lines* by Land (1988). The original version was transformed into the following sequence of events presented in single clause format, i.e. one event is usually coded by a single clause. This format is most natural, and it is the default way of rendering attention foci in discourse (c.f. Chafe 1994). All events presented in this way are equal – at least grammatically. The input version of the story is presented below:

Mr Lawrence designed and was fitting kitchen furniture in a client's house for two weeks.

He was paid most of the money in cash by a client of his kitchen-design company. He worried that he had so much money in his possession.

All the banks were closed as it was already very late.

He was carrying a plain paper bag containing 2000 pounds in 20 pound notes home

He was very hungry too.

He bought some take-away dinner for himself on the way.

He walked through the front door of his house at the end of a long day's work.

He ate the take away.

It was close to midnight.

He felt exhausted.

He placed the paper bag and the remains of a take-away dinner on the kitchen table.

He made straight for the living room,

and sat down in front of a roaring fireplace.

He watched television.

His wife entered the room.

She asked him what was in the paper bag.

Mr Lawrence was not listening = he was watching an interesting film.

His wife put the paper bag on the fire.

Then Mr Lawrence wandered back into the kitchen.

And he glanced at the table.

He could not see the paper bag (containing money).

Mr Lawrence asked his wife where the bag was.

His wife answered that she had put it on the fire with the other rubbish.

Mr Lawrence rushed back to the living room.

He tried to beat the fire out.

He didn't manage to save all the money.

He managed to salvage only 300 pounds in singed 20-pound notes.

He carefully collected up all the ashes.

He deposited them with the local branch of his of NatWest Bank.

The events were presented in chronological order, except for the MRE, which said that the wife *had put the paper bag on the fire*. In this way, the story assumes the husband's point of view. In their written versions all participants had to assume the wife's perspective. The input story was presented in a written form, rather than a video for practical reasons. It would have been much harder to shoot this scene, and a video would make it difficult, or hard to control what participants would actually say.

The temporal sequence of the story events is repeated again below with numbers signifying events. Whenever one event is causally connected with the following, an arrow is used, " \rightarrow ". At times two events are co-temporal to a significant extent, and this is signalled by the equals "=" symbol. All these events were actually coded in the input version, and were objective (verifiable) events with some exceptions. The exceptions are events in: 3, 4, 5, 8, and the event that appears between the 17^{th} and 18^{th} event. Numbers 3, 5, 8 are subjective and also potentially evaluative in character, whereas 4, 6, 17 are quite highly evaluative. For example, number 7 says that the money was in a plain paper bag. Apart from being a statement of fact, it is naturally surprising for most people to learn that a large sum of money had been put in a plain paper bag. Such behaviour is judged as irresponsible, and potentially disastrous.

- Designed →
- 2. was fitting (and fitting, and fitting for two weeks) \rightarrow
- 3. became late =
- 4. was paid 2000 in cash \rightarrow
- 5. worried =

```
6. banks closed = 7. carried money in plain paper bag =
8. was hungry \rightarrow
9. bought take-away meal →
10. got home \rightarrow
11. put bag (with cash), briefcase and remains of meal on kitchen table \rightarrow
12. went to living room \rightarrow
13. sat down near the roaring fireplace →
14. watched TV →
15. wife entered room =
16. asked, "What is in the paper bag?" →
17. he wasn't listening→
    {wife thought it was rubbish} →
18. wife put bag in the fireplace →
    {money burn} →
19. he wandered to kitchen →
20. glanced at the table =
21. couldn't see the paper bag (containing money) →
22. asked wife where bag was \rightarrow
22. wife answered that she had put it in the fireplace \rightarrow
23. rushed back to living room →
24. tried to beat out the fire →
25. saved only 300 \rightarrow
25. collected up all the ashes \rightarrow
26. deposited 200 pounds and ashes with the bank for re-evaluation.
```

This rather long temporal chain of events can be subdivided into a few causal chains. I have been able to delimit seven such chains with some subjective and evaluative material, shown below (events that the participants added, but which the original script did not mention are put between {}):

```
CHAIN 1
Designed (PL: 'zaprojektował') → was fitting (and fitting, and fitting for two
weeks) → became late [subjective](on the pay day, the last day of his work)
CHAIN 2
was paid 2000 in cash [evaluative] → carried money in plain paper bag
CHAIN 3
became late [subjective, evaluative] → banks closed → worried
CHAIN 4
was hungry [subjective, evaluative→ bought take-away meal
[got home // put bag (with cash), briefcase and remains of meal on kitchen table //
went to living room // sat down near the roaring fireplace // watched TV // wife
entered room // wife asked, "What is in the paper bag? ]
CHAIN 5
he wasn't listening [subjective, evaluative] → {wife thought it was rubbish}
[subjective] \rightarrow wife put bag in the fireplace \rightarrow {money burn}
CHAIN 6
he wandered to kitchen // glanced at the table = couldn't see the paper bag (with
the cash) \rightarrow asked wife where bag was \rightarrow wife answered that she had put it in the
fireplace → rushed back to living room
```

CHAIN 7

 $\{\text{money burn}\}\$ MRE → tried to beat out the fire → saved only 300 {rest of money in ashes} → collected up all the ashes → deposited 300 and ashes with the bank {for evaluation} and re-evaluation

Most events within the chains are objective, but some are of subjective, and/or of evaluative type, e.g.: became late, in cash, he wasn't listening, wife thought it was rubbish, only 300 (pounds). These were naturally used by the participants in their own retellings of the story from the point of view of the wife.

Procedure

Two groups of participants were asked to read the same input story for 5 minutes. Afterwards, they had to re-write the same story from the wife's point of view, but either in an objective way, or in such a way as to put blame for what had happened on the husband. All participants had 20 minutes to plan and write the stories from their respective viewpoints.

The stories (13 in each group) were then analyzed for the number of: objective events, subjective events, evaluative events and added events. Any other categories, whose presence had not been predicted, were dealt with during the analysis.

The subjective events that were also considered evaluative are exemplified by:

127) as he is a terrible slob; so I thought the bag was useless; I tried to ask him what he brought; As he ignored my question.

It would be hard to verify their truth-value, and they often refer to the second or third participant in the story. Some other phrases or sentences were recognized as subjective only:

I assumed it was to be put in the fireplace;I did my share of housework;I was sure he would put them in his bank;I was so tired;The fireplace was the ideal thing for that.

The above examples frequently begin from the pronoun *I*, which only emphasizes subjectivity. Still other expressions were judged to be only evaluative, and they predominantly referred to emotions, but also to circumstances (sometimes seemingly unnoticeable) and events that, once communicated, could be selectively

taken as proof, or causal force that led to the MRE (most reportable event - i.e. money went up in smoke).

129) Because he always left things;

It was about midnight;

He ignores me, disrespects me;

If he had better contact with me, it wouldn't have happened.

The counting of the objective, subjective, and evaluative as well as added events (represented by clauses or phrases) was performed in such a way that if an utterance was coded as both subjective and evaluative at the same time, it was counted twice.

Importantly, the coding was performed by two coders, who had to discuss any discrepancies in categorizing a given clause, or phrase as belonging to the following categories:

- a) evaluative,
- b) subjective,
- c) both evaluative and subjective,
- d) added events.

The last category, as it turned out, was not numerous in the data set. The participants coded only a few events that had not been communicated by the input story. This is why they were included in the descriptive statistics but excluded from the final analysis of the inferential test.

Results and analysis

The following table presents numbers of particular events and evaluative phrases (material) together with added events.

Condition	Objective	Subjective	Evaluative	Made up
Blame	155	36	109	7
Be objective	179	11	57	6

Table 14. Numbers of different types of events and material in retellings

As expected, there were more objective events in the 'objective' condition, more 'subjective' events in the subjective condition, and more evaluative commentaries in the 'blame husband' condition. The number of so-called added events turned out to be too small to consider further.

These descriptive statistics were further analyzed for their significance. To this end, a chi-square test of independence was used. Under the experimental hypothesis, H1, the number of the objective, subjective and evaluative categories is dependent on the application of the independent variable, i.e. two different instructions to either put blame on the husband or be objective.

There was a significant relationship $(X^2 \ (3, N = 560) = 26.43; p < .05)$ between the numbers of the objective, subjective and evaluative events and the independent variable, i.e. two different instructions to either put blame on the husband or be objective.

In other words, students in the experimental group produced different interpretations of the input story. They foregrounded their subjective evaluations of the content of the input narrative as evidenced by a bigger number of subjective events, smaller number of objective events, and more evaluative material

A related question was tested in the follow-up language comprehension study, which asked whether foreign language readers are sensitive to differences in the number of evaluative, subjective and objective events.

5.3. Study two: Story comprehension task

To repeat, this study sought to answer a general research question, whether foreign language students are sensitive to the amount of objective, subjective and evaluative material (e.g. events) incorporated in a story? This was demonstrated to be an important aspect of construal that operates across story events, and involves selection of narrative material (events, evaluations, lies, opinions, etc.). If a speaker decides to code something in language, its prominence becomes higher. In this way, as this work argued in chapter one, the primary goal of construal options and operations is heightened salience of selected entities in conceptualization for different pragmatic reasons. The first study (section above) showed that one such reason could be putting blame on another person for what has happened.

Method

Questions and hypothesis

The question pursued here was presented above, to find out whether language comprehenders respond to a dominant use of one type of event in a story. The readers' sensitivity was operationalised as an answer on a scale of credibility from 1 to 8. It was hypothesized that of the two selected texts that each

participant (N = 33) was asked to read, the one with more objective events, fewer subjective events and less evaluative material would be judged more credible.

Credibility, in turn, was used as an indirect measure of how well a given version of a story (from the blame husband condition, or be objective condition – see section above) presents causal links and hence responsibility for the most reportable event (MRE). Readers can understand both versions of course, but they are also ready to respond individually to different levels of coherence (strength of causal connections in this case) that the two versions of the story present.

Materials

Two stories have been selected from the set produced by the participants in the previous study. The two different conditions (blame husband vs objective) produced different responses coded in two separate tables presented below for clarity:

Table 15. Numbers of objective and subjective events as well as evaluative units in blame-husband condition from the previous study

Blame husband group, story number	Objective events	Subjective events	Evaluative units
1	6	3	6
2	12	1	5
3	23	5	6
4	12	7	6
5	11	6	17
6	14	2	12
7	19	5	4
8	11	4	5
9	4	1	25
10	9	1	0
11	17	1	6
12	13	0	9
13	4	0	8
Totals	155	36	109

Be objective group	Objective events	Subjective events	Evaluative events
1	14	2	3
2	14	1	0
3	8	1	1
4	11	0	2
5	11	0	5
6	13	1	3
7	21	4	11
8	13	0	6
9	10	0	7
10	21	1	9
11	11	1	3
12	18	0	2
13	14	0	5
Totals	179	11	57

Table 16. Numbers of objective and subjective events and evaluative units in be objective condition from the previous study

The shaded stories from each group were selected with the criterion being that they should differ with respect to the amount of units (objective events, subjective events and evaluative units). The story from the *blame-husband condition* contained:

- a) 11 objective events,
- b) 6 subjective events,
- c) 17 evaluative units.

By way of comparison, the *objective condition* (the control condition) contained:

- a) 21 objective events,
- b) 1 subjective event,
- c) 9 evaluative units.

One can observe that the two stories differed with respect to the number of respective units, but they are of very similar length as concerns the total number of words. The stories are presented below:

Story 1 – blame husband condition (204 words)

It was just a usual day - I thought that. But it was a mistake. I drove to my school, taught English a couple of hours, and came back home. Everything as usual. I know that my husband works very late, and it irritates me. He never have time for

me – to speak freely or go on a holiday simply. But I must live with him – he's my husband. I was so tired when he came back home, but I started to talk with him and clean the house – I was only pretending, as usual, Our conversation didn't last long – my husband didn't say a word to me. That kind of conversations were normal in our life. Later on, when he was watching TV, I decided to clean the kitchen and living room. I know it was late, but I was too tired to do this earlier. I saw the bag and so many papers were there. I am not used to keep those papers in my house. The fireplace was the ideal thing for that. I simply burnt it. And what's the problem? Cleaning is my stuff, my husband is not supposed to do anything at home. I simply did my work. That's all.

Story 2 – be objective condition (216 words)

My husband designed kitchen. He was given money in cash by his client. Once he was given money in a plain paper bag. There were 2000 pounds in 20 notes. He was anxious because of possessing such huge amount of money and all banks were closed as it was really late. He also was very hungry so he went to the restaurant and bought some take away. At home he ate what he had bought and left all things: litter, food and this paper bag in the kitchen. Then he went to the living room and turned on TV. He started watching it without paying attention what was going on around. At this time I came home and saw the mess in the kitchen. I asked him politely what was it but he didn't' answer, so a bit angry because of his lack of response I throw everything in a fireplace. Frankly speaking, when I saw my husband fighting with a fire I was ready to call an ambulance. But in tears in his eyes he told me that in the bag there was money. I was astonished with the answer and wasn't surprised at all when he gathered the ash and put it in the bank. Since that time he always answered all my questions.

Procedure

The participants (N = 33) were given the following instructions in Polish, here translated into English:

Which of the following texts (on the reverse of the A4 sheet of paper) more credibly presents how the described story event was brought about, happened? Read both texts carefully in either order and decide how credible each of the stories is on the scale 1-2-3-4-5-6-7-8. The more points, the more credible the story is. Put an 'x' in the box under the number of points you would give to each story (see example below).

TEXT A

Points on CREDIBILITY SCALE	1	2	3	4	5	6	7	8
YOUR EVALUATION					X			

TEXT B

Points on CREDIBIILTY SCALE	1	2	3	4	5	6	7	8
YOUR EVALUATION		X						

Importantly, the instruction also said that they were not supposed to assess grammar, vocabulary, or other mistakes, only the story credibility.

Results

The participants assigned ranks from 1 to 8 on a scale of credibility, which served as an operational definition of story coherence, which in turn reflects the strength of construed causal connections.

In this within-subject experimental design, a Wilcoxon signed-ranks non-parametric test was used. This was necessary as the concrete rank, e.g. 4 must not be considered two times larger than 2; it is only interpreted as larger than 2; the distances between ranks on a scale are not equal, of course.

The results of the Wilcoxon signed-ranks non-parametric test: (w (N = 33) = 34; p < .05) induces a decision to reject the Null Hypothesis – H0, and accept the experimental hypothesis – H1, according to which the imbalance between ranks assigned to story A and story B is statistically significant, and it must be attributed to the application of the experimental variable, i.e. the fact that the stories differed with respect to the amount of objective and subjective events as well as to the evaluative units. In other words, the experimental subjects, who were foreign language learners, tend to assign more credibility value to a story whose causal structure is taken care of by the dominant number of objective events, fewer subjective events and fewer evaluative units.

5.4. Conclusions and discussion of narrative production and comprehension tasks

The language (narrative) production task required the students to re-write a narrative that had been presented in verbal form. This method of presentation may be criticized, because it is medium specific. After all, students had to write again what they had already read about in the same language (English). However, this was purposeful. The interesting question was how students would change the material presented in verbal form in order to polarize participants' roles (husband and wife) and construe causality to blame the husband for the fact that money went up in smoke. A video presentation, different in modality, would have left too much freedom for the participants. The written form of the input narrative helped hold some conditions constant: the most reportable event, and the objective events were controlled as the participants had been instructed not to change them (they were told they actually did happen). This study focused on how foreign language learners construed events to produce a story. Hence, discourse perspective was emphesized.

EFL students at upper-intermediate to advanced levels demonstrated ability to construe a narrative by adjusting the number of subjective events, objective events and evaluative material (units) without being explicitly instructed to do so. This is arguably a new finding as it pertains to EFL context, and it corroborates the conclusions reached by Labov (2001, 2004, 2011), but using an experimental design. Moreover, the study also tentatively suggests that the described strategies have a language-universal character, i.e. they are not tied to native forms of language use. To be credible, the participants tried to present objective events, and they kept the evaluative material to a minimum.

As for the story comprehension task, the participants tended to ascribe more credibility value to those events whose falsehood can be verified (objective events). The story that contained more evaluative elements and some subjective events was shown to be judged as less credible. This happened arguably because with more evaluative material and more subjective events, the story in the *blame husband* condition construed causality between events more loosely.

However, both study 1 & 2 demonstrated (in agreement with what CogLing has to say about causality) that it is dynamically construed, not only by presenting objective events, but also by coding evaluative responses and subjective events. With MRE, and the other events controlled for, the above results are attributed to the experimental manipulation.

Chapter 6

Retelling of a video and picture sequence in Polish and English

6.1. Introduction

This chapter continues the presentation and analysis of how speakers of English as a foreign language deal with the task of construing and verbally coding events to form a narrative. As in the previous chapters, this part uses experimental design, whose details are explained later. The pool of story-retellings used in the analysis comes from what one could refer to as laboratory context. However, the advantage of such an approach to studying discourse is that important comparisons between and within groups are possible. However, the qualitative analysis of the data pool is also presented.

Like the previous chapters, chapter six supports the general theme of the book that the subordinate goal of construal operations is to properly adjust the salience of entities (e.g. objects, characters, locations, reified processes) and relations (e.g. features of objects, processes). The dynamic character of production and comprehension of language in narrative construction is dealt with by quantitative study of events together with qualitative analyses of observed phenomena.

6.2. The task and its unit – sentence

The author decided to choose an approximately eight-minute-long cartoon video, an episode from the well known silent series for children *Bolek and Lolek* to ask about:

- how the participants will construe the presented material in writing,
- how they will configure individual scenes in language,
- how they will package events and their parts in sentence format.

In line with the tradition in Cognitive Linguistics, Chafe (1994: ch. 11) claims that sentences have a special mental status. Whereas *intonation units* express single attention foci, sentences tend to involve something that the scholar

decided to call *centres of interest*. They (i.e. sentences) are not only units of grammar according to this view, and their use in writing evolved from how people used them in speech. The following example (p. 141) illustrates this line of argument.

- 130) a) .. I was on the ^bus tod^a=y,
 - b) .. ^a=nd there was this w^oman s^aying,
 - c) .. that her s^on,
 - d) .. w^orks .. for the r^anger s^ervice or whatever.
 - e) .. And .. there was sn^o=w,
 - f) .. ch^est high,
 - g) .. at Tu^olomne M^eadows. (Chafe 1994)

This sequence contains seven foci of consciousness-attention, and two centres of interest, analogized to the level of a sentence. The intonation units: a, b c, d hold together in that they represent active foci of a larger coherence, are divided in transcription by a comma and a full stop at the end. The use of a comma in transcription is a correlate of sustained intonation to signal that a speaker has not yet finished verbalizing a certain whole. The same happens in the case of: e, f, g. According to Chafe (ibid.), this ability is especially useful in language because people constantly try to express memories and imaginations larger in scope than whatever a single focus of attention can successfully handle. In other words, our memories and imaginations have changed, but the limit of how much content the mind can represent at a given moment remains constant, so there is a tension between how much content we would like to code into a single intonation unit in speech (but also in a sentence during writing), and how much the human attention system can handle. The limitation is that a single intonation unit can hold a single act of active consciousness. The sentence then can be interpreted as a human attempt to overcome the limited capacity of a conscious focus.

The task involved retellings of either a video sequence or a set of pictures (showing the same story) in either Polish or English. The video lasted approximately 8 minutes and there were 30 picture-screenshots arranged in a sequence that illustrated the same story. The participants watched the video and were asked to retell its content in written form afterwards. They had 15 minutes to write the story. Those participants who were in the pictures condition looked at the story for some time (not more than 8 minutes) and then they were supposed to write the story. The time limit in this case was also 15 minutes. Each experimental group was allowed not more than 15 minutes to complete the writing task after the input had been presented to them for 8 minutes.

The participants were Polish born students of English as a foreign language; their level can be described as ranging from intermediate to advance. Thirty students (N=30) took part in the study, and they were divided randomly into one of the four experimental conditions:

- Polish-native describe video (PL-vid),
- English-foreign describe video (ENG-vid),
- Polish-native describe a set of pictures (PL-pict),
- English-foreign describe a set of pictures (ENG-pict).

The rationale behind these group divisions lies in the general design of the study and its questions. First, we wished to test whether different language conditions (native vs. foreign) in groups would cause different numbers of actually coded sentences, and hence centres of interest. Second, we were also interested to learn whether different tasks would induce variable coding and construal of the input.

At this point, we wish to stress that as the sentence is understood to be a *centre of interest*, it was used to operationalize the presumed difficulty, or ease that the groups of Polish-native and English-foreign writers encountered during this task performance. Even if one can suggest no reason at all why the two groups (eng/pl) should have variable memories of the content, we can speculate that at moments where the foreign language users encounter coding problems due to limited language resources, they will decide to avoid coding a problematic scene, or a sequence of events, resulting in a smaller number of sentences in the retellings between experimental conditions.

A similar reasoning applies to the two other conditions, i.e. the groups who were either asked to retell the content of the video, or a sequence of picture-screenshots. The expectation was that the video watchers would be much better prepared to select any *centre of interest* to code, while those participants who had to rely on picture sequences would have no choice but to rely on what moments of the story had been selected and presented in the form of motionless pictures. The latter group (pictures) was expected to use fewer sentences than the former one (video condition), because it is the video that is easier to understand and interpret. In other words, it was speculated that it is not only the language that one is asked to use, but also the task that would induce differences in how the participants would encode respective visual inputs in language. In particular, the specific expectation was that the video-watchers would produce more *centres of interest* (sentences) than the picture-viewers.

The experimental design used was that of ANOVA 2 x 2, which can take care of any interaction effects between conditions, should they arise.

6.3. Data coding

This is a general section that will refer to the subsequent analyses of the data into both sentences and events.

The collected samples were coded in the format of a data-base of Microsoft Access program, with the following tables related to each other in a one to many fashion.

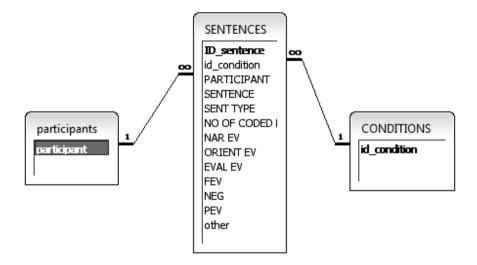


Fig. 15. Tables and their relations in the dBase of sentences that were used in story retellings

The SENTENCES table has the following important descriptors:

- the actual sentence where the actual sentences were written,
- sent type simple, subordinate, coordinate, complex,
- number of coded events per sentence altogether,
- number of narrative events.
- number of events that can be classed as belonging to orientation,
- number of events that have an evaluative character.
- number of the so-called future, and potential events,
- other residual commentary.

The PARTICIPANT table only had numbers standing for particular participants, so the study was completely anonymous, and the participants had been informed about it. The CONDITIONS table had two columns, one uniquely identifying each condition, and the other was used to give a name to each of them:

- Polish-video.
- Polish-pictures,
- English-video,
- English-pictures.

6.4. Analysis one: Sentences in story retellings, questions, hypotheses, results, discussion

The author strongly argues that the data is real, even if it comes from foreign language users at intermediate to advanced levels. The task we used has a high ecological validity. The participants were asked to write about a video material or a sequence of pictures, and such tasks are frequently performed not only by native speakers about the content of stories broadcast on television, but also by foreign language learners in their classroom after they have read a story in their handbook, a simplified reader, magazine or internet. Having been exposed to the input (video vs. pictures), the participants had to rely on their memories during the written retellings of the perceived events. The first general research question that we asked is repeated below.

General Question 1: Will speakers of Polish-native and English-foreign languages code events presented by either a video or picture sequence differently? Will the four independent groups (PL-VID, PL-PIC, ENG-VID, ENG-PIC) differ as regards the number of sentences they will decide to use?

The sentence, as discussed above, is understood to be a *centre of interest*. However, it is not a constant of a human cognitive system. It is construed online, dynamically.

Different experimental conditions, i.e. language (PL-ENG) and input type (VID-PIC) had two levels each, and they represented two independent variables manipulated in the experiment. It was predicted that the write-in-Polish condition would render fewer sentences in general in agreement with the understanding that foreign language use is more effortful. The other prediction was that the video condition would render more sentences than the picture condition. It was based on the observation that when writing after watching a video, a participant can, at least in theory, select any moment at all to construe a story, and there would be more possible centres of interest, hence also sentences. By contrast, those who only viewed the pictures were limited by the amount of centres of interest, and moreover they did not have the advantage of experiencing a continuous flow of activity. Its fragments presented by particular screenshots did not match so easily compared to the video condition, and the picture viewers must have made more effort in constructing and reconstructing the temporal and causal links. To repeat, as a result it was hypothesized that the picture condition would render fewer sentences than the video condition. The exact hypotheses are repeated for clarity below:

Video-Pictures

H1: The video condition will render statistically more sentences in the writtenverbalization of the cartoon than in the picture condition. H0: The video condition will not have more sentences than the picture condition in a statistically significant way.

Polish-English

H1: The use of Polish-native language will render more sentences in the retelling of the cartoon regardless of the type of input (i.e. video-pictures).

H0: The use of Polish will not be associated with a statistically significant increase in the number of sentences used to retell the cartoon regardless of the video or pictures condition.

Interaction

H1: There will be interaction between the language used in the written descriptions of the silent cartoon and the type of input. In particular, it is predicted that it is the users of Polish as a native language who will benefit most from the video presentation, and they will use the greatest number of sentences to describe the silent cartoon presentation.

H0: No interaction will be observed, which will indicate that the two variables manipulated in the experiment are independent of each other.

The experimental design used independent groups for two important reasons: logical and practical. First, though it is generally agreed that the use of the same participants to act in two conditions for comparison is beneficial and raises the sensitivity of a test, the very nature of the task made it impossible. After any participant wrote her/his story in any of the four conditions of the experiment, s/he could not be asked to do it again! This would have been possible only if the participants had been asked to take part in the other condition after a certain period of time (perhaps two weeks?). Supposedly, such a period of time would be needed for any person to forget the first viewing of the input and not be affected by its influence in the second condition.

There is, however, a positive side of having independent groups as well. If such a test renders results that are statistically significant at a selected level (usually ALPHA<.05), it should also do so in a between-subjects design, which is considered more sensitive in general.

PL-ENG vs. VIDEO-PICTURES – descriptive statistics and ANOVA 2 x 2 The table presenting raw data from each condition illustrates the differences between the experimental groups and conditions:

Table 17. Raw data from Polish-pictures-video and English-pictures-video study

	Pictures	Video
English	9, 11, 11, 12, 19, 26	9, 9, 10, 12, 14, 16, 16, 18
Polish	6, 7, 9, 10, 14, 14, 16, 16, 17	14, 18, 20, 21, 23, 28, 35

The raw numbers in each cell represent the quantities of sentences that each participant used in his/her condition. There were 6 participants in Eng-Pictures condition, 8 participants in the English-Video condition, 9 in the Polish-Pictures condition and 7 in the Polish-Video condition. The next table displays important measures of central tendency and dispersion.

Table 18. Summary of descriptive statistics in study comparing number of sentences in Polish-pictures-video and English-pictures-video conditions

		Within e	ach box:
Summar	v of	Item $1 = N$ Item $2 =$	$\sum X$ Item 3 = Mean
descriptive s		Item $4 = \sum X^2$	tem 5 = Variance
			Item 7 = Std. Err.
	ı	item 0 – Std. Dev.	nem / – sta. en.
	PIC	VID	Total
ENGLISH			
1	6	8	14
2 3	88	104	192
3	14.66	13	13.71
4	1504	1438	2942
5	42.67	12.29	23.76
6	6.53	3.51	4.87
7	2.67	1.24	1.3
PL			
1	9	7	16
2 3	109	159	268
3	12.11	22.71	16.75
4	1459	3899	5358
5	17.36	47.9	57.93
6	4.17	6.92	7.61
7	1.39	2.62	1.9
Total			
1	15	15	30
2	197	263	460
3	13.13	17.53	15.33
4	2963	5337	8300
5	26.84	51.84	42.99
6	5.18	7.2	6.56
7	1.34	1.86	1.2

The largest mean number of sentences was produced in the PL-VID condition, followed by ENG-PICT, ENG-VID, and last PL-PICT. The choice of Polish resulted in a greater overall mean number of sentences per single retelling (M-PL = 16.75) used to code the presented content compared to the choice of English (ENG = 3.71). When it comes to the choice of input, the mean number

of sentences produced in a video retelling was greater (M-VID = 17.53) than in the pictures condition (M-PICT = 13.30). There are more sentences per each retelling when the participants retold the content of the video rather than the picture sequence in Polish.

One must remember that by doing this experiment we were restricted by the number of participants, whose retellings were transcribed and analyzed. With 30 people, who participated, it took the transcribes over one week to finish the job. Finally, approximately 500 sentences were collected. This is not a large corpus, which was also caused by limitations of time and resources. This is why the results should be treated with some caution.

ANOVA 2 x 2 was used to draw inferences from the group means and test whether the reported differences were statistically significant at $\alpha = .05$.

ANOVA Summary						
Source	SS	df	MS	F	p	
Rows-lang: pl/en	68.81	1	68.81	2.47	0.1281	
Columns – input: pict/vid	145.2	1	145.2	5.2	0.031	
Lang x input interaction	307.01	1	307.01	11	0.0027	
Within groups variation:						
(i.e. error due to individual variation)	725.65	26	27.91			
Total	1246 67	29				

Table 19. ANOVA results of the study of sentences in pictures/video *vis à vis* Polish/English conditions

A significant main effect was obtained only for input type (F (1, 26) = 5.2; p < .05). ANOVA further revealed a significant interaction between language and input type: (F (1, 26) = 11; p < .05). However, there was no significant main effect for language choice: (F (1, 26) = 2.47; p > .05).

To sum up this section, language did not have an effect on the number of sentences the participants decided to use when they coded the content of their respective input story. However, it was the video presentation, but not pictures that caused that the participants produced more sentences in their retellings. Moreover, the results of the quantitative analysis presented above most strongly argue that the choice of Polish-native language interacts with the video condition as regards the number of sentences in a retelling.

Discussion of results

One may rightly wonder how to interpret these results. The subjects were asked to write a story. Not even their sentences as such, but their numbers used in every retelling were considered.

As regards the fact that no significant differences in the numbers of sentences were shown to exist between Polish-native and English-foreign languages, the speakers of English as a foreign language did not tend to consider the content of the cartoon story hard to write about, and the post-task questionnaire they answered confirmed this explanation. Most of them did not avoid an effort of coding a particular centre of interest to the effect that at least in this regard the two language conditions did not differ. Language users in both groups behaved similarly in this respect. They noticed, remembered and decided to code in language a very similar number of *centres of interest*. However, the sheer number of sentences in either Polish or English retellings does not point to any tendencies of thinking for speaking (c.f. Slobin 1996).

The participants commented on the task in the following way. First, many of them admitted the task was easy in general. However, many of them also said that it was the amount of detail that posed some problems, especially when it comes to the sub-topic of attempted car repair. The boys performed a variety of actions to repair the old car. Though presented in strict chronology in the film, these actions did not form a causal chain, but only a temporal one. However tentatively, this demonstrates that time is not necessarily a good memory index of events. In the story that was analyzed here, it was causality that probably helped remember actions and events, perhaps locations as well. Second, there was a tension in the presented video, even more so in the picture sequence between the events that were taking place as the film progressed and the events imagined and hoped for by the boys, coded as the so-called future events. This topic is discussed later.

Moreover, despite the obvious instruction to retell the content of the video, many participants reported that the task required creativity. This particular comment is significant as it points again to the dynamic character of discourse processes of construal. Different fragments of the original input had to be connected seamlessly. It turned out especially effortful in the picture-sequence, as the pictures did not present a continuous flow from which to choose relevant information. Instead, a writer was compelled to impose interpretations. Sometimes relations between pictures were not easy to understand. By contrast, the video condition facilitated the choice of the moments crucial for the story. Its continuous flow compared to static, interrupted temporality made the interpretation process easier. Interestingly, it was the participants in the Polish condition whose retellings had the largest mean number of sentences.

The study so far has directed the reader's attention to the numbers of sentences per each cartoon story retelling without analyzing the types of sentences used in the Polish versus the English conditions. This gap is filled by the section to follow.

6.5. Analysis two: Type of sentences and events in Polish and English retellings of story, introduction

The analysis attempted above informed about the numbers of *sentences* that the participants construed depending on the language they used and the input type they had been exposed to prior to the writing task. A sentence rightly served the purpose of an operational definition of an abstract concept of a *centre of interest*, an attempt at overcoming the limitations of human active focus of attention.

It is also interesting to ask how such a focus functions. If its correlate is *a sentence*, indirect information about how language users choose different sentence types can serve as the operational definition of its (attention focus) composition.

When a language user decides to frame a portion of experience (input), in the case of a story, or a narrative, s/he has to select a certain portion of time and space (definitional for event category), objects, locations, characters, features, but also impressions, possibly emotions as well and distribute them over the beginning, middle and end parts of a sentence. But sentences can be used to juxtapose information about events in a myriad of ways that traditional, functional, but also cognitive grammars refer to as *simple*, *coordinate*, *subordinate* and *complex*. The focus of this analysis of the data set of Bolek and Lolek retellings is the use of sentence types operationalised as a preferred way of construal (conceptual level) and coding (linguistic level) of events.

The next section presents the rationale, questions, operational definitions, comments on the coding process and specific hypotheses.

Analysis two: rationale, sentences types in BIL (Bolek and Lolek Cartoon) retellings and what they can tell us

As indicated in the introduction to the first study, during the coding process the data was categorized by two experienced linguists into the following traditional categories of sentence:

- a) single finite clause,
- b) compound/coordinate sentence two or more coordinate clauses,
- c) subordinate sentence up to two clauses, one of which was the main clause,
- d) co-ordinate and subordinate sentence sentence containing both clauses that are related in a subordinate and coordinate way.

Prototypically, a simple clause is used to code a single event; two or more autonomous events can be coded in a prototypical compound (coordinate) sentential frame. Subordinate sentences contain two or more clauses, one main, or independent and more dependent clauses. The myriad of syntactic possibilities

constitute resources that language users select to adjust the cognitive salience of entities (THINGS and RELATIONS). The criteria used during coding were structural, semantic and cognitive.

A simple clause may contain only one main verb. Any basic syntactic pattern has obligatory constituents, e.g. Quirk et al. (1972: 172).

SV The dog is barking.
SVO The film fascinated me.

SVC Your homework seems difficult. SVA My school is in the other district.

SVOO They should give their money to the poor.

SVOC Most teachers have found her quite hardworking.

SVOA You can put the bag in the corner.

These patterns can be associated with numerous additional, optional constituents. Though the subject and object are typically coded by nominals, whereas processes, events and actions by verbs, there are possibilities to reify PROCESSES and construe them as if they were THINGS. For example, instead of saying, *He jumped three metres* (PWN-Oxford Dictionary), one can say, *in a single jump* (PWN-Oxford Dictionary). In the former sentence, *jump* designates an event, has processual profile, whereas in the latter sentence it has a nominal profile. A single finite clause, profiles energetic interaction (Langacer 1991: Vol. 2, p. 193); it focuses on a narrow portion of the action chain, and there is one main verb whose processual profile is inherited by the whole clause.

Compound or coordinate sentences consist of syntactic structures that contain more than one clause with equal, i.e. cognitively autonomous status, so they can boast of two equally salient profiles imposed by the finite verbs. This semantic definition was used in conjunction with the structural criterion that coordinate clauses are juxtaposed with such connectors as: *for*, *and*, *nor*, *but*, *or*, *yet*, *so* – the well known FANBOYS.

The subordinate sentences in the data set contain one main verb of the main clause and at least one more finite or non-finite verb of the dependent clause or clauses. Some of the subordinate structures are short, e.g.,

131) Idąc na przystanek, chciał już wsiąść do autobusu.

'Walking to the bus stop, he wanted to get on the bus.'

Arguably, the main and most salient event is coded with the verb *wanted*. It is the existence of the plan that is put to the forefront. An alternative construal could be:

132) He had a plan \rightarrow He would get on the bus \rightarrow At that time he was walking.

The above sequence is not haphazard, but reflects the cognitive salience of the coded events: first of all *plan*, second *get on the bus*, and last, the temporal and spatial frame, or context coded by *as he was walking*. Other subordinate constructions are longer:

- 133) Bolek showed Lolek the poster which informed about a possibility to exchange metal for tents, bags and other holiday equipment.
 - Zaraz potem spotkał się z Bolkiem, który zaciągnął go w miejsce gdzie wisiał niezwykle ciekawy plakat, przedstawiający propozycję spędzenia wakacji.
 - transl. 'Soon after that he met Bolek, who took him to the place where an exceptionally interesting poster, showing a proposal of spending the summer holidays, hung.'

Langacker (1991: Vol. 2: 437) proposes resorting to the issue of conceptual dependence / independence when deciding if a sentence is subordinate. The dominant profile in a subordinate sentence is imposed by the verb in the main clause. For example, the sentence *When mum came back*, *she saw him playing with the children*, is about the fact that the mother <u>saw</u>, exactly because this verb's profile is dominant. In attentional terms, the sentence is an instruction to pay more attention to the fact she saw, than that she came back, or that he was playing with the children.

Subordinate clauses fuse with main clauses in different ways. Complement clauses are most dependent, followed by modifying clauses and adverbial clauses coming last on the cline of autonomy (cf. Badio). Coordination and subordination processes of linguistic syntax show prototype effects, and this is a direct consequence of variable salience of entities in conception.

Moreover, there is the question, 'what it means for a subordinate structure to be a clause' (Langacker 1991, Vol 2: 419). Like every linguistic category, this one exhibits various departures from the prototype, associated with a dependent (subordinate) clause that could stand alone; it has an explicit form of the finite verb with other necessary components also explicitly coded in language. The departures can be of two kinds: absence of clausal elements, and a profile that is non-processual. Somewhere along this cline, a researcher is faced with a question whether one is dealing with a clause. Generally, in such cases, the rule of thumb that we used was the criterion that to be classed as a clause, the subordinate structure had to have a verb form.

The last type of syntactic construction used by the speakers, and coded as subordinate-coordinate, subsumed cases of subordination and compounding within a single sentence format, as in the following examples.

134) Gdy ich zobaczył, zabrał z auta swoje walizki i wręczył Bolkowi i Lolkowi kluczyki od swojego auta.

'When he saw them, [he] took his suitcases from the car and handed Bolek and Lolek the keys to his car.'

Bolek found an advertisement about holidays on the campsite near the lake and decided that this would be a great idea to spend their free time.

Such constructions create especially favorable conditions for coding multiple events ranked for salience in a sentential format. If filmed, or imagined, they would require a portion of real time that is considerably longer than in the case of, especially, simple clauses.

The data set represents different sentence structures. They are observable choices of linguistic coding, and reflect conceptualizations of the events and entities presented in the input. The author argues that these alternative linguistic codings of observed reality, or input in the case of our experiment reflect conventional outlooks on events, and speakers' preferences. The use of one's native language is intuitively free of the restrictions and limitations imposed by the fact that a person is coding information into the interlanguage system of English (in this case). Because this work looks specifically at events, the choice of input was not haphazard. As the analysis of the previous study indicated, the participants reported no difficulty coding any specific event or events after watching the video or pictures. The reader is reminded that there was no significant effect of language on the mean number of all sentences used in any input retelling.

However, understanding the differences between single, coordinate and subordinate sentences described above, one may expect that different language conditions (foreign/native) will effect variable mean numbers of single, coordinate, subordinate, and sub-coordinate sentences per retelling. It is necessary to remind that the choice of *sentence type* was an operational definition of presumed cognitive complexity and preference as regards an aspect of event construal.

The presumed biggest cognitive load is posed by complex (both subordinate and coordinate sentences), followed by subordinate sentences, coordinate sentences, and last, single clauses. This load is inversely proportional to the efficiency with which one can express a complex conceptual structure. Foreign language learners, despite their level of proficiency, intermediate to advanced, were predicted to favour single and coordinate clauses, and we expected that subordination as well as more complex structures would be favoured by the native speakers of Polish versions of the input cartoon.

Analysis two: questions and hypotheses about sentences in Polish vs. English retellings

Hence, the general research question we tried to answer was formulated as follows:

Does the use of a foreign language induce such thinking for speaking that leads to less complex conceptualizations, more easily codable in language?

whereas the more narrow research question, closer to the operationalization of sentence type as related to levels of cognitive complexity has been phrased as:

Will the use of Polish-native and English-foreign languages be independent of the number of different sentence types in the data?

At the risk of being repetitive, it was predicted that the Polish-native data set of sentences will differ from its English-foreign counterpart as regards the number of the respective sentential categories. In particular, we expected that Polish-foreign retelling would contain more simple clauses, and fewer subordinate and complex sentences. As regards coordinate sentences, we predicted that there would be no important differences due to the observation that coordination is relatively simple, additive and should not be avoided by foreign language speakers.

As the analysis concerns the data used in the first study (see above) the reader is referred back for details concerning the participants (N = 30), and other apects of design to the previous sub-section. The coding was performed by two experienced researchers, who reached 95% agreement.

Study two: descriptive statistics on sentence types

The following table shows raw scores and their percentages in each category:

	Sentences: raw scores / percentages								
Input type	SIMPLE	CO-ORD	SUBORD	SUB-CC	TOTALS				
pic-eng	30.68%	26.14%	29.55%	13.64%	100.01%				
vid-eng	24.04%	20.19%	29.81%	25.96%	100.00%				
total-eng	54.72%	46.33%	59.36%	39.60%					
pic-pl	30.00%	25.45%	28.18%	16.36%	100%				
vid-pl	25.16%	24.53%	31.45%	18.87%	100.01%				
total-pl	55%	49.98%	59.63%	35.23%					

Table 20. Sentence types across the experimental conditions

The percentages in the cells that describe the numbers of different sentence types in each condition are very similar. The Polish-native and the English-foreign languages present similar numbers also if input type is disregarded. This is an indication that the choice of language of the silent video retellings is not associated with differences in preferential use of sentence types by the two experimental groups.

In order to corroborate these intuitions, and observations, a Chi-squared test of independence was used. The actual raw numbers of different sentence types coded in Polish and English are shown in the table below:

Language	Sentence type							
	simple	co-ord	subord	complex				
pl	52	44	57	39				
eng	73	67	81	48				

 Table 21. Raw numbers of sentence types in four experimental

 conditions

There are two qualitative variables: language and sentence type. The former, language, has two levels (Polish, English), whereas the latter is characterized on three levels (simple, coordinate, subordinate and complex type of sentence).

H1: language choice and sentence type are related.

H0: language choice and sentence type are independent of each other.

There turned out to be no significant relationship between language choice and number of different sentence types in the data set of Polish and English video retellings X^2 (3, N = 460) = 0.553; p > .05.

Discussion of results

The conclusions obtained after the application of the chi-squared test may be a little surprising. However, the reader is reminded that the coding of the sentences did not consider whether the sentences that the participants produced in writing were grammatically correct or not. And grammatical correctness is something that can be assessed against some norm, usually a native standard. An interlanguage can be regarded as a self-contained system, and this was the view adopted here.

Moreover, the stories were not too demanding conceptually, or lexically. They had two main characters and two others, whose role was easy to remember. They all interacted with a limited, relatively small number of objects. Perhaps the only real challenge for the participants was the fact that the film was silent, so some details concerning causality were unclear, but this was true of both conditions.

Apart from this, the sheer numbers of the syntactic categories concerned do not say anything about the actual decisions that the participants made to code events. Hence, the analysis that is more qualitative in character is attempted in another section. Meanwhile, still another quantitative analysis is provided in the section to follow, this time concerning the number of events that the participants construed and coded in language.

6.6. Analysis three: Events in story retellings

The major motivation for this particular sub-study comes from the observation that sentence and event levels are not isomorphic. Even single clauses can be used to code more than one event. The options available in the case of coordinate and subordinate sentences are even more varied. Mind allows multiple perespectives on events and their sequences, with language reflecting this kaleidoscopic flux. Hence, apart from the mere sentence frame one uses (see description above), cognitive complexity is also presumably connected with the number of events encoded in one sentence, so also in the entire retelling. Skilful encoding of event complexes (their sequences and other aspects) is something a language user must learn. We predicted that English-foreign verbalizations of the input cartoon would contain a fewer, mean number of events per one story retelling because we speculated that foreigners cannot pack various events into one sentence and additionally rank them for salience by applying appropriate grammatical constructions as skilfully as native speakers of a language. The number of encoded events (errors ignored, all attempts counted) was used as the operationalization of the conceptual complexity and skill with which Polish and English written versions of the cartoon were presented.

For analytical purposes, each sentence in the data set was coded for the number of

- a) all events,
- b) narrative events,
- c) future events,
- d) negative events.
- e) orienting events,
- f) evaluative events.

The question of what counted as an event had to be answered because we needed objective (as far as possible) criteria of their delimitation. Generally an event was ticked off any time it was signalled by a finite form of a verb in any sentence type. Some other events were also spotted and counted if some other verbal form was applied with processual profile. As an example, let us analyze the following sentence:

135) Bolek and Lolek were watching this situation, and when the man perceived them, he gave them the keys to this car.

This sentence was analyzed as containing 3 events, all of which were narrative events. This analysis is rather straightforward; all verbs are used in their finite forms, and hence the whole structure is prototypical. Other sentences in both Polish and English sub-sets of data departed in various ways from the prototype thus defined.

- 136) a) Unfortunately, because of nails on the street, they got a flat tyre.
 - b) They're trying to repair the car.
 - c) At the very beginning they wanted to do a yacht.
 - d) Happy that they can visit all country, they went off.
 - e) They noticed a poster advertising scrap shop.
 - f) After lots of trying of fixing the car, they gave up.

(136a) does not contain the verbal predicate *there were nails*. In (136b) *to rapair* is an infinitival counterpart of a presumably more salient *they were repairing*; the same applies to example (136c). The verbs with which such infinitival clauses are possible are in fact quite popular in English. (136c) again misses the verb *[they] were [happy]*. Following this example, there is sentence (136d), which illustrates a non-finite modifying clause, which describes the poster, *advertising scrap shop*; its finite alternative could be, *which advertised / was advertising (?) a scrap shop*. The last example (136f) reifies a process and uses the verbs *trying* and *fixing*.

Some more examples of different sentence types in the data of cartoon retellings

The sentences coded as single clauses in the corpus of data collected for the purposes of this study have multiple realizations, and this variety is far beyond the scope of this book. What is important for the topic of construal and coding operations is that some simple clauses coded a single event, but others more of them, as the following examples illustrate.

- 137) a) Bolek odprowadzał Lolka do domu.
 - lit. 'Bolek saw Lolek off home'.
 - b) B&L byli zadowoleni z dotarcia na miejsce.
 - lit. 'B&L were glad with get-NOMINAL to the spot'.
 - c) Bolek znalazł ogłoszenie o wyjeździe na obóz żeglarski. lit. 'Bolek found an advertisement about going to a saling camp'.

The first sentence (a) in this example poses no problem; it is a single clause that codes a single event; in (b) the phrase *were glad* is followed by the nominalized verb (and reified process) *get* to the spot. A similar process is exemplified by (c), where the verb *go* is nominalized by the form *wyjazd*, 'go-NOMINAL'. The interesting observation, especially in the case of simple clauses is that they can be used to code more than one event, ranked as regards salience.

In the case of examples (b) and (c) presented above, and in agreement with Talmy (2007), the salience of a finite verb form 'were glad', and znalazł ogłoszenie 'found an ad' is greater than the salience of nominalized wyjeździe 'go-NOMINALIZED', and dotarcia 'get-NOMINALIZED'.

The sentences in the *coordinate sentence* category contain from 1 to 5 events of different types. For example, the sentence,

138) He has some luggage and fishing equipment,

was analysed as coding the event of possession signalled by the word *has*, with co-ordinated nominals: *luggage* and *equipment*. Other sentences consist of more than one event, as in:

- 139) a) The man agreed and lent them the car. two events
 - b) The boys are probably at school because they have schoolbags on their shoulders. *two events*
 - c) They did not know what to do with their spare time and began to think of possible trips to go on. *three events*
 - d) Nie zbudowali w końcu łodzi, zobaczyli mężczyznę z wędkami i zapragnęli łowić ryby. *four events* lit: 'They did not build the boat in the end, saw a man with fishing rods and wished they could go fishing.'
 - e) Bolek od razu rozmarzył się o pieniądzach, i co kupić, zaś Lolek o naprawie auta i przejażdżce. *five events* lit: 'Bolek at once dreamt of money, and what to buy, whereas Lolek aborted repairing the car and going for a drive.'

In (139a) the two events are AGREED and LENT. The sentence construes a single participant, *the man*, mentioned earlier, hence salient and preceded by the definite article *the* followed by two coordinated verb phrases; in (b) the conjunction *because* coordinates the first part of the sentence that expresses a conjecture followed by the presentation of a scene that the participant remembered, and which led to this speculation. This is the "I THINK X, BECAUSE Y" construction. In (139c) there are three events of KNOWING, DOING, and TRIPS. The reader learns that the boys DIDN'T KNOW, so this fragment was analyzed as a negative event. Example (139d) codes a negative

event *nie zbudowali lodzi*, 'didn't build a boat', followed by zobaczyli, 'saw', zapragnęli X 'desired X', X=lowić ryby, 'fish' or 'go fishing'. Last, example (e) was analysed as coding the following events of rozmarzyl się o pieniądach 'dreamed of money', i co kupić 'and what to buy', o naprawie auta 'of repairing the car', o przejażdżce 'of a ride'; the event of dreaming is coded at the beginning of the sentence, and the word rozmarzyl się 'dreamed of' is not repeated after Lolek, though it refers to this second part of the co-ordinate structure as well.

Questions, hypotheses, analysis and discussion of results

The research question that we asked in this context was phrased in the following way:

Are native speakers able to bundle more information about events in a sentence than non-native speakers who are students of English as a foreign language?

The reader is reminded that the mean number of events coded per story retelling is operationalised as a relative ease / difficulty with which the participants coped with the content presented in their respective inputs. The precise experimental hypothesis (H1) and the null hypothesis (H0) are presented below:

H1: Polish-native language retellings of the cartoon presented by video and sequence of pictures will contain more events than in the case of English-foreign language condition per single retelling,

H0: The null hypothesis predicts that the numbers of events across conditions would not differ in a statistically significant way per single retelling.

The following descriptive statistics for that matter are presented and discussed below:

Variables	Polish	English
Valid data	17	13
Mean	38.2	27.3
Median	33	23
Range	68	25
Variance	343.4	61.5
Stand. deviation	18.5	7.8
St. error of mean	4.4	2.1
Upper 95% CL of mean	47.8	32.0
Lower 95% CL of mean	28.76	22.56
Skewness	0.8	0.7
Kurtosis	3.2	2.3
Maximum	83	44
Minimum	15	19

As for the values of central tendency, the mean number of coded events turned out to be bigger (per sample) in the Polish condition, and the same applies to the median. The range of results turned out to be more than twice as large when the story was coded in Polish than in the case of English. In other words, the Polishnative renditions of the silent film exhibit larger differences than the English ones. The value of standard deviation also confirms this, (SD-PL = 18.5, and SD-ENG = 7.8). With unequal variances, it is important to apply an appropriate version of the t-test, to be discussed later.

It is also interesting to note the so called upper and lower 95% *confidence intervals* that refer to this data. The upper CL interval is 47.8, and the lower 28.76 for the Polish data set, whereas the CL intervals of the English data set equal 32 and 22.56, at Alpha = .05. These CL intervals describe the probability of obtained results better than a sheer p value most often used in inferential statistics tests. The value of *skewness* describes how symmetrically the data are distributed about the mean. A symmetrical distribution has a skewness of zero. It is generally accepted that when the value of skewness becomes bigger than 1, or smaller than -1, the skewness is considerable and the distribution is "far from symmetrical" about the mean. The following figure illustrates the above descriptive statistics:

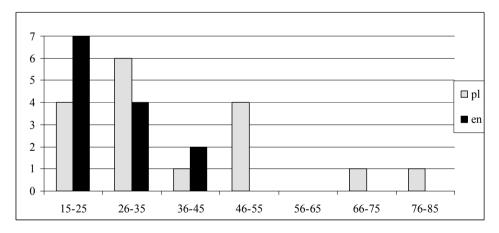


Fig. 16. Events in different sentence types in English and Polish

The English retellings of the story are placed between Min. =19 and Max. = 44 of all types of events. There is a marked preference among the English-foreign writers for the smaller class of between 15-25 events per one written interpretation of the input. After this value their number decreases. The Polish retellings are also quite representative within this range, even bigger within the

¹⁶ Quoted after http://www.graphpad.com/guides/prism/6/statistics/index.htm?stat_skewness_and_kurtosis.htm DOA: 25.02.2014.

class of between 26 and 35 events per single, written story interpretation. However, what differs these two Polish and English sub-samples is the rather long tail towards the larger numbers of all events per single retelling in the Polish sub-sample.

This information, together with the data about the minimum and maximum numbers of events in each sub-corpus suggests the following conclusions regarding the important question of which data should be considered in the next step of the analysis, i.e. in the *t*-test. The rule of thumb in such cases is that the values that lie further away than 2 standard deviations from the mean are ignored in an inferential test. For the two sub corpora of Polish and English retelling it means that there is a need to consider values between 15 and 75, in which case only the single case of 83 events will be treated as an outlier in the Polish data only.

The Polish retellings of the silent cartoon, regardless of input type, do tend to contain a greater mean number of coded events per each sample (M=38.2; SD=13.5) than their English counterparts (M=13; SD=7.8). This reduction was statistically significant (t (23) = 1.89; p < .05) in a one-tail test, which indicates that the experimental hypothesis should be, though tentatively, accepted.

The acceptance of the experimental hypothesis that there would be more events in the Polish retellings in a statistically significant way is corroborated by the finer analysis of actual sentence types that added up to this result. Let us look at the following table:

	Simple	Coord	Sub	Sub-cc	Total
pl-events	84	161	199	174	618
pl-sentences	73	67	81	48	269
Proportion e/s	1.15	2.40	2.45	3.62	2.29
eng-events	55	97	113	126	391
eng-sentences	52	44	57	39	192
Proportion e/s	1.05	2.20	1.98	3.23	2.03
t-test sig. at alpha = .05	yes/no	no	yes	yes	yes

Table 22. Events and sentences in English and Polish retellings

While the *t*-test at the five per cent level is hardly (yes/no) significant for single clauses, it turned out to be insignificant for coordinate structures, but significant again for the subordinate sentences and complex (subordinate and coordinate) sentences. This is exactly what the author predicted. In addition, it was the subordinate sentences, where the differences between Polish and English group of writers were the biggest in terms of the number of events per sentence type.

Discussion of results

The above results, though real, need to be accepted with caution due to the sample size (N=30). As was indicated in the introduction to this section, the number of events that the participants decided to code per one retelling and sentence was to demonstrate their propensity to configure information about events in an efficient way. This is argued to be an aspect of construal inasmuch as it is not at all clear how to cut up continuous events into coherences manageable by our consciousness and memory, let alone how to associate language form with them.

6.7. Summary and conclusions of the quantitative analyses of Bolek and Lolek cartoon retellings

The first part of chapter six dealt with quantitative analyses of Polish-native vis á vis English-foreign retellings of one episode of the silent cartoon Bolek and Lolek. The general questions that we asked concerned, albeit indirectly, different aspects of narrative construal and coding of events to form a narrative. The choice of the main independent variable, language, naturally resulted from our interest in how foreign (Polish) language users of English would construe and code events. The selection of the other independent variable (study one), i.e. input type (video-dynamic vs. pictures-static) was used because it was predicted that construal and coding also depended on task type (cf. Tavakoli and Foster 2008; Skehan and Foster 1999; Skehan 1998). The task demanded that the participants should write their version of the cartoon observed in either the video or picture format. The following units amenable to quantification: sentence, sentence type, event, events were used as convenient operational definitions of the predicted, relative difference between native and non-native verbal renditions of the visual stimuli. In particular, it was expected that the use of a foreign language would be more effortful, and will lead to:

- 1) a smaller number of sentences, where a sentence was operationalised as a centre of interest (Chafe 1994),
- 2) increased use of single and coordinate syntactic structures at the expense of subordinate sentential frames, and even more complex ones,
- 3) a decrease in the number of actually coded events per each story retelling as well as per sentence.

All the above are argued to be aspects of construal. Having been exposed to visual input, the participants wrote sentences. Their sentences, as Chafe (1994) argues are attempts to go beyond the limitation imposed on our attention

(consciousness) system. At the stage of viewing the input, one can argue, there were no differences; every participant's memory of what s/he had seen was the same (with some built-in, and natural differences). However, after that the participants were asked to write what they had seen in different languages, and they would have to switch what Slobin (1996) called thinking for speaking. Some of the measurable aspects of this process are the items on the list above (see previous page).

The results turned out to be different. First, it was shown that the choice of language had no significant effect on the number of sentences produced per average retelling. In other words, those who wrote in English wrote as many sentences as their Polish counterparts, which is used as evidence that at the selected level of linguistic proficiency and content, the participants behaved similarly. The use of the English language was not associated with dropping some content due to coding problems. This observation was also corroborated by the post-task request to say how hard they found the task, and if they used avoidance strategies. However, this first study demonstrated a statistically significant difference between the numbers of sentences after a dynamiccontinuous input type (video) as compared to the static (picture sequence). As predicted, it was the video condition that led to a larger number of sentences the participants used in their retellings. The causal relations between activities were easier to decipher and interpret from the video than from the picture sequence. This conclusion could be especially useful for those constructing teaching materials. Moreover, there was an interesting interaction between language and input-type. The largest numbers of sentences were produced at the junction of the Polish-native-language and Video conditions. The effect could have been brought about by the relative ease with which a native speaker can use language, and the observation that the video presented the content in an undisturbed, continuous way conducive to proper inferences about causality between events. Second, it was demonstrated that the Polish verbalizations of the cartoon, irrespective of the input type, contained statistically more events per retelling. More specifically, this effect, though not large, describes event construal and coding, especially in subordinate and complex sentences. Single sentences, as well as coordinate structures were not very different as regards the number of coded events per sentence, and remained unaffected by the choice of the independent variable, language. As the author predicted, the foreign language users are less skilled at packaging events into the format of a subordinate and more complex sentence. Such a format is arguably acquired through schooling and experience. Subordinate sentences are not necessarily products of very creative language use, but instead, they are established constructions that conveniently encode complex gestalts with the salience of entities appropriately adjusted. Third, sheer numbers of different sentence types were shown to be

independent of language choice. It was interesting to find out that the proportions of different sentence types across the language variable were similar.

Though useful, these quantifications were not able to account for some aspects of construal and coding that could be approached with the use of the corpus of stories and their more qualitatively inclined analysis. This is the goal of the next section.

6.8. Multiple construals of selected scenes: qualitative analysis

This section looks at selected scenes from the discussed video material in order to analyze the choices that the writers made in representing them. Because the main unit of the participants' written retellings is the sentence (different types as discussed above), it is not possible to focus on a single screenshot (picture), but instead one needs to make appropriate selection of a portion of content that will involve evolution through time, definitional for the event category.

The selected screenshots representing key moments in the story will serve as reference points in the linguistic analyses of multiple construals to follow. Their titles are provided below:

- 1. B&L (Bolek and Lolek) WALK (return home from school),
- 2. B SAYS GOODBYE,
- 3. L ENTERS HOUSE,
- 4. L PACKS,
- 5. L LEAVES HOUSE,
- 6. L GETS TO BUS STOP,
- 7. BUS ARRIVES,
- 8. L ABOUT TO ENTER BUS,
- 9. B WHISTLES AND CALLS L,
- 10. B SHOWS L THE POSTER HOLLIDAY AD,
- 11. BOYS TAKE BARREL FOR METAL SCRAP,
- 12. MAN STOPS THEM.
- 13. BOYS WANT TO COLLECT MORE SCRAP NO SUCCESS,
- 14. MAN IN CAR ARRIVES,
- 15. CAR BREAKS DOWN,
- 16. MAN GIVES BL CAR KEYS,
- 17. B's DREAM SELL CAR AND GO ON HOLIDAYS,
- 18. L's DREAM DRIVE CAR,
- 19. REPAIR ATTEMPT,
- 20. REPAIR CONTINUES,
- 21. BOYS DRIVE CAR,

- 22. BOYS DRIVE CAR,
- 23. BOYS IN CAR HIT SIGN POST,
- 24. MORE REPAIR.
- 25. WHEEL PUNCTURE,
- 26. TOO MUCH AIR PUMPED AND EXPLOSION OF TYRE.
- 27. BL DRIVE AGAIN,
- 28. LORRY IN THE WAY,
- 29. BL ENTER METAL SCRAP COLLECTION POINT,
- 30. SCRAP (CAR) WEIGHING,
- 31. MAN WRITES OUT CHEQUE,
- 32. BOYS ENTER SPORTS SHOP,
- 33. BL BUY EQUIPMENT AND LEAVE SHOP,
- 34. BL GO ON HOLIIDAYS.

The selection and names of events provided above are the author's. They are motivated by a causal chain with the following observations crucial for its implementation:

ORIENTATION:

- 1. It was the beginning of the holidays and the boys needed to go somewhere.
- 2. They had no money.

COMPLICATING ACTION:

- 1. Bolek saw the advertisement, which said COLLECT METAL SCRAP AND EARN MONEY.
- 2. Bolek showed the ad to Lolek.
- 3. A man's car broke down, and he gave them the keys.
- 4. They thought they might sell the car.
- 5. They tried to rapair it, but did not manage to.
- 5. They sold it at a metal scrap collection point.
- 6. They earned some money.

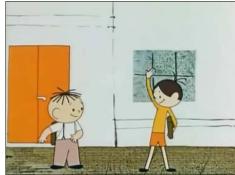
CODA:

- 7. They bought camping equipment.
- 8. They went on a summer holiday by train.

Verbal elements in construal and coding of B&L WALK

The orientation is explicitly provided only in the title of the video and screenshots. The participants had been told what the title was. The actual story begins from B&L WALK (RETURN HOME AFTER SCHOOL). The following screenshots exemplify this event:





1. B&L (Bolek and Lolek) WALK

2. B SAYS GOODBYE (return home from school)

Fig. 17. Screenshots from *Bolek and Lolek: First day* of summer holidays, a silent cartoon video (Cartoon studio in Bielsko Biała, director: Władysław Nehrebecki/Alfred Ledwig)

Apart from three participants, others decided to code this information somehow. The exceptions were those who were in the *pictures* condition, and their retellings used 9 and 16 sentences. The first scene, where the boys were walking along a street did not induce any causal interpretation to the later developments, i.e. their attempts to sell some metal scrap, earn money and go on holidays. Rather it was better to remember that it happened at the beginning of the sequence and served the purpose of orienting the audience in the story.

The sentences in the video and the pictures conditions differed. Whereas the former (video) were closer to what actually happened, the latter were more interpretative. Let us look at the verbs used in each of these conditions:

VID PL

spacerowali [were walking], odprowadzał [was seeing off], wracali [were returning], odprowadził [saw off]

VID EN

had time to relax, went out (from school), wanted to \rightarrow FE, came back, were excited

PICT EN

split up, graduated from school, started to have free time, walked around the street, decided to go, came back, were walking, left school, decided to meet PICT PL

odprowadził [saw off], rozdzielili się [split up], spotkali (ponownie) [met (again)], umówili [arranged to meet], skończyli (zajęcia) [finished (classes)].

The verbs in the VID-PL condition describe the walking in different ways. Spacerowali 'walked' encodes speed and manner. The verb odprowadzał 'was seeing off' also points to manner, and so does odprowadził 'saw off', but the two differ with respect to the construal of salient phases of the event. Whereas odprowadzał construes its middle part, odprowadził profiles its final phase. Unlike the rest of the verbs in this condition, the verb wracali 'were returning' is

specific as regards which phase of the event is in focus (middle), but it is schematic as far as manner goes, i.e. the boys may have been returning by car, bus, or on foot, etc. Moreover, the events are construed as ongoing, which is typical in English and also expected in Polish for construing the background.

By contrast to the verbs used in the VID-PL condition, the ones used in the VID-EN condition for this first scene are more general, i.e. they represent a higher, more schematic level of categorization, e.g.: went out and came back, both tokens of GO, and they also designate subjective evaluation rather than an aspect of the event. They are: had time to relax, were excited, strangely absent in the Polish-native transcriptions. They also tend to orient at this phase of the story, rather than describe the background. It is presumably easier to provide an orienting comment than to present the exact background provided by the input.

By comparison to the video condition, and regardless of language used, the picture sequences effected construals with a greater range of spontaneous interpretations. Perhaps, in the absence of linguistic resources (though the participants claimed they had no particular problems with coding their intentions), they decided to construct causality in different ways, not by coding what was objectively observable, but by resorting to whatever codable content they had at hand that fitted the context: graduated from school, started to have free time, decided to go (on holidays), left school, decided to meet (after school). The first graduated from school is of course an error (against the content of the video), with the presumed intention being *finished the last day at school*, and it was inspired by the title of the video (and picture sequences) that appeared at the beginning. The second expression, left school is similar to it. Interestingly, no school was actually seen in the material, only two boys walking as in the two screenshots above, a nice example of top down processing and activation of an action schema allowing various inferences (e.g. that they were going home). Decided to go on holidays is an event one would not actually observe, so this construal is based on the title presented at the beginning as well as the meaning of the presented cartoon-story. It helps build causality of the story, which is substantial for any narrative form. Once such a declaration had been made, it was possible to justify the events that followed, i.e. each of them helped achieve the goal. Decided to meet is a verb phrase which functions in such a way that the verb decide is the main verb o the sentence, and the infinitive to meet complements it. The author argues that it is the meaning of decide that is more salient relative to its infinitival complement as its form is finite (cf. Talmy 2007).

The remaining verb phrases used to describe the scene were: walked around the street, came back, were walking. The last example is probably most neutral; it construes an activity that serves the background for whatever happens next, and it has an orienting function, not a narrative one. The actual intention behind walked around the street as interpreted against the input content is that the speaker wished to communicate walked along the street; it construes a background activity and profiles its extension through time. The Polish-

pictures condition also construed the scene with a smaller range of verbs denoting movement. This could mean that the speakers of Polish were more ready to impose conventional construal-codings, while the English speakers' attention wandered to those aspects of their memeories of the presented events that they felt were easier to code in English as a foreign language.

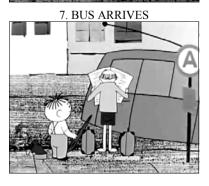
Analysis of multiple construals of a selected scene

The author decided to use another scene that follows the one described in the section above. It is not represented by a single screenshot, but involves a span of time between the moment Lolek (the shorter boy in the cartoon) enters the house (3) and when his brother Bolek whistles and calls his attention (9-10) to come and have a look at a poster of a scrap metal merchant advertising his services.

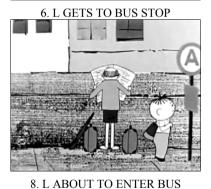
3. L ENTERS HOUSE













9. B WHISTLES



Fig. 18. Screenshots from *Bolek and Lolek: First day* of summer holidays, a silent cartoon video (Cartoon studio in Bielsko Biała, director: Władysław Nehrebecki/Alfred Ledwig)

The above screenshots are not used as a prescriptive measure of what the participants should have included in their verbalizations. They only serve the purpose of illustrating the task and content.

The video (dynamic) versus pictures (static) stimuli differed with regard to how the content was interpreted, with greater variability in the pictures condition, as had been expected. The following sentences construing this scene from the English-foreign condition are provided below with numbers standing for a single participant in the corpus:

140) Pictures-English

12)

He goes to the bus stop and gets into the bus.

Then he gets out.

Bolek is standing on the street, leaning on some post sign.

13)

Null – scene ignored by this participant

14)

So Bolek took a bus and Lolek decided to go by foot.

The time when they arrived to boat, they realized that it could not have been able to happen.

17)

They came back home from school.

After some time, Lolek left home and went to the bus stop.

When he left the bus, he noticed that Bolek was waiting for him.

18)

Lolek waited for the bus, and when he left the bus, Bolek was waiting for him.

19)

When they left school, they decided to meet a little bit later and start doing their holiday adventure.

BOLEK WAIT BOLEK LEAN BOYS MEET

BOYS START ADVENTURE B&L ARRIVE AT BOAT

Categories / participants	12	13	14	17	18	19
BOYS LEAVE SCHOOL		•••				+
BOYS COME HOME				+		
B TAKES BUS			+	+		
L LEAVE HOME						
L GOES TO BUS STOP	+		+	+		
L WAIT BUS					+	
L GETS INTO BUS	+				+ INFER	
L GETS OUT OF BUS				+	+	
L NOTICE B				+		
BOLEK STAND STREET	+					

Table 23. Table analyzing English verbalization of a video sequence

The events presented in this condition are listed in the 'categories' column in a chronological order, with some exceptions, e.g. B&L ARRIVE TO BOAT. Roughly, their temporal succession then is represented by their position on this list. There is great variability as to which events became linguistically construed. Participant [12] focuses on Lolek, and her attention is switched on to the brother Bolek at a certain moment. By contrast [14] gets construed completely differently. Here the writer mistook some later screenshots showing future, possible activities for narrative ones, though B&L ARRIVE TO BOAT is qualified with the expression that could not have been able to happen. [17] focuses on the event as early as BOYS COME BACK (FROM SCHOOL), came back from school. Though the focus of this sentence is on the moment of coming back, the event of leaving school is also signalled, albeit in a less salient way by the prepositional phrase from school. [18] is more similar to [12], whereas [19] missed out on the middle phases of the described sequence, and instead signals its beginning and end. In sum, one can observe considerable variability in events recruited for linguistic construal and coding.

+NEG

The above results of the English codings of the screenshots are compared with with their Polish counterparts. The following sentences were written:

141) 8)

Pierwszego dnia wakacji Bolek odprowadził Lolka na przystanek autobusowy.

Lolek wsiadł do autobusu, ale zaraz wysiadł.

9)

Pierwszego dnia wakacji Bolek odprowadził Lolka na przystanek autobusowy.

Lolek wsiadł do niego, a potem wysiadł.

10)

Chłopcy rozdzielili się na przystanku autobusowym i spotkali ponownie jakiś czas później.

11)

Bolek odprowadził Lolka na przystanek autobusowy.

Lolek wsiadł do autobusu i odjechał, jednak szybko wrócił.

15)

Zanim Lolek dojechał do Bolka, Bolek czekał an niego z informacją jak mogą spędzić fajnie wakacje.

16)

Bolek poszedł pieszo, Lolek natomiast pojechał autobusem.

Kiedy Lolek wysiadał z autobusu, Bolek już na niego czekał bez plecaka.

28)

Chłopcy pożegnali się i każdy wyruszył w swoją drogę.

Lolek zabrał aparat i torbę i udał się na przystanek autobusowy.

Wsiadł do autobusu jadącego w stronę miasta.

Ku jego zdziwieniu, wysiadł po jakimś czasie an tym samym przystanku. Zaraz potem spotkał się z Bolkiem, który zaciągnął go w miejsce gdzie wisiał niezwykle ciekawy plakat, przedstawiający propozycję spędzenia

wakacji.

29)

Lolek poszedł na przystanek autobusowy, ale nie spotkał tam Bolka.

Okazało się, że gdy wysiadł w umówionym miejscu, Bolek już tam na niego czekał.

30)

Lolek poszedł na przystanek autobusowy, przy którym stał pan odwrócony do niego i czytający gazetę.

Wcześniej Lolek miał coś w ręku, wygląda na to, że pieniądze bo gdy wysiadał z autobusu Bolek przeszukiwał jego torbę i nie mógł ich znaleźć)

A similar table is used to analyze decisions to code particular events, with the names of events listed in the left-hand column.

Categories / participants	8	9	10	11	15	16	28	30
B SEE L OFF TO BUS STOP	+	+		+				
BOYS LEAVE SCHOOL								
BOYS COME HOME								
BOYS SAY GOOD-BYE								
L TAKE BAG AND CAM							+	
B TAKES BUS						+	+	
L LEAVE HOME					+	+	+	+
L GOES TO BUS STOP			+		+		+	
L GETS TO BUS STOP	+	+		+				
BOYS SPLIT AT BUS STOP	+	+		+				
L WAIT BUS								
L GETS INTO BUS							+	+
L GETS OUT OF BUS							+	
L NOTICE B								
BOLEK STAND STREET					+	+		
BOLEK WAIT			+					
BOLEK LEAN								
BOYS MEET							+	
B SHOW L POSTER							+	
BOYS START ADVENTURE								
B&L ARRIVE TO BOAT								

Table 24. Table analyzing English verbalization of a video sequence

The events that the participants decided to code in this condition are more numerous, but there were more participants in this condition as well. It is interesting to observe that, though in general there is considerable variability of interpretation in the Polish-pictures condition, the actual decisions are distributed quite densely (more than in the English-pictures condition) around the middle part, i.e. the bus-stop scene, with some (3) participants orienting the audience towards the beginning of the action chain, so to speak. There are of course differences as regards the amount of detail the writers of Polish decided to use as well.

The remaining video conditions, both finalized by writers of English-foreign, or Polish-native languages are discussed below. As already argued, this condition turned out easier inasmuch as it presented the content dynamically, and continuously with much less room for individual interpretations of what might have happened between some screenshots. The data of seven (7) participants from the English-video condition coding this sequence are quoted below:

142) 20)

First of all, Lolek decided to go alone on a trip. When Bolek noticed it, he persuaded him to change his plans. 21, 22, 23, 24)

Null

25)

The shortest one, Lolek, prepared himself for some travel, but before he got into a bus, his brother Bolek had stopped him.

26)

Bolek and Lolek came back from school.

Lolek wanted to take a bus and go on holidays but Bolek stopped him. 27)

Lolek went to his house to take a bag and brothers met at the bus station. Lolek was looking at a timetable when Bolek showed him a poster.

Quite significantly, participants (21, 22, 23, 24) refrained from any attempt to code any event that belongs in this part of the cartoon. On closer inspection these written renditions of the cartoon's content are very schematic. For example:

143) It was the first day of vacations.

Bolek and Lolek had time to relax.

First of all, Lolek decided to go alone on a trip.

When Bolek noticed it, he persuaded him to change his plans.

This example is schematic of the described sequence of events. Though it communicates the same thing, it does so without coding: bus, bus-stop, walk, meet, etc. One could argue that it was easier than trying to describe the input story more precisely. It may be an example of a communication strategy on the participant's part, i.e. to prune the details from a linguistic verbalization of a sequence of events. It is unclear, though, what exactly motivated the use of such a strategy, especially if one confronts the observation with an earlier finding that the participants did not report the input to be particularly hard to encode in a foreign or Polish language. The analysis into events renders the following results described in the next table:

Table 25. Events in English verbalization of a scene

Categories / participants	20	25	26	27
BOYS COME BACK SCHOOL			+	
L ENTER HOUSE				+
L TAKE BAG				+
L DECIDE GO ALONE TRIP	+	+	+	
L LOOK AT TIMETABLE				+
B STOP L		+	+	+
L ABOUT TO GET INTO BUS	+	+		
B NOTICE THIS	+			
B PERSUADE L CHANGE PLAN				
B SHOW L POSTER				+

Again, the English video condition has events that are grouped around the bus stop scene and Bolek whistling to call his brother's attention. The event of *deciding to go on holiday* is also quite popular.

Let us now compare this mix to the video-Polish condition. It is represented by the following sentences:

144) 1)

Lolek wszedł do domu.

Chłopiec spakował płecak i wyszedł.

Idąc na przystanek, chciał już wsiąść do autobusu,

jednak Bolek go powstrzymał gwiżdżąc.

2)

Chłopczyk spakował w plecak najpotrzebniejsze rzeczy i ruszył przez miasto w stronę przystanku autobusowego.

Kiedy autobus nadjechał, a Lolek był już jedną nogą w pojeździe, Bolek zagwizdał na niego.

Lolek odwrócił się, a wtedy autobus odjechał.

3)

Lolek wszedł do domu, odłożył plecak z książkami na półkę.

Zabrał mały plecak turystyczny i postanowił wyjechać na wakacje.

Po drodze na przystanek minał starszą panią czytającą gazetę.

Gdy wsiadał do autobusu, usłyszał, że ktoś na niego gwiżdże.

Obrocił się, i zobaczył, że to Bolek robi sobie z niego żarty.

Gdy ponownie chciał wsiąść do autobusu, tego już nie było.

Zdenerwowany Lolek podszedł do Bolka.

5)

Lolek wszedł, wziął worek, i pośpieszył na autobus.

Niestety autobus odjechał bez Lolka, ponieważ ten został zaproszony przez Bolka, który pojawił się znikąd.

Lolek był wściekły, że autobus uciekł, zaś Bolek śmiał się z rupieci, które Bolek miał w plecaku.

6)

Lolka wsiadającego do autobusu zatrzymał Bolek.

Autobus odjechał, Lolek został z Bolkiem, {który pokazał mu plakat z rysunkiem łódki na wodzie, dając do zrozumienia Lolkowi, iż ma świetny pomysł an spędzenie wakacji.} – to już nie.

7)

Zabrał torbę, i uciekł.

Stojącego na przystanku Lolka zauważył Bolek.

Zawołał go i zaproponował wyjazd na wakacje.

At first sight these are longer than in the video-English condition, hence also seem more elaborate. The following event categories have been sifted as shown in the next table:

Categories / participants	1	2	3	5	6	7
L ENTER HOUSE	+		+	+		
L PUT DOWN SCHOOLBAG			+			
L PACK RUCKSACK	+	+	+	+		+
L DECIDE TO GO ON TRIP			+			
L LEAVE HOUSE	+					+
L GO TO BUS STOP	+	+	+	+		+
L PASS ELDERLY LADY			+			
LADY READ PAPER			+			
BUS COME		+				
L ABOUT TO ENTER BUS	+	+	+		+	+
B WHISTLE TO L	+	+	+	+		+
L TURN ROUND		+	+			
B STOP L ENTER BUS	+		+		+	
BUS LEAVE		+	+	+	+	
B LAUGH AT L			+	+		
L ANGRY			+	+		
L COME UP TO B			+			
B SHOW L POSTER					+	
B PROPOSE HOLIDAY TO L						+

Table 26. Events in a scene verbalized in Polish

Even at first glance, the event categories are again more numerous in the video-Polish condition, and the whole sequence is covered more evenly, so to speak.

In sum, the video and the pictures condition differ in that the former has a smaller range of interpretations of the observed input cartoon. This is attributable to the continuous nature of the video presentation in comparison to the static screenshots, which required more inferencing between individual screenshots. The writers in the Polish-native condition presented more events, and especially in the video condition their verbalizations stand out as more detailed, and they are construed with the use of a variety of syntactic, subordinate options, which corroborates the conclusions reached in the quantitative part.

On the whole, it is possible to say that regardless of the language in which the participants wrote their answers to the tasks, they were able to communicate the entire content with numerous differences. It turned out that there are some salient events that almost everyone coded, e.g. *the bus scene*, and some others, whose presence was only observed in some retellings.

All participants tried to render the events in chronological order, and they also added some evaluative and orienting commentary. Although many of them also attempted subordinate structures, the qualitative analysis and the examples quoted above demonstrate that this ability seems to be more natural for the native-Polish writers than their foreign-English counterparts. Subordination is a complex cognitive, and syntactic process (referring to the ability to handle form), and its linguistic manifestation reflects language users' struggle to construe and code a sequence of events, or a scene as densely as possible, and with a satisfactory amount of detail ranked for salience

6.9. Summary and conclusions

This part has considered construal and coding processes with the use of experimental design, and also more qualitatively by looking at the actual coding decisions that language users made when they wrote their versions of the silent input cartoon story.

In the experimental part the author tested how two independent variables, the use of either Polish-native or English-foreign language influenced the following dependent variables: number of coded sentences in general, number of different sentence types (i.e. single, compound, subordinate, etc.), number of events coded per each sample, number of events per sentence. These two language (PL/ENG) variables had two levels each, either video or pictorial presentations, the so-called 2x2 design with independent groups (each participant took part in only one of the four conditions of the experiment).

Two dependent variables, i.e. the sentence and event were chosen. The former was used to operationalise the so-called *centre of interest*, whereas the latter was inherently interesting; its relation to sentence in general and different sentence types was an operational definition of relative skill and ease with which the participants, all Polish students of English as a foreign language, verbalized events.

Contrary to the prediction, neither the choice of Polish or English effect a statistically greater number of sentences, and hence also centres of interest per single retelling of the input story. The prediction was based on the observation that due to the expected greater effort in producing a written retelling in a foreign language, the English version, irrespective of input type, would have fewer events as some of them would be dropped. The possible explanation of this result lies in the fact that the chosen story was not too difficult, and did not contain any technical language. However, the reader is reminded that unless a specific coding was unintelligible, it was counted even if it contained a grammar, lexical or other (e.g. pragmatic) mistake. Such an approach was in

agreement with the contention that a foreign language (inter)system is a legitimate, self-contained, though perhaps more variable object of study and comparison.

As regards the type of input, i.e. either the video or pictures, it was demonstrated that there was a statistically significant difference between them. Namely, those in the video condition produced more centres (operationalised by sentence) of interest per single retelling. This result was attributed to the fact that video is continuous; it allows more freedom to construe causality structure of a narrative. Moreover, the use of Polish-native language in the experiment and the choice of video interacted and produced a significantly greater number of the already mentioned centres of interest.

The second study showed that the participants who used Polish as a native language demonstrated a particularly well-practised skill of packaging the greatest number of events per sentence, especially of the sub-ordinate type.

The analysis also demonstrated, in agreement with our prediction, that the pictures condition resulted in more interpretative, less exact, and more schematic linguistic construals of the input story. Also, by looking at the actual linguistic choices made regarding two selected scenes, it turned out that the linguistic choices of those in the Polish condition were much less variable, and focused on representing the actual content of the video or pictures.

The studies presented in this chapter can surely be regarded as touching aspects of event construal within a narrative discourse. The novelty of the studies lies in their experimental character, which allowed control of the interesting variables. The participants made various actual choices, sometimes unpredictable, and even counterfactual, pointing to the creative, dynamic aspects of language use.

Conclusions

The foregoing theoretical chapters of this monograph have supported the main thesis that construal operations subserve the more superordinate goal of ranking the cognitive salience of entities of a conceptualization while language form plays the role of instructing about its details. Hence the author decided to use two terms: construal and coding. While the former was associated with conceptualization, the latter with language form. This is in agreement with Cognitive Grammar (cf. e.g. Langacker 1991). One should not think, however, they are dissociated. On the contrary, any linguistic expression involves both semantic and segmental poles, together with correspondences between them. The decision to posit cognitive salience with this super-ordinate status within construal operations was made after extensive literature review on the topic of construal, and a conclusion that it was attention, and effected salience that constituted the common denominator of different categorizations. Moreover, it was also in agreement with the author's own predictions and observations, as well as some modern treatments of the topic, e.g. attention in language (e.g. Talmy 2007).

However, the author stays neutral as regards the choice of a particular model, or theory of attention, and instead accepts that multiple strands of research contribute specific details that form a related network of knowledge in this respect. This work accepted such theorizing on attention and consciousness that posits the former the status of a number of implicit mental processes constituting the content of the latter (consciousness).

Moreover, the theory shows that features and functions of attention as they are discussed in psychological literature converge with discussions of this topic within cognitive linguistics literature. For example, Langacker's (1987, 1991, 1999, 2001, 2008) distinctions in this respect are profile/base alignment, figure/ground distinction, mental scanning operations, windowing in discourse, designation, reification, cognitive definitions of grammatical categories (noun, verb, adjective, adverb, etc.), temporality/atemporality, grounding, attentional frame, Autonomy/Dependence, modification/complementation), e-site, prominence asymmetry, foregrounding/backgrounding. They all involve selection of an entity from some larger conceptual scope, the so-called profile on a base, where the base constitutes the context against which the designatum of an expression is defined. The psychological terms such as scope of attention, focused/unfocused attention, exogenous and endogenous attention, selective and divided attention,

to mention only a few converge with the Cognitive Linguistics terminology in this respect.

The theoretical format of the representations and processes accepted here was that of the so called *perceptual symbol systems* (Barsalou 1999). They are creative neural mechanisms, so also conceptual in nature, though based on the same modality specific circuits that allow visual, kinaesthetic, olfactory, motor and other types of perceptual information. Barsalou (ibid.) said that *attention* within a mental simulation (cf. Bergen 2012) instructed via language should be treated as a semantic feature of a linguistic expression. Instead of describing meaning with reference to abstract symbols, the author prefers to accept the theoretical bases of mental simulation theory. It is very similar to the proposal expressed by the so-called situation models, which are "mental representation[s] of activity described by discourse" (Zacks & Tversky 2001: 35). The similarity is indeed close if mental simulations and situation models are agreed to be online, dynamic, and most importantly, modal, i.e. not expressed in terms of abstract symbols (Bergen, private communication, e-mail DOA: 23.06.2014).

Still another theoretical stance accepted by the author of the present monograph was that L2 knowledge, skill and processing, though different from L1 qualitatively and quantitatively (cf. Paradis 2009, Ellis, N. 1999, 2003, 2006a,b, Schmiedtova 2008, 2013) is a legitimate object of study as regards construal and coding of narrative events. The author was not as much interested in grammatical correctness, lexis, dysfluencies, as in the very act of construing and coding of events in Polish-native or English-foreign languages. Naturally, appropriate comparisons were made in this respect, and they are described when the author deals with the second, experimental research part of the thesis.

The author also accepted the definition of the *event* concept after Zacks and Tversky (2001: 7), i.e. as "a segment of time at a given location perceived by an observer to have a beginning and end". This definition is convenient for it is most embracing and encompasses many, sometimes mutually exclusive, categorizations of this term. A single event has the most salient conceptual core and less salient background context. "Different types of action, activity, process, or state can be perceived and conceptualized as (more or less prototypical instances of) events" (Lewandowska-Tomaszczyk 2014: 36). The book demonstrated parts of events (partonomies) and their kinds (taxonomies). The former can be represented at the time-scale of between one to a few seconds, in which case they are referred to as *atomic events*, or a larger time interval of 10 to 30 seconds, where intentionality begins to play a role (cf. Zacks and Tversky 2001). Action components either related to mere physical change and change associated with goal are registered as cognitively prominent, and so perceived, remembered, also construed and coded in language appropriately.

Knowledge about events is not only stored in the episodic memory, but it is schematized, hence models and schemas of events have been proposed. Such

generalized knowledge structures of events are claimed to enable binding of numerous features, objects and characters as belonging to a single event, or scene. They also allow embedding, so important in understanding the partonomy of events. In addition, they accommodate different levels of abstraction. Moreover, they are active both in top-down and bottom-up up processing. In cognitive linguistics, Langacker's (e.g. 1991, 2008) schematic representation of events assumes the name of action chain model, billiard ball model, and canonical event model. These are archetypal for numerous examples of events as they may appear in a narrative. Their salient parts are physical objects (analogized to billiard balls), whose physical motion exerts force (causes) and effects their movements. Various metaphorical extensions of such a scenario (observer included or excluded) are possible in language that codes narrative events. Hence time as well as cause was shown to be dynamically construed.

Events' natural habitat is narrative. This is where they are selected (or not) by language users to present a story, seldom (if ever) without a point. The book surveyed the oft quoted traditional work by Labov and Waletzky (1967), together with much more recent work by Labov (1997, 2001, 2004, 2006, and 2011), on event reportablity, sequential and temporal organization or events, credibility, causality, assignment of blame and praise, viewpoint, how speakers lie and present evaluative material together with the so-called subjective in place of objective events, ordinary events and their role in constructing causality. All these topics are modern discourse-analytic interpretations of narrative. Apart from this, however, the author provides references to work which goes beyond the context of narrative as an account of personal experience. An example of this work is Ervin-Tripp and Küntay (1997: 132-166), or Norrick (2003). Speakers were shown to present fragments of stories during conversations, not the full elaborations of a schema, to make a special point, or illustrate an idea.

The research part of this work described in chapters four, five and six had the goal of experimentally testing the most general hypothesis of the primacy of the goal of reaching cognitive salience of selected entities in the processes of construal-coding. The experimental studies presented, supplemented with some qualitative analyses were designed to answer questions about the whole narrative sequence, rather than about specific scenes and configurations of elements within them. The data came from L2 English and L1 Polish. The author, in agreement with Hulstijn (2007: 197), or Cieślicka (2006), treats L2 as a fully legitimate object of study. Some other researchers who are interested in L2 processing are for example N. Ellis (2006b), Schmiedtova (2008, 2013), Paradis (2009), Roberts and Siyanova-Chanturia (2013), Van Beek et al. (2013), also Arabski and Wojtyszek (2010).

Studies performed in chapter four of non-lingistic video unitization and verbalisation showed that the event category is psychologically real. The participants did not divide themselves clearly into either fine or coarse event

units, but those who effected beyond 28 breakpoints were in the minority, and most of them had as many breakpoints in the video unitization task as in the video verbalization task irrespective of language used, either Polish-L1, or English-L2, i.e. the difference in the numbers of events between groups of L1 and L2 coders did not differ in a statistically significant way. The salient moments in the video that the participants used to insert breakpoints, as reported in the post task questionnaire, were change of activity, end of activity, beginning of activity, or change of location and character (in this order). This induces the conclusion that the cognitive prominence of these special moments can be attributed to the parallel use in the perceptual task of the schemas for events. The comparison of the number of intonation units and events used regardless of language additionally showed that the preferred strategy in the linguistic coding of events is to distribute its content across more than one intonation unit. This, in turn, is analogized to the shifting attention focus and its limitation as proposed by Chafe (2004). Moreover, the speakers of Polish-L1 preferred to create more events at moments important for the causal structure of the presented sequence of events, whereas their English-L2 seemed to rely on the strategy to use the first available clue during verbalization without waiting for the clue to be disambiguated. Additionally, the salient organization of events was along the time scale, i.e. sequential, as presented in the input with occasional comments that someone forgot to say something that had happened before; many intonation units were character-object pairs. Moreover, despite the clear instruction to recreate the content, some speakers commented that the task required creativity, which was generally corroborated by a large amount of pauses, hesitations, and other examples of disfluent use of language coupled with interpretations that had not been shown by the video.

The next chapter of part two presented two experimental studies into the causality of events. The conclusions reached in them also confirmed the hypothesis about the superordinate importance of the goal of reaching cognitive salience of selected entities within a narrative. The studies involved two experimental designs, one language production and the other language comprehension. The former demonstrated that English-L2 writers were able to manipulate the content of a narrative in such a way as to put blame on one character for what had happened. The effected strategies involved the dominant use of evaluative material and subjective events at the expense of objective events (for details see chapter 5). The novelty of this approach, in comparison to similar studies (e.g. Labov 2011), is that the author was able to control for important variables to demonstrate what strategies are used when the participants had the task of polarizing participant roles. As an important followup, the comprehension task tested whether English-L2 readers are sensitive to the differences between stories written in the two different conditions of the experiment, i.e. "be objective", and "try to put blame on your husband". The results showed that the use of objective events (not subjective events together with evaluative material of a different kind) led to greater effected credibility ascribed to this version of the story, which in turn was an operational definition of the strength of causal relations construed and coded in language.

Last but not least, chapter six looked at different sentence types and events in a task that required students to write a narrative on the basis of a silent video, or its picture presentation. In other words, two independent variables were used: language (PL – ENG) and input type (video – pictures) in a 2 x 2 ANOVA experimental design. The salience of the observed events regardless of input type depended on the interpretation of their causality. The study observed no significant difference between the number of events selected for direct linguistic coding in English-L2 and Polish-L1 conditions. This was interpreted as a consequence of the observation that the input did not pose special coding problems. However, the choice of video over pictures effected a statistically greater number of sentences, operationalised as centres of interest after Chafe (1994). Moreover, an interesting interaction between input type and language (L2 or L1) was noticed, namely, it was the Polish writers who benefitted more from the video input, because writing in L1 they had the flexibility to select and code in language any event they decided was important. By contrast, in general the writers of L2 and L1 did not use more sentences of one type (single, coordinate, subordinate and complex). When the author looked at the relationships between sentences and events, it turned out that English-L2 writers were less adept at packing many events in the (especially) subordinate and complex sentential format and in this way ranking them for cognitive prominence. Moreover, the qualitative analysis in this chapter showed that in general the sentences in the pictures condition, due to more processing effort required to reach understanding of what was happening, were more interpretative than in the video condition. Moreover, there was evidence in the data of both L2 and L1 of dynamic and effortful construal of the input.

In sum, the theoretical chapters together with results of experimental studies of part two speak to the hypothesized primacy of the goal of reaching cognitive salience of selected events and their components during the construal and linguistic coding of a narrative. Surely, more detailed experimental work on the level of a single scene as regards event construal in discourse context would be expected as a natural follow-up to the present study.

References

- Allport, A. 1987. "Selection for action: some behavioural and neurophysiological considerations of attention and action". In: A. Sanders and H. Heuer (eds.), *Perspectives on perception and action*, Hillsdale, NJ: Lawrence Erlbaum Associates. 395–419.
- Allport, A. 1993. "Attention and control: have we been asking the wrong questions? A critical review of twenty five years". In: D. E. Meyer and S. Kornblum (eds.), *Attention and Performance XIV: Synergies in Eexperimental Psychology, Artificial Intelligence, and Cognitive Neuroscience*. Cambridge MA: MIT Press. 183–218.
- Anderson, J. R. and Bower, G. H. 1973. *Human Associative Memory*. Washington DC: Winston and Sons
- Arabski, J. and Wojtyszek, A. (eds.). 2010. *Neurolinguistic and Psycholinguistic Perspectives on SLA*. Bristol-Buffalo-Toronto: Multilingual Matters.
- Aske, J. 1989. "Path predicates in English and Spanish: a closer look". In: *Proceedings of the 15th Annual Meeting of the Berkley Linguistic Society, Feb.* 18-20. 1-14.
- Austin, J. 1979. *Philosophical Papers*, (3rd edition). Oxford: Clarendon Press.
- Baars, B. J. 1997. "Some essential differences between consciousness and attention, perception and working memory". *Consciousness and Cognition* 6, 363-371.
- Bach, E. 1986. "The algebra of events". Linguistics and Philosophy 9, 5-16.
- Badio, J. 2004. Conceptual and Phonetic Chunking Procedures of English Speech. Unpublished PhD dissertation. University of Łódź: Łódź, Poland.
- Badio, J. 2008. "Verb complementation in speech a corpus study". In: B. Lewandowska-Tomszczyk (ed.), *Corpus Linguistics, Computer Tools and Applications State of the Art.* Frankfurt am Main: Peter Lang. 270-290.
- Badio, J. 2012. "Events, intonation units and constructions in narration". In: K. Kosecki and J. Badio (eds.), *Cognitive Processes in Language*. Frankfurt am Main: Peter Lang. 135-149.
- Bain, A. 1888. The Emotions and the Will, (3rd ed.). London: Longmans Green and Co.
- Barker, R. G. and Wright, H. F. 1954. *Midwest and Its Children: The Psychological Ecology of American Town*. Evanston, IL: Row, Peterson and Company.
- Barker, R. G. and Wright, H. F. 1966. *One Boy's Day: A Specimen Record of Behaviour*. Hamden, CT: Archon Books.
- Barsalou, L. 1988. "The content and organization of autobiographical memories". In: U. Neisser and E. Winograd (eds.), *Real Events Remembered: Ecological and Traditional Approaches to the Study of Memory*. Cambridge: Cambridge University Press. 193-243.
- Barsalou, L. 1999. "Perceptual symbol systems". Behavioral and Brain Sciences 22, 577-609.
- Barsalou, L. 2008. "Grounded cognition". Annual Review of Psychology 59, 617-645.
- Barsalou, L. 2009. "Simulation, situated conceptualization and prediction". *Philosophical Transactions of the Royal Society* 364, 1281-1289.
- Barsalou, L. and Sewel, D. R. 1985. "Contrasting the representation of scripts and categories". *Journal of Memory and Language*, 24, 646-665.
- Bartlett, F. C. 1932. Remembering: A Study in Experimental and Social Psychology. Cambridge: Cambridge University Press.

- Bergen, B. K. 2012. Louder than Words: the New Science of How the Mind Makes Meaning. New York: Basic Books.
- Bergen, B. K. and Chang, N. 2005. "Embodied construction grammar in simulation-based language understanding". In: J. O. Östman and M. Fried (eds.), *Construction Grammars: Cognitive Grounding and Theoretical Extensions*. Amsterdam/Philadelphia: John Benjamins, 147-195.
- Bergen, B. K. and Wheeler, K. B. 2006. "Sentence understanding engages motor processes". In: *Proceedings of the Twenty-Seventh Annual Conference of the Cognitive Science Society*. 213-245.
- Bergen, B., Shane L., Matlock, T. and Narayanan, S. 2007. "Spatial and linguistic aspects of visual imagery in sentence comprehension". *Cognitive Science* 31, 733-764.
- Billman, D., Swilley, A. and Krych, M. 2000. "Path and manner priming: verb production and verb recognition". *Proceedings of the 20th Annual Conference of the Cognitive Science Society*. Hillsdale, NJ: L. Erlbaum Associates.
- Bloom, A. H. 1981. The Linguistic Shaping of Thought: A Study in the Impact of Language on Thinking in China and the West. Hillsdale, NJ: Erlbaum Associates.
- Bradley, F. H. 1886. "Is there a special activity of attention?". Mind 11(43), 305–323.
- Bradley, F. H. 1902. "On Active Attention". Mind 11(41), 1-30.
- Broadbent, D. E. 1958. Perception and Communication. Oxford: Pergamon Press.
- Brown, R., and Lenneberg, E. 1954. "A study in language and cognition". *Journal of Abnormal and Social Psychology* 49, 454–462.
- Buccino G., Binkofski F., Fink G., Fadiga L., Fogassi L., Gallese V., Seitz R. J., Zilles K., Rizzolatti G., and Freund H. J. 2001. "Action observation activates premotor and parietal areas in a somatotopic manner: an fMRI study". European Journal of Neuroscience 13, 400-404.
- Carrel, P. 1983. "Some issues in the role of schemata, or background knowledge, in second language comprehension". *Reading in a Foreign Language* 1, 82-92.
- Chafe, W. 1994. Discourse, Consciousness and Time. Chicago: The University of Chicago Press.
- Chafe, W. 1996. "How consciousness shapes language". Pragmatics and Cognition 4 (1), 35-54.
- Chafe, W. 1998. "Language and the flow of thought". In: M. Tomasello (ed.), *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*. Mahwah, NJ: Lawrence Erlbaum Associates. 93-111.
- Chafe, W. 2003. "Prosodic and functional units of language". In: J. A. Edwards and M. D. Lampert (eds.), *Talking Data: Transcription and Coding in Discourse Research*. Hillsdale, NJ: Lawrence Erlbaum Associates. 33–43.
- Charniak, E. 1975. Organisation and Inference in Frame-Like Systems of Common-Sense Knowledge. Catalogna: ISCS.
- Chase, W. G. and Ericsson, A. 1981. "Skilled memory". In: J. R. Anderson (ed.), *Cognitive Skills and Their Acquisition*. Hillsdal, NJ: Lawrence Erlbaum Associates. 141-190.
- Cieślicka, A. 2004. On Processing Figurative Language. Poznań: Motivex.
- Cieślicka, A. 2006. "Literal salience in on-line processing of idiomatic expressions by L2 speakers". Second Language Research 22(2), 115-144.
- Cieślicka, A. 2007. "Language experience and fixed expressions: differences in the salience status of literal and figurative meanings of L1 and L2 idioms". In: M. Nenonen, and S. Niemi (eds.), Collocations and Idioms 1: Papers from the First Nordic Conference on Syntactic Freezes. 55-70.
- Cieślicka, A. 2010. "Formulaic language in L2". In: M. Putz and L. Sicola (eds.), Cognitive Processing in Second Language Acquisition. Amsterdam: John Benjamins.
- Clair, R. N. St., Rodriguez, W. E. and Irving, J. 2010. *Linguistic Systems and the Physiological Classification of Verbs*. http://epistemic-forms.com/R-physiology-verbs.html.

- Comrie, B. 1981. Language Universals and Linguistic Typology: Syntax and Morphology, Chicago, IL: University of Chicago Press.
- Conway, M. A. 1992. "A structural model of autobiographical memory". In: M. A. Conway, D. C. Rubin, H. Spinner, and Wagner, W. A. (eds.), *Theoretical Perspectives on Autobiographical Memory*. Dordrecht: Kluwer, 167-193.
- Cortazi, M. 1993. Narrative Analysis. London: The Falmer Press.
- Coulson, S. 2001. Semantic Leaps: Frame Shifting and Conceptual Blending in Meaning Construction. Cambridge: Cambridge University Press.
- Croft, W. and Cruse D. A. 2004. Cognitive Linguistics. Cambridge: Cambridge University Press.
- Damasio, A. R. and Tranel, D. 1993. "Nouns and verbs are retrieved with differently distributed neural systems". *Proceedings of the National Academy of Sciences* 90, 453-459.
- Damasio, H., Grabowski, T. J., Tranel, D., Hichwa, R. D. and Damasio, A. R. 1996. "A neural basis for lexical retrieval". *Nature* 380, 499-505.
- Damasio, H., Grabowski, T. J., Tranel, D., Ponto, L. L. B., Hichwa, R. D. and Damasion, A. R. 2001. "Neural correlates of naming actions and of naming spatial relations". *Neuroimage* 13, 1053-1064.
- Davidson, D. 1969. "The Individuation of Events". In: N. Rescher (ed.), *Essays in Honor of Carl G. Hempel*, Dordrecht: D. Reidel. 216-234.
- Desimone, R. and Duncan, J. 1995. "Neural mechanisms of selective visual attention". *Annual Review of Neuroscience* 18: 193–222.
- Du Bois, J. W., Schuetze, C., Danae, P., and Cuming, S. 1992. "Discourse transcription". In: *Santa Barbara Papers in Linguistics*, Vol. 4. Santa Barbara, University of California, Department of Linguistics.
- Dirven, R. and Verspoor, M. 2004. *Cognitive Explorations of Language and Linguistics*. Amsterdam: John Benjamins.
- Ellis, N. 1994. Implicit and explicit learning of languages. San Diego: Academic Press.
- Ellis, N. 1996. "Sequencing in SLA: phonological memory, chunking and points of order". *Studies in SLA* 18, 91-126.
- Ellis, N. 1998. "Emergentism, connectionism, and language learning". *Language Learning* 48, 631-664.
- Ellis, N. 1999. "Cognitive approaches to SLA". Annual Review of SLA 9, 22-42.
- Ellis, N. 2003. "Constructions, chunking, and connectionism: the emergence of second language structure". In: C. Doughty and M. Long (eds.), *Handbook of SLA*. Malden, Mas.: Blackwell. 52-82.
- Ellis, N. 2005. "At the interface: dynamic interactions of explicit and implicit knowledge". *Studies in SLA* 27, 305-352.
- Ellis, N. 2006a. "Cognitive perspectives on SLA: the associative-cognitive CREED". *AILA Review* 19, 100-121.
- Ellis, N. 2006b. "Selective attention and transfer phenomena in SLA: contingency, cue competition, salience, overshadowing, blocking, and perceptual learning". *Applied Linguistics* 27, 164-194.
- Ellis, N. and Robinson, P. (eds.). 2007. *Handbook of Cognitive Linguistics and Second Language Acquisition*. Mahwah, N.J.: Lawrence Erlbaum.
- Ellis, R. 2008. The Study of Second Language Acquisition. Oxford: Oxford University Press.
- Ervin-Tripp, S. M. and Küntay, A. 1997. "Conversational stories". In: T. Givón (ed.), *Conversation: Cognitive, Communicative and Social Perspective*. Amsterdam: John Benjamins. 133-166.
- Evans, V. 2000. Successful Writing Intermediate. Newbury, Berkshire: Express Publishing.
- Evans, V. and Green, M. 2006. *Cognitive Linguistics: An Introduction*. Edinburgh University Press.

- Færch, C. and Kasper, G. 1980. "Processes and strategies in foreign language learning and communication". *Interlanguage Studies Bulletin* 5, 47-118.
- Færch, C. and Kasper, G. 1983. "Plans and strategies in foreign language communication". In: C. Færch and G. Kasper (eds.), *Strategies in Interlanguage Communication*. London: Longman. 210-238.
- Fauconnier, G. 1995. *Mental Spaces: Aspects of Meaning Construction in Natural Languages*. Cambridge, Mass.: A Bradford Book. The MIT Press.
- Fauconnier, G. 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Fauconnier, G. and Sweetser, E. (eds.). 1996. *Spaces, Worlds and Grammar*. Chicago and London: Chicago University Press.
- Fillmore, Ch. 1976. "Frame Semantics and the Nature of Language". In: Annals of the New York Academy of Sciences: Conference on the Origin and Development of Language and Speech, Vol. 280, 20-32.
- Fillmore, Ch. 1977a. "The case for case reopened". In: P. Cole (ed.), Syntax and Semantics 8: Grammatical Relations. New York: Academic Press. 59–81.
- Fillmore, Ch. 1977b. "Topics in lexical semantics". In: R. Cole (ed.), *Current Issues in Linguistic Theory*. Bloomington: Indiana University Press. 76–138.
- Fillmore, Ch. 1982. "Frame semantics". In: Linguistic Society of Korea (ed.), *Linguistics in the Morning Calm*. Seoul: Hanshin Publishin Co. 111-137.
- Friedman, W. J. 1987. "A follow-up to scale effects in memory for the time of events the earthquake study". *Memory and Cognition* 15, 518-520.
- Genneri, S. P., Sloman, S. A., and Malt, B. C. and Fitsch, W. T. 2001. "Motion events in language and cognition". *Cognition*. 49-79.
- Gibbs, R. W., Bogdanovich, J. M., Sykes, J. R. and Barr, J. D. 1997. "Metaphor in idiom comprehension". *Journal of Memory and Language* 37, 141-154.
- Gibson, J. J. 1977. "The theory of affordances". In: R. Shaw and J. Bransford (eds.), *Perceiving, Acting, and Knowing*. New York: Wiley. 67-82.
- Giora. R. 2003. On our Mind: Salience, Context and Figurative Language. Oxford: Oxford University Press.
- Gallese, V., Fadiga, L., Fogassi, L. and Rizzolatti, G. 1996. "Action recognition in the premotor cortex". Brain 119, 593-609.
- Geeraerts, D. and Cuyckens, H. (eds.). 2007. *The Oxford Hanbook of Cognitive Linguistics*. Oxford: Oxford University Press.
- Givón, T. 1990. *Syntax: A Functional-Typological Introduction*, Vol. 2. Amsterdam and Philadelphia: John Benjamins.
- Glenberg, A. M. and Kaschak, M. P. 2002. "The Role of Affordances and Grammatical Constructions in Sentence Comprehension". *Journal of Memory and Language* 43, 508-529.
- Goldbreg, A. E. 1995. Constructions: A Construction Grammar Approach to Argument Structure. Chicago: Chicago University Press.
- Goldberg, A. E. 2003. "Constructions: a new theoretical approach to language". *Trends in Cognitive Sciences* 7(5), 219-224.
- Goldberg, A. E. 2007. "Construction Grammars". In: P. C. Hogan (ed.), *The Cambridge Encyclopedia of the Language Sciences*. Cambridge: Cambridge University Press.
- Goldberg, A. E. 2010. "Verbs, constructions and semantic frames". In: M. Rappaport Hovav, E. Doron and I. Sichel (eds.), Syntax, Lexical Semantics and Event Structure. Oxford: Oxford University Press. 39-58.
- Goldberg, A. E., Casenhiser, D. and White, T. R. 2007. "Constructions as categories of language". *New Ideas in Psychology*, 25, 70-86.

- Goldman-Eisler, F. 1958. "Speech production and predictability of the words in context". *Quarterly Journal of Experimental Psychology* 10, 96-106.
- Graesser, A. C., Wiemer-Hastings, P. and Wiemer-Hastings, K. 1994. "Constructing inferences and relations during text comprehension". *Psychological Review* Vol. 101, No 3, 371-395.
- Graesser, A., Wiemer-Hastings, P., and Wiemer-Hastings, K. 2001. "Constructing inferences and relations during text comprehension". In: T. Sanders, J. Schilperoord, and W. Spooren, (eds.), Text Representation: Linguistic and Psycholinguistic Aspects. Benjamins, Amsterdam. 249–271.
- Greenberg, J. 1966. "Language universals". In: T. Sebeok (ed.), *Theoretical Foundations. Current Trends in Linguistics*. The Hague: Mouton. 61–112.
- Heine, B. 1997. Cognitive Foundations of Grammar. Oxford: Oxford University Press.
- Hulstijn, J. 2007. "Fundamental issues in second language acquisition". EUROSLA Yearbook 7, 191-203.
- Ingarden, R. 1964. *Time and Mode of Being*. Springfield: Charle C. Thomas Publisher Translated by Helen Michejda.
- Jackendoff, R. 1986. Semantics and Cognition. Cambridge, MA: MIT Press.
- Jackendoff, R. 1990. Semantic Structures. Cambridge, MA: MIT Press.
- Jackendoff, R. 1997. The Architecture of the Language Faculty. Cambridge, Mass.: MIT Press.
- James, W. 1890. The Principles of Psychology. New York: Dover.
- Johnson-Laird, P. N. 1983. Mental Models: Towards a Cognitive Science of Language, Inference and Consciousness. Cambridge, Mass.: Harvard University Press.
- Johnston, J. C. and McCann, R. S. 2006. "On the locus of dual-task interference: is there a bottleneck at the stimulus classification stage?". *The Quarterly Journal of Experimental Psychology* 59: 694–719.
- Kaschak, M. P. and Glenberg, A. M. 2000. "Constructing meaning: the role of affordances and grammatical constructions in sentence comprehension". *Journal of Memory and Language* Vol. 43(3), 508-529.
- Kasper, G. and Kellerman, E. (eds.). 1997a. *Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives*. London: Longman.
- Kasper, G. and Kellerman, E. 1997b. "Introduction: approaches to communication strategies".In: G. Kasper and E. Kellerman (eds.), Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives. London: Longman. 1-4.
- Kenny, A. 1963. Action, Emotion and Will. London: Routlege and Kegan Paul.
- Kemmer, S. 2003. "Human cognition and the elaboration of events". In: M. Tomasello (ed.), *The New Psychology of Language*. Mahwah, N.J.: L. Erlbaum Associates. 89-118.
- Kim, J. 1975/1996. "Events as property exemplification". In: R. Casati and A. C. Varzi (eds.), Events, Aldershot: England. 117-136.
- Köhler, W. 1929. Gestalt Psychology. New York: Liveright.
- Koch, C. and Tsuchiya, N. 2007. "Attention and consciousness: two distinct brain processes". *Trends in Cognitive Sciences* 11: 16–22.
- Koffka, K. 1935. Principles of Gestalt Psychology. New York: Harcourt, Brace.
- Kossylyn, S. M. 1975. Information representation in visual images. Cognitive psychology 7, 341-370.
- Kossylyn, S. M. 1981. "The medium and the message in mental imagery: a theory". *Psychological review* 88, 46-65.
- Kossylyn, S. M. 1983. Ghosts in the Mind's Machine: Creating and Using Images in the Brain. New York: Norton.
- Labov, W. and Waletzky, J. 1967. "Narrative analysis". In: J. Helm (ed.), *Essays on the Verbal and Visual Arts*. Seattle: University of Washington Press, 12-44. Reprinted in the *Journal of Narrative and Life History* 7, 3-38.

- Labov, W. 1997. "Some further steps in narrative analysis". *Journal of Narrative and Life History* 7: 395-415.
- Labov, W. 2001. "Uncovering the Event Structure of Narrative", Georgetown University Round Table. (Georgetown: Georgetown University Press). Available online at: http://www.ling.upenn.edu/~wlabov/uesn.pdf (accessed 9 April 2004).
- Labov, W. 2004. "Ordinary Events". In: C. Fought (Ed.), *Sociolinguistic Variation: Critical Reflections*. Oxford: Oxford University Press. 31-43.
- Labov, W. 2006. "Narrative pre-construction". Narrative Inquiry 16, 37-45.
- Labov, W. 2011. "Oral narratives of personal experience". In: P. C. Hogan (ed.), *The Cambridge Encyclopedia of the Language Sciences*. Cambridge: Cambridge University Press. http://www.ling.upenn.edu/~wlabov/Papers/FebOralNarPE.pdf
- Lakoff, G. 1987. Women, Fire and Dangerous Things: What Categories Reveal About the Mind. Chicago: University of Chicago Press.
- Lakoff, G. and Johnson, M. 1999. Philosophy in the Flesh. New York: Basic Books.
- Lamb. S. 1999. *Pathways of the Brain: The Neurological Basis of Language*. Amsterdam: John Benjamins.
- Lambrecht, K. 1994. Information Structure and Sentence Form: A Theory of Topic, Focus, and the Mental Representations of Discourse Referents. Cambridge: Cambreidge University Press.
- Lancaster, J. S. and Barsalou, L. 1997. "Multiple organizations of events in memory". *Memory* 5 (5), 569-599.
- Land, G. 1988. Behind the Headlines. Harlow, Essex: Longman.
- Langacker, R. 1987. Foundations of Cognitive Grammar, Volume 1, Theoretical Prerequisites. Stanford, California: Stanford University Press.
- Lanagacker, R. 1991. Foundations of Cognitive Grammar, Volume 2, Descriptive Applications. Stanford, California: Stanford University Press.
- Langacker, R. 1999. Grammar and Conceptualization. Berlin-New York: Mouton de Gruyter.
- Langacker, R. 2001. "Discourse in cognitive grammar". Cognitive Linguistics 12(2), 143-188.
- Langacker, R. 2008. Cognitive Grammar, A Basic Introduction. Oxford: Oxford University Press.
- Leech, G. 1983. Principles of Pragmatics. New York: Longman.
- Lewandowska-Tomaszczyk, B. 2011. "Events as they are". In: P. Stalmaszczk (ed.), *Turning Points in the Philosophy of Language and Linguistics*. Frankfurt am Main: Peter Lang. 35-63.
- Lewandowska-Tomaszczyk, B. 2014. "Time and time experience in language". In: B. Lewandowska-Tomaszczyk and K. Kosecki (eds.), *Time and Temporality in Language and Human Experience*. Frankfurt am main: Peter Lang. 19-44.
- Levelt, W. J. M. 1989. Speaking, from Intention to Articulation. Cambridge, Mass.: MIT Press.
- Levinson, S. 1996. "Relativity in spatial conception and description". In: J. Gumperz and S. Levinson (eds.), *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press. 177-202.
- Levitin, D. 2002. Foundations of Cognitive Psychology, Core Readings. Cambridge, Mass.: The MIT Press
- Lieven, E., and Tomasello, M. 2008. "Childern's first language acquisition from a usage-based perspective". In: P. Robinson and N.C. Ellis (eds.), *Handbook of Cognitive Linguistics and Second Language Acquisition*. London-New York. Routlege, 140-189.
- Linell, P. and Korolija, N. 1997. "Coherence in multi-party conversation". In: T. Givón, (ed.), Conversation: Cognitive, Communicative and Social Perspectives. Amsterdam/Philadelphia: John Benjamins. 167-205.
- Logan, G. 1996. "The CODE theory of visual attention: an integration of space-based and object-based attention". *Psychological Review* 103(4), 603–649.
- Lucy, J. 1993. Grammatical Categories and Cognition. Cambridge: Cambridge University Press.

- Mack, A. and Rock, I. 1998. Inattentional Blindness. Cambridge MA: MIT Press.
- Malpas, J. 2010. "Donald Davidson". *The Stanford Encyclopedia of Philosophy (Fall 2010 Edition*), Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/fall2010/entries/davidson/>.
- Mandler, G. 1967. "Organization and memory". In: K.W. Spence and J.T. Spence (eds.), *The psychology of learning and motivation*, Vol. 1. New York: Academic Press, 327-372.
- Maruszewski, T. 1996. *Psychologia Poznawcza* [Cognitive Psychology]. Warszawa: Polskie Towarzystwo Semiotyczne.
- McCarthy, M. and Carter, R. 1997. Exploring Spoken English. Cambridge: Cambridge University Press.
- Merleau, P. M. 1994. *The Primacy of Perception*. Evaston, Illinois: Northwestern University Press. Metzing, D. 1979. *Frame Conception and Text Understanding*. Berlin: de Gruyeter.
- Miller, G. A. and Johnson-Laird, P. N. 1976. *Language and Perception*. Cambridge, MA: Harvard University Press.
- Minsky, M. 1975. "A framework for representing knowledge". In: P. Winston (ed.), *The Psychology of Computer Vision*. New York: McGraw Hill. 211-280.
- Mole, Ch. 2013. "Attention", *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/fall2013/entries/attention/>.
- Moore, T. and Armstrong K. M. 2003. "Selective gating of visual signals by microstimulation of frontal cortex". *Nature*, 421(6921), 370–373.
- Muller, H. J., and P. M. Rabbit 1989. "Reflexive and voluntary orienting of visual attention: time course of activation and resistance to activation". *Journal of Experimental Psychology, Human Perception and Performance* 15(2), 315-330.
- Neisser, U. 1967. Cognitive psychology. New York: Appleton-Century-Croft.
- Neisser, U. 1976. Cognition and Reality. San Francisco: Freeman.
- Neumann, O. 1987. "Beyond capacity: a functional view of attention". In: A. Sanders and H. Heuer (eds.), *Perspectives on Perception and Action*. Hillsdale, NJ: Lawrence Erlbaum Associates. 361–394.
- Newtson, D. 1973. "Attribution and the unit of perception of ongoing behavior". *Journal of Experimental Social Psychology* 12, 436-450.
- Newtson, D. and Enquist, G. 1976. "The perceptual organization of ongoing behaviour". *Journal of Experimental and Social Psychology* 12, 336-348.
- Newtson, D., Enquist, G. and Bois, J. 1976. "The objective basis of behavioural units". *Journal of Psychology and Social Psychology* 35, 847-862.
- Newtson, D., Hairfield, J., Bloomingdale, J., and Cutino, S. 1987. "The structure of action and interaction". *Social Cognition* 5, 191-237.
- Nęcka, E., Orzechowski, J. and Szymura, B. 2006. *Psychologia Poznawcza* [Cognitive Psychology]. Warszawa: Wydawnictwo Naukowe PWN.
- Norman, D. A. 1999. "Affordances, conventions and design". Interactions 38-42.
- Norrick, N. R. 2003. *Conversational Narrative: Storytelling in Everyday Talk*. Amsterdam/ Philadelphia: John Benjamins Publishing Company.
- Norrick, N. R. 2005. "The dark side of tellability". Narrative Inquiry 15, 323-344.
- Paradis, M. 2004. A Neurolinguistic Theory of Bilingualism. Amsterdam: John Benjamins.
- Paradis, M. 2009. *Declarative and Procedural Determinants of Second Languages*. Amsterdam: John Benjamins Publishing Company.
- Penfield, W. 1958. "Some mechanisms of consciousness discovered during electrical stimulation of the brain". *Proceedings of the National Academy of Sciences* 44, 51-66.
- Pylyshyn, Z. 1973. "What the mind's eye tells the mind's brain: a critique of mental imagery". *Psychological Bulletin* 80, 1-24.

- Quine, W. V. 1985/1996. "Events and reification". In: Casati, V. W. and A. C.. Varzi (eds.), Events, Aldershot: Dartmouth Publishing. 107-116.
- Quirk, R., Greenbaum, S. Svartvik, J. 1972. A Grammar of Contemporary English. London: Longman.
- Radden, G. and Dirven, R. 2007. Cognitive English Grammar Series: Cognitive Linguistics in Practice 2. Amsterdam: John Benjamins Publishing Company.
- Rappaport H. M. R. and Levin, B. 2010. "Reflections on manner/result complementarity. In: M. R. Rappaport Hovav, E. Doron, and I. Sichel (eds.), *Lexical Semanticts, Syntax and Event Structure*. Oxford/New York: Oxford Studies in Theoretical Linguistics. 21-39.
- Reber, A. S. 2000. Słownik Psychologiczny. Warszawa: Wydawnictwo Naukowe Scholar.
- Reynolds, J., and Desimone, R. 2001. "Competitive mechanisms subserve selective visual attention", In: A. Marantz, Y. Miyashita, and W. O'Neil (eds.), *Image, Language, Brain: Papers From the First Mind Articulation Project Symposium*, Cambridge, MA: The MIT Press. 233–247.
- Richardson, D. C., M. J. Spivey, L., W. Barsalou and Marce, K. 2003. "Spatial representation activated during real-time comprehension of verbs". *Cognitive Science* 27, 767-780.
- Rizzolati, G., Riggio, L., Dascola, I., and Umiltá, C. 1987. "Reorienting attention across the horizontal and vertical meridians: evidence in favour of a premotor theory of attention". *Neuropsychologia* 25(1A), 31–40.
- Roberts, L. and Siyanova-Chanturia, A. 2013. "Using eye-tracking to investigate topics in L2 acquisition and L2 processing". *Studies in Second Language Acquisition* V.35(02), 213-235.
- Rosch, E. 1973. "Natural categories". Cognitive Psychology 7, 328-350.
- Rosch, E. 1978. "Principles of categorization". In: E. Rosch and B. B. Loyds (eds.), *Cognition and Categorization*. Hillsdale: Lawrence Erlbaum. 27-48.
- Rumelhart, D. E. 1977. "Understanding and summarizing brief stories". In: D. Laberge and S. J. Samuels (eds.), *Basic Processes in Reading: Perception and Comprehension*. Hillsdale, New Jersey: Lawrence Erlbaum Associates. 265-303.
- Rumelhart, D. E. 1980. "Schemata: the building blocks of cognition". In: R. J. Spiro, B. C. Bruce, and W. F. Brewere (eds.), *Theoretical Issues in Reading Comprehension: Perspectives from Cognitive Psychology, Linguistics, Articifial Intelligence, and Education*. Hillsdale, NJ: L. Erlbaum Associates. 99-135.
- Rumelhart, D. E., and Ortony, A. 1977. "The represenentation of knowledge in memory". In: R. C. Anderson, R. J. Spiro, and W. E. Montague (eds.), Schooling and the Acquisition of Knowledge. Hillsdale, N.J.: L. Erlbaum Associates.
- Schank, R. C. and Abelson, R. P. 1977. Scripts, Plans, Goals and Understanding of Natural Language: An Inquiry into Human Knowledge Structures. Hillsdale, J. J.: L. Erlbaum Associates.
- Schegloff, E. 1990. "On the organisation of sequences as a source of coherence in talk-in-interaction". In: B. Dorval (ed.), *Conversational Organization and Its Development, Advances in Discourse Processes*. Norwood, N.J.: Ablex. 38, 289-327.
- Schmiedtova, B. 2008. "Do L2 speakers think in L1 when speaking in the L2?". Vigo International Journal of Applied Linguistics 8, 139-179.
- Schmiedtova, B. 2013. "Traces of L1 patterns in L2 in the event construal of Czech advanced speakers of L2 English and L2 German". *IRAL 51*, 87-116.
- Scifo, P., Fazio, F., Rizzolatti, S., Cappa, S. F., and Perani, D. 2005. "Listening to action-related sentences activates fronto-parietal motor circuits". *Journal of Cognitive Neuroscience* 17, 2, 274-281.
- Shumann, J. Crowwell, S., Jones, N., Lee, N., Suchert, N. and Wood, L. 2004. *The Neurobiology of Learning: Perspectives from Second Language Acquisition*. Mahwah, N.J.: Lawrence Erlbaum.

- Simons, D. 2000. "Attentional capture and inattentional blindness". *Trends in Cognitive Sciences* 4, 147–155.
- Skehan, P. 1998. A Cognitive Approach to Language Learning. Oxford: Oxford University Press.
- Skehan, P. and Foster, P. 1999. "The influence of task structure and processing conditions on narrative retellings". *Language Learning* 49(1), 93-120.
- Slobin, D. I. 1996. From 'Thought to Language' to 'Thinking for Speaking. In: J. Gumperz and S. C. Levinson (eds.), Rethinking Linguistic Relativity. Cambridge: Cambridge University Press. 70-96.
- Slobin, D. 2004. "The many ways to search for a frog: linguisite typology and the expression of motion events". In: M. Stromqvist, and L. Verhoeven (eds.), *Relating Events in Narrative*, Vol. 2: *Typological and Contextual Perspectives*. 219-257.
- Sprenger, A. S. 2003. *Fixed Expressions and the Production of Idioms*. Ph.D. dissertation. [MPI Series in Psycholinguistics]. Ponsen and Looijen BV: Wageningen.
- Sprenger, A. S., Levelet, W. J. M., and Kempen, G. 2006. "Lexical access during the production of lexical phrases". *Journal of Memory and Language* 54, 523-534.
- Stalmaszczyk. P. (ed.). 2011. Turning Points in the Philosophy of Language and Linguistics. Frankfurt am Main: Peter Lang Gmbh.
- Stanfield, A. R. and Zwaan, R. A. 2001. "The effect of implied orientation derived from verbal context on picture recognition". *Psychological Science* Vol. 12, No 2, 145-176.
- Stelma, J. H. and Cameron, L. J. 2007. "Intonation units in spoken interaction". *Text and Talk.* 27-3, 361-393.
- Stout, G. F. 1891. "Apperception and the movement of attention". Mind 16(61), 23-53.
- Talmy, L. 1977. "Rubber-sheet cognition in language". In: *Papers From the Thirteenth Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistic Society.
- Talmy, L. 1978. "Figure and ground in complex sentences". In: J. H. Greenberg (ed.), *Universals of Human Language (vol. 4): Syntax*. Stanford, Calif.: Stanford University Press.
- Talmy, L. 1985. "Force dynamics in language and thought". In: *Papers from the 21st Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago Liknguistic Society.
- Talmy, L. 1988. "Force dynamics in language and cognition". Cognitive Science 12, 49-100.
- Talmy, L. 2000. Toward a Conceptual Semantics, Vol. 1 and 2. Cambridge, Mass.: The MIT Press.
- Talmy, L. 2007. "Attention Phenomena". In: D. Geeraerts and H. Cuyckens (eds.), *The Oxford Hanbook of Cognitive Linguistics*. Oxford: Oxford University Press. 264-294.
- Tavakoli, P. and Foster, P. 2008. "Task design and second language performance: the effect of narrative type on learner output". *Language Learning*, 58(2), 439-473.
- Taylor, R. J. 1995. *Linguistic Categorization: Prototypes in Linguistic Theory*, 2nd edition. Oxford: Clarendon Press.
- Taylor, J. R. and McLaury, R. (eds.). 1995. *Language and the Cognitive Construal of the World*. Berlin-New York: Mouton de Gruyter.
- Taylor, R. J. and Tversky, B. 1997. "Indexing events in memory: evidence for index dominance". Memory 5(4), 509-542.
- Taylor, J. R. and Zwaan, R. 2008. "Action in cognition: the case of language". *Language and Cognition* 1(1), 45–58.
- Tesnière, L. 1959. Elements de Syntaxe Structurale. Paris: Klincksieck.
- Tettamanti, M., Buccino, G., Saccuman, M. C., Gallese, V., Danna1, M., Pulvermueller, F. 2001. "Brain reflections of words and their meaning". *Trends in Cognitive Sciences* V.5, 12, 234-267.
- Tettamanti, M., Buccino, G., Saccuman, M. L., Gallese, V., Danna, M., Scifo, P., Fazio, F., Rizzolatti, G., Cappa, S. F. and Perani, D. 2005. "Listening to action-related sentences activates fronto-parietal motor circuits". *Journal of Cognitive Neuroscience* 17:2, 273-281.

- Titchener, E. B. 1908. Lectures on the Elementary Psychology of Feeling and Attention, New York: The Macmillan Company.
- Tomasello, M. 2001. "Perceiving intentions and learning words in the second year of life". In: M. Bowerman and S. C. Levinson (eds.), *Language Acquisition and Conceptual Development*. Cambridge: Cambridge University Press. 132-158.
- Tomasello, M. 2008. "Children's first language acquisition from a usage-based perspective". In: P. Robinson and N. C. Ellis (eds.), *Handbook of Cognitive Linguistics and Second Language Acquisition*. New York and London: Routlege. 168-197.
- Tomlin, R. S. 1995. "Focal attention, voice, and word order: an experimental, crosslinguistics study". In: P. Downing and M. Noonan (eds.), *Word Order in Discourse*. Amsterdam: John Beniamins. 517–554.
- Treisman, A. 1999. "Feature binding, attention and object perception". In: G. W. Humphries, J. Duncan and A. Treisman (eds.), Attention, Space and Action, Oxford: Oxford University Press. 91–111.
- Treisman, A. 2003. "Consciousness and perceptual binding". In: A. Cleeremans (ed.), *The Unity of Consciousness: Binding, Integration and Dissociation*. Oxford: Oxford University Press. 123-156.
- Treisman, A., and Gelade, G. 1980. "A feature-integration theory of attention". *Cognitive Psychology* 12, 97-136.
- Tripper, S. P., and Driver, J. 1988. "Negative priming between pictures and words in a selective attention task: evidence for semantic processing of ignored stimuli". *Memory and Cognition* 16(1), 64–70.
- Tulving, E. 1966. "Subjective organization and the effects of repetition in multi-trial free recall verbal learning". *Journal of Verbal Learning and Verbal Behavior* 5, 381-391.
- Tulving, E. 1983. Elements of Episodic Memory. Oxford: Oxford University Press.
- Tversky, B. 1990. "Where partonomies and taxonomies meet". In: S. L. Tsohatzidis (ed.), *Meanings and Prototypes: Studies on Linguistic Categorization*. London: Routledge. 334-344.
- Tversky, B., and Hemenway, K. 1984. "Objects, parts, and categories". *Journal of Experimental Psychology: General* 113, 169-193.
- Umiker-Seboek, J. 1979. "Pre-school children's intraconversational narratives". *Journal of Child Language* 6, 91-110.
- Van Beek, G., Flecken, M. and Starren, M. 2013. "Aspectual perspective taking in event construal". *International Review of Cognitive of Applied Linguistics in Language Teaching* 51, 199-227.
- Van Dijk, T. A., and Kintsch, W. 1983. Strategies of Discourse Comprehension. New York: Academic Press.
- Vendler, Z. 1957. "Verbs and Times". The Philosophical Review Vol. 66, No. 2, 143-160.
- Verkuyl, H. 1993. The Theory of Aspectuality, the Interaction between Temporal and Atemporal Structure (Cambridge Studies in Linguistics). Cambridge: Cambridge University Press.
- Wagener, W. A. 1986. "My memory: a study of autobiographical memory over six years". Cognitive Psychology 18, 225-252.
- Wertheimer, M. 1923. "Untersuchungen zur lehre von der gestalt II". *Psychologische Forschung* 301-350.
- Whitten, W. B. I. and Leonard, J. M. 1981. "Directed search through autobiographical memory". *Memory and Cognition* 9, 566-679.
- Wilson, N. and Gibbs, R. W. Jr. 2007. "Real and imagined body movement primes metaphor comprehension". *Cognitive Science: A Multidisciplinary Journal* 31(4), 721 731.
- Winograd, T. 1976. Towards A Procedural Analysis of Semantics. Palo Alto: Stanford AI-TR 292.

- Wittgenstein, L. 1953/2001. Philosophical Investigations. Oxford: Blackwell Publishing.
- Yantis, S. 1998. "Control of visual attention". In: H. Pashler (ed.), *Attention*, New York: Psychology Press.
- Zacks, J., Tversky, B., and Iyer, G. 2000. "Perceiving, remembering and communicating structure in events". *Journal of Experimental Psychology: General* 130: 29-58.
- Zacks, J. and Tversky, B. 2001. "Event structure in perception and conception". *Psychological Bulletin* 127, 3-21.
- Zubin, D. A., and Hewitt, L. E. 1995. "The deictic center: a theory of deixis in narrative". In: J. F. Duchan, G. A. Bruder, and L. E. Hewitt (eds.), *Deixis in Narrative: A Cognitive Science Perspective*. Mahwah, NJ: Lawrence Erlbaum. 129–155.
- Zwaan, R. A. 1999. "Embodied cognition, perceptual symbols, and situation models". *Discourse Processes* 28, 81-88.
- Zwaan, R. A., and Radvansky, G. A. 1998. "Situation models in language comprehension and memory". *Psychological Bulletin* 123, 162-185.
- Zwaan, R., Stanfield, R. and Yaxley, R. 2002. "Do language comprehenders routinely represent the shapes of objects?". *Psychological Science* 13, 68-171.

Dictionaries and corpora

- 2004. Wielki słownik PWN-Oxford: Wydawnictwo Naukowe PWN S.A. and Oxford University Press.
- 2009. Collins COBUILD Advanced Dictionary: Heine Cengage Learning / Harper Collins Publishers British National Corpus (BNC).

Films

Nehrebecki, W., and Ledwig, A. [directors]1965-1966. *Bolek i Lolek na wakacjach, pierwszy dzień wakacji, odcinek 07* [Bolek and Lolek on holidays, first day of summer holidays, episode 1]. Studio Filmów Rysunkowej w Bielsku-Białej [Video Cartoon Studio in Bielsko-Biała] (producer) [Video podcast]. Available from http://www.youtube.com/watch?v=htRoACMUmM4

Appendices

1. Script for actors in study one, chapter one to perform

- C1: Kasia is sitting in her room. Leaves the room.
- C2: Goes downstairs /camera follows/.
- C3: Puts on shoes, C4: Takes a ball, C5: opens door and leaves.
- C6: Goes downstairs into the garden.
- C7: Walks along the lawn.
- C8/9: Alex reading /whole scene, no changes/.
- C9: Kasia signals to play.
- C10 Alex stands up.
- C11: They play (throw ball) -10 sec.
- C12: Ball lands in bushes.
- C13: Alex goes to fetch the ball, enters the bush /camera follows inside the bush/, after 10 s. camera follows.
- C14: Alex is not there.
- C15: Camera turns around.
- C16: Alex sitting and reading.

2. Video in study one, chapter one retold in English-L2 and Polish-L1 (examples)

AJ-ENG

- 1. in a film I saw a girl,
- 2. e.. she was sitting in her room,
- 3. she was sitting on a chai=r,
- 4. a . and she was working . with her her laptop,
- 5. then she closed the laptop,
- 6. and ... eh .. went down the stairs.
- 7. er .. during her way . she opened and closed the window,
- 8. er . then she g . went downstairs,
- 9. and .. put on her shoes,
- 10. first she put on her lseft shoe,
- 11. then the right shoe,
- 12. ... eh . she took a ball with her,
- 13. and she went opened the door,
- 14. and she went outdoor to the garden,
- 15. she went around the house,
- 16. ... with the ball,
- 17. ... and eh . .. in the garden was sitting her friend,
- 18. she asked her friend . that they play the ball,
- 19. girls through to each other the ball,
- 20. .. and eh .. one girl ..eg ... didn't catch the ball,
- 21. and eh ... girls tried to find that ball,
- 22. but ... unfortunately .. they did not find that ball.

BB-PL

```
e . na materiale filmowym widzimy nastolatke.
prawdopodobnie znajduje się w swoim pokoju,
y .. siedzi przy biurku.
eee... z z zamykaaa laptopa.
eee... wychodzi .. na półpietro,
schodzi na półpiętro,
i ... wyglada przez okno,
y . następnie schodzi na dół,
u ... zakłada . a . sandałki,
bierze piłkę i wychodzi na dwór,
v .. na dworze ... vvv .. czeka .. może nie czeka,
y ... an dworze y ... na krzesełku widzimy . y .. w ogrodzie widzimy prawdopodobnie jej siostrę,
. być może koleżnakę,
nie wiem.
e ... która e któ któ która która zachęca do gry w piłke.
y . zaczynają grać,
i obie podają sobią tą piłkę y . przerzucając ją e .. rękami w górze,
e .. niestety . piłka v ... hm . nie zostaje złapana przez v ... dziewczynke
która wzięła ta piłlkę .. an dwór,
y . więc y . koleżanka czy siostra ... wyruszają na poszukiwanie tej piłki,
jednak . y . piłka jest .. znajduje się tak .. daleko za drzewami . za krzakami,
nie wiem.
yy . że dziewczynie nie udaje się w ogóle znaleźć tej piłki,
no iii ostatnia scena pokazuje nam piłkę . zbliżenie piłki
.. miedzy .. krzakami choinkami.
v .. a następnie dziewczyne siedząca na krzesełku,
to znaczy że .. po prostu nie udało jej się zapać tej piłki,
wvcia
wydostać o wydostać
```

3. Story and instructions used in chapter five, study one, language production

Mr Lawrence designed and was fitting kitchen furniture in a client's house for two weeks.

He was paid most of the money in cash by a client of his kitchen-design company.

He worried that he had so much money in his possession.

All the banks were closed as it was already very late.

He was carrying a plain paper bag containing 2000 pounds in 20 pound notes home.

He was very hungry too.

He bought some take-away dinner for himself on the way.

He walked through the front door of his house at the end of a long day's work.

He ate the take away.

It was close to midnight.

He felt exhausted.

He placed the paper bag, briefcase and the remains of a take-away dinner on the kitchen table.

He made straight for the living room.

and sat down in front of a roaring fireplace.

He watched television.

His wife entered the room.

She asked him what was in the paper bag.

Mr Lawrence was not listening = he was watching an interesting film.

His wife put the paper bag on the fire.

Then Mr Lawrence wandered back into the kitchen.

And he glanced at the table.

He could not see the paper bag (with money).

Mr Lawrence asked his wife where the bag was.

His wife answered that she had put it on the fire with the other rubbish.

Mr Lawrence rushed back to the living room.

He was trying to beat the fire out.

He didn't manage to save all the money.

He managed to salvage only 300 pounds in signed 20 pound notes.

He carefully collected up all the ashes.

He deposited them with the local branch of his of NatWest Bank.

Instructions for condition A

Wstep:

Badanie jest zupełnie bezpieczne i anonimowe. Prezentowana w badaniu sekwencja wydarzeń pokazuje coś, co się przydarzyło Panu Lawrence'owi. Wszystkie wydarzenia przedstawione zostały w formie zdań – należy uważać je za prawdziwe – takie były fakty. Interesuje mnie narracja w języku obcym.

Instrukcja:

A-1

Część pierwsza: (sugerowany czas 5-8 min. - jeśli trzeba, trochę więcej).

Przeczytaj zdarzenia, które składają się w pewną historię Pana Lawrence'a. Staraj się jak najlepiej zapamiętać przebieg zdarzeń. W fazie następnej tego badania należy dokonać opisu tego, co się stało.

NIE MOŻNA POTEM ODNOSIĆ SIE DO ZAPREZENTOWANEGO MATERIAŁU.

. . .

Zapoznaj się z wydarzeniami przedstawionymi w formie zdań:

STORY EVENTS IN CHRONOLOGY (as far as possible)

faza czytania i zapoznawania się ze zdarzeniami (5–8 min., ewentualnie troche wiecej)

A-2

Część druga:

Napisz historyjkę ponownie wg tych instrukcji:

- 1. Ty jesteś Pania Lawrence (zdarzenia prezentujesz w pierwszej osobie z jej punktu widzenia.
- 2. Opowiedz całość ponownie tak, aby wyszło na to, że to NIE TWOJA (Pani Larence) wina, lecz jej męża.
- 3. Nie możesz kłamać, zwłaszcza dodawać zdarzenia, których nieprawdziwość łatwo by było zweryfikować, ale inne (??) zabiegi są dopuszczalne.
- 4. Możesz przedstawić te zdarzenia w dowolnej formie, tj. zdania mogą być dłuższe, krótsze, różne czasy, chronologicznie lub nie.

Instructions for condition B

Wstep:

Badanie jest zupełnie bezpieczne i anonimowe. Prezentowana w badaniu sekwencja wydarzeń pokazuje coś, co się przydarzyło Panu Lawrence'owi. Wszystkie wydarzenia przedstawione zostały w formie zdań – należy uważać je za prawdziwe – takie były fakty. Interesuje mnie narracja w jezyku obcym.

B-1

Część pierwsza: (sugerowany czas 5–8 min. – jeśli trzeba, trochę więcej)

Zapoznaj się i przeczytaj zdarzenia, które składają się w pewną historię Pana Lawrence'a. Staraj się jak najlepiej zapamiętać przebieg zdarzeń. W fazie następnej tego badania należy dokonać opisu tego, co się stało. NIE MOŻNA POTEM ODNOSIĆ SIĘ DO ZAPREZENTOWANEGO MATERIAŁU.

Zapoznaj się z wydarzeniami przedstawionymi w formie zdań:

B-2

STORY EVENTS IN CHRONOLOGY (as far as possible)

faza czytania i zapoznawania się ze zdarzeniami (5–8 min., ewentualnie trochę więcej)

Only example stories written in both conditions:

Condition A:

4

It was about twelve o'clock when my husband came back home.

He was working with a very rich client who asked him to do up his kitchen.

After two weeks my husband finally finished it and was paid for it 2000 pounds.

Of course I had no idea that he would keep such a great amount of money in a paper bag. I was sure he would put them in his bank.

What a pity that I was wrong.

I saw a paper bag and I thought that my George ate something while he was walking home and I was so tired

. . .

My husband knows that I don't like rubbish on the table so he should have known that keeping money in a paper bag that looked as rubbish is not a good idea.

I asked him what was in the bag but he did not answered.

. . .

I was sure that it was not anything important and I threw it to the fire.

Few minutes later he asked me where is that paper bag he brought and left on the table.

I answered that I threw it and it is burnt and then he shouted, "My money!"

It is not my fault that he hadn't told me that all banks were closed and he kept 2000 pounds in a paper bag.

5

It was just a usual day – I thought that.

But it was a mistake.

I drove to my school, taught English a couple of hours, and came back home.

Everything as usual.

I know that my husband works very late, and it irritates me.

He never have time for me – to speak freely or go on a holiday simply.

But I must live with him – he's my husband.

I was so tired when he came back home, but I started to talk with him and clean the house - I was only pretending, as usual.

Our conversation didn't last long – my husband didn't say a word to me.

That kind of conversations were normal in our life.

Later on, when he was watching TV, I decided to clean the kitchen and living room.

I know it was late, but I was too tired to do this earlier.

I saw the bag and so many papers were there.

I am not used to keep those papers in my house.

The fireplace was the ideal thing for that.

I simply burnt it.

And what's the problem?

Cleaning is my stuff, my husband is not supposed to do anything at home.

I simply did my work.

That's all.

Condition B:

1

It was midnight and my dear husband came back from work and as usual he didn't have time for me

Not saying any word, he was watching film on TV.

When I asked him what was in the paper bag, which was lying on the table, he didn't even notice it

As I don't like rubbish lying on the table, I throw the paper bag to the roaring fireplace.

Then, some time later my husband came to the kitchen searching for the paper bag.

He asked me where it was and I answered that I throw it to the fireplace.

Then he started to put down the fire and informed me that there had been money in the paper bag and he was obliged to take it to the bank.

In the bank there was 2000 pounds but he manage to save only 300 pounds of it.

If he had better contact with me, it wouldn't have happened.

2.

One day my husband came home very late.

It was midnight when I heard some noises from the kitchen.

When I walked in, mu husband wasn't there, he was watching TV in the living room.

I decided to clean up the mess that he has made and threw the paper bag, that was on the table, to the fireplace.

Suddenly my husband appeared in the kitchen and asked me where is the paper bag, so I told him what I did.

Surprisingly, he became nervous and rushed to the fireplace.

It turned out that in the paper was money.

He managed to safe small amount.

4. Stories and instructions used in chapter five, study two, language comprehension

Dziękuję za pomoc w badaniu, które jest zupełnie anonimowe, oraz bezpieczne. Interesuje nas narracja. Czas max 7 minut wraz z zapoznaniem się z instrukcjami.

Zadanie:

Który z tekstów na odwrocie (a. *czy* b.) bardziej wiarygodnie przedstawia jak doszło do opisywanego w tekstach zdarzenia?

Przeczytaj oba teksty uważnie i ustaw poziom WIARYGODNOŚCI co do relacjonowanych zdarzeń – na skali:

Im wyżej (więcej), tym tekst bardziej wiarygodny. Interesuje nas Twoje zdanie temat.

Ważne! Nie oceniamy błędów językowych, słownikowych, itp.

– Zaznaczamy przy użyciu "x" w dostarczonych paskach papieru, na których są tabelki:

Tekst A

Tekst B

- Zaznaczamy dopiero po przeczytaniu dwóch tekstów.
- Jeśli są jakieś pytania, proszę je zadać przed rozpoczęciem badania.

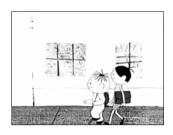
STORY A - BLAME HUSBAND CONDITION

It was just a usual day – I thought that. But it was a mistake. I drove to my school, taught English a couple of hours, and came back home. Everything as usual. I know that my husband works very late, and it irritates me. He never have time for me – to speak freely or go on a holiday simply. But I must live with him – he's my husband. I was so tired when he came back home, but I started to talk with him and clean the house – I was only pretending, as usual, Our conversation didn't last long – my husband didn't say a word to me. That kind of conversations were normal in our life. Later on, when he was watching TV, I decided to clean the kitchen and living room. I know it was late, but I was too tired to do this earlier. I saw the bag and so many papers were there. I am not used to keep those papers in my house. The fireplace was the ideal thing for that. I simply burnt it. And what's the problem? Cleaning is my stuff, my husband is not supposed to do anything at home. I simply did my work. That's all.

STORY B - BE OBJECTIVE CONDITION

My husband designed kitchen. He was given money in cash by his client. He was given money in a plain paper bag. There were 2000 pounds in 20 notes. He was anxious because of possessing such huge amount of money and all banks were closed as it was really late. He also was very hungry so he went to the restaurant and bought some take away. At home he ate what he had bought and left all things: litter, food and this paper bag in the kitchen. Then he went to the living room and turned on TV. He started watching it without paying attention what was going on around. At this time I came home and saw the mess in the kitchen. I asked him politely what was it but he didn't' answer, so a bit angry because of his lack of response I throw everything in a fireplace. Frankly speaking, when I saw my husband fighting with a fire I was ready to call an ambulance. But in tears in his eyes he told me that in the bag there was money. I was astonished with the answer and wasn't surprised at all when he gathered the ash and put it in the bank. Since that time he always answered all my questions.

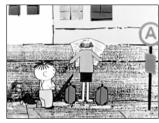
5. Story of Bolek and Lolek in pictures















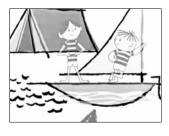






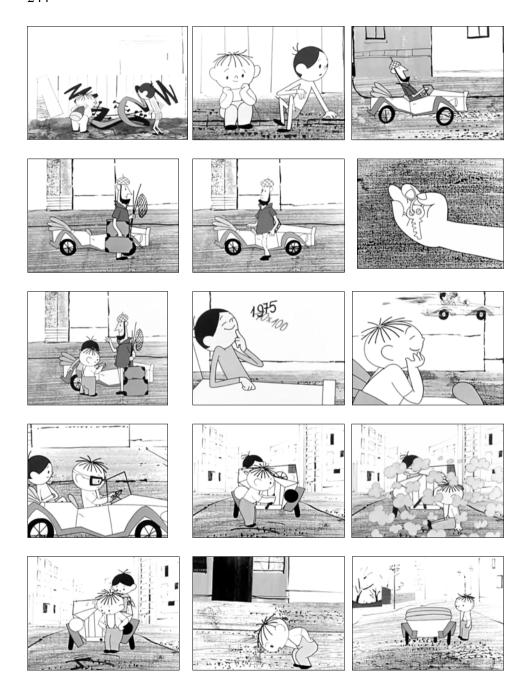












Source: Screenshots from *Bolek and Lolek: First day* of summer holidays, a silent cartoon video (Cartoon studio in Bielsko Biała, director: Władysław Nehrebecki/Alfred Ledwig)