Cognitive interpretation of the semantic field of perceptual adjectives hard and soft (on the basis of lexicographical works)

Perceptual (sensory vocabulary) of different languages has long since seen a particular growth of interest, sparked by the works of A. Wierzbicka, A. Merzlyakova, K. Rakhilina, M. Shindo and S. Ullmann, among others. Among various parts of speech under study, perception adjectives move centre stage and hold one of the leading positions. This can be accounted for the ability of adjectives to reflect the speaker’s way of construing the situation, because they increase the precision of description, and their grading characteristics tend to imply the speaker’s attitude to or evaluation of the situation. There has been a huge bulk of research on perception adjectives that denote such vital qualities as smell, colour (sight), hearing, taste, and tactile phenomena. The verbalization of tactile senses, in particular, adjectives with the semantic component soft – hard, have, nonetheless, received little focus from researchers studying the English language, and, accordingly, calls forth the need for in-depth research in this area. Adjectives that denote hardness in the English language have already been the object of research focusing on lexical-semantic groups in the Old English period [1], their semantic structure has been analyzed as part of the domain “Touch” [7]. A comparative linguistic research of the regularities of semantic derivation of the adjectives [2] has also partially dwelled on them. The present paper focuses on the correlation of semantic and conceptual dimensions of antonymous adjectives hard and soft that represent the individual concept HARDNESS in the modern English.

It should be mentioned that the studies of the ways of structuring knowledge and ideas of contemporary English speakers about the adjectival units under research that, on the whole, denote a deep conceptual field, has not yet been represented as a systematic phenomenon from linguocognitive perspective in the national linguistic literature.

Hence, the present research aims at investigating the semantic representation of the adjectives hard and soft on the basis of 10 English dictionaries of the latest publications [AHDE, CED, MD, MWCD, WNWCD, OALD, LDOCE, UD, PD, CALD], as well as analyzing the conceptual field of the lexemes under study. On the whole, when juxtaposing the semantic field (SF) with the conceptual field (CF), we, in fact, compare the linguistic world view with the conceptual one. The correlation between the conceptual and the linguistic world views is, most of the times, considered to be such, according to which the conceptual world view is broader than the linguistic one, and completely embraces the content of the latter [5, p. 145-147].

Since the basic trend in semantic-cognitive research (O.L. Bessonova, K.V. Rakhilina, M.V. Skab, Y.A. Sternin) [3; 8; 9; 11] consists in the studies of the correlation of the language semantics with the human conceptual sphere, i.e. semantic processes with the cognitive ones, we turn to the analysis of
dictionary definitions, working our way from the semantics of lexical units to their conceptual content. As O.S. Kubryakova rightly puts it, “the information that has been marked by a human as particularly relevant for his/her existing, is fixed in dictionary definitions” [6, p. 65]. Language, according to the postulates of semantic-cognitive approach, is viewed as one of the ways of getting access to a human’s conscience, his/her conceptual sphere, as well as the content and structure of concepts representing the units of thought. Such way is the most objective and the most formalized.

Let us examine methods of cognitive interpretation on the example of the results of a linguo-cognitive research of the semantics of the adjectives hard and soft. The first stage of the cognitive interpretation of the results of lexicographical representation of the semantics of the adjectives under research presupposes the selection of semantic blocks (the term belongs to K.V. Rakhilina), that are considered to be groups of two or more meanings that have common features and differ from other meanings of the same word. The second stage of cognitive interpretation of semantic field of the analyzed adjectives is generalization of separate meanings and formation of specific cognitive features within corresponding classifiers. Lexical units that are similar in their semantics, are interpreted as representations of a separate cognitive feature, and their frequency is added.

On the basis of the cognitive interpretation of lexicographical representation of SF of the adjectives hard and soft among the elicited meanings we have singled out 14 semantic blocks for the adjective hard and 12 SBs – for the adjective soft that reflect cognitive features of the corresponding adjectives.

As the results of the performed research indicate, the semantic field of the adjective hard is represented by the following 14 SBs: “Difficulty” (19,5%), “Considerable impact” (14,9%), “Severeness” (10,4%), “Harshness, disagreeable sensations” (10%), “Hardness of an object” (10%), “Non-compliance” (6,6%), “Realistic view” (6,2%), “Exactness” (5,8%), “Authenticity” (4,6%), “Persistence” (3,3%), “Endurance” (2,9%), “Stability” (2,9%), “Core information” (1,7%), “Audacity” (1,2%). Percent representation of the SF structure of the adjective hard, produced as a result of investigating different SBs, can be graphically presented by means of the following diagram (see Picture 1):
The determined SF structure of the adjective *hard* that is characterized by cognitive features which are verbalized by a totality of upper-mentioned SBs, implies different ways of its explication by native speakers. Specifically, SB “Hardness of an object” mirrors speakers’ conception about hardness of different objects that are perceived by touch through direct contact with the surrounding world. Hardness of objects manifests itself during active (via hands and fingers) or passive (via skin) perception of the world by a human. According to the frequency index the dominant conceptual feature (CF) is the following: *resistant to pressure; not readily penetrated; firm* (9): hard cement. It is interesting that semantic block “Hardness of an object” in all 10 dictionaries appears in the first position. Nonetheless, the percent fraction of the given semantic block is not the highest, but is inferior to four other SBs. The semantic block “Harshness, disagreeable sensations” also reflects speakers’ idea of hardness of phenomena which, unlike the previous ones, are perceived by human by means of other sensory spheres: sight, hearing, smell, and taste. The most frequent conceptual feature in this semantic block is “*intense in force or degree; violent*” (9): hard wind. Thus, SBs “Hardness of an object” and “Harshness, disagreeable sensations” fix the existence of sensory-image representation. “Considerable impact” (has the most frequent CF – *having high alcoholic content; intoxicating* (10): hard drink), “Exactness” (dominant is CF: *marked by sharp outline and definition* (5): hard silhouette), “Authenticity” (the most frequent CF is: *that can be verified; undeniable; factual* (9): hard evidence), “Core information” (which is represented by the only CF: *consisting of the basic facts about major events, as opposed to presenting feature stories, opinion* (4): hard news) constitute rational-logical modus, since they are the results of abstracting, and are not perceived directly by means of sensory organs. The rest of SBs are united by a common conceptual feature “evaluation” and, therefore, represent evaluative modus. It is interesting to observe that hardness is perceived by the
representatives of English linguoculture not only negatively, but is also characterized by a positive estimation. For example: SB “Persistence” (introduced by the only CF: performing with great energy, persistence, intensity (8): hard worker), “Audacity” (has 1 CF: brave, strong and ready to fight (3): to be hard enough), “Endurance” (CF with the highest frequency index: being heavily fortified (3): hard missile), “Realistic view” (with the most frequent CF: free from illusion or bias; practical; realistic (7): hard view of life), “Stability” (the highest frequency index belongs to CF: in strong demand; stable (4): hard currency). The negative vector of evaluation characterizes the following CFs: “Difficulty” (introduced by two most frequent CFs: difficult to accomplish or resolve (10): hard problem ma demanding the exertion of energy (10): hard labor), “Severity” (with the most frequent CF: harsh or severe in effect, nature (9): hard words), “Non-compliance” (the most frequent CF is: resistant in persuasion; adamant; tough (8): hard man).

Thus, the conceptual field of the adjective hard is a totality of concepts as quanit as of information and knowledge of English native speakers about hardness. As suggested by Y.S. Stepanov, “a sensory image constitutes the nucleus of any concept, which, governed by the needs of rational cognition, goes through a series of complex thinking processes, aiming at a higher level of abstraction”. On its way it becomes overgrown with a great many features, which mirror the qualities of objects and phenomena that are perceived, transforming into a complete image” [10, p. 44]. Indeed, when analyzing the achieved results, we ascertain that on the same level with perceptual images there are cognitive features, which have been formed as a result of associative thinking, cognitive activity and abstracting.

Let us proceed with the analysis of the semantic field of the antonym soft, which is presented by 12 SBs (see Picture 2): “Agreeable sensations” (20,5%), “Complianace” (11,9%), “Weak impact” (11,9%), “Softness of an object” (10%), “Easiness” (9%), “Kindness” (8,1%), “Feebleness” (8,1%), “Instability” (5,7%), “Vagueness” (5,7%), “Mental deficiency” (3,8%), “Inauthenticity” (3,3%), “Secondary information” (1,9%).

![Picture 2. Percent representation of the semantic field structure of the adjective soft](image-url)
Using identical procedure, we single out the same modi and determine the most frequent conceptual feature for each semantic block:

1) **Sensory-image modus**: “Agreeable sensations” (3 CFs with the highest frequency: low and pleasing (10): soft voice; not brilliant or glaring; subdued (10): soft light; temperate mild, pleasant, without much force (10): soft breeze), “Softness of an object” (2 CFs with the same frequency index: yielding readily to pressure or weight; not hard or stiff (10): soft wax; smooth or fine to the touch (10): soft silk).


3) **Evaluative modus**: a) **positive evaluation**: “Easiness” (CF: easy; not complicated (10: soft job), “Benevolence” (CF: tender-hearted, kind, compassionate (10): soft grandmotherly woman), “Compliance” (CF: not strict enough with other people; lenient; permissive (10): to be soft on children), b) **negative evaluation**: “Feebleness” (CF: physically out of condition; flabby; delicate (7): too soft for the army), “Instability” (CF: gradually declining in trend; sluggish; unstable (7): soft market) “Mental deficiency” (CF: mentally deficient (8): to be soft in the head).

Since the lexemes under study bear antonymous relations and their contrasting is the linguistic phenomenon, it is interesting to observe areas of their semantic approximation, as contrasting is a kind of comparison, and susceptible to comparison are only those lexical units, which overlap in their semantics. Comparing the SBs, produced as the results of interpretative research, we notice considerable divergences in the evaluative modus of the analyzed adjectives.

**Table 1. Comparative characteristics of the evaluative modus of the adjectives hard and soft**

<table>
<thead>
<tr>
<th>Evaluative modus of the adjectives under study</th>
<th>hard</th>
<th>soft</th>
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<tbody>
<tr>
<td>1. SB “Difficulty”</td>
<td>1. SB “Easiness”</td>
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<tr>
<td>2. SB “Stability”</td>
<td>2. SB “Instability”</td>
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<tr>
<td>3. SB “Endurance”</td>
<td>3. SB “Feebleness”</td>
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<td>4. SB “Severity”</td>
<td>4. SB “Kindness”</td>
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<td>5. SB “Non-compliance”</td>
<td>5. SB “Compliance”</td>
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<td>–</td>
<td>6. SB “Mental deficiency”</td>
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<tr>
<td>6. SB “Persistence”</td>
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<td>7. SB “Audacity”</td>
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<td>8. SB “Realistic view”</td>
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The data represented in the table above suggest the phenomenon of semantic asymmetry of antonyms, which consists in the fact that one of the members of an antonymous pair is semantically more complex than the other one. According to a well-established view, one of the members of an antonymous opposition is positive in its semantic interpretation, and the other is negative, while the very relation is asymmetrical. The negative member of the opposition appears to be more important and more complex semantically [4, p. 145]. Such asymmetry (moving into two directions) is natural as it is clearly reflective of the segmentation of the real world. Proceeding from solely psychological assumptions, it is natural for a human to react more sharply on negative phenomena that call forth discomfort and cause counteraction. Owing to this, the sphere of explication of the negative member of the opposition will be represented in language more discretely. In the given adjectival opposition, **hard** is a negative, marked member of the opposition, and denotes the presence of the feature “hardness”, while its antonym, **soft**, performs the function of a positive, unmarked member of the opposition and indicates the absence or a lower degree of explication of the corresponding feature.

To summarize, the results of the carried out interpretative analysis of the semantic field of the adjectives indicate that their conceptual field (which constitutes a totality of concepts of a varying degree of importance for the a human’s cognition) is characterized by integral as well as differential conceptual features. The analyzed lexemes, with are verbalized by means of different SBs, function in the totality of the following modi: sensory-image, rational-logical, and evaluative. The data, drawn from lexicographical sources have demonstrated that the evaluative modus of the adjectives under study is marked by the biggest number of differential conceptual features, which can be explained by the appliance of these lexemes to the layer of sensory vocabulary, for which evaluative characteristics of sensations and impressions are paramount. Based on the findings of this preliminary study, several lines of future research may be useful to gain further insight into the conceptual field of the adjectives **hard** and **soft** by studying their combinatory potential within a textual fragment and establishing new, individual cognitive characteristics.

**Literature**


