## CONCEPT SCARCITY AND ITS HISTORICAL DEVELOPMENT IN ENGLISH

У статті досліджено структурно-семантичний потенціал термінологізованого імені концепту НЕСТАЧА – лексеми scarcity (п.) за допомогою етимологічного аналізу. Етимоном лексеми scarcity (п.) виступає протоіндоєвропейський корінь дієслова kerp- із значенням «збирати врожай». Зміст концепту утворений сукупністю семантичних ознак та внутрішньою формою «відсутність певної кількості» з негативною оцінкою «менше норми». Ці ознаки профілюються в понятійних доменах ЕКОНОМІКА та ТОРГІВЛЯ, МАТЕМАТИКА, БІДНІСТЬ, які складають «базу даних» номінативного простору концепту та мотивують відповідні когнітивні ознаки та концептуальні зв'язки НЕСТАЧА в дискурсі.

**Ключові слова:** внутрішня форма слова, етимологічний аналіз, етимон, концепт, нестача, семантична ознака.

The principal focus of the current cognitive linguistic studies is on the natural language "as a means for organizing, processing, and conveying information" (Geeraerts 5) stored in the brain with a semantic meaning being treated as "the primary linguistic phenomenon" (ibid). With an assumption that there is a growing tendency among scholars to investigate the mechanisms of communication ability based upon intellectual and cognitive competence it naturally involves interdisciplinary researches and cooperation with other disciplines to determine the mechanism of human communication ability.

The *purpose* of this study is to carry out electronic corpora-based (historical dictionaries and thesauri) etymological analysis of the name of the concept SCRACITY – the lexeme *scarcity* (n.) in order to "establish the origin of the word, explain the history of its occurrence, uncover past word-formation relationships, show how modern meanings emerged" (Makovskij 26) and see how the conceptual content is construed and whether it changed through time.

The theoretical background of this study is historical cognitive science as a new and perspective direction of cognitive research in linguistics which focuses on revealing "the most general laws of the evolution of concepts on the basis of diachronic analysis methods" (Shevchenko 139). In terms of diachronic approach I follow I. Shevchenko's (ibid 135) clearly stepped algorithm for determining historical transformations of the concepts at all levels:

1) pre-conceptual (archetypal) features and the notional basis of the concept;

- 2) its categorical properties; 3) the name of the concept and the structure of the semantic space;
- 4) modeling of the cognitive structure of the concept in particular historical periods;
- 5) figurative and value characteristics of the concept according to metaphor and metonymy data;
- 6) mechanisms of discursive actualization in speech acts (for concept-events) or in strategies and tactics of politeness (for concepts-signs);
- 7) comparing the data obtained for each of the historical periods and determining the leading vectors of development as the evolutionary/involutionary types of transformations of the concept.

The structure of the concept is much more complicated and varied than the lexical meaning of words so etymological review on the historical development of the semantic properties of the name of the concept, which is a matter of 'time' and 'cognitive mechanism', requires determining *the etymon* of the name of the concept, *the inner form*, the semantic structure of the lexeme *scarcity* (n.) in diachrony and *the range of domains* where its meanings were profiled over time.

I argue that all those semantic transformations given below are motivated by a repeated denotative sign or a formal semantic indicator – 'state of being limited in amount', which determines the inner form of the lexeme *scarcity* (n.) – "the nearest etymological meaning of the word, the way the content is expressed" (Potebnja 146), which has survived to the present day and underlies the formation of modern meanings of *scarcity* (n.).

The content of the concept SCARCITY is stored in the verbal form and manifested by its name – the term "scarcity" (n.) defined in Business Dictionary as "ever-present situation in all markets whereby either less goods are available than the demand for them, or only too little money is available to their potential buyers for making the purchase. This universal phenomenon leads to the definition of economics as the "science of allocation of scarce resources" (BD) and as such, possesses term properties – definition, meaning correspondence, strictness of the term; serves as "a designation of a specific concept of science" (Leitchik, Shelov 90).

It should be noted, that by the word *scarcity* I distinguish between: *the term of scarcity* specified above; *the notion of scarcity* implying that "there is never enough (of something) to satisfy all conceivable human wants, even at advanced states of human technology which involves making a sacrifice – giving something up, or making a tradeoff – in order to obtain more of the scarce resource that is wanted" (Milgate 548) and *the theory of scarcity* as an economic principle "which states that limited supply, combined with high demand, equals a lack of pricing equilibrium" (BD). Therefore the semantic content of the concept is disclosed by the meanings of the lexeme *scarcity* (n.) and the term *scarcity* itself and can be explained as a category of

understanding based on cognitive models.

According to the lexicographical sources (ODC; MWD; OED), technically, the lexeme *scarcity* (n.) is a suffixed word derived from *scarce* (adj.) with the help of the Latinate suffix *-ity* by a relatively productive word-formation pattern ADJ+*ity* with a growth rate of 0.0007 by Baayen's index of productivity (Baayen "Quantitative aspects" 116). This suffix is considered to be "more productive in scientific and technical discourses" (Baayen 22) as different registers tend to be employed for communication on different topics and it is used to form nouns denoting quality or condition or 'degree of a quality or condition' (ODC).

I. Plag proves through his examples that "words, belonging to this morphological category, are nouns denoting qualities, states or properties usually derived from Latinate adjectives (e.g. curiosity, productivity, solidity). Apart from the compositional meaning described above, many -ity derivatives are lexicalized, i.e. they became permanently incorporated into the mental lexicons of speakers, thereby often adopting idiosyncratic meanings, such as antiquity 'state of being antique' or 'ancient time', curiosity 'quality of being curious' and 'curious thing'" (Plag 115). He also explains this tendency by the suffix's ability to change the stress pattern of the base so that many of the polysyllabic base-words undergo an alternation (trisyllabic shortening), whereby the stressed vowel or diphthong of the base word, and thus the last but two syllable, becomes destressed and shortened as in obsc[i]ne-obsc[E]nity (ibid).

The same transformation took place in the structure of the name of the concept under consideration, i.e., *scarce* originating from Vulgar Latin *scarsus* from classical Latin *excerpere* with the meaning 'pluck out' (first registered in the English language in 13<sup>th</sup> century meaning 'restricted in quantity' (OED)) which, as a result, adopted its basic present-day meaning 'the quality, condition, or fact of being scarce' and evolved into the close to its present "shape" of *scarcety* in the 15<sup>th</sup> century.

Having traced the whole chain of morphological transformations of the word *scarcity* (n.) (OED) to its 'ultimate' origin, it became clear that the **etymon** of this lexeme is PIE stem of the verb *kerp*- ('to gather, pluck harvest') which in its turn underwent a set of transformations and emerged in Latin as a derivative from *carpere* ('pluck, gather') + prefix *ex*-  $\rightarrow$  *excerpere* with three semantic properties: 1) 'pluck out, pick out, extract'; 2) figuratively 'choose, select, gather'; 3) 'to leave out, omit'. Only the first meaning migrated into ME instantiated in the forms *scarsete*, *skarsete*, *skarcete*, *scharsete* (ibid).

The following data collected from historical thesauri (HTOED; NEDHP) indicate that the semantics of the lexeme *scarcity* (n.) has gone through nine stages of evolution from 1340 up to present time:

1340–1531 (obs.) frugality, parsimony; niggardliness, stinginess, meanness, e.g.,

For right as men blamen an Auaricious man by cause of his scarsetee and chyngerie.

**1380–1450** (obs.) deficiency, shortcoming, e.g.,

Set in A meene of prudent governaunce, That ther be nouthir **skarsete** nor excesse, But a ryght Rewle of Attemperaunce

**1387–1616** (*obs.*) the condition of being slenderly or inadequately provided (also absol., straitened condition with regard to means of living or comfort; penury, hardship), e.g.,

Scarcity and want shall shun you, Ceres blessing so is on you.

**1398–1526** (*obs.*) scantiness (of diet), e.g.,

Scarcyte in meate, and the bely alway somwhat hungry, is ... praysed

**1400**– insufficiency of supply; smallness of available quantity, number, or amount, in proportion to the need or demand, e.g.,

And tho was..grete scarste of corne and of othir vitaill.

**1450**– insufficiency of supply, in a community, of the necessaries of life, dearth (a period of scarcity, a dearth), e.g.,

After such a famine there followed a **Scarsitie** in South Wales.

**1663**– (rare) comparative fewness, small number (of something not desirable), e.g.,

The Hollanders ..Vant of their scarcity of theeves... but attribute the same scarcity to that defence they... make against Theeves.

**1787**– the mangel-wurzel (also *scarcity plant*, *scarcity root*), e.g.,

Beta vulgaris, the Beet, with its varieties, the Scarcity and Mangel Wurtzel.

1848– (attrib.) an enhanced value due to scarcity (so scarcity price, etc.), e.g.,

Things which cannot be increased ad libitum in quantity, and which therefore, <...>, command a scarcity value.

Out of these nine meanings four are marked as obsolete ('frugality', 'deficiency', 'straitened living condition', 'scantiness of diet') as no longer used, but they are still present within the semantic space of SCARCITY, (cf. these meanings with those in modern dictionaries (MWD; CED): 'straitened living condition'  $\rightarrow$  'want of provisions for the support of life'; 'deficiency, shortcoming'  $\rightarrow$  'lack'; 'insufficiency of supply'; 'scantiness of diet'  $\rightarrow$  'hunger'). Moreover, they operate in the semantic space of the concept in the form of synonyms and related words also included in the notional layer of the concept: *deficit, deficiency, crunch, dearth, deficit, drought, failure, famine, inadequacy, lack, inadequateness, insufficiency, lacuna, paucity, pinch, poverty, scantiness, scarceness, shortage, undersupply, want (ibid) except, of course, the meaning 'mangel-wurzel' which otherwise can motivate figurative linguistic means of the concept (cognitive metaphors) where SCARCITY is understood in terms of another conceptual domain (PLANT).* 

Further morphological changes brought to life two more derivatives: scarcely (adv.),

scarceness (n.) which altogether with scarce (adj.) and scarcity (n.) constitute the 'etymological nest' (M. Makovskij's term), i.e. "the aggregate of related words united by a common root in terms of their origin" (Makovskij 14).

The range of semantic domains where these meanings were profiled through history determine "a database" of the nominative space of the concept and fall into two main categories: EXTERNAL WORLD and MIND (HTHOED) which are further specified by its semantic properties such as referring to the domains SCIENCES (ECONOMICS and COMMERCE, MATHEMATICS) and HAVING or POSSESSION (POVERTY and MEANNESS) respectively (ibid). This allows for the content of a name mental representation to be identified with the information carried by the corresponding mental representation type while the etymological analysis provided information about the emergence and development of the semantic structure of name of the concept, its compatibility with lexemes in other languages and can facilitate the reconstruction of newly created meanings in further research.

To sum up, the name of the concept SCARCITY – the lexeme *scarcity* (n.) is a polysemous word formed by the nominal suffix *-ity* (borrowed from Latin through French) from *scarce* (adj.) with nine lexical meanings motivated by the inner form 'state of being limited in amount'. Though the word-forming meaning of the suffix is partially adopted by the word, its analysis allowed us to see how the semantics of the derivative and therefore the semantic structure of the concept were formed: the categorical semantic properties 'a state or condition or degree of being scarce' make up the semantic basis of the concept's notional content and together with other meanings profiled within the domains ECONOMICS and COMMERCE, MATHEMATICS, POVERTY, MEANNESS take part in the formation of the stereotypical perception of the concept SCARCITY in the English worldview defined by its name.

Modeling the cognitive structure of the concept in particular historical periods can become the subject of further analysis of the concept SCARCITY so in a further perspective these findings may prove to be useful in the development of historical cognitive linguistics in general and diachronic cognitive semantics, in particular in terms of collection and analysis of the empirical data.

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## **List of Sources**

## **List of Abbreviations**

BD – BusinessDictionary.com

CED – Collins English Dictionary

HTOED – Historical Thesaurus of the Oxford English Dictionary

MWD – Merriam-Webster Dictionary and Thesaurus

NEDHP – A New English Dictionary on Historical Principles

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OED – On-line Etymology Dictionary

OEDO – Oxford English Dictionary Online