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*Joanna Podhorodecka*

Pedagogical University of Cracow, Poland

## THE ROLE OF SEMANTIC FACTORS IN PASSIVIZATION: A USAGE-BASED STUDY

### Introduction: the aims and scope of this study

It is a commonly known fact that not each transitive verb can appear in the passive and that the frequency of passivization can vary greatly between different verbs or even between different senses of the same verb. This study is an enquiry into possible reasons for this situation. The question that it addresses is as follows: what semantic and syntactic factors influence the possibility and the frequency of usage of verbs in the passive construction? On the basis of data from The British National Corpus, the author examines actual passive uses of two verbs (one of which is often and the other relatively rarely passivized) in search of features which could account for the difference in the frequency of the verbs' passive usage. Ronald Langacker's Cognitive Grammar (1991, 2008) is used as the framework for the analysis.

The two verbs chosen for the purpose of this study are *see* and *watch*. In addition to their semantic affinity – both verbs relate to the domain of visual perception – there is a clearly visible difference in the frequency of their passive uses: the former is extremely frequent, while the latter infrequently passivized. In the LGSWE corpus, the verb *see* appears in the top ten of verbs most frequently occurring in the passive (Biber et al. 1999: 478), while *watch* numbers among the verbs which passive forms constitute less than 2% of their overall usage (Biber et al. 1999: 481). This assessment is confirmed in the present research: the BNC corpus yielded only 344 tokens of the verb *watch* in the passive, the overall number of its verbal uses being 18 894, whereas the verb *see* appears in the passive as many as 14 707 times, out of altogether 185 589 tokens. Thus, the passive constitutes 7,9% of all uses for the verb *see* and only 1,8% for *watch*; in other words, the verb *see* is four times more frequent in the passive.

As the overall number of the passive uses of the verb *watch* provided by the BNC corpus was 344, a corresponding random sample of 350 passive uses of *see* was constructed. The tokens were coded for various semantic and syntactic criteria (which will be described in more detail in section 3) and analysed by means of R statistical programming environment. The resulting multiple correspondance

analysis shows correlations between particular factors which contribute to the differences between the frequency of the passive for the two verbs.

## Passive and passivizability in Cognitive Grammar

### The passive as a construction

In Cognitive Grammar, the relationships between clausal participants are often described in terms of the action chain model: a conceptual model presenting the interaction between the agent and the patient in terms of transfer of energy. The model is schematically presented in Figure 1, where the circles represent the participants and the arrows – the energy transfer.

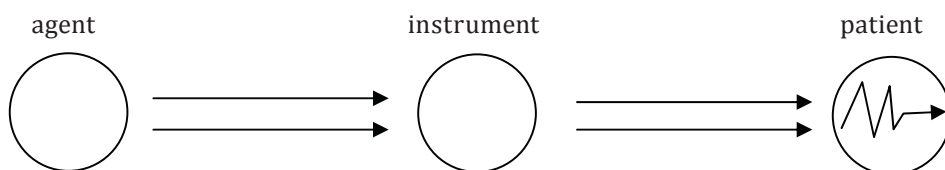


Fig. 1. The action chain model, adapted from Langacker 1991: 285 and Evans and Green 2006: 603

A prototypical action involves the transfer of energy from the agent (“energy source”) to the patient (“energy sink”), which as a result undergoes a change of state (Evans 2007: 4). The interaction between the agent and the patient may be mediated by the instrument. This unified conceptual model of agent-patient interaction underlies the structure of the transitive clause.

In a prototypical, unmarked clause structure, the element coded as the subject is either the energy source or the element that is closest to it, furthest “upstream” in the action chain (Evans and Green 2006: 603). Thus in a typical active transitive clause, it is the agent that is most likely to be assigned the most prominent position of the trajector – the primary clausal participant.

The passive construction is treated in Cognitive Grammar as an instance of marked coding: a way of structuring the information which is less typical in terms of its frequency and its distributional potential. The basic function of the passive construction is “to convert a process (specified by the content verb) into an atemporal relation with a contrasting figure/ground organization” (Langacker 1991: 202–203). The passive thus reverses the hierarchy of salience between the participants: the agent, normally coded as the subject, is defocused, while the element promoted to the position of the clausal trajector is the patient/theme – the participant that would normally be assigned the less prominent position of the landmark – the secondary figure, in an active clause expressed by the direct object. The two processes – defocusing the agent and promoting the patient/theme – are interconnected, as “when one participant is left unspecified, the other becomes more salient just through the absence of competition” (Langacker 2008: 384).

Such a difference in the hierarchy of salience is motivated by discourse factors: the speaker, for various reasons, focuses the listener's attention not on the energy source, but on the energy sink – the participant affected by the action. This shift of emphasis, trajector-landmark reversal, is the basic function of the passive construction.

Constructions are treated in Cognitive Grammar as pairings of form and meaning at various levels of linguistic organization (Langacker 2008: 161–162). Syntactic constructions, as opposed to individual lexical items, have schematic meaning (Evans 2007: 43), which includes pragmatic and discourse-related factors (Taylor 2009: 225). The possibility of particular lexical items combining with a particular construction depends on the compatibility of the items' specific meaning with the schematic meaning of the construction.

The basic function of the passive construction is the clausal trajector-landmark reversal, which can only be meaningful in the context of the whole gestalt of agent-patient interaction in a transitive clause. The ability of a particular verb to combine with the passive does not depend only on the verb, but on the whole construal and its compatibility with the action chain model.

The passive is a feature of construal, the way that information is organized and presented by the speaker, and as such it is seen in terms of discourse functions of the whole clause. Often the verb itself and the nominals involved in the construction are not enough to account for passivizability, and we need to refer to semantic factors related to the whole construal, such as ex. the volitionality of the agent, perfectivity of the action, the affected patient (Rice 1987: 1), or even features such as metaphorization and evaluation (Podhorodecka 2007: 124–134). Semantic factors which contribute to the passivizability of the clause often co-occur in prototypical instances of transitive clauses, and they form a unified conceptual model (Rice 1987: 3).

### **The transitive clause prototype**

Discussing the nature of syntactic constructions, Taylor observes that “possibility of occurrence in a construction is a matter of gradience, some items being readily available, others being totally excluded, with, in between, a range of items which use is dubious or sporadic” (2009: 222). This entails that constructions, similarly to other linguistic items, should be treated as radial categories, which display prototype effects and can be described in terms of more central and more marginal cases (Taylor 2009: 222–228). Central, prototypical constructions are the most common: they have the highest frequency and distributional potential, i.e. they can appear in the widest range of contexts. Consequently, the ability of a clause to appear in the passive construction is related to its prototypicality: a more typical transitive clause is more likely to be made passive.

The passivizability of a clause depends on its closeness to the transitive clause prototype, whose central aspect is the agent-patient interaction, schematically presented in the action chain model.

Langacker (1991: 302) describes the characteristics of a typical transitive clause as follows:

It has two participants expressed by overt nominals that function as subject and object.

It describes an event, as opposed to a static situation.

The event is energetic, relatively brief, and has a well defined endpoint.

The subject and the object represent discrete, highly individuated physical entities.

These entities already exist when the event occurs.

The subject and the object are fully distinct and participate in a strongly asymmetrical relationship.

The subject's participation is volitional, while that of the object is non-volitional.

The subject is the source of the energy, and the object is its target.

The object is totally affected by the action. (Langacker 1991: 302)

In other words, the event described by a typical transitive clause is dynamic, punctual and perfective. It features two distinct, pre-existing participants in an asymmetrical relationship based on the contrast between the energy source and the energy sink, volition and lack of volition. The patient is affected by the action.

Taylor (2009: 232–233), going back to earlier studies by Lakoff (1977) and Hopper and Thompson (1980), lists the following semantic properties of the transitive clause in its typical instantiations. The event is perfective, rather real than hypothetical and involves direct physical contact. It features two distinct, individuated participants, which are in opposition and are denoted by the nominals with specific reference. The event is initiated and controlled by a conscious and volitional, therefore usually human, agent. The patient is typically inanimate, and as a result of the event it undergoes an immediate, visible change of state. The event is causative, as its effect is intended by the agent.

The properties of the transitive clause prototype are summarized in Table 1 below:

**Table 1.** The transitive clause prototype: a summary

<b>The participants</b>	<b>The event</b>
Two participants, coded by nominals	Dynamic
Specific reference	Telic/perfective
Pre-existing	Punctual
Maximally distinct	External and observable
In opposition	Involving physical contact
	Rather real than hypothetical
<b>The agent</b>	<b>The patient</b>
Trajector (primary figure)	Landmark (secondary figure)
Volitional	Non-volitional
In control of the action	Affected by the action
Human	Inanimate
Energy source	Energy sink

In the case study that follows, the characteristics of the prototypical transitive clause will be related to the actual passive uses of the verbs *see* and *watch*, in order to account for the difference in their passivizability.

## **See and watch: a case study**

### **Similarities and differences between *see* and *watch***

First of all it must be emphasized that there are many semantic similarities between the two analysed verbs. Both of them depart from the transitive clause prototype in two important ways: they pertain to the domain of perception rather than physical action and the situations they describe are predominantly atelic (they do not have an inherent endpoint) and durative (they extend over time). These features of *see* and *watch* are exemplified by typical uses of the verbs in 1a. and 1b. below:

1a. *This pattern of acquired dyslexia is in fact seen.*

1b. *'Do you feel you are being watched now?'*<sup>1</sup>

On the other hand, what brings the two verbs closer to the transitive clause prototype is the fact that they both encode situations with two clearly distinct participants in an asymmetrical relationship – the perceiver and the perceived. The primary participant is almost exclusively human and can be described as either agent or experiencer. While the participants of situations encoded by the verb *watch* can be classified as agent and patient/theme, in the case of the verb *see*, the relationship between the participants is closer to that between experiencer and theme. This particular feature situates the verb *watch* much closer to the transitive clause prototype, as what we encounter here is a volitional agent and a potentially affected patient. That is why Taylor considers the verb *watch* to be more prototypically transitive than the verb *see*, arguing that “the act of watching is under the control of the subject” (2009: 234).

Apart from the volitionality of the agent, there are other features that, paradoxically, make the verb *watch* more typically transitive: the event it describes is external, observable and dynamic. In other words, it's more of an action than an act of perception. Considering that the verb *watch* is in fact four times less frequent in the passive, there must obviously be other semantic factors that influence the passivizability of the two verbs. What are they?

### **Semantic factors**

If we relate the discussion in the previous section to the summary of the transitive clause prototype presented in Table 1 above, it will become apparent that many of the semantic characteristics of *see* and *watch* are relatively stable and can be summarized as follows: both verbs feature two distinct participants in an asymmetrical relationship, where the primary participant is human. Both verbs profile an event which is typically, though not exclusively, imperfective (atelic and

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<sup>1</sup> All the examples come from the BNC Corpus. Emphasis added.

durative). As opposed to the verb *see*, the verb *watch* describes an external, observable and dynamic event with a volitional agent.

The features that vary in different uses of the two verbs and may therefore influence their passivizability are the following: the perfectivity of the event, specific reference of agent and patient<sup>2</sup> and three features related to the patient only: whether it is human, pre-existing and affected by the action. The data obtained from the BNC corpus were coded for the above-mentioned features, in a procedure that involved six distinctions:

- Is the event construed as perfective or imperfective?
- Is the agent specific or unspecific?
- Is the patient specific or unspecific?
- Is the patient human or non-human?
- Is the patient pre-existing?
- Is the patient affected by the action?

#### Is the event construed as perfective or imperfective?

It has already been mentioned that the situations encoded by both *see* and *watch* are predominantly construed as imperfective: they usually extend over time and lack an inherent end-point. Such typical uses, where both verbs are durative and atelic, are exemplified in 2a and 2b below.

2a. *Big is no longer **seen** as beautiful.*

2b. *The place **was watched** night and day.*

However, it is possible for both verbs to encode a perfective event or a series of such events. This usually happens if the passive subject is construed as bounded: 3a below describes six separate, punctual, complete acts of perception, while in 3b the subject denotes a single specific event with relatively clear time boundaries.

3a. *Only six species of orchids **have been seen** this year.*

3b. *The climax of the match **was watched** by only about 8,000 people.*

Perfectivity may also be introduced into the construal by a perfective verb form or an adjunct expressing repetition or placing the event within a specific time frame:

4a. *This will be the first time SummerSlam **has been seen** outside the USA.*

4b. *The first signs of the new eruption **were seen** on 23 March 1902.*

It must be noted that in the corpus data the situations coded by the verb *see* are twice more often construed as punctual: the percentage of perfective construals is 24%, as opposed to 11,6% for the verb *watch*. The tendency of the passive *watch*

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<sup>2</sup> Note that henceforth, due to the technical necessity to unify the coding procedure, the term “agent” is applied to primary participants of both verbs (the agent of *watch* and the experiencer of *see*). Likewise, the term “patient” relates to the secondary participant of both *watch* and *see*, irrespective of its being or not being affected by the action.

towards imperfective construals is further emphasized by its preference for the progressive aspect: the verb occurs in the progressive in 42,1% of the analysed tokens, as opposed to only 1,4% for the verb *see*.

### Is the agent specific or unspecific?

In a prototypical transitive clause, both participants have specific reference. In the passive, the basic condition for the agent's specificity is its being overtly expressed. Long passives with the agent introduced in a *by*-phrase are more characteristic of the verb *watch*, where they constitute 34% of all tokens. With the verb *see* such constructions seem to be avoided, as they appear only in 4,2% of the uses. In a significant majority of tokens the agent is left unspecific: it is either omitted altogether, as in 5a below, or it denotes a fairly unspecific group of individuals, as in 5b.

5a. *If the animal **is seen** against a pale background, the pale patches blend in with the environment.*

5b. *American soccer **is watched** by a more middle-class audience of both sexes.*

Construals with a specific agent, exemplified in 6a and 6b below, are definitely a minority. Even so, they are used over ten times more often with the verb *watch* (18,6%) than with the verb *see* (1,7%).

6a. *She could neither see nor **be seen** by the pair in the observation room.*

6b. *Kevin, in turn, **was being watched** by his wife, Enid, who had gaoler's eyes, was more regal than the Queen, and in her spotted dress looked like a Sherman tank with measles.*

An overtly expressed specific agent is clearly more characteristic of the verb *watch*. On the one hand, it brings the verb closer to the transitive clause prototype, but on the other hand, it may actually interfere with passivization, which main function is reversing the hierarchy of the salience between clausal participants. A specific, volitional agent is conceptually more prominent and as such it may be more difficult to demote.

### Is the patient specific or unspecific?

The specificity of the patient is a more straightforward question, as in the passive it is expressed by the most prominent clausal participant – the subject. In this respect there are no dramatic differences between the two analysed verbs. For both of them the passive subject is specific in a vast majority of cases (78,5% for *see* and 85,5% for *watch*). It is again the verb *watch* that shows a greater tendency for participant specificity, although this time its predominance is only marginal. The examples below show typical passive construals with a specific (7a) and an unspecific (7b) subject.

7a. *Hilary Frome knew he **was being watched**.*

7b. *Some pupils don't like **being watched**, however.*

### Is the patient human or non-human?

Construals where the patient is human constitute over one half of the tokens of passive *watch* (53,7%), but for the verb *see* they are definitely a minority (19,1%). While for the verb *watch* there is practically an equal possibility of the patient being human and non-human, the verb *see* clearly favours non-human participants as passive subjects. So, it is the passive of the verb *see* that usually profiles a clearly visible opposition between a specific non-human patient and an unspecified human agent. This is shown in 8a below, while 8b and 8c exemplify construals with respectively human and non-human subject, equally characteristic for the verb *watch*.

8a. *Systems of this type **have been seen** in beer production.*

8b. *Still, she knew she **was being watched**.*

8c. *The process **can be watched** under a low power dissecting microscope.*

### Is the patient pre-existing?

In the majority of tokens the patient is pre-existing for both the verb *see* (90,6%) and *watch* (82,6%), as in 9a and 9b below:

9a. *And he **had not been seen** for some days.*

9b. *Bernice still had a feeling of **being watched**.*

There is, however, a visible group of tokens of the verb *watch* (17,4%), where the passive subject is an event which co-exists with the action. In 10a, the patient, *a football match*, does not exist before or continue after the act of watching.

On the other hand, there is also a type of construal characteristic solely for the verb *see*, where the patient is actually produced by the action. In this pattern, the passive subject is typically an extraposed that-clause and the verb can be paraphrased as “conclude/realize.” For instance, in 10b the conclusion *that they were right* emerges as a result of the experiencer’s thought process. Consequently, it does not exist before or during the act of seeing, but is affected by the event.

10a. *A football match **could be watched** by a lot of people, especially if it is televised.*

10b. *In the future it **would be seen** that they were right.*

The dominant tendency with both *see* and *watch* is for the patient to be pre-existent, yet some variations are possible, in which each of the verbs displays its own characteristic pattern: *watch* combines with a co-existing passive subject and *see* with an effected subject. It is worth noting that in both situations the patient is non-human and denotes a relation: either an event or a proposition.

### Is the patient affected by the action?

An even more complex set of distinctions emerged in the analysis of causation patterns associated with the two verbs. For both verbs the largest group of tokens (45,4% for *see* and 34,4% for *watch*) feature an affected patient. The effect often pertains to the mental domain and has to do with the subject’s awareness,

knowledge or perception. This in turn entails that the subjects are predominantly human. In many construals with the verb *watch*, the subject's awareness of being watched is emphasized and more often than not it produces a reaction, as in 11a below. Collocations such as "feeling/sensation/awareness/pressure of being watched" are extremely common in the data. The verb *see* frequently combines an affected patient with the complex transitive "see as" construction, as in 11b below, where what is influenced by the event is the perception of the subject.

11a. *Sensing she was being watched, she spun round to face the doorway, the Beretta gripped tightly at arm's length.*

11b. *As such it is seen as the first part of a larger work.*

In only slightly smaller percentage of tokens (42% for *see* and 32,8% for *watch*) the passive subject remains unaffected by the action. This can be seen in 12a and 12b below: veining in a mineral rock does not normally undergo a change of state as a reaction to being seen and neither does a television set as a result of being watched.

12a. *Simple, distinct veining can also be seen.*

12b. *The television sets owned by prosperous Zambians were also watched by a number of relatives who were less well off.*

The group of construals with the verb *see*, already mentioned before, in which the passive subject is the result of the experiencer's thought process, also stands out here as a separate category, due to the correlation between time and causation: the effect is always subsequent to its cause. It is exemplified by 13 below, or 10b in the previous section.

13. *It will be seen again that the four ogres – anxiety, fear, guilt and anger – all play their parts.*

In addition to these, there is a significant group of construals where there is a causative relation involved, although it is by no means straightforward. These construals have been labelled as "potential" and they are more frequently connected with the verb *watch* (32,8%) than *see*, where they are quite marginal (3,2%). Consider the examples below:

14a. *However, children must be watched to ensure they do not abuse this little dog's trust by pulling on their ears.*

14b. *'Your house will certainly be watched.'*

14c. *In fact, their departure was watched with quiet satisfaction by a surprising number of Rockford residents.*

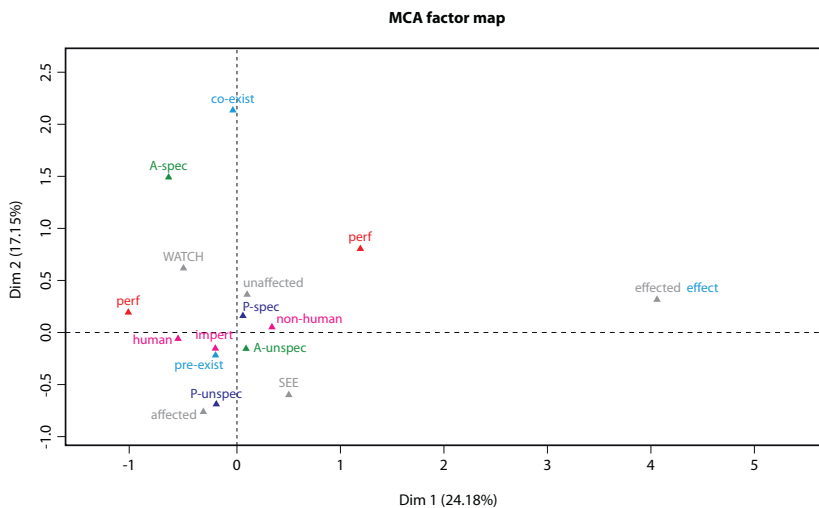
In 14a the subject is not directly affected by the very act of watching; however, there is a possibility of the agent's interference if the children do actually pull on the dog's ears. Similarly, in 14b the house itself is not affected, but it is the owner of the house that may be affected by the agent's potential action or the

very awareness of being watched. In 14c it is the agent – *Rockford residents* – that is affected by the act of watching, as the protagonists’ departure causes them to experience “quiet satisfaction.” As can be seen from the examples above, the term “potential” is applied to causation patterns in which the agent may potentially interfere with the patient’s actions or where an element of the construal other than the passive subject is affected by the event.

The distribution of the four above-mentioned causation patterns within the data seems interesting. Two dominant patterns emerge for the verb *see*: the patient is clearly either affected (45,4%) or unaffected (42%) by the action, with only marginal presence of the remaining two less straightforward patterns: effected (9,4%) and potential (3,2%). The tokens of the verb *watch*, however, divide almost equally into three patterns: affected, unaffected and potential (respectively 34,4%, 32,8% and 32,8%). It can be concluded that the verb *see* favours clear and unambiguous patterns, while *watch* does not show any specific preferences for particular causation type, apart from the fact that it does not normally combine with effected patient.

### Semantic factors: correlational analysis

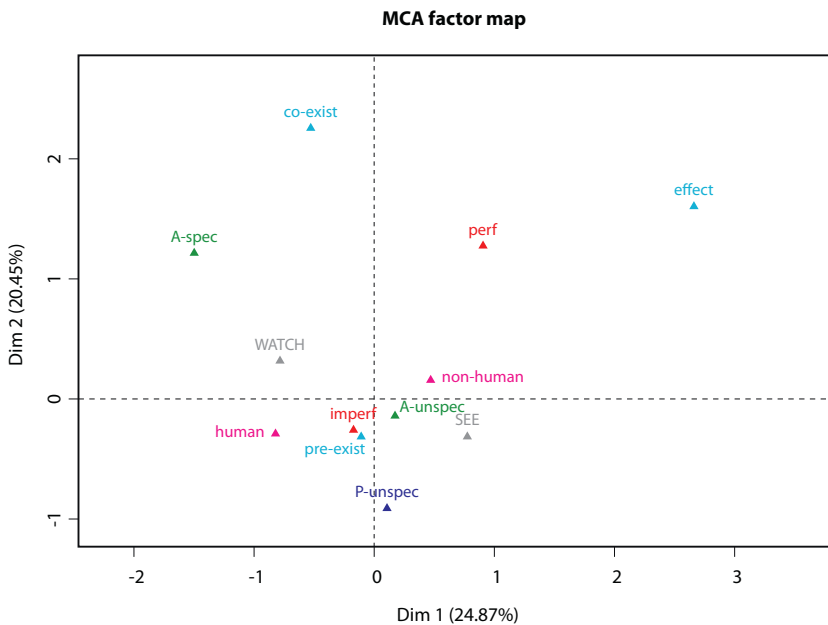
The graph in Fig. 2 presents the results of correlational analysis of all the factors discussed above. The distance between particular points in the graph corresponds to how closely the features denoted by those points are correlated in the data. It follows that features which frequently occur together will form clusters in the graph. The two analysed verbs – *see* and *watch* – are marked in black capitals. If points denoting specific features are situated closer to one of the verbs, it means that those features are more closely associated with this verb. Ideally, we should discover two clusters of features related respectively to *see* and *watch*, and another cluster situated in between the two verbs, denoting the features that they share. However, what emerged when all the features were analysed together is the following:



**Fig. 2.** The passive of *see* and *watch*: correlational analysis (all semantic factors)

The most clearly visible correlation here is a particularly close connection between “effected” causation patterns and the term “effect” used to describe time relationship between the patient and the action (the two alternative terms being “pre-existing” and “co-existing”). Both of them refer to a group of 33 tokens of the verb *see*, in which the passive subject emerges as a result of the event. The closeness of these two features, which co-occur in all of the 33 tokens, causes the other semantic differences between the two verbs to become less significant in comparison. For the sake of greater clarity, the analysis was conducted again, without including the causation patterns. Before we discuss the results, which are presented in Fig. 3 below, let us comment on the features related to causation.

As already mentioned, the “effected” causation pattern is characteristic for the verb *see*, while the pattern the most clearly associated with *watch* is the one labelled “potential,” where either the patient or another element of the construal may potentially be affected by the event. The pattern equally characteristic for both *see* and *watch* is the one with unaffected patient (“unaffected”), which is situated right between the points denoting the two verbs on the graph. The affected patient pattern (“affected”) is also possible for both verbs, but it leans more towards the verb *see*, where it constitutes the largest group of tokens.



**Fig. 3.** The passive of *see* and *watch*: correlational analysis (semantic factors without causation)

Figure 3 presents a correlational analysis of the remaining semantic factors. Removing the data related to causation patterns has made the relationship between them more clearly visible. There is a closely connected cluster of features situated between the two verbs, and thus describing the properties characteristic

for both *see* and *watch*. The core of the cluster is formed by the points denoting imperfective event (“imperf”), unspecific agent (“A-unspec”) and pre-existent patient (“pre-exist”) – the three features that are equally characteristic for both verbs. On the outer edge of the cluster we encounter human (“human”) and non-human (“non-human”) patient, the former related more closely to the verb *watch*, the latter to *see*. The distinction between specific and unspecific patient is in a very similar situation: both features are situated on the outside of the central cluster of properties, with specific patient (“P-spec”) more characteristic for *watch* and unspecific patient (“P-unspec”) for *see*.

The features which are clearly more characteristic for only one of the two analysed verbs are all situated in the upper part of the graph. For the verb *watch*, these are co-existent patient (“co-exist”) and specific agent (“A-spec”). A co-existent patient is an event co-occurring with the act of watching, like *a football match* in 10a or *their departure* in 14c. The importance of specific agent with the verb *watch* is further supported by its tendency to take long passives, which constitute over one third of all its passive forms, as opposed to their marginal percentage with the verb *see*. Features more closely related to the verb *see* are perfectivity of the construal (“perf”) and a patient which is created as a result of the event (“effect”).

The results of the correlational analysis of the two verbs are summarized in Table 2 below. Box 1 contains the features equally common for both verbs, while box 2 – those features that occur with both verbs, but lean more towards one of them. The two boxes in 3 list the features that are significantly more characteristic for either *see* or *watch*.

**Table 2.** The passive of *see* and *watch*: correlational analysis of semantic factors – summary

	WATCH	SEE
1.	Imperfective event Unspecific agent Pre-existing patient	
2.	Human patient/Non-human patient Specific patient/Unspecific patient	
3.	Specific agent Co-existent patient	Perfective event Patient as effect

### Syntactic factors

First of all, it should be noted that the division between semantic and syntactic factors is made for the sake of greater clarity of the data, as the author subscribes to the Cognitive Grammar view that differences in syntax are connected with differences in meaning, and one cannot be analysed independently of the other. The factors grouped under the label “semantic” relate more closely to the properties of the whole construal, while those described as “syntactic” pertain more to the form and function of the verb. Both of those types, however, have important consequences for the meaning of the analysed corpus material.

In this part of the research the data obtained from the corpus were coded for tense, aspect, polarity, type (long or short passive), complementation pattern and the form of the subject.

### Tense

With regard to tense, the tokens were divided into five categories: present, past, modal, quasi-modal and non-finite. Past and present forms constitute significant groups for both verbs. For the verb *see* there is no disproportion between the two tenses: each of them constitutes 23,4% of tokens. The verb *watch*, however, has a larger number of past forms (37,5%) than present forms (23,8%).

Another interesting regularity is a particularly close association of the passive *see* with modal verbs: modals constitute as many as 39,4% of the tokens, as opposed to only 15,1% for the verb *watch*. This clearly results from the tendency of all verbs of senses to combine with modals, particularly *can* and *could*. Interestingly, these two modals, together with *should* and *must*, are the ones that combine most frequently with the passive, especially in academic prose (Biber et al. 1999: 499).

The category of quasi-modals includes constructions such as *need to*, *have to* and *be to*. They are almost equally characteristic for both verbs, though relatively infrequent (3,4% for *see* and 6,7% for *watch*).

Non-finite constructions, involving an infinitive or a participle of the verb, correlate more clearly with *watch*: they constitute 16,8% of the tokens, the third largest group for this verb, while for *see* they are only 10,3%, which is last but one group followed only by quasi-modals.

To summarize: the verb *see* clearly favours the combination with modal verbs, followed by an equal number of past and present tenses, while *watch* shows a clear preference for past over present forms and a significant presence of non-finite constructions.

### Aspect

In terms of verbal aspect, the tokens were marked as simple, progressive and perfective, with the combination perfect-progressive not attested in the data, as the analysed verbs are in the passive. An overwhelming majority of tokens of the verb *see* feature simple aspect (91,7%), with progressive and perfective aspects only marginally present, in respectively 1,4% and 6,8% of tokens. Note that although the frequency of perfective aspect with *see* is relatively low, the verb features a visibly higher percentage of perfective construals (24%). This shows that perfectivity does not have to result from a perfective form of the verb: it may be introduced into the construal by a bounded subject or bounding the event in time, as in the example 3a or 4b.

For the verb *watch*, perfective aspect is also quite infrequent (3,2%), while its remaining tokens divide into simple (54,6%) and progressive aspect (42,1%). The relatively high frequency of the progressive aspect makes the passive *watch* atypical, as the combination passive/progressive is quite rare (Biber et al. 1999: 483).

Out of the three attested aspectual forms, the verb *see* clearly prefers simple aspect, while *watch* allows combinations with both simple and progressive. This

obviously results from the fact that *see* is stative in most of its uses, while the verb *watch* is dynamic.

### Polarity

Polarity involves a simple distinction between positive and negative verb forms. There are no great disproportions between the two verbs, and unsurprisingly a great majority of tokens are positive: 88,8% of *see* and as many as 96,8% of *watch*. Consequently, the percentage of negative construals is slightly higher for *see* (11,2%) than *watch* (3,2%).

### Type

The category labelled “type” involves the distinction between short passives and long passives, with the agent overtly expressed by means of a by-phrase. These are significantly more common for *watch*, where they constitute 34% of all tokens, as opposed to the marginal 4,2% for *see*. Obviously, the verb *see* has a greater tendency for defocusing the agent.

### Complementation pattern

It is the verb *see* that offers a greater variety of complementation patterns. Apart from the basic monotransitive construction, which constitutes almost a half (49,7%) of the analysed sample, *see* can combine with as many as three types of complex transitive patterns: the “be seen as” (37,1%), the to-infinitive (9,1%) and the ing-participle construction (4%). These are exemplified respectively in 15a, 15b and 15c below:

15a. *The views of outsiders are even more likely **to be seen as** hostile and derogatory.*

15b. *The Prime Minister **was seen** by the public **to be working** against political trends.*

15c. *Only that dear atheist and free-thinker, the Magistrate, **was seen raising** a sardonic eyebrow at this name.*

The complementation of the passive *watch* is far less complex: all analysed cases feature the basic monotransitive construction, as exemplified in 16a, with only one token in the sample, shown in 16b below, combining with the -ing form.

16a. *The interests of the deaf in various towns **should be watched** by the local agents.*

16b. *They **were watched following** this course until the light failed.*

### Form of the subject

As far as the form of the subject is concerned, in most uses of both verbs (88,8% for *see* and 86,6% for *watch*) the passive subject is expressed by a nominal. It is also possible for both verbs to appear in non-finite constructions with hidden subjects, as shown in 17a and 17b below. This is more common for *watch* (13,4%) than *see* (0,8%).

17a. *It's a lot bigger than just **being watched**.*

17b. *This is work **to be avoided** because of the risk of **being seen as** incompetent.*

Additionally the verb *see* can combine, though rather infrequently, with a non-finite clause (4%) or a finite clause (9,1%) as the subject. Such constructions are exemplified in 18a and 18b.

18a. *Either way, kicking the ref when you have won **might be seen** as unsporting.*

18b. *In the future it **would be seen** that they were right.*

Although the basic pattern, with the subject expressed by a nominal, prevails for both verbs, it is again the verb *see* that shows a greater variety of possible constructions by allowing clausal subjects, both finite and non-finite, often placed in extraposition.

### Syntactic factors: correlational analysis

Correlational analysis of all the factors discussed in 3.4 yielded the following results:

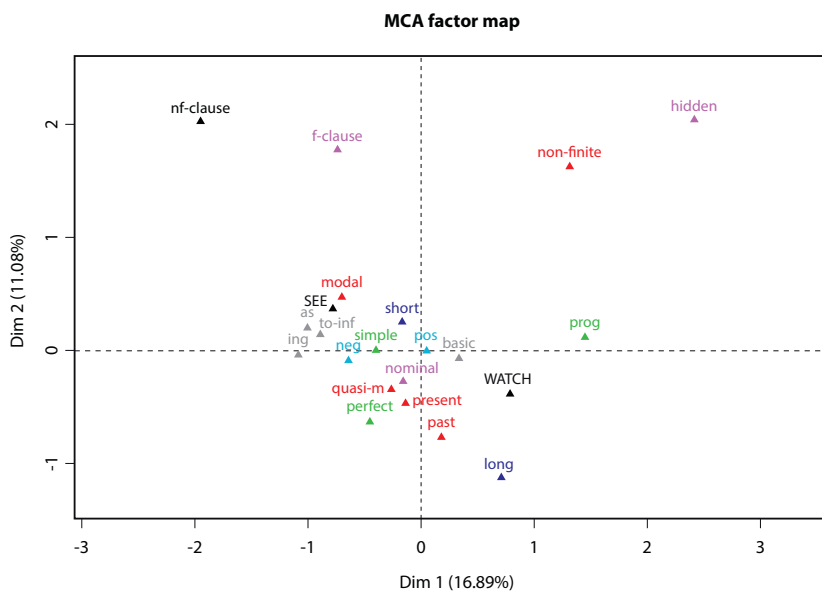


Fig. 4. The passive of *see* and *watch*: correlational analysis (syntactic factors)

Similarly to the correlational analysis of semantic factors, we can distinguish three groups of features here: the central cluster of properties equally characteristic for both verbs, the properties shared by both verbs but leaning more towards one of them, and finally the properties definitely more characteristic for either *see* or *watch*.

The core cluster is formed by the following properties: the passive subject expressed by a nominal (“nominal”), positive polarity (“pos”), perfective aspect (“perfect”), quasi-modals (“quasi-m”) and present tense verb forms (“present”).

The second group of properties brings together the features situated on the outer edge of the central cluster: short passive (“short”), simple aspect (“simple”)

and negative polarity (“neg”) are a bit more closely correlated with *see*, while basic monotransitive sentence structure (“basic”) and past tense (“past”) are slightly more characteristic for *watch*.

Finally, the third group of features includes those that are particularly closely related to only one of the two analysed verbs. The cluster of properties around the verb *see* contains modal verbs (“modal”) and the three complex transitive complementation patterns: the “be seen as” (“as”), the to-infinitive “be seen to” (“to-inf”) and the participle “be seen -ing” construction (“ing”). Note that these are positioned very close together, forming a cluster within a cluster. There are only two features that are clearly more characteristic for *watch*: long passive (“long”) and progressive aspect (“prog”).

Factors situated in the upper part of the graph also correlate more frequently with only one of the verbs: finite (“f-clause”) and non-finite clause (“nf-clause”) as the passive subject with *see*, and hidden subject (“hidden”) and non-finite verb form (“non-finite”) with *watch*. The distance of these features from the verbs indicates that although they are characteristic for one of the verbs only, their tokens are not particularly numerous.

The results of the analysis are summarized in Table 3. Note that the positions of the two verbs in the table have been reversed from Table 2, to reflect the arrangement of *see* and *watch* in Figure 4.

**Table 3.** The passive of *see* and *watch*: correlational analysis of syntactic factors – summary

	SEE	WATCH
1.	Nominal as the passive subject Positive polarity Perfective aspect Quasi-modals Present tense	
2.	Short passive/Monotransitive pattern Simple aspect/Past tense Negative polarity	
3.	Modal verbs Complex transitive pattern Clausal subject (finite and non-finite)	Long passive Progressive aspect Non-finite verb form Hidden subject

## Conclusions

The conclusion that arises from the data discussed above is that the main reason for the low passivizability of the verb *watch* is an atypical hierarchy of salience between the clausal participants, which is incompatible with the schematic meaning of the passive construction. To put it simply, the agent and the patient are not asymmetrical enough: the patient is often human and aware of being watched, while the agent is specific, overtly expressed in a significant percentage of cases, and thus is not sufficiently defocused. Another important factor is the imperfectivity of the construal, visible in the verb’s frequent co-occurrence with the

progressive aspect. And finally an important role is played by the complexity of causation patterns associated with *watch*, also departing in many ways from the transitive clause prototype.

On the other hand, what makes the verb *see* a more likely candidate for the passive is the fact that it resembles the transitive clause prototype in two important aspects; namely, it usually features a non-human patient affected by the action and the event is more readily construed as perfective. Last but not least, the verb offers a greater variety of extended senses and a wider range of syntactic patterns, both in terms of its complementation and the possible form of the passive subject.

It must be concluded that the aspects decisive for the frequency of passivization of the verbs *see* and *watch* are the asymmetry of the agent and the patient as well as the perfectivity of the event and the causative component of the construal.

### Tools and sources

*The British National Corpus*, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium. <http://www.natcorp.ox.ac.uk/>

R Development Core Team (2008). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, <http://www.R-project.org>

### Bibliography

- Biber, D., Johansson, S., Leech, G. et al. 1999. *The Longman Grammar of Spoken and Written English*. London: Longman.
- Evans, V. 2007. *A Glossary of Cognitive Linguistics*. Edinburgh: Edinburgh University Press.
- Evans, V., Green, M. 2006. *Cognitive Linguistics. An Introduction*. Edinburgh: Edinburgh University Press.
- Hopper, P.J., Thompson, S.A. 1980. "Transitivity in grammar and discourse" in *Language*. 56: 251–299.
- Lakoff, G. 1977. "Linguistic Gestalts" in *CLS*. 13: 236–287.
- Langacker, R. 2008. *Cognitive Grammar: A Basic Introduction*. Oxford: OUP.
- Langacker, R. 1991. *Foundations of Cognitive Grammar*. Vol. II: *Descriptive Application*. Stanford: Stanford University Press.
- Podhorodecka, J. 2007. *Evaluative Metaphor: Extended Meanings of English motion Verbs*. Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej.
- Rice, S. 1987. "Transitivity and the Lexicon", [crl.ucsd.edu/newsletter/02/2-2.pdf](http://crl.ucsd.edu/newsletter/02/2-2.pdf)
- Taylor, J. 2009. *Linguistic Categorization*. Oxford: OUP.

## **Rola czynników semantycznych w pasywizacji**

### **Streszczenie**

Celem niniejszej pracy jest zbadanie, jakie czynniki mają wpływ na częstotliwość pasywizacji czasowników w języku angielskim. Na podstawie danych z korpusu językowego The British National Corpus, autorka bada dwa angielskie czasowniki: *see* i *watch*, z których pierwszy jest czterokrotnie częściej używany w stronie biernej niż drugi. Dane korpusowe zostają poddane analizie za pomocą środowiska oprogramowania statystycznego R, co wykazuje zarówno hierarchię ważności jak i wzajemne powiązania pomiędzy poszczególnymi semantycznymi i syntaktycznymi właściwościami obu czasowników. Najistotniejsze dla częstotliwości ich użycia w stronie biernej okazują się: asymetryczna relacja pomiędzy *agenssem* a *patientsem*, perfektywność wydarzenia i związane z nim relacje przyczynowo-skutkowe.