

*Teaching the English active and passive voice with the help of cognitive grammar: An empirical study*

Jakub Bielak

Adam Mickiewicz University, Kalisz, Poland

State School of Higher Professional Education, Konin, Poland

[kubabogu@amu.edu.pl](mailto:kubabogu@amu.edu.pl)

Miroslaw Pawlak

Adam Mickiewicz University, Kalisz, Poland

State School of Higher Professional Education, Konin, Poland

[pawlakmi@amu.edu.pl](mailto:pawlakmi@amu.edu.pl)

Anna Mystkowska-Wiertelak

Adam Mickiewicz University, Kalisz, Poland

State School of Higher Professional Education, Konin, Poland

[mystkows@amu.edu.pl](mailto:mystkows@amu.edu.pl)

Abstract

Functionally-oriented linguistic theories, such as cognitive grammar (CG), offer nuanced descriptions of the meanings and uses of grammatical features. A simplified characterization of the semantics of the English active and passive voice grounded in CG terms and based on the reference point model is presented, as it is the basis of the instructional treatment offered to one of the groups in the quasi-experimental study reported in the paper. The study compares the effects of feature-focused grammatical instruction covering the form and meaning/use of the English voices based on CG with those of teaching based on standard pedagogical grammar rules. The results point to relatively high effectiveness of both instructional options in fostering the use of the target structures in both more controlled and more spontaneous performance, with traditional instruction being more successful than that based on CG with respect to the latter. A possible explanation of this superiority is that the subset of the participants ( $n = 27$ ) exposed to the tradi-

tional explanations found them simple and easy to apply, contrary to the situation in the other group.

*Keywords:* pedagogical application of cognitive grammar, active and passive voice, reference point model, subject, topic

The exact nature of both the immediate and ultimate effects of grammar instruction as well as the mental processes stimulated by it are issues of considerable controversy in SLA and related areas of study. However, most contemporary researchers do agree that such instruction may be of at least limited value for the development of linguistic knowledge, especially of the explicit, conscious kind, and perhaps also for its implicit, unconscious counterpart (e.g., De Graaff & Housen, 2009; DeKeyser, 2000; Doughty, 2003; Larsen-Freeman, 2003; Nassaji & Fotos, 2011). This view is reflected in the fact that most language education programs include some kind of form-focused instruction, which in turn prompts most language teachers to attend to grammatical issues in their classrooms. They may teach grammar in a variety of ways, of which those that involve at least some explicit focus on grammatical form and/or meaning must by necessity make use of descriptions of grammatical elements which are taught. Even though those descriptions are often directly taken from pedagogical grammars, their ultimate origin is in the field of linguistics.

In the majority of cases, the grammatical descriptions informing form-focused instruction derive from the traditional structuralist paradigm, which often neglects the semantic side of grammar by dealing with it only in general terms or ignoring important aspects thereof (Bielak & Pawlak, 2013). Recent years, however, have seen some renewed interest in the insights and pedagogical use of more meaning-oriented theories of language, such as systemic functional linguistics (Halliday & Matthiessen, 2004) or cognitive linguistics (Geeraerts, 2006; Janssen & Redeker, 1999). The contribution to language teaching of the views of language they offer, and, especially, of their descriptions of particular grammatical features, may be particularly valuable when it comes to elucidating the nuances of their meanings and the semantic differences between competing grammatical structures suitable for use in a given situation (cf. Larsen-Freeman, 2002).

The general case for the employment in language teaching of what may be referred to as functional, as opposed to formal, approaches to language has been made elsewhere (Achard, 2004, 2008; Bielak, 2012; Bielak & Pawlak, 2011, 2013; Liamkina & Ryshina-Pankova, 2012; Niemeier & Reif, 2008; Turewicz, 2000; Tyler, 2008; Tyler & Evans, 2001; Williams, Abraham, & Negueruela-

Azarola, 2013) and it will not be presented here in detail. It will suffice to say here that the descriptions of grammatical phenomena grounded in these approaches focus on their meaningfulness and its conceptual motivation, that is, the reasons for/explanations of grammatical meaning in terms of language user cognitions. These may in turn incorporate a variety of factors governing the use of grammatical features including both linguistic and extralinguistic context and the perspective of the speaker. The potential usefulness of pointing such elements of the semantics of grammar to learners has frequently been endorsed in recent years (see e.g., Larsen-Freeman, 2003 and most of the sources listed earlier in this paragraph), but the practical efficacy of doing so has been tackled and tested much less frequently (some recent examples are Bielak & Pawlak, 2013; Król-Markefka, 2010; Tyler, Mueller, & Ho, 2010; White, 2012).

In the cases in which it has been done, the researchers have exposed participants to relatively detailed semantic descriptions of selected grammatical items with the hope of improving and strengthening particular form-meaning mappings making up their linguistic knowledge. Although the results of this research are far from conclusive, it seems that teaching guided by meaning-oriented views of language and its grammar has a certain potential to be effective. The present paper reports and discusses the findings of a study which tested the pedagogic effectiveness of relatively detailed semantic descriptions of the English active and passive voice offered by cognitive grammar (CG; Langacker, 1987, 1991, 2008), which is one of the leading theories within the broader meaning-focused movement of cognitive linguistics. Before the actual findings are considered, the CG characterization of the target structures is provided and the methodology of the study is elucidated, including the nature of the instructional treatments used, one of which drew heavily on the CG descriptions in question.

### Cognitive Grammar Characterization of the English Voice

What distinguishes the theory of CG from other linguistic theories and what will be presently demonstrated is that it seeks to explain language structures and processing in terms of general human cognition. At the outset, it also needs to be noted that the CG characterization of the relevant grammatical items provided here is greatly simplified and includes only these details which are absolutely necessary for the reader to appreciate the nature of the treatment offered to one of the groups which took part in the study reported below. The simplification is primarily dictated by limitations of space (the CG descriptions in their full complexity are offered by Langacker, 1991, 2008). It is, however, also important to acknowledge that as this well-developed theory offers highly detailed, comprehensive analyses of a wide range of grammatical structures of English which make

use of often highly abstract concepts as well as theory-specific terminology and diagrammatic representations, any use of its insights for pedagogic purposes must involve a considerable degree of simplification and modification. In fact, the relatively high degree of the complexity and abstractness of the descriptions the theory produces seems to be one of the major potential drawbacks of CG as a basis of pedagogical grammar (Bielak & Pawlak, 2013).

It is necessary to precede the CG description of the meanings of the English active and passive voice with the presentation of one of the basic cognitive models that the theory evokes to account for different linguistic phenomena, including the two notions which will be of special interest in the present discussion, namely the *subject* and *topic*. In cognitive linguistics, *idealized cognitive models* (Lakoff, 1997) are taken to be mental representations which form on the basis of recurrent patterns of human experience. One of them, schematically depicted in Figure 1, is the so-called *reference point model* (Langacker, 1991). It includes the *conceptualizer* (C; the speaker, the listener) who achieves “mental contact” with the *target* of conception (T), which generally means that the speaker/listener’s attention is being turned to the target (the mental path is symbolized by the dashed arrows). As the figure shows, however, this mental contact is not achieved directly. The essence of the model is that the conceptualizer traces a mental path to a relatively nonsalient entity, the target, with the mediation of a relatively salient element, the *reference point* (R). The target is to be found in a conceptual area referred to as the reference point’s *dominion* (D), which is a range of knowledge associated with the reference point and which may be relatively freely accessed once the reference point itself is conceptualized. In other words, the reference point constitutes a kind of an access point to a certain realm of knowledge called its dominion. The relationship between the reference point and its target is asymmetrical, because in a given situation/context only the former is salient enough to facilitate the establishment of mental contact with the less salient target, while an inverted process is less plausible due to the low salience of the target. As already mentioned, the reference point model, which makes use of our ability to “invoke the conception of one entity in order to establish ‘mental contact’ with another” (Langacker, 2008, p. 83) is evoked in CG to insightfully explain a number of diverse grammatical phenomena such as possessive constructions or pronominal anaphora, but here its usefulness for characterizing two notions of special interest in the present discussion will be presently demonstrated.

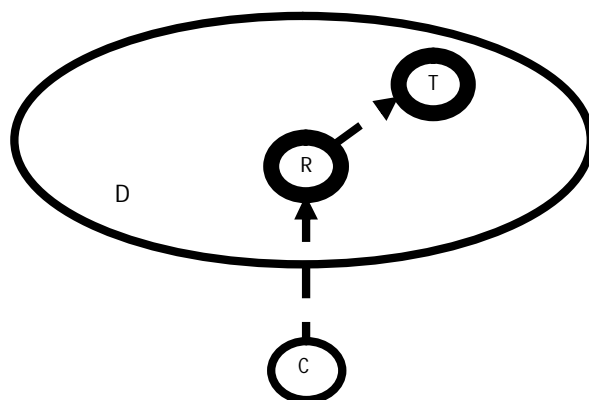


Figure 1 The reference point model (Langacker, 1999, p. 174)

The CG description of the meanings of the two voices needs to include its characterization of a basic grammatical relation or function, namely the *subject*. The reason for this should be obvious: The noun phrases which express the basic “participants” of a situation perform different functions in active and passive sentences, with the active object going to the subject position in the passive and the active subject being moved to the agent phrase introduced by *by* or removed altogether. The subject is seen in CG as a primary relational figure (Langacker, 1991). This means that it is construed as the most salient entity in the conceptualization of the relation between two major participants, this relation being the semantic core of the whole situation coded by a clause. The other elements of the relation, including the object(s) and the process, are some kind of background against which the subject is initially conceived as a figure. Although it will not be of direct relevance for the ensuing discussion, it may be parenthetically mentioned here that the object, which normally expresses the second major participant in a clausal relation, is viewed in CG as a secondary clausal figure (Langacker, 1991). This characterization of the subject clearly foregrounds its affinity with the reference point in the cognitive model introduced earlier, which rests on the fact that both are relatively salient entities easily and strongly attracting the speaker/listener’s attention. For this reason, CG puts some kind of an equation mark between them, claiming that the subject is in fact a reference point facilitating the establishment of mental contact with the whole of the relational situation portrayed by the entire clause (Langacker, 2008). Besides the description of the subject, the present discussion also requires reference to the CG view of the general notion of linguistic *topic*.

In CG, there is a close similarity between the subject and the topic. The former, just as the latter, is claimed to be a reference point understood in terms of the reference point model (Langacker, 1991, 2008). It may be a supraclausal reference

point in terms of which a stretch of discourse longer than a clause or a sentence is interpreted because the reference point facilitates mental contact with the form and content of this portion of discourse. For our immediate purposes, it is more important that, with both the subject and the topic being characterized as salient reference points, there is a tendency for the two roles to conflate, with the effect that in many clauses the entity designated by the subject is the discourse topic, or, at the very least, when there is a different active supraclausal topic, it may be considered as a kind of a local subtopic in an individual clause. In either case, the subject, by virtue of its salience, is the entity which constitutes an access point to the whole situation depicted by the clause, in which it is also a participant.

The above discussion sheds light on the CG view of the function of the grammatical category of voice in general and on its understanding of the difference between the English active and passive voice as well as their use. According to CG, the function of voice is simply the reflection of different configurations of salience (Langacker, 1991, 2008). If focal prominence associated with topicality and reference points falls on the agent, the agent appears in the subject position, also associated with extra salience in comparison with the object and the rest of the clause, which renders an active sentence. Such sentences are the default option in English, because its speakers tend to associate focal prominence with agency. However, if special circumstances such as the status of being highly topical make the patient more salient than the agent, the former appears in the subject position associated with increased focal prominence and the status of a reference point, which gives rise to the construction and use of a passive sentence. In sum, CG evokes the relative salience of situational participants as a factor explaining and governing the use of the active and passive voice in English.

The uses of the two voices are illustrated in Figures 2 and 3, which concern two example sentences taken from Eastwood (1999, p. 132). The first one is *Bell invented the telephone* and is part of an imaginary encyclopedia entry about the inventor Alexander Graham Bell, some other facts about whom were given earlier in it. The second one is *The telephone was invented by Bell* and is part of another conceived encyclopedia entry about one particular device invented by Bell, the telephone, which has also been characterized to a certain extent earlier in the entry. In Figure 2 the conceptualizer first achieves mental contact (symbolized by the thick arrows) with, or turns attention to, Bell, the inventor, who is a reference point due to the salience he has achieved by virtue of being discussed in the preceding part of the entry. This in turn enables the shift of attention to the whole of the situation portrayed by the sentence, which is schematically represented within the ellipse symbolizing the dominion of Bell, with the thin arrow representing the interaction between the two major participants of the situation. One of them, Bell, is included within a heavy-line box, which highlights the extra salience it ini-

tially enjoys, in comparison to the other participant and the situation as a whole, by virtue of being the topic and the subject. Figure 3 is quite similar, the major difference being that mental contact is first achieved with the telephone, which replaces the inventor in the capacity of the reference point and subject thanks to the focal prominence given to it by its being the topic. Attention is then turned to the whole situation, which is part of the dominion of the telephone. The linguistic symbol of the device, the word *telephone*, is included within a heavy-line box to reflect its salience and reference point status. Let us signal at this point that Figures 2 and 3 and their somewhat simplified descriptions based on the ones just presented were used in the treatment offered to one group of participants in the course of the study described in detail later in the paper.

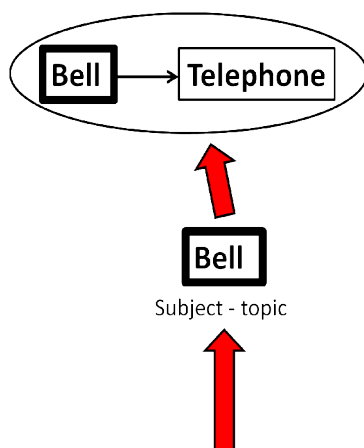


Figure 2 The CG view of the use of reference point model in *Bell invented the telephone*

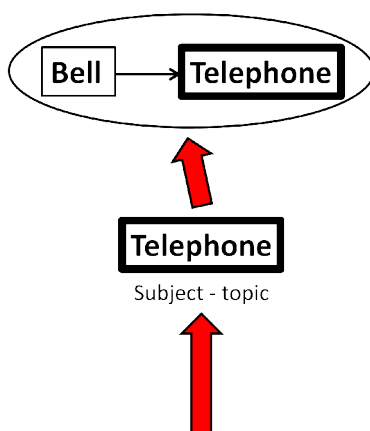


Figure 3 The CG view of the use of reference point model in *The telephone was invented by Bell*

This also pertains to Figure 4, which illustrates the use of the passive voice in sentences such as *Our money was stolen*, which do not include the agent phrase. The speaker may want to forego referring to the agent of the situation for many different reasons (cf. the discussion in the treatment section below) while still talking about the other participant and the situation as a whole, and, among other options, passive sentences such as the one just mentioned make it possible. Assuming the descriptive apparatus of CG, we may explain this use of the passive by claiming that even though a schematic conception of the agent is evoked as part of the conceptualization associated with such sentences (cf. Langacker, 2008), the lack of a more detailed specification concerning its nature and identity make it necessarily less salient not only than the patient, enjoying the status of the primary focal participant, but perhaps also than the relation and interaction between the agent and the patient symbolized by an arrow. This is the reason why the agent fails to be mentioned in the sentence. It also explains why in Figure 4 the box representing the thief (someone) as well as the caption within it are rendered in a pale shade of grey rather than in black. Despite the absence from the figure of the arrows representing the path of mental contact, it goes without saying that the reference point analysis pertains also to the sentence under discussion, a visual trace of it being the heavy-line box around *our money*, standing for the reference point, which is darker than the arrow symbolizing the interaction between the participants. Like every schematic representation, the figure does not explicitly show every nuance of meaning, but it should be remembered that the reference point analysis pertains to and provides insights concerning every instance of the use of the English active and passive voice.

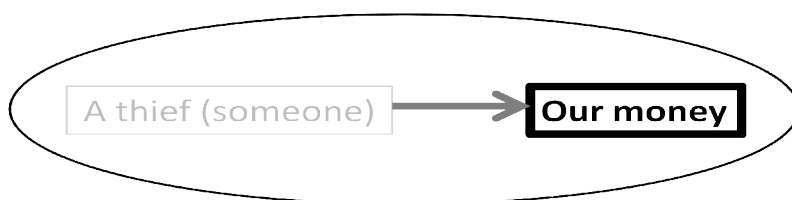


Figure 4 The CG view of the meaning of *Our money was stolen*

### Research Questions and Hypotheses

The research project described below took the form of a quasi-experimental study with a pretest-posttest-delayed posttest design, and it was intended to determine the effectiveness of teaching the English passive and active voice on the basis of grammatical descriptions drawing upon CG and compare it with the effectiveness of teaching based on standard descriptions



of the same grammatical features. More specifically, it was aimed to seek answers to the following two research questions:

1. Does grammar teaching based on descriptions of grammatical features grounded in CG produce significant learning gains in both the short and long run?
2. Is there a difference between the effects of CG-inspired form-focused instruction and the same kind of instruction based on standard pedagogical descriptions in both the short and the long run?

On the basis of the literature and previous research concerning the applicability of functionally-oriented linguistic paradigms to language teaching mentioned earlier in the paper, we came up with two hypotheses which were subject to investigation in the present study. First, we hypothesized that CG-based teaching of the English voices will give rise to significant learner gains in both the short and long run. The second hypothesis was that CG-inspired grammatical instruction will be as or more effective than that employing standard pedagogical descriptions in both the long and the short run.

## Method

As can be seen from Table 1, which presents the research schedule, the pre-test, carried out in Week 1, was followed by the treatment, about 100 min in length, undertaken in two experimental groups in Week 2, an immediate posttest in Week 3, and a delayed posttest and a background questionnaire in Week 4. No control group was involved and only two distinct types of treatment were compared, even though it was initially the intention of the researchers to include a control group.

Table 1 Research procedure

Week	Procedure
Week 1	Pretest
Week 2	Treatment in the traditional and cognitive (100 min)
Week 3	Posttest
Week 4	Delayed posttest followed by a background questionnaire

## Participants

The participants were 27 female students of elementary education with extended instruction in English. They were all in their early 20s, all of Polish nationality with Polish as their L1 and were studying at a university in a mid-

size town in central Poland. In particular, the participants were enrolled in year two of a 3-year BA program, where the primary focus was laid on classes related to various aspects of pedagogy, but the students also had the benefit of numerous classes devoted to English grammar, conversation, writing or integrated skills. They attended two intact groups which were taught a speaking and vocabulary course by one of the present researchers, who also focused on the English passive and active voice during two classes for the purposes of the research project described here. One of the groups was provided with explanations of the target grammar based on CG and was thus called the cognitive group (COG;  $n = 14$ ), and the other had the targeted structures explained in a more standard manner and was thus labeled STAN (STAN;  $n = 13$ ).<sup>1</sup>

Despite certain inevitable differences, the students in the cognitive and standard groups were comparable in terms of their proficiency in English as well as experience in learning the target language, which amounted to 10.62 years for all the participants, ranging from 7 to 14 years. In the case of COG, it stood at 10.14 years (between 7 and 14 years), while in STAN it equaled 11.15 years (between 8 and 14). The mean number of hours of English instruction the participants had received throughout this relatively long period per week was 1.59, 2.63 and 3.73 at the levels of elementary school, junior high school and high school respectively, this data being very similar for both groups. In addition, along with their school education, some participants had attended out-of-school English courses for periods from 1 to 4 years. In COG 6 participants had received some instruction of this sort (4 of them for 1 year, 1 for 2 years, and 2 for 4 years), while in STAN 8 members (3 for 1 year, 4 for 2 years, and 2 for 3 years). When it comes to other forms of extra-curricular exposure to English at the time of the study, 9 participants in COG and 12 in STAN declared they experienced some of it, while 5 participants in COG and only 1 in STAN declared they did not. This exposure was mostly through the media and

---

<sup>1</sup> One of the anonymous reviewers pointed out that the fact of assigning two intact classes to the two experimental conditions justifies the assumption that the results have been influenced by such intervening variables as group dynamics and group cohesiveness and that this problem should have been eliminated by subjecting different halves of the two intact groups to different treatments. The present authors did not even entertain such an idea because the whole study and its instructional interventions were conducted during regularly scheduled university classes and it was not feasible to expect one half of each of the two groups to attend their classes outside of the schedule. It should also be mentioned that, despite certain obvious drawbacks, as Mackey and Gass (2005) write, using intact classes is common in second language research and “may have the advantage of enhancing the face validity of certain types of classroom research. For example, if the effects of a particular instructional method are investigated, an existing classroom may be the most ecologically sound setting for the research” (p. 143).

consisted in listening to and translating English songs and watching English movies and TV. In addition, 1 participant in COG and 1 in STAN said they corresponded in English with people from abroad and 1 participant in COG and 4 in STAN claimed they sometimes talked to English-speaking people (family members, friends and acquaintances) during their stays in Poland. In sum, it seems that the members of STAN had slightly more experience learning and using English than those in COG, but the two groups can still be regarded as comparable in this respect. It should also be pointed out that there was much individual variation in the two groups with respect to the command of English, with some students being much more advanced than others.

The motivation to learn English displayed by the participants was mostly instrumental, with the vast majority mentioning the usefulness of the language when it comes to international communication, job prospects, and their possible emigration as the reasons for learning it. Only 1 participant in COG and 3 in STAN linked their learning of English to their desire to teach it, a somewhat surprising fact given that the university course they were completing was preparing them to become early school teachers qualified to teach English among other subjects. In addition, several participants in both groups declared they simply found English interesting and likable and its learning fun.

### Instructional Treatment

The treatment was delivered (and the whole study conducted) during normally scheduled EFL classes the participants attended as part of their university education by one of the present authors, who was the course instructor.<sup>2</sup> An important piece of information is that all the metalinguistic talk during the treatment in both groups including the metalinguistic parts of corrective feedback, to be mentioned later in the paper, was done in Polish. Another im-

---

<sup>2</sup> As pointed out by one of the anonymous reviewers, the fact that one of the investigators was also an experimenter delivering the treatment may have led to experimenter bias. Despite this drawback, and in particular despite the possibility that the investigator-instructor might have inadvertently favored one of the treatment conditions or groups, the conflation of the investigator and instructor roles in the present study was prompted by its practicality. It must also be added that as the investigator in question was a relatively experienced one, care was taken to conduct the treatment sessions in as impartial a manner as possible with respect to the instructor's attitude towards the treatments as well as towards the two groups of participants. Therefore, the possible effects of experimenter bias may be hypothesized to have been subtle indeed, if at all present. The results of future replication studies involving other experimenters may show if the results of the present study were seriously flawed by experimenter bias (cf. Ryan, 2012).

portant fact is that the participants in both groups were provided with specially prepared handouts including both the tasks done and information discussed in the course of the treatment, with considerable parts of the latter also displayed by means of a Power Point presentation.

To use the terminology employed by Ellis (1997), the treatment in both COG and STAN was feature-focused, in the sense that it was concentrated on a specific grammatical structure (i.e., the English passive and active voice) and the same language data were used, the only difference being the nature of the explanations with which the participants were supplied. In both groups, the students were exposed to and encouraged to analyze passive sentences, reminded of the passive verb forms required by different grammatical tenses (present simple, present progressive, past simple, present perfect), and then provided with the relevant rules concerning the use of active and passive sentences (see Appendices A and B for samples of the materials used). These rules concerned selected reasons for which the speaker or writer may opt for the use of one voice rather than the other in a particular utterance or sentence.

The principles discussed with the two groups concerned two general uses of the English passive (and active), which will become apparent in the following discussion of the rules used with STAN. The rules and the examples used here and in the treatment are taken from the pedagogical grammar by Eastwood (1999, p. 132-134). The presentation of the first principle was done with reference to each of the last sentences in the following two example encyclopedia entries and included the line of reasoning presented below them.

(1) *Alexander Graham Bell*

*A British inventor who went to live in Canada and then the USA. Bell invented the telephone.*

(2) *Telephone*

*An apparatus with which people can talk to each other over long distances. The telephone was invented by Alexander Graham Bell.*

It is quite obvious that the two sentences have different topics in the sense that they are about different things: The one in the first entry is about the inventor, while that in the second entry is about the invention. An English sentence usually begins with the (grammatical) subject, which normally expresses the topic, that is, what the sentence is about. If the topic is the agent, the active voice is used. If, alternatively, the agent is not the topic, this status being instead conferred on the patient, that is, someone/something undergoing an action, the passive voice is used. These two claims may be considered as two subcomponents of the first rule used with STAN.

The second rule concerned other reasons which prompt the use of the passive rather than active voice, exemplified by the following:

- (3) *All our money and passports were stolen.*
- (4) *A man was arrested last night.*
- (5) *The streets are cleaned every day.*
- (6) *Oil has been discovered at the North pole.*
- (7) *This kind of jacket is considered very fashionable these days.*
- (8) *A lot of attempts have been made to find the Loch Ness monster.*

The rule explaining why the passive is used in all the examples is that this voice is employed when the speaker does not want to mention the agent of the action. Some specific reasons for the unwillingness to include the agent are that it does not add any new information (Examples (3)-(4)), it is not important ((5)-(6)) or it is unknown or hard to determine ((7)-(8)).

Before specific reasons why one or the other of the two voices may be selected in a particular situation were discussed with COG, the group was familiarized with the basics of the reference point model. It was done in a way very similar to that described in detail in Bielak (2007), which dispensed with most of the technical CG terminology used when the model was introduced earlier in the present paper with the exception of the term *reference point*. The fine details of the procedure may be found in the aforementioned publication, and here we will just say that the model was introduced with reference to the way one may turn somebody else's attention to particular stars visible in the nighttime sky by first referring to other, more salient (larger, brighter) stars in their vicinity. This part of the treatment in COG made use of a number of pictorial representations, which is also true of the discussion of the relevant rules concerning the use of the voices. While the pictures related to the principles of use were exactly the ones already presented earlier in the paper (Figures 2, 3 and 4), the rules were considerably simplified versions of the CG characterization of the English voice accompanying these pictures. The essence of the metalinguistic instruction given to COG was the order in which we focus attention on the respective participants of a clausal situation as well as the situation as a whole, including the reasons for particular attentional sequences related to topicality and reference point organization, because these are responsible for the use of either active or passive sentences in particular situations. The rules which were discussed with COG in the treatment will not be described here in greater detail, because their expanded versions were already presented in considerable detail in the section including the CG characterization of the English voice.

As already mentioned, the treatment in both groups relied on the same language material and methodological options, with the difference having to

do with the choice of the pedagogical rules provided. It should be noted that in addition to the differences between them transpiring from the above descriptions, the general difference was that while the CG-based treatment attempted to explain why subjects were topics and occurred in sentence-initial positions, the standard treatment made no such attempt. Rather than providing some kind of semantic motivation for the existing state of affairs in a way similar to the CG treatment, it only established a link between subjects and topics and did not provide any justification for it.

In both conditions, the activities described earlier in the present section, which included the presentation of and reflection on the relevant rules, were partially interspersed with and partially followed by a practice phase, in which the participants were first invited to attend to the form-meaning mappings with the help of input-based activities (i.e., input-flood, input enhancement and structured input referential activities) and then to engage in the performance of output-oriented activities, both those involving text-manipulation (i.e., controlled, traditional exercises such as paraphrasing) and text-creation activities (i.e., such that were semi-communicative in the sense that students were encouraged to produce their own sentences with the use of the targeted features (see Appendices A and B, for samples of the materials used). At all stages, the students were also provided with corrective feedback which was both input-based, taking the form of recasts (i.e., corrective reformulations of incorrect utterances which preserve the communicative intention of the speaker, and do not get in the way of meaning and message conveyance), and output-based, in the form of clarification requests and elicitations that prompted the students to attempt self-corrections, often with the assistance of metalinguistic comments and discussions of the correct answers. Therefore, with the exception of the explanations which were given to the participants (i.e., couched in standard or CG terms), the intervention in both conditions can be said to have by and large implemented the PPP (presentation–practice–production) format, with explicit instruction in the form of deduction and induction being followed by controlled practice, both comprehension-based and production-oriented in nature, and relatively free practice, which involved the production of the passive and active voice in real time. The amount of time devoted to the treatment was comparable in both groups and amounted to about 100 min (i.e., one entire 90-min class as well as the beginning of another).

### Data Collection and Analysis

In order to assess the impact of the treatment on the participants' ability to use the targeted structures in different context, a written and an oral test were administered as pretests, immediate and delayed posttests, with a split block

technique being used (i.e., the test that was used as a pretest in one group was used as a posttest in the other and then, yet again, as the delayed posttest).<sup>3</sup> The written test was mostly aimed to tap into the participants' explicit or declarative knowledge, or such that is conscious in nature and can be drawn upon when there is sufficient time (Ellis 2009).<sup>4</sup> It required the students to come up with a description of a house located in a major city in the USA, and consisted of 7 sentences that were to remain in the original form (e.g., *The house I want to describe is very interesting*) and 25 prompts which the participants were supposed to use as a basis for producing sentences in the active and passive voice (e.g., *buy / a young couple from Boston / the house / two months ago*; see Appendix C for the sample test form). Even though the students were allowed 30 min to complete the task, two of them were given an additional 10 min to perform it. One of the researchers also answered questions regarding unknown vocabulary, the need to produce a continuous text or separate sentences, the order of words in the sentences as well as the possibility of adding words that were not included in the script. The texts that the participants produced were scored in two different ways to reflect the possibly different degrees of the participants' mastery of the form and meaning/use dimensions of the target structures.

The reason for focusing on the form, meaning and use in the tests was that the treatment in both groups concerned primarily meaningful use of active and passive voice, but it also focused on the form of the two voices in several tenses. Two distinct scoring schemes were used, which amounted to the effective creation and use of two different tests in both modes giving different weights to the knowledge of the meaning/use of the target structures, on the one hand, and their form on the other. The first test, which was called the form, and meaning/use test put much more emphasis on the form than on the meaning/use of the English passive and active voice. The second one, called the thematic structure test, focused primarily on the meaning/use dimension rather than on form. The numbers of points awarded per one test item under the two scoring schemes were as follows:

---

<sup>3</sup> The design and nature of the data collection instruments used in this study, as well as the scoring schemes that may be used, are described in great detail in Bielak, Pawlak, and Mystkowska-Wiertelak (in press). The present section includes only the most important information.

<sup>4</sup> The authors are fully aware of the fact that the concepts of explicit and implicit knowledge may not be synonymous with the notions of declarative and procedural knowledge (DeKeyser, 2007, 2009) as well as of the fact that the development of implicit knowledge may be constrained by the impact of age or the instructional context, with the effect that, in the case of postpubescent learners struggling to acquire the target language in a foreign language context, it is perhaps more warranted to talk about highly automatized declarative knowledge that can be employed under real-operating conditions (DeKeyser, 2009; DeKeyser & Juffs, 2003).

1. The form and meaning/use test:
  - 3 points if obligatory occasion was created<sup>5</sup> and passive form (the correct form in the correct tense) and meaning/use (the correct voice) were provided;
  - 2 points if obligatory occasion was created and a single inaccuracy with respect to form, tense, or meaning/use occurred, for example *The garden was designed Ø Japanese gardeners* (form), *The house was rebuilt ...* (form), *The house was built by builders in 1989* (meaning/use);<sup>6</sup>
  - 1 point if obligatory occasion was created and two inaccuracies of the above sort were present, for example *The house was rebuilt by builders in 1989* (form and meaning/use);
  - 0 points if no obligatory occasion was created or if more than two inaccuracies of the above sort occurred.
2. The thematic structure test (in contrast to the previous scheme, neither the use of a wrong tense nor any other problems with form, as long as it was clear which voice was used, was penalized; the right thematic structure, i.e., the presence or otherwise and the order of noun phrases and the verb was assessed):
  - 2 points if obligatory occasion was created, which was tantamount to the presence of a verb, and if the order of noun phrases and the verb was correct, for example *A few builders killed during construction*;
  - 1 point if obligatory occasion was created and a single inaccuracy with respect to thematic structure occurred, or if a lexical verb was absent, for example *During construction a few builders killed something* (thematic structure), *Saw the house 20 people* (thematic structure), *The house was in 1989* (lexical verb absent);
  - 0 points if no obligatory occasion was created, or if obligatory occasion was created but two or more inaccuracies with respect to thematic structure occurred, for example *Two months ago a young couple from Boston bought the house*.

---

<sup>5</sup> The use of the term *obligatory occasion* should not be taken to mean that obligatory occasion analysis of the sort used by Brown (1973) was employed. Two major differences between obligatory occasion analysis and the scoring used here is that the former analyzes spontaneous utterances and does not penalize participants for not creating obligatory occasions, while the latter concerns relatively highly constrained utterances and does penalize for not creating obligatory contexts.

<sup>6</sup> Here and in the remaining examples of erroneous responses the errors are underlined.



The two schemes were intended to be used in scoring both the written and the oral test, but, ultimately, only the written test was scored by means of both.

For the oral test, only the first scheme was used because it seemed that in this test, possibly under the influence of the treatment, and particularly its linguistic examples, which included many more instances of passive sentences in comparison with active ones, numerous participants employed a special guessing strategy which made them use only or mostly the passive in their responses.<sup>7</sup> This guessing-like behavior resulted in unduly inflated scores for these participants on the posttests in the case of the thematic structure test, where the mere decision to use one voice rather than another might have earned one a large number of points for a given test item.

In contrast to the written test, the aim of the oral one was to tap the participants' implicit, or highly automatized, explicit knowledge, or such that is available for use when striving to attain communicative goals under real operating conditions. The task was similar to the one on the written measure but it was a little shorter, there was a short training session before it, a time limit was imposed, the students were given 1.5 min to familiarize themselves with the requisite lexis and to ask questions about unknown vocabulary items, and they were requested to complete the task in 6 min, with most of them finishing the task after about 5 min. The performance of the task was audio-recorded with the help of voice recorders placed before the participants and subsequently the transcripts of their performance were used in the scoring phase. In both tasks, the means were calculated and the statistical significance of the observed differences was determined by means of performing independent (for between-group comparisons) and paired samples (for within-group comparisons) *t* tests, a statistical procedure that appears to be appropriate in cases where only two groups are involved. In addition, effect sizes were calculated and expressed in *etas squared* for all the differences which were investigated.

## Findings

As can be seen from Figure 5 and Tables 2 and 3, which present the means and *t*-test values for the written form and use pretest, immediate and delayed posttests, not only was STAN better than COG at the very beginning (a difference of 3.09), but this initial advantage was maintained on the immediate (a difference of 6.24) and the delayed posttest (a difference of 5.21), with the caveat that none of these divergences turned out to be statistically significant

---

<sup>7</sup> For details of the issue of guessing and the possible preventive and corrective measures, see Bielak, Pawlak and Mystkowska-Wiertelak (in press).

( $p > .05$ ; their magnitudes were moderate, as indicated by the eta squared effect size values ranging between .06 and .12).<sup>8</sup> Far more conclusive are the results of the analysis of the progress that the students in both groups made over the course of the treatment and the pattern is almost identical. To be more specific, the mean in STAN increased by 19.15 from the pretest to the immediate posttest and then decreased by 10.62 on the delayed posttest, with the pretest-delayed posttest difference amounting to 8.53, which indicates that some of the instructional gains were maintained over time. The mean in COG rose by 16.00 from the pretest to the immediate posttest, only to drop by 9.57 on the delayed posttest, with part of the initial advantage being carried over to the last test, as is evident in the difference of 8.53 between the pretest and the delayed posttest. It should also be emphasized that all of these differences reached statistical significance and their magnitudes were very large (all etas squared were much higher than .14, ranging between .40 and .82).

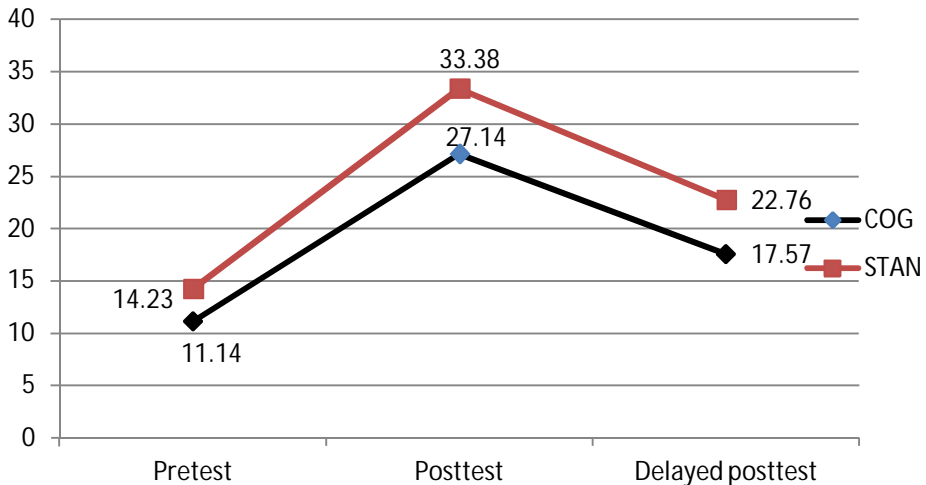


Figure 5 The results of the written form and meaning/use test

Table 2 The means and independent samples *t* tests for the written form and meaning/use test (between groups)

Test	COG ( <i>n</i> = 14)		STAN ( <i>n</i> = 13)		<i>t</i>	<i>p</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Pretest	11.14	7.20	14.23	4.72	-1.30	.20	.06
Posttest	27.14	8.30	33.38	9.18	-1.85	.07	.12
Delayed posttest	17.57	9.18	22.76	9.45	-1.44	.16	.08

<sup>8</sup> Cohen's (1988) guidelines were used for the interpretation of eta squared effect sizes according to which .01 = small effect, .06 = medium effect, and .14 = large effect.

Table 3 The means and paired samples *t* tests for the written form and meaning/use test (within groups)

Group	Pretest		Posttest		Delayed posttest		Test pair	<i>t</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
COG ( <i>n</i> = 14)	11.14	7.20	27.14	8.30	17.57	9.18	Pre-Post	-7.36***	.80
							Post-Del	7.83***	.82
							Pre-Del	-2.98*	.40
STAN ( <i>n</i> = 13)	14.23	4.72	33.38	9.18	22.76	9.45	Pre-Post	-7.18***	.81
							Post-De	4.57**	.63
							Pre-Del	-3.47**	.50

\**p* < .05\*\**p* < .01\*\*\**p* < .001

As illustrated in Figure 6 and Tables 4 and 5, the patterns observed on the written form and meaning/use test were to a large extent mirrored on the written thematic structure test, with the caveat that the differences between STAN and COG were much smaller throughout the study. Given that, it is not surprising that no one of them proved to be statistically significant and that they were all of small or very small magnitudes (etas squared ranged between .0007 and .01). More precisely, the mean for COG was mere 0.66 higher than for STAN and the difference deviated much from this value neither on the immediate nor the delayed posttest, amounting to 0.39 on the former and 1.16 on the latter. The pattern for the improvement of the participants in the two groups is also almost identical to that which could be observed on the written form and meaning/use test. For one thing, the means in both STAN and COG increased from the pretest to the immediate posttest, by 6.84 and 6.57, respectively, with both of these gains being significant and of large magnitude (etas squared amounting to .35 and .46 respectively). This was followed by a slight drop in both STAN (2.84) and COG (2.07), with the difference between the posttest and delayed posttest scores reaching significance and being of large magnitude (eta squared = .33) in COG, but not in STAN (no significance and the magnitude was moderate; eta squared = .10). Importantly, in both groups some of the instructional gains were retained, as evidenced by the pretest-delayed posttests differences of 4.00 in STAN and 4.50 in COG, both of which were significant and of large magnitude (etas squared amounting to .35 and .32, respectively).

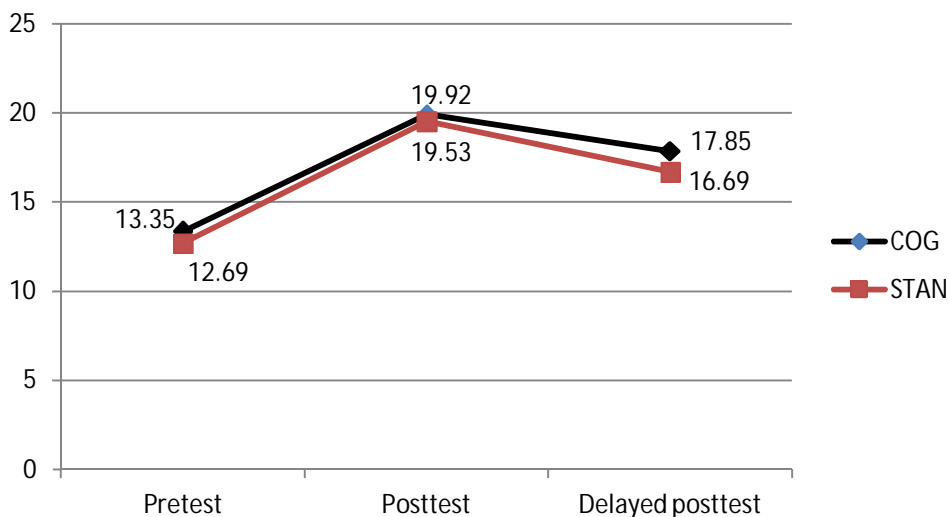


Figure 6 The results of the written thematic structure test

Table 4 The means and independent samples *t* tests for the written thematic structure test (between groups)

Test	COG ( <i>n</i> = 14)		STAN ( <i>n</i> = 13)		<i>t</i>	<i>p</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Pretest	13.35	4.48	12.69	3.61	0.42	.67	.007
Posttest	19.92	6.25	19.53	7.78	0.14	.88	.0007
Delayed posttest	17.85	5.73	16.69	6.34	0.50	.62	.01

Table 5 The means and paired samples *t* tests for the written thematic structure test (within groups)

Group	Pretest		Posttest		Delayed posttest		Test pair	<i>t</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
COG ( <i>n</i> = 14)	13.35	4.48	19.92	6.25	17.85	5.73	Pre-Post	-3.38**	.46
							Post-Del	2.56*	.33
							Pre-Del	-2.49*	.32
STAN ( <i>n</i> = 13)	12.69	3.61	19.53	7.78	16.69	6.34	Pre-Post	-2.59*	.35
							Post-Del	1.19	.10
							Pre-Del	-2.56*	.35

\**p* < .05

\*\**p* < .01

An interesting finding is that although all the effect sizes for the progress of both groups on the two written measures were similar in that they pointed to very large magnitudes of the learning gains, the ones for the form and mean-

ing/use test were much higher than those for the thematic structure test. In particular, the treatment explained as much as 80% of the variance in the immediate posttest scores in COG and 81% in STAN on the form and meaning/use measure, but only 46% and 35%, respectively, on the thematic structure test. Similarly, the intervention conditions accounted for 40% of the variance in the delayed posttest scores in COG and 50% in STAN on the form and meaning/use test, but considerably less, namely 32% and 35%, respectively, on the thematic structure test. From these figures it transpires that the magnitude of the gains on the test focusing mostly on the accurate form of the target structures was sometimes approximately double that on the test focusing primarily on the meaning and use dimension, and it was larger by at least 8 percentage points.

As can be seen from Figure 7 and Tables 6 and 7, the situation on the oral test, which for the most part can be regarded as a form and meaning/use test, does not mirror that on the written tests because the differences between the two groups did reach significance in the course of the study. Even though STAN was superior to COG at the very outset, the difference of 2.46 did not reach statistical significance and was of small magnitude ( $\eta^2 = .04$ ). However, it rose to 8.21 on the immediate posttest and decreased only marginally to 6.72 on the delayed posttest, with both of these values reaching statistical significance and being of large magnitude ( $\eta^2 = .15$  in both cases). At the same time, the participants in both groups did make headway after the treatment and the initial gains were, at least in part, maintained over time, with all the differences between the three tests being significant and of large or even very large magnitude ( $\eta^2$  ranged between .33 and .69). In the case of STAN, the mean rose by 14.39 from the pretest to the immediate posttest, then it decreased by 4.85 on the last test, but the improvement from the pretest to the delayed posttest was still considerable and significant, amounting to 9.54. As to COG, the initial increase in the mean equaled 8.64, which was followed by a drop of 3.36, with the effect that the pretest-delayed posttest difference stood at 5.28 and was as well significant. Apart from the self-evident difference in performance between STAN and COG, what is also interesting is the large magnitude of the gains in both groups, which is surprising in view of the fact that the task was expected to place great demands on the participants by tapping primarily their implicit knowledge of the targeted structure.

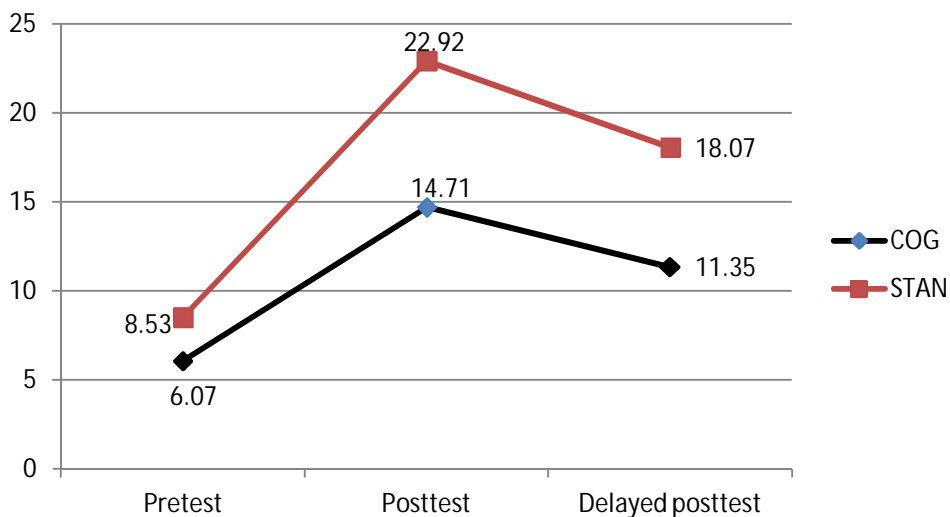


Figure 7 The results of the oral form and use test

Table 6 The means and independent samples *t* tests for the oral form and meaning/use test (between groups)

Test	COG ( <i>n</i> = 14)		STAN ( <i>n</i> = 13)		<i>t</i>	<i>p</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Pretest	6.07	5.48	8.53	6.21	1.09	.28	.04
Posttest	14.71	9.98	22.92	9.29	-2.07	.04	.15
Delayed posttest	11.35	8.17	18.07	8.19	-2.13	.04	.15

Table 7 The means and paired samples *t* tests for the oral form and meaning/use test (within groups)

Group	Pretest		Posttest		Delayed posttest		Test pair	<i>t</i>	Effect size (eta squared)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
COG ( <i>n</i> = 14)	6.07	5.48	14.71	9.98	11.35	8.17	Pre-Post	-4.83***	.64
							Post-Del	2.57*	.33
							Pre-Del	-3.60**	.49
STAN ( <i>n</i> = 13)	8.53	6.21	22.92	9.29	18.07	8.19	Pre-Post	-5.18***	.69
							Post-Del	4.18**	.59
							Pre-Del	-3.87**	.55

\**p* < .05

\*\**p* < .01

\*\*\**p* < .001

## Discussion

Although the results of the study have to be regarded with considerable circumspection, particularly in view of the fact that it suffers from rather serious limitations, they still provide a basis for an attempt to address the research questions and to shed light on the contribution of instruction drawing upon standard descriptions of grammar structures and those grounded in CG to the development of learners' linguistic knowledge. When it comes to the first research question, concerning the effectiveness of grammar teaching which draws on CG-based descriptions, it appears that instruction of this kind was beneficial for the growth of both explicit and implicit knowledge. This is because the COG participants' pretest-immediate posttest gains turned out to be statistically significant, with much of the advantage being retained over time and the differences in means between the pretest and the delayed posttest reaching significance, which testifies to the durability of the intervention. This conclusion is supported by the fact that for all of these gains the effect sizes were large or very large, with the treatment accounting for between 32% and 80% of the variance in scores. Thus, it seems that the results of the study do not provide grounds for the rejection of the hypothesis established on the basis of the relevant literature that CG-based grammatical instruction produces significant learner gains in both the short and long run.

The conclusions are perhaps somewhat less optimistic for the proponents of the use of CG-grounded descriptions in language pedagogy in the case of the second research question, which concerned the comparison of the effects of such a pedagogic intervention with those of treatment relying upon explanations of grammar structures found in popular, standard pedagogical grammars. This is related to the fact that although the results of STAN and COG were comparable on the two written tests, both in the short and long run, with none of the differences being significant, the students in STAN outperformed those in COG on the oral test, both on the immediate and the delayed posttest, with the differences reaching statistical significance and being of large magnitude. It could thus be argued that the two types of intervention were by and large equally efficacious when it comes to the development of explicit knowledge, but standard descriptions could be regarded as offering a better foundation for the growth of implicit knowledge, or, perhaps, as DeKeyser (2007, 2009) would have it, the automatization of explicit, declarative knowledge, in this case of passive and active constructions. Thus, in the light of the present results, the second hypothesis we put forward, that CG-inspired instruction is at least as effective as that based on standard pedagogical descriptions in both the long and the short run, cannot be rejected when it

comes to explicit grammatical knowledge, but must be discarded with reference to implicit (or highly automatized explicit) knowledge.

The findings under discussion may also be taken to indicate that the ways in which grammar structures are presented to learners may not be of crucial significance, particularly when it comes to the mastery of relevant rules and the ability to employ them in controlled processing in situations when there is ample time to contemplate the responses. While instruction based on CG may, as suggested by its supporters, be more meaningful and therefore induce deeper levels of processing, drawing upon more widespread, standard descriptions may be more appealing to learners because it is in many cases simpler, less convoluted, more concrete in terms of rules of thumb, and, what may be especially relevant, familiar to learners. In consequence, what matters more is perhaps the entire instructional sequence, which, apart from the appropriate initial explanations, has to provide students with sufficient practice opportunities as well as carefully targeted, timely and properly supplied corrective feedback.<sup>9</sup>

If this is indeed the case, then a question arises why the participants in STAN did better than those in COG on the oral test, intended as a measure of implicit knowledge, particularly in view of the fact that the practice phase was identical in both cases. A plausible, although clearly not fully satisfactory, explanation could be that the standard descriptions and rules, despite being somewhat more restricted in scope, were easier to apply in controlled and later more communicative practice, thereby leading to superior use of the targeted structures in a task that emulated real-operating conditions to some extent. A related explanation, also offered in the study by Bielak and Pawlak (2013) in which the pedagogical usefulness of CG and standard explanations was also compared, is that the participants, given their long history of previous English instruction, were already familiar with (large parts of) the standard rules.<sup>10</sup> Therefore, the treatment offered to STAN may have consolidated that prior knowledge among its members, while the novel CG treatment may have constituted an extra challenge to COG, may have confused them, or may have been perceived as unnecessary. What is more, these negative outcomes may have been especially potent during oral performance, with no time to ponder the full significance of the CG treatment. The fact that there was a lot of individual variation among the participants with respect to their level of

---

<sup>9</sup> This is related to the remark by one of the anonymous reviewers that any type of instruction might have resulted in satisfying results. The present authors take it to mean that roughly any type of high quality explanations followed by the practice phase used in this study might have been effective. This possibility has just been suggested in the course of the discussion and it is obviously an empirical issue that should be investigated, as claimed in the conclusion section.

<sup>10</sup> This explanation was also suggested by one of the anonymous reviewers.



advancement is also important in this context. The reason is that the relatively high complexity and novelty of the CG treatment may have been especially detrimental to the progress of less advanced learners in COG, with lower level learners in STAN not affected in the same way by their rather simple and perhaps even already familiar treatment.

What may also lend credence to the tentative explanation offered above making reference to the relative simplicity of the standard treatment is the fact that the descriptions and rules utilized in it were also to a certain extent meaning-oriented. After all, they referred to the notion of linguistic topic, even if, contrary to the CG-based rules, they did not attempt to explain the link between topics and subjects. This is what makes these standard rules different from the standard pedagogic descriptions which are usually contrasted with those offered by functional/cognitive linguistics with the aim of testing the pedagogic effectiveness of both. A tentative conclusion then may be that we might expect some superiority of descriptions based on functional linguistics over standard ones specifically if the latter are devoid of semantic considerations to an especially high degree. An example of such a grammatical principle is the standard prescription offered by most pedagogical grammars to use infinitives after certain verbs and gerunds (*-ing* participles) after others, which is not accompanied by any semantic rationale.

One more possible explanation for the comparative ineffectiveness of the CG treatment when it comes to the oral measure suggested is the layout of the reference point illustrations in Figures 3 and 4.<sup>11</sup> They display the entity corresponding to the subject of the passive sentence on the right and the agent on the left, and this configuration obviously does not reflect the actual word order of passive sentences. Visually representing the passive as a reference point phenomenon in this way may thus confuse learners with respect to word order. As it is possible that pictorial representations are evoked by learners as mnemonic devices especially frequently in more spontaneous language use because there is no time for drawing upon more sophisticated knowledge structures, this would explain why the possible negative influence of the pictures manifested itself on the oral test and not on the written ones.

An intriguing issue concerns the reasons why the students in both STAN and COG should have made such spectacular progress on the oral test, even though the intervention focused on their understanding of the use of the two voices, thus, presumably, catering to the development of explicit rather than implicit knowledge. While it could be said that this is the effect of the format of practice that followed the standard and CG-based explanations, this is highly

---

<sup>11</sup> This explanation was suggested by one of the anonymous reviewers.

unlikely given that the entire treatment was confined to about 100 min in both cases. This phenomenon is perhaps better explained in terms of the practice effect since, even though the prompts in the oral task were different from those in the written task, the operations to be performed were essentially the same, with the exception that time pressure constituted an important factor in the former. In addition, some of the phrases which appeared in the exercises or on the written tests could have been memorized as entire chunks (e.g., *the university was surrounded, the house was located*) rather than rule-based, and used as such in spontaneous performance. Another plausible explanation is the use of the guessing strategy mentioned earlier, which, even though not employed to such a great extent in the form and meaning/use oral test as in the thematic structure test, may still have played a significant role and inflated some participants' scores on the oral test.

What also deserves a brief explanation is the relatively large difference between the magnitudes of the learning gains of both groups on the form and meaning/use test on the one hand and the thematic structure test on the other. What may account for this finding is the possibility that the participants benefited more from the practice phase of the treatment than from the presentation of the semantics and pragmatics of the target structures. This explanation would then be compatible with our earlier remark that what may be more important than the nature of grammatical principles used in form-focused instruction is the whole pedagogical sequence with enough opportunities for practice and suitable feedback.

### Conclusions

What surely has to be kept in mind when attempting to account for the findings reported above are the limitations of the study, some of which are quite serious and may have impacted its validity. The most obvious is the failure to include a control group, which, in spite of the initial intentions of the researchers, proved to be impossible for logistical reasons, and makes it difficult to unambiguously attribute the gains observed to the presence and nature of the pedagogic intervention rather than some extraneous variables. Although the magnitude of the instructional gains in both groups is such that it would be unreasonable to deny the positive role of the treatment, and although the study was relatively short (4 weeks) and conducted in a foreign rather than second language setting so that the likelihood of much incidental learning seems rather low, the design is clearly a weakness which calls for considerable caution when interpreting the data. A related problem, which, however, can be observed in many similar studies, is the brevity of the treatment

(ca. 100 min), a shortcoming which has to be taken into account, for example, when elucidating the causes of the unexpected progress of the participants in STAN and COG on the oral task. While, without doubt, the results would have been more credible had the intervention lasted much longer, this is the price to be paid for doing research in real classrooms where time is a precious commodity and unexpected scheduling problems are bound to occur, and, perhaps, the ecological validity ensured by such conditions is invaluable in and of itself. Finally, what could be questioned is the extent to which the tests used in the present study are indeed appropriate measures of explicit and implicit knowledge, particularly in view of the claims that specially designed batteries of tests should be employed for this purpose (cf. Ellis et al., 2009). As was demonstrated by some of the authors (e.g., Mystkowska-Wiertelak & Pawlak, 2012), however, some of those tests are not free from flaws and it would seem that operationalizing the two types of language knowledge in terms of the presence of time pressure and the need for spontaneous use of a specific structures is justifiable (cf. Pawlak, 2012).

Although the results of the study do not suggest that the meaning-oriented rules based on CG, with their focus on the conceptual motivation behind and the nuanced descriptions of the meanings of the English active and passive voice, are superior to standard structuralist descriptions, they do show that CG descriptions may be at least as effective, particularly when it comes to the use of the target structures in a controlled manner. And even in the case of more spontaneous oral performance, although the gains of the learners exposed to CG-inspired instruction turned out to be lower than those of the learners taught in a standard manner, the effectiveness of the former option cannot be questioned. A question then arises whether teaching based on CG is a viable option to be used in the language classroom. Our response would be that uncritically embracing this kind of teaching would be premature, but that some teachers at least might judiciously select certain of its elements and try to use them in their classrooms in order to complement the standard rules, especially if they do not seem to be effective in a particular situation, or to introduce variety. What supports this is the possibility implied by the preset study that the nature of grammatical explanations may be less important than practice and corrective feedback.

Given the general case for meaning-focused grammatical instruction, let us speculate, however, that the effectiveness of CG-based rules might benefit from their more widespread use in language pedagogy. If they were to be used to introduce to learners the meaning and use of a wider range of grammatical features, this would surely make students more comfortable with certain concepts and descriptive tools recurring in CG such as the reference point model,

which might in turn favorably affect the pedagogic utility of the theory and its descriptions. Obviously, this is just an assumption which should be subject to rigorous empirical examination. As the effectiveness of the CG-inspired formulations tested in this study has turned out to be to a large extent comparable to the effectiveness of those usually employed, the results may be taken as rationale for this kind of research, which should additionally focus on learners at different levels of advancement as well as on the teaching and learning of different grammatical structures. What should also be investigated in future research is how form-focused instruction which does not include any explicit explanation of the semantics of grammatical features and is based mostly on practice and corrective feedback compares to teaching utilizing grammatical explanations, including those inspired by CG. An example of such research would be a study similar to the present one, but the design of which would include, in addition to COG and STAN, another experimental group exposed only to the practice/feedback phase of the treatment, as well as a control group exposed to no instruction at all. Research experimenting with the nature of CG descriptions used would also be welcome, including investigating the impact of reversing the order of the agent and patient in Figures 3 and 4 so that they mimic the word order of passive sentences. In addition, recalling the tentative conclusion that CG descriptions might turn out to produce better gains than standard ones if the latter are such that they blatantly neglect semantic considerations, it seems that studies involving such standard rules are needed.

## References

- Achard, M. (2004). Grammatical instruction in the Natural Approach: A Cognitive Grammar view. In M. Achard & S. Niemeier (Eds.), *Cognitive linguistics, second language acquisition, and foreign language teaching* (pp. 165-194). Berlin: Mouton de Gruyter.
- Achard, M. (2008). Teaching construal: Cognitive pedagogical grammar. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 432-455). New York: Routledge.
- Bielak, J. (2007). Applying Cognitive Grammar in the classroom: Teaching English possessives. In M. Pawlak (Ed.), *Exploring focus on form in language teaching* (Special issue of *Studies in Pedagogy and Fine Arts*) (pp. 113-133). Poznań: Faculty of Pedagogy and Fine Arts, Adam Mickiewicz University.
- Bielak, J. (2012). Cognitive grammar in the service of teaching linguistic flexibility and creativity. In H. Lankiewicz & E. Wąsikiewicz-Firlej (Eds.), *Informed teaching: Premises of modern foreign language pedagogy* (pp. 155-173). Piła: Państwowa Wyższa Szkoła Zawodowa im. Stanisława Staszica.
- Bielak, J., & Pawlak, M. (2011). Teaching English tense and aspect with the help of cognitive grammar: An empirical study. *Studies in Second Language Learning and Teaching*, 1, 365-400.
- Bielak, J., & Pawlak, M. (2013). *Applying Cognitive Grammar in the foreign language classroom: Teaching English tense and aspect*. Heidelberg: Springer.
- Bielak, J., Pawlak, M., & Mystkowska-Wiertelak, A. (in press). Testing the meaning and use of grammar: Beyond grammatical accuracy. In Ł. Salski & W. Szubko-Sitarek (Eds.), *Perspectives on foreign language learning*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Brown, R. (1973). *A first language: The early stages*. Cambridge, MA: Harvard University Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- De Graaff, R., & Housen, A. (2009). Investigating the effects and effectiveness of L2 instruction. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 726-755). Malden, MA: Wiley-Blackwell.
- DeKeyser, R. M. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition*, 22, 499-533.
- DeKeyser, R. M. (2007). Skill acquisition theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 97-113). Mahwah, NJ: Lawrence Erlbaum.

- DeKeyser, R. M. (2009). Cognitive-psychological processes in second language learning. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 119-138). Malden, MA: Wiley-Blackwell.
- DeKeyser, R. M., & Juffs, A. (2005). Cognitive considerations in L2 learning. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 437-454). Mahwah, NJ: Lawrence Erlbaum.
- Doughty, C. J. (2003). Instructed SLA: Constraints, compensation, and enhancement. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 256-310). Oxford: Blackwell.
- Eastwood, J. (1999). *Oxford practice grammar* (2nd ed.) Oxford: Oxford University Press.
- Ellis, R. (1997). *SLA research and language teaching*. Oxford: Oxford University Press.
- Ellis, R. (2009). Measuring implicit and explicit knowledge of a second language. In R. Ellis, S. Loewen, C. Elder, R. Erlam, J. Philp, & H. Reinders (Eds.), *Implicit and explicit knowledge in second language learning, testing and teaching* (pp. 31-64). Bristol: Multilingual Matters.
- Ellis, R., Loewen, S., Elder, C., Erlam, R., Philp, J., & Reinders, H. (Eds.) (2009). *Implicit and explicit knowledge in second language learning, testing and teaching*. Bristol: Multilingual Matters.
- Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design*. New York: Routledge.
- Geeraerts, D. (Ed.) (2006). *Cognitive linguistics: Basic readings*. Berlin: Mouton de Gruyter.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Edward Arnold.
- Janssen, T., & Redeker, G. (Eds.) (1999). *Cognitive linguistics: Foundations, scope, and methodology*. Berlin: Mouton de Gruyter.
- Król-Markefka, A. (2010). *Metalinguistic knowledge and the accurate use of English articles: The effects of applying Cognitive Grammar in second language teaching* (Unpublished doctoral dissertation). Uniwersytet Jagielloński, Kraków.
- Lakoff, G. (1987). *Women, fire and dangerous things*. Chicago: Chicago University Press.
- Langacker, R. W. (1987). *Foundations of cognitive grammar*. Vol. 1: *Theoretical prerequisites*. Stanford: Stanford University Press.
- Langacker, R. W. (1991). *Foundations of cognitive grammar*. Vol. 2: *Descriptive applications*. Stanford: Stanford University Press.
- Langacker, R. W. (2008). *Cognitive grammar: A basic introduction*. Oxford: Oxford University Press.
- Larsen-Freeman, D. (2002). The grammar of choice. In E. Hinkel & S. Fotos (Eds.), *New perspectives on grammar teaching* (pp. 103-118). Mahwah, NJ: Lawrence Erlbaum.

- Larsen-Freeman, D. (2003). *Teaching language: From grammar to grammaring*. Boston: Thomson and Heinle.
- Liamkina, O., & Ryshina-Pankova, M. (2012). Grammar dilemma: Teaching grammar as a resource for making meaning. *The Modern Language Journal*, 96, 270-289. doi: 10.1111/j.1540-4781.2012.01333.x
- Mystkowska-Wiertelak, A., & Pawlak, M. (2012). *Production-oriented and comprehension-based grammar teaching in the foreign language classroom*. Heidelberg: Springer.
- Nassaji, H. & Fotos, S. (2011). *Teaching grammar in second language classrooms: Integrating form-focused instruction in communicative context*. Routledge: New York.
- Niemeier, S., & Reif, M. (2008). Making progress simpler? Applying cognitive grammar to tense-aspect teaching in the German EFL classroom. In S. de Knop & T. De Rycker (Eds.), *Cognitive approaches to pedagogical grammar* (pp. 325-356). Berlin: Mouton de Gruyter.
- Pawlak, M. (2012). Variability in the use of implicit knowledge: The effect of task, level and linguistic form. In E. Piechurska-Kuciel & L. Piasecka (Eds.), *Variability an stability in foreign and second language learning contexts* (pp. 279-298). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Ray, W. J. (2012). *Methods: Toward a science of behavior and experience* (10th ed.). Belmont, CA: Wadsworth Cengage Learning.
- Turewicz, K. (2000). *Applicability of Cognitive Grammar as a foundation of pedagogical/reference grammar*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Tyler, A. (2008). Cognitive linguistics and second language instruction. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 456-488). New York: Routledge.
- Tyler, A., & Evans, V. (2001). The relation between experience, conceptual structure and meaning: non-temporal uses of tense and language teaching. In M. Pütz, S. Niemeier, & R. Dirven (Eds.), *Applied cognitive linguistics I: Theory and language acquisition* (pp. 63-105). Berlin: Mouton de Gruyter.
- Tyler, A., Mueller, C. M., & Ho, V. (2010). Applying cognitive linguistics to instructed L2 learning: The English modals. In J. Littlemore & C. Juchem-Grundmann (Eds.), *Applied cognitive linguistics in second language learning and teaching (AILA Review 23)* (pp. 31-49). Amsterdam: John Benjamins.
- White, B. J. (2012) A conceptual approach to the instruction of phrasal verbs. *The Modern Language Journal*, 96, 419-438. doi: 10.1111/j.1540-4781.2012.01365.x
- Williams, L., Abraham, L. B., & Negueruela-Azarola, E. (2013). Using concept-based instruction in the L2 classroom: Perspectives from current and future language teachers. *Language Teaching Research*, 17, 363-381. doi: 10.1177/1362168813482950

APPENDIX A

Sample materials used in the treatment offered to STAN

Passive voice: form

The teacher explains the problem.

to be + 3 forma czasownika [3rd verb form]

The problem	is	explained	(by the teacher).
The problems	are	explained	(by the teacher).
The problem	was	explained	(by the teacher).
The problems	were	explained	(by the teacher).
The problem	has been	explained	(by the teacher).
The problems	have been	explained	(by the teacher).
The problem	is being	explained	(by the teacher).
The problems	are being	explained	(by the teacher).

Passive voice: use (1)

Alexander Graham Bell

Telephone

A British inventor who went to live in Canada and then the USA. Bell invented the telephone.

An apparatus with which people can talk to each other over long distances. The telephone was invented by Alexander Graham Bell.

ACTIVE

*Bell invented the telephone.*

PASSIVE

*The telephone was invented by Bell.*

Bell *invented the telephone.*

Subject and agent

The telephone *was invented by* Bell.

Subject Agent

The subject (Bell) is the agent.

The subject (the telephone) is not the agent. It is the thing that the action is directed at.

.....  
.....  
.....  
.....

Passive voice: use (2)

*All our money and passports were stolen.*

*A man was arrested last night.*

*The streets are cleaned every day.*

*Oil has been discovered at the North Pole.*

*This kind of jacket is considered very fashionable these days.*

*A lot of attempts have been made to find the Loch Ness monster.*



### Furry Dance – a spring festival

The Helston 'Furry (Floral) Dance' is one of the oldest festivals in England. It is held in Helston, an old Cornish town. It celebrates the coming of spring. The 'dance' is a procession through the narrow streets of the town. The men wear top hats and suits, the women wear their best dresses and children are dressed in white. At the time of the festival the streets are decorated with beautiful flowers. At present preparations are being made for this year's event. A large truck of flowers has already been bought and the clothes have already been prepared.

### Halloween – a winter festival

The celebration of Halloween on October 31<sup>st</sup> was begun by the Celts over 2000 years ago and it has been practiced ever since. Their festival of the dead marked the beginning of winter. People believed that ghosts and witches came out on that night. These beliefs were not encouraged by the church but the festival was not abandoned. During the festival lanterns and candles were lit to keep the ghosts away and costumes and masks were worn to frighten them. People traveled from village to village and asked for food. It was believed that any village that didn't give food would have bad luck. These customs were brought to the USA in the nineteenth century by Irish immigrants. Today in the USA and UK, children wear costumes and go from door to door saying 'Trick or treat' and they are given sweets to take home.

*Adapted from Opportunities Pre-Intermediate by Michael Harris, David Mower and Anna Sikorzyńska*

I. Correct the following statements about the festivals and then compare your answers with a partner:

1. The Helston 'Furry Dance' is held to celebrate the end of spring.
2. All the inhabitants are dressed in white during the Helston festival.
3. The clothes for the Helston festival have not been prepared yet.
4. The celebration of Halloween was begun by the Anglo-Saxons.
5. The festival was abandoned for a while because it was not encouraged by the church.
6. Children are taken inside the houses they visit at all times.

II. Fill in the blanks using appropriate forms of the verbs in brackets:

The little town of Rockwell (consider) \_\_\_\_\_ by many people to be the most interesting place in the state of Arizona. Rockwell (build) \_\_\_\_\_ in the middle of the 19th century by a group of German colonists. Soon afterwards most of those colonists (kill) \_\_\_\_\_ by local Indians. Their graves (often, visit) \_\_\_\_\_ by their relatives, who do not have enough money to renovate the cemetery. However, they say that money (now, collect) \_\_\_\_\_ to do this and to buy flowers from time to time. In fact, At

least once a month flowers (bring) \_\_\_\_\_ to the graves by the inhabitants of the town. Lately, the inhabitants (portray) \_\_\_\_\_ in a documentary film about Rockwell. The film (make) \_\_\_\_\_ by a very young director, Robert Clark. Rockwell is known for its holidays and festivals. At the moment a state holiday (celebrate) \_\_\_\_\_ and the streets are full of tourists and people who live nearby. Two months ago two new hotels (open) \_\_\_\_\_ in the center of Rockwell because more and more people are coming to visit this historic location. Usually constructors (give) \_\_\_\_\_ at least a year to build a hotel like that but this time they had to do it in six months.

III. The sentences form a story. Fill in the blanks with appropriate passive verbs.

1. The puppy was \_\_\_\_\_ on the street a few days ago.
2. Later it \_\_\_\_\_ to our house.
3. When my son noticed that it was very dirty, it \_\_\_\_\_ by my wife.
4. Since that time the little dog \_\_\_\_\_ always \_\_\_\_\_ in the house because my son wants to play with it all the time.
5. Last week it even \_\_\_\_\_ to the zoo because Mark refused to leave home without it.
6. Since the time it was found on the street, the puppy \_\_\_\_\_ a lot of new tricks by my children.
7. At present it \_\_\_\_\_ how to open the door with its paw (*tapa*).
8. My wife \_\_\_\_\_ by different dogs a few times in her life so she is afraid of our new pet.

IV. Using the cues below describe how Thanksgiving Day is celebrated in the USA (do not change the underlined part). Be prepared to tell the rest of the class about the holiday:

1. Thanksgiving/celebrate/fourth Thursday in November. This is related to the colonization of America.
2. first American colonists/give food/by native American Indians/in 1620.
3. they/show how to grow own food/by native American Indians.
4. in 1621/first Thanksgiving festival/celebrate/by the colonists.
5. it/make a holiday/by President Lincoln/in 1864/and/it celebrate/by American people since then.
6. now/turkey and pumpkin pie/eat/at family dinners
7. cranberry sauce/also use
8. on this day/family members reunite/even if they separate/by thousands of kilometers

V. Using the cues below tell your partner about the hotel where you stayed at the weekend (do not change the underlined sentences).

A

1. The hotel I stayed at is a very good one.
2. locate / somebody / the hotel / next to Central Park
3. see / people / the hotel / from far away / because it is very tall

4. construct / builders / the hotel / in the 1920s
5. use / somebody / the hotel / as a government office / during the war
6. often / visit / important people / the hotel
7. One of them is George Michael.
8. often / organize / George Michael / parties / at the hotel
9. at the moment / prepare / somebody / a room / for Donald Tusk

B

1. The hotel I stayed at is very beautiful.
2. situate / somebody / the hotel / close to the sea. This is beautiful, but [to jest początek następnego zdania]
3. so far / destroy / the sea / 5 buildings close to the hotel
4. construct / builders / the hotel / at the end of the 19<sup>th</sup> century
5. later / use / somebody / the hotel / as a police station
6. make / somebody / some changes / two years ago
7. add / somebody / a new swimming pool
8. buy / somebody / new furniture
9. at the moment / somebody / plant / trees / in front of the hotel

APPENDIX B

Sample materials used in the treatment offered to COG

Passive voice: form

The teacher explains the problem.

to be + 3 forma czasownika [3rd verb form]

- The problem is explained (by the teacher).
- The problems are explained (by the teacher).
- The problem was explained (by the teacher).
- The problems were explained (by the teacher).
- The problem has been explained (by the teacher).
- The problems have been explained (by the teacher).
- The problem is being explained (by the teacher).
- The problems are being explained (by the teacher).

Passive voice: use (1)

Alexander Graham Bell

Telephone

A British inventor who went to live in Canada and then the USA. Bell invented the telephone.

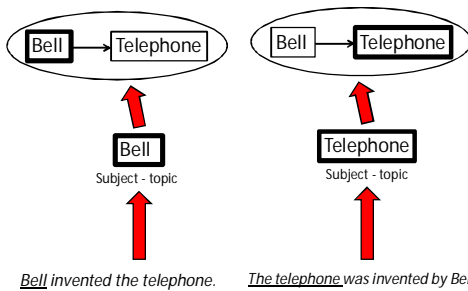
An apparatus with which people can talk to each other over long distances. The telephone was invented by Alexander Graham Bell.

ACTIVE

*Bell invented the telephone.*

PASSIVE

*The telephone was invented by Bell.*



.....

.....

.....

.....

.....

.....

.....

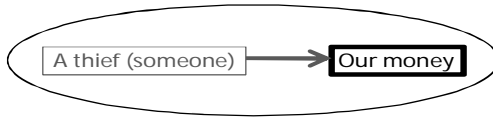
.....

.....

.....

Passive voice: use (2)

- All our money and passports were stolen.*
- A man was arrested last night.*
- The streets are cleaned every day.*
- Oil has been discovered at the North Pole.*
- This kind of jacket is considered very fashionable these days.*
- A lot of attempts have been made to find the Loch Ness monster.*



*Our money was stolen.*

*(Practice materials and tasks were exactly the same as those in Appendix A.)*

APPENDIX C

Sample test form

Nazwisko i imię: ..... Grupa: ..... Data: .....  
[Name: ..... Group: ..... Date: .....]

Zadanie pisemne 1

[Written task 1]

Przygotuj opis domu w Nowym Jorku. Każda z poniższych numerowanych wskazówek powinna odpowiadać jednemu zdaniu w twoim opisie, który nie może zawierać więcej zdań. Kolejność zdań powinna odpowiadać kolejności wskazówek. Zdania podkreślone należy wstawić do opisu w niezmienionej formie. Opis powinien zawierać wszystkie podane informacje, ale niektóre rzeczowniki mogą zostać zamienione na zaimki (*he, they, it, itp.*) lub pominięte. W poszczególnych zdaniach postaraj się zastosować odpowiednie czasy oraz odpowiednią stronę: czynną lub bierną.

[Write a description of a New York house. Each numbered prompt below should correspond to one sentence in your description, which must not include more sentences. The order of sentences should follow the order of the prompts. The underlined sentences must appear in the description in an unaltered form. Your description should include all the information given in the prompts, but some nouns may be replaced with pronouns (*he, they, it, etc.*) or left out.

Try to use the right tenses and the right voice, either active or passive, in different sentences of the description.]

1. The house I want to describe is very interesting.
2. locate / somebody / the house / in the suburbs / near a beautiful lake and park
3. protect / a high fence / the house / and / surround / an oriental garden / the house
4. design / Japanese gardeners / this garden
5. later / learn / these gardeners / a new job
6. attend / these gardeners / many golf courses taught by the best golfers
7. Eventually, the gardeners became golf instructors.
8. teach / these gardeners / many media personalities / in the 1930s
9. surprisingly / win / a lot of these personalities / important amateur golf competitions.
10. build / builders / the house / at the beginning of the 20<sup>th</sup> century
11. design / a famous American architect / the house
12. The architect's name was Henry Howard.
13. also / design / Henry Howard / seven beautiful palaces in Europe
14. damage / a flood / the house / in 1930
15. cause / heavy rainfalls / this flood
16. in addition / destroy / this flood / a lot of buildings in many villages around New York
17. rebuild / builders / the house / a year later
18. regard / most people / the house / as one of the most beautiful houses in the area / for a long time

19. The area surrounding the house is very clean. Garbage cans are small and no garbage is visible around them. This is because [to jest początek następnego zdania]
20. pick up / somebody / garbage / three times a week
21. The area is also very safe.
22. patrol / the police and detectives / the area / very often
23. in fact / probably / patrol / somebody / the area / at this moment
24. The house has five rooms and two bathrooms.
25. see / twenty potential buyers / the house / in recent years
26. buy / a young couple from Boston / the house / two months ago
27. Their names are Jerry and Jane.
28. add / already / Jerry and Jane / a garage
29. build / an experienced engineer, Carl Smith / the garage
30. also / design / Carl Smith / Jerry's mother's house / five years ago
31. also / buy / Jerry and Jane / two other houses / in New York / recently
32. plan / Jerry and Jane / currently / another purchase