VISUAL PERCEPTION ACTS: SOME ASPECTS OF LINGUISTIC REPRESENTATION IN LANGUAGES WITH DIFFERENT CODING STRATEGIES OF CHARACTERIZATION SEMES

This article deals with the description of the specifics of representing the semantic field of visual perception by English, German, French and Russian verb lexemes. The emphasis is on "basic" lexemes, those ones that denote the ability to perceive information visually without having the intentionality component in their semantic structure. These verb lexemes are "see," "sehen," "voir," and "видеть." Their semantic structure consists of two components: "visual perception" and "ability." In German, a third component, "intentionality," can also be activated, although, it changes the lexeme's status, because it is the absence of the "intentionality" component that distinguishes the "basic" verbal predicates of visual perception from a large group of other lexemes in which this component is mandatory. In verbs like "look," "regarder," "watch" and others it occupies one of the central places in the seme structure of the word. This ability to have such a component can be presented implicitly or explicitly, depending on various factors, including the linguistic tradition.

Keywords: visual perception, basic verbal lexemes, extended verbal lexemes, modal components, objective modality, and subjective modality.

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ОСОБЕННОСТИ ЛИНГВИСТИЧЕСКОЙ РЕПРЕЗЕНТАЦИИ АКТОВ ВИЗУАЛЬНОГО ВОСПРИЯТИЯ (НА МАТЕРИАЛЕ ЯЗЫКОВ С РАЗЛИЧНОЙ СТРАТЕГИЕЙ КОДИРОВАНИЯ СЕМ ХАРАКТЕРИЗАЦИИ)

В данной статье на примере сопоставления глагольных лексем английского, немецкого, русского и французского языков предлагается описание специфики различных способов представления семантического поля визуального восприятия в зависимости от установившихся языковых норм. Акцент сделан на «базовых» лексемах, таких, которые обозначают способность визуально воспринимать информацию, при этом могут не содержать в своей структуре такой компонент, как интенциональность. Данными лексемами являются глаголы "see", "sehen", "voir" и "видеть". Их особенностью является двухкомпонентная семантическая структура: «визуальное восприятие» и «наличие способности к визуальному восприятию», но в немецком языке, помимо двух базовых компонентов, в состав семемы также может быть включен третий ком-

понент — «интенциональность». Возможность появления этого компонента связана со многими факторами, в том числе и с языковой традицией. Тем не менее именно отсутствие компонента «интенциональность» отличает «базовые» глагольные предикаты визуального восприятия от большой группы лексем другого уровня, в которых этот компонент присутствует всегда, занимая одно из центральных мест в семной структуре слова ("look", "regarder", "смотреть" и другие). Также, по-разному может быть представлен компонент «наличие способности» — имплицитно или эксплицитно, в зависимости от языка.

Ключевые слова: визуальное восприятие, базовые глагольные лексемы, расширенные глагольные лексемы, модальные компоненты, объективная модальность.

Introduction

One of the main tasks of modern science is the creation of intelligent systems capable of simulating complex cognitive processes occurring in the human mind. Imitation of brain activity with the help of artificial intelligence instruments involves linguistic structuring of the reality, the fragments of which are reflected in various units which can code, store and reproduce the knowledge. Language is the basic system that these units create.

Cognitive operations associated with the process of obtaining information are encoded in the language in various ways, including the use of direct nominations of channels through which information is received. According to G. A. Zolotova, the verbs of perception are of the "modus" type; they, unlike the "dictum" ones, are not independent, since they do not "represent a segment of extralinguistic existence ... they function as a frame of objective information, present information about a speech situation, and interpret the dictum" [Zolotova et al., 1998: p.75]. Due to the fact that an act of receiving information is carried out by direct observation of ongoing events (modus frame of the first type), these verbs are actively used in the reproductive register, when the speaker's inclusiveness and immersion in the chronotope of events provide the possibility of obtaining information by sensory means.

Visual perception is one of the main tools for processing incoming information. Such status determines the existence of a wide range of instruments capable of representing its semantic structure. For these purposes, linguistic units of two types can be used: "basic" and "extended," which, in turn, depending on the specificity of presenting semes of characterization, are divided into synthetic and analytic. The meaning of the terms reflects their semantic structure: "basic" units directly denote the process of visual

perception. These are "видеть" (Russian), "see" (English), "sehen" (German), and "voir" (French).

When describing the functioning of channels for receiving and processing information, various types of correlations between additional semantic components in different languages can be mentioned. They may include such aspects of a situation as activity / passivity, temporal duration, the degree of interest of the agent, etc. For presenting each of these meanings there is a certain set of language tools. The seme of goal-setting seems especially significant, because is serves as a differential feature of correlated predicates. Aristotle divided verbs into "kinetic" (describing "movements") and "energy" (presenting "implementations"): "Since of the actions which have a limit none is an end but all are relative to the end... E.g. at the same time we are seeing and have seen, are understanding and have understood, are thinking and have thought (while it is not true that at the same time we are learning and have learnt, or are being cured and have been cured). For it is not true that at the same time a thing is walking and has walked, or is building and has built... But it is the same thing that at the same time has seen and is seeing, seeing, or is thinking and has thought. The latter sort of process, then, I call an actuality, and the former a movement." (Aristotle, 350 B.C.E).

The group of "extended" units includes lexemes with the semantic structure containing a basic component "visual perception" and an additional one (or several ones) capable of characterizing the act of visual perception. These components can be included in the semantic scheme of a lexeme or presented in the semantics of units of different levels: word-building, affixal (prefixes) or grammatical (morphological or syntactic). The classification of the components which describe an act of visual perception was developed by the authors of English-Russian Dictionary of Synonyms: 1) the speed of the action, 2) its nature, 3) the properties of the agent of the action, 4) the properties of its object [Apressyan 2001, p. 280]. Among typical characterizing components which can describe the act itself and the attitudes towards it the following ones can be singled out:

"agent's intention, main aim of directing one's sight at a particular object or in a certain direction." This component dominates the field with almost all lexemes (except "basic") marked by it. The core is presented by "look" (English), "sehen" (German, there is a tendency in the language to include this component into the structure of the basic lexeme), "regarder" (French), and "смотреть" (Russian). The set also includes a subgroup: lexemes in which the semantic feature "focusing on an object" domi-

nates ("regard," "observe," "watch," "betrachten," "beobachten," "gucken," "глядеть," "наблюдать," "observer," etc.);

a set of components presenting agent's attitude towards the process of visual perception. This group includes positive attitudes such as, for instance, astonishment, amazement ("gape," "таращиться," "уставиться," "glotzen"), admiration ("любоваться," "gaze," "contempler", etc.);

negative components in the semantic structure are usually activated when the attitudes of third parties, for instance, disapproval, are presented by the lexemes ("goggle," "ogle," "таращиться," "пялиться," еtc.).

Extended units can rely on the presence of a modal component that characterizes the act of visual perception or introduces agent's / third party's attitude to it. Such elements are universal instruments of characterizing the ability — modal verbs are mainly seen in this list, but adverbial units can also act in the same way:

- (1) Spectacles are not allowed, so if you **can't see well enough** without them but want to compete anyway you should either get a pair of soft contact lenses or see how you manage without glasses.
- (2) Sie können Hell und Dunkel unterscheiden und sorgen dafür, dass ein Mensch in der Dämmerung und nachts gut sehen kann.
- (3) Я теперь **мог** не только ходить, **видеть**, говорить, но и плавать, то есть не бояться глубины.
- (4) De nombreux enfants qui ont des problèmes de vue ne sont pas totalement aveugles. Ils **peuvent voir un peu**. Certains enfants peuvent voir la différence entre la lumière et l'obscurité mais ne voient aucun objet.

In these sentences, the basic lexeme is accompanied by additional evaluative elements — *well enough*, *gut*, *un peu*, as well as locative and temporal markers in the German Sentence — *in der Dämmerung* and *nachts*.

What is interesting is that adverbial elements can simultaneously perform the semantic function of objectification, for example:

(5) Видеть дальше своей могилы ему не дано.

A circumstantial construction дальше своей могилы (beyond its grave), which combines aspects of time, place and measure, with the component "place" being objective in its essence. It indicates the point in space to which the gaze can be directed. Similar patterns can also found in English:

(6) The horizons of her life seemed unnaturally close; she **could see** no further **uphill than the lofty breadfruit tree that overhung the road at the edge of the clearing**.

The analytic group includes deverbatives and, less often, words of other parts of speech, including auxiliary ones, in the semantic structure of which the seme of direct visual perception is not given, and the expansion of the meaning can occur due to the introduction of additional elements. For instance, the verb phrases "натолкнуться на кого-либо взглядом" (Russian), "come across (somebody or something)" (English) or, if to mention non-verbal units, locative prepositions: "передо мной" (Russian) and their equivalents in other languages. The meaning of visual perception in such units is implicit.

Methods and materials

The analysis conducted in this article relies upon the structures obtained from Russian National Corpus in the form of two sets: in Russian proper and in two or more languages (parallel corpora). The parallel corpora have been used for the purpose of tracing the difference between structures given in different languages. The corpus is available at https://ruscorpora.ru/. The monolingual corpora include the following: British National Corpus (https://www.english-corpora.org/bnc/), German Reference Corpus "DeReKo" (Deutsche Referenzkorpus — DeReKo. https://cosmas2.ids-mannheim.de/cosmas2-web) and French Mixed Corpus developed by the University of Leipzig in 2012 (https://corpora.uni-leipzig.de/fr?corpusId=fra_mixed_2012).

The methods used in the article include the component analysis and comparative analysis. The behavior of basic verb lexemes indicating acts of visual perception has been observed in different surroundings. The basic aim is to detect the ability of semantic components of these lexemes to be activated when used for describing various situations and attitudes of the parties involved in the act of visual perception: a mandatory participant — the agent, and two optional ones — the object (if personal) and the third party (the observer of the process).

Results and discussion

The status of basic lexical units which can be considered as "starting points used to determine the act of visual perception without agent's active participation" determines their employment to denote both the ability "to perceive visually" (intransitive), and in some cases the ability "to perceive the surrounding reality passively, without active participation" (when accompanied by an object, transitive). In the status of intransitive units, these lexemes are located in the core of the semantic field: initially,

the ability to perceive visually is mentioned <1>, then, if necessary, at the next semantic levels, the manifestation of this ability in the surrounding reality takes place <2>:

It should be noted here that, an object cannot be completely excluded from the situation of visual perception. The process of visual perception is two-component: regardless of the situation, there are two parts: an agent and an object of perception. The object can be presented implicitly, including its complete disguising in the proposition. But the very structure of the process, of course, contains it, even in case of just ascertaining the mentioned ability. A. A. Potebnya noted that "... when we do not pronounce the object of a verb which is objective in its nature we do not make this verb subjective, because, we, so to speak, without changing the verb itself, leave an empty place for the object with it: he has already been reading — no matter what, but something expressed by a name would certainly stand in the accusative case" [Potebnya, 1977: p. 249].

Another feature of basic lexemes constructions, if deprived of the intentional component, is their inability to take circumstantial elements representing aim (that answer the question "why?"). This was noted by T. B. Alissova, who pointed out that in such cases the predicate is considered to be "a unit of incomplete contact" opposed to units of complete contact [Alissova, 2009: p. 29].

The basic verb lexemes may behave in the languages differently. Russian allows their use without any additional explicit elements, such as object, modal component, or meaning expansion with the help of extra morphological elements. All of them can be absent in Russian, in that case the physiological ability is described (to perceive visually). Such representation of the lexeme "видеть" can be observed in the following poem by A. M. Fedorov:

(8) Я глаза свои зажмурил, чтоб не видеть. Я закрыл руками уши, чтоб не слышать. А лесной проклятой погани неймется: Пуще дразнит, пуще давит и пугает Диким полчищем всё ближе обступает; Свист да хохот неотвязней раздается.

In the poem by A. K. Tolstoy the same lexeme is used, but in a slightly different surrounding:

(9) Много в пространстве невидимых форм и неслышимых звуков, Много чудесных в нем есть сочетаний и слова и света, Но передаст их лишь тот, кто умеет и видеть и слышать, Кто, уловив лишь рисунка черту, лишь созвучье, лишь слово, Целое с ним вовлекает созданье в наш мир удивленный.

"Видеть" in (8), which deals with the ability to see, differs from "видеть" in (8) by being modally marked due to the explicit presence of the modal unit "уметь." In Russian this element is optional, while in English, German and French its presence in finite constructions is mandatory, since the isolated use of the basic lexemes in the meaning of "visually perceive reality" is not allowed. These lexemes can be used as non-finite units, as "unseeing" in English, or "sans voir" in French, but the use of these ones is rather limited by context and compatibility.

The silent status of the modal component in (8) does not indicate its complete absence. In the poem of A. M. Fedorov the agent denies the ability to see, that is, the situation becomes unreal. In the statement "Я вижу," which is technically an elliptical construction that describes the mentioned ability, full form being "Я могу видеть" ("I can see"), the idea of the ability does disappear completely, it just gets disguised.

One of the functions of the modal component is positioning the situation in the time continuum, since the use of the tense form of the auxiliary verb which accompanies "see" allows establishing a direct connection between the temporal parameter of a situation and a linguistic unit representing it. On the other hand, this parameter can be concealed by means of infinitive constructions which still transmit the modal component of desirability / undesirability when used in negative constructions: Я глаза свои зажмурил, чтобы не видеть... (I closed ту eyes so as not to see ...)

The absence of the subjective modality component in statements of this type is possible when they are supported by phase elements. This can be observed in the poem "Litvinka" by M. Y. Lermontov:

(10) Бежали дни, Арсений стал опять, Как прежде, **видеть**, слышать, понимать, Но сердце, пораженное тоской, Уж было мертво, — хоть в груди живой.

The phase lexeme «стал» ("became"), which correlates with the verb «видеть» ("see"), does not impose any restriction on it and acts only as a clarifying element. In English, German and French modal lexemes do impose such restrictions on the independence of the verb "to see." If this verb is used in an intransitive finite structure it is always supported by them:

(11) I can see well.

In English the independent use of the verb "to see" can be observed in those constructions which are marked by the meaning "to understand":

GUIL: (Patient but edged) You don't get my meaning. What is the first thing after all the things you've forgotten?

(12) ROS: Oh I see. (Pause.) I've forgotten the question.

The Collins English Dictionary defines this meaning as "to perceive (an idea) mentally; understand." German and French constructions are also marked by the use of parallel lexemes either with a modal verb or with the component to "understand" which may displace the basic component "to perceive visually," fully or partially:

- (13) Nun kann man die Sache aber auch umgekehrt sehen.
- (14) Das sehe ich anders.

In French:

(15) Moi-même, **je ne vois pas** pourquoi le festival devrait déménager.

As it can be noticed, the English sentences are characterized by the independent use of the unit "to see" as a marker of understanding the situation. Parallel lexemes in German and French do not demonstrate such ability: "to see" is usually followed by an explanation of what actually the "object of understanding" is.

Another group of phrases displaying non-objective uses of the basic lexemes is presented by infinitives. The tendency to nominalize infinitives in elliptical constructions is prevailing, moreover, there is a direct semantic link between these verbs and their objects:

- (16) His office, however, was plenty easy to see.
- (17) Ich warf einen Blick durch die offene Tür, aber von Giordano und Charlotte war wider Erwarten nichts zu **sehen**.
- (18) Vous pouvez venir à une ou plusieures répétitions, sans obligation, juste pour **voir**.
- (19) En revanche, la gestion du timing constitue le principal challenge auquel on est confronté dans cet épisode, les derniers parcours acrobatiques requérant un timing millimétré qui fait plutôt plaisir à **voir**.

The sentences (16)–(19) present the constructions in which the non-finite forms (infinitives) are not independent¹. They are limited by the

¹Only having two basic components: "visual perception" and "ability" with no other explicit units to accompany them.

presence of the objects. Non-finite lexemes without objects are not quite frequent, still they can be found in Russian:

... глаза свои зажмурил, чтобы не видеть, (8)

in French:

(20) Après avoir parcouru la campagne pendant deux heures, Mrs. Aouda et son compagnon — qui regardait un peu sans voir — rentrèrent dans la ville, vaste agglomération de maisons lourdes et écrasées, qu'entourent de charmants jardins où poussent des mangoustes, des ananas et tous les meilleurs fruits du monde.

Both independent constructions are used for characterizing purposes: in (8) the infinitive "не видеть" describes the aim of the speaker (the author of the poem) to prevent a possible act of visual perception from happening, and in the infinitive construction with the preposition "sans" in (20) the infinitive is used quite in a specific manner — to characterize an existing process of visual perception marked by a lexeme containing component "intention" ("regarder"). The introduction of the negative element "ne" together with the basic lexeme into the phrase's structure can destroy the intentional component represented by the lexeme "regarder."

In English it is not the infinitive unit that demonstrates independence, but a participial one: *unseeing*. The Collins dictionary gives the following definition of this unit: "If you describe a person or their eyes as unseeing, you mean that they are not looking at anything, or not noticing something, although their eyes are open." [Collins, 2006]. This instrument of characterization can be used in the same manner as "sans regarder" in French:

(21) Ему казалось, что его здесь нет, что он висит где-то в небесной пустоте, смотрит вниз и видит мягко освещённый уютный уголок, молчащего Мака и рядом с ним в кресле нечто мёртвое, окоченевшее, безгласное и бездыханное...

...as if he were not in it, but suspended somewhere in space; as if he were looking down upon this softly illuminated cozy corner, upon the silent Mac, and upon something stiff, **unseeing**, and lifeless propped in a chair beside Mac.

In the original Russian text by the Strugatsky brothers there is no mentioning of inability to perceive visually. According to H. S. Jacobson, the translator of the novel "Prisoners of Power," this lexeme can be an equivalent of units that describe other conditions: "безгласное" ("unable to speak") and "бездыханное" ("unable to breathe"). The inability to see,

as presented in the translation, can also be considered as a feature of an unalive being.

Another way to represent the base form without activating implicit components is through translated constructions. For example, the translation of one of the mottos of Queen Elizabeth I: *video et taceo — I see and keep silent*. But it should be pointed out that such examples seem to be not natural to English; it is extremely difficult to find similar ones in language corpora.

One more point deserving attention is the behavior of the German basic verb lexeme "sehen." The presence of the intentional component in its structure can be observed in the following sentence:

(21) Trotz der anhaltend positiven Konjunktur **sehen** viele Menschen mit Sorge in die Zukunft. Несмотря на стабильно позитивную конъюнктуру многие люди с озабоченностью **смотрят** в будущее.

This lexeme, unlike its English, French and Russian "basic" counterparts ("see," "voir," and "смотреть"), allows the activation of intentional and objective components. The one of intention is rather frequently activated, in those cases it becomes a counterpart of "смотреть," "look," and "regarder." It can also be used as a multicomponent lexeme, which may include into its semantic structure the interpretation of two "extra" components: "intention" and "object" — "fernsehen" ("to watch TV"). The first component ("intention") is presented implicitly, while the second is activated by means of the prefix "fern-". The presence of explicit object is not required. In other languages extended lexemes are used for describing such situations: "watch," "regarder," and "смотреть", moreover, the use of explicit objects leads to its ability to take other components, both characterizing and objective, which are usually expressed synthetically: "umsehen" ("to look around") and others.

Conclusion

Thus, it can be pointed out that the independent use of the basic lexeme — a finite form of a verb — in combination with an agent is generally characteristic of Russian. In that case two basic components are activated ("the agent" and "the act of perception"), the other two ("the object" and a modal component) being implicit. In English, French and German the presence one of the components, an object of perception or a modal component, characterizing the act, is mandatory: the lexemes are used either with explicit modal verbs ("can see," "sehen zu können," "pouvoir

voir," etc.), or with an object ("see a tree," etc.). In addition to that, syntactically independent uses of non-finite forms of the verb can in fact be observed, although, they usually correlate with the object. This correlation is of a particular interest, since non-finite forms of the verb are located closer to the propositional structure of the statement due to their "pure" status, the focus being exclusively on the event component, which does not take into consideration the parameters of subjective modality. These ones are quite frequently used in the Russian (16) and less frequently in the English and French non-verbal constructions with the meaning of characterization: "unseeing" (independently), "unseeing + Noun" (usually, "eyes", "face") or in "sans regarder."

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