





Conference Paper

Computer-mediated Discourse and the Process of Lexical Meaning Transformation in Modern English

Natalia M. Nepomniashchikh and Yana A. Volkova

Peoples' Friendship University of Russia, Moscow, Russian Federation

Abstract

Having become a Lingua Franca, English is undergoing constant changes in its phonetic, lexical and grammatical systems. Nowadays, rapid technological development, a growing number of information sources, and many other substantial transformations contribute to the language evolution. In addition, complex interaction between different social and cultural groups has a significant impact on the language as well. These changes may affect phonetic, lexical, semantic and syntactic aspects of the language. The purpose of this paper is to reveal and analyze the semantic changes that have taken place in the English language due to the development of "net-English". Several lexical units, 'twit' (or 'tweet'), 'surf', 'google', 'share', 'like' among them, were taken as examples. Generally, this type of language change can be explained by the emergence of new concepts in different spheres. But it is connected not only with physical changes such as new technological achievements or development of new products and tools. There also exist more subjective reasons, such as human perception, which is constantly changing as well. Semantic change can be classified into different types including metonymic transfer, generalization, metaphorization, etc., all which are traced in the Internet discourse. The research employs the traditional research methodology of definitional and contextual analysis and involves the comparative study of vocabulary definitions and the contextual meaning of the lexical units under analysis; excerpts from the National Corpora (British National Corpora and Corpus of Contemporary American English), online forums and the Internet articles (blogs, twits) serve as the empirical basis for the research. The study concludes the existence of the global "semantic shift" in modern English, the assessment of which and its influence on the English and global culture requires further thorough research and detailed linguistic description.

Keywords: computer-mediated discourse, the Internet discourse, lexical meaning, transformation, "semantic shift".

1. Introduction



Digital technologies are pervasive in the 21st century. There is no doubt that digitalization process transforms the process of communication. This transformation has been

Corresponding Author: Natalia M. Nepomniashchikh nepomnyashchikh-nm@rudn.ru

Published: 21 January 2021

Publishing services provided by Knowledge E

© Natalia M. Nepomniashchikh and Yana A. Volkova. This article is distributed under the terms of the Creative Commons

Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the XXIII International Conference Conference Committee.



going at a high speed and has already produced an impressive effect on human communication. The technological shift in communication inevitably affects the language system. It refers not only to the English language but to all languages used for the Internet communication.

Having become a Lingua Franca, English is undergoing constant changes in its phonetic, lexical and grammatical systems. These changes may seem not very noticeable at first, but even a brief acquaintance with the literary sources from previous centuries would illustrate how dynamic and changeable the English language is. Language changes for different reasons. The evolution of society may cause language transformations. Nowadays, rapid technological development, a growing number of information sources, and many other substantial transformations contribute to language evolution, which is reflected in a number of studies. In addition, complex interaction between different social and cultural groups has a significant impact on the language as well.

The nature of language evolution causes a lot of debate bringing about different opinions, which can vary from radical rejection to acknowledgment and approval [8; 1]. Changes may affect phonetic, lexical, semantic and syntactic aspects of the language. The purpose of this paper is to reveal and analyze the semantic changes that have taken place in the English language due to the development of "net-English". Several lexical units, 'twit' (or 'tweet'), 'surf', 'google', 'share', 'like' among them, were taken as examples. Generally, this type of language change can be explained by the emergence of new concepts in different spheres. But it is connected not only with physical changes such as new technological achievements or development of new products and tools. There also exist more subjective reasons, such as human perception, which is constantly changing as well. Semantic change can be classified into different types such as metonymic transfer, generalization, metaphorization, etc. These changes can generally be traced in the computer-mediated discourse; thus, it is the first type of discourse that should be considered when analyzing the transformations in lexical meaning.

2. Methodology

The research employs the traditional research methodology of definitional and contextual analysis and involved the comparative study of vocabulary definitions and the contextual meaning of the lexical units under analysis; excerpts from the National Corpora (British National Corpora and Corpus of Contemporary American English),



online forums and the Internet articles (blogs, twits) serve as the empirical basis for the research.

The study is based on the theoretical concepts and findings of domestic and foreign linguists in the field of discourse analysis (see [4, 9, 12]) and virtual / computermediated / electronic discourse(see [3, 6, 7, 10, 11]), as well on L. Wittgenstein's assumption that the meaning of the word is its use in a language: "For a large class of cases though not for all-in which we employ the word 'meaning' it can be defined thus: the meaning of a word is its use in the language." [13: 20] One of the theorists of the virtual discourse, O.V. Lutovinova, reveals its characteristic features and claims that virtual discourse is a specific socio-cultural environment characterized by a number of specific values including unlimited accessibility and speed of obtaining information and making friends, anonymity, lack of spatial boundaries, blurring distances and erasing the role of the time factor, democratic communication, and freedom of expression [11: 8]. According to S. Herring, though text-based computer-mediated communication exists in many forms (or genres), these forms are united by "visually-presented language". And it is the computer medium that affects understanding the essence of this "computer-mediated language" by supplying a specific environment, "free from competing influences from other channels of communication and from physical context, in which to study verbal interaction and the relationship between discourse and social practice." [7: 127] Therefore, we proceed from the assumption that the specific computer environment creates specific communication conditions, thus providing for specific shifts in the traditional meaning of lexical units, which reflects the correlation between communicative and social practices.

3. Results and Discussion

The research analyses the new meanings acquired by some common lexical units ("twit" (or "tweet"), "surf", "google", "share", "like", etc.) due to their usage in the computermediated discourse. The conducted analysis shows that a rapid development of the Internet social networks and a growing number of the Internet users have affected the language even deeper and more rapidly than technical progress in the past ten years. Linguists believe that any changes in the language are the result of the brain's desire to simplify and clarify phrases [2]. This statement refers to the English language as well, which can be illustrated with the phenomenon of meaning extension. We will demonstrate it on a number of examples. **KnE Social Sciences**



The Oxford Advanced Learner's Dictionary gives the following definitions of the word "surf": "1. large waves in the sea or ocean, and the white foam that they produce as they fall on the beach, on rocks, etc.; 2. an act of going surfing". Nevertheless, a rather different meaning has become common in the recent years: "Because I didn't spend half my life try to save your life so you could surf the net and watch YouTube." Or: "Young women more often surf the net than older women: no gender-specific difference is perceptible in the age group under 25." (Reverso) In the course of the research, more than 220,000,000 web-links were found with the collocation "surf the Net", which illustrates its broad expansion. The Urban Dictionary provides the following definition to this phrase: "surf the Net" — is to browse the World Wide Web." (Urban) Developed as a result of the metaphorical transfer, this meaning causes no difficulty in understanding among the English-speaking Internet users.

Another word brought into the world by the digital age is "to google". This lexical unit resulted from the metonymic transfer from the name of Google Corporation and originally meant 'to type words into the search engine GoogleTM in order to find information about somebody / something'. (OED) Thus, our generation witnessed the process of this neologism officially becoming a part of the English language. Moreover, originated as a proper name, "google" has become a generic term for searching information in the Internet with the help of any search engine, not specifically $Google^{TM}$. It is not a rare case today to see such phrases as: "Side note, do not google that phrase." or "I'm going to google sulfur maps." (Reverso), etc. According to D. Glance, turning "Google" into a common verb has had a huge impact on the "collective global memory" because googling opened access to it, which is similar to the process when "the Gutenberg press allowed us to outsource people to books." [5] It should be also noted that etymologically "google" comes from "googol". "Sean [Anderson] verbally suggested the word "googolplex", and Larry [Page] responded verbally with the shortened form, "googol" (both words refer to specific large numbers)."(https://graphics.stanford. edu/\${\sim}\$dk/google_name_origin.html) Actually, the word "google" is considered a misspelling and mispronunciation of this mathematical term. Although, while turning to the Corpus linguistics sources (British National Corpus – BNC), it was revealed that the verb "to google" cannot be found there up to the year 2000. Corpus of Contemporary American English (COCA) did not have any reference to the word "google" up to 2000 either; however, in 2019 the updated COCA already contains 16,479 sample phrases with this lexeme (dating 2000-2019): "Using Google location history data to quantify fine-scale human mobility."; "In an email to Fortune, Google noted its workers are listening to improve the system.", "He'd been afraid to Google it.", "Google me, -

KnE Social Sciences



Charlie said." etc. However, it was in 2002 that the term "to google" was declared the word of the year by the American Dialect Society, and seven years later, in 2009, the same society made "google" the word of the decade. Thus, the unique linguistic situation with the word "to google" can be briefly described in the following way: in the past two decades, rapid development of digital technologies forwarded by the Google Corporation caused the appearance of a new lexeme, which appeared to be a brief and convenient way to express the concept of our turning to society's "transitive memory." D. Glance mentions an interesting fact that the Google Corporation resisted (even using legal tools) the use of "google" as a synonym to "search" since it could lose the protection of the name as a trademark [6]. Life has shown the futility of this resistance and the triumph of Wittgenstein's assumption that the meaning of the word is its use in a language.

A similar transformation occurred with the word "twit" with the only difference that this word has already belonged to the English language for centuries. Oxford Advanced Learner's Dictionary marks "twit" as a noun which means 'a silly or annoying person'. Besides this word a word "twitter" can be found in the same source, which means: "1. when birds twitter, they make a series of short, high sounds; 2. to talk quickly in a high excited voice, especially about something that is not very important." (OED) With the appearance of Twitter.com — a source for social networking — the term "twit" has stably come into the Internet communication, but with a change in spelling. Mind that this lexical unit is used both as a verb and a noun in the Internet communication. The word "tweet" acquired the meaning 'to write messages (twits - or: tweets) in Twitter' in modern Internet communication where we see such phrases as: "And Pepper Burke sent out another tweet." (Reverso) functioning as a noun. Or: "It's the trail of dead Fae that really had me sit up and tweet." (Reverso), functioning as a verb. In this example, a few changes, both in the word's meaning and outer form, can be observed:changes in spelling, in the lexical meaning (metaphorical extension of meaning) and a visible morphological change (conversion). The new meaning of the word "twit" triggered the appearance of several derivative compounds, such as "tweet tooth" — 'a person who has a strong craving to post a tweet on the Twitter website' (Collins), "tweetheart" — 'a sweetheart on the Twitter website', "tweet up" — 'a meeting at which people who communicate with each other via the social networking site Twitter meet face to face.'

One of the most significant shifts in the semantic side can be traced in the word "like". As for the definition from Oxford Advanced Learner's Dictionary, it is: "1. similar to somebody / something; 2. used to ask somebody's opinion of somebody / something; 3. in the same way as somebody / something." (OED) So, mainly it is used as a verb or



as a part of an idiomatic or fixed expression. A modern Internet trend is to use the word "like" as a noun (which is another case of conversion, similar to "Google", "twit", "text", etc.) with the meaning — "the symbol of a heart or a thumb which an Internet reader puts in front of the message that he / she likes": "11 Ways to Get Lots of Likes on Facebook." (Post) Or: "Even though it might feel uncomfortable to ask for likes, comments, and shares — it works." (Impact)

The following example illustrates the development of semantic structure in another lexical unit — "share". According to Oxford Advanced Learner's Dictionary "share" is a verb: "1. to have, use or experience something at the same time as somebody else; 2. to have part of something while another person or other people also have part" (OED) (the dictionary provides seven definitions of this verb, which are mainly connected with the meaning "to divide"). If we turn to the meaning of the noun "share" in the field of Economics, it collocates with the word "market". As for "market share" in Oxford Advanced Learner's Dictionary, it is "the amount that a company sells of its products or services compared with other companies selling the same things." (OED) With the appearance of digital communication technologies, the word "share" came into use among the Internet users: "So who's got the next million-shares post for me?" (Reverso) Or: "Please, share this post so that more people can see." (Reverso)In this context, the word "share" is used as a noun and as a verb and means "to transmit (another person's post) to one's contacts." (Collins)

All the examples considered, it could be seen that the Internet communication, especially the development of social net-working, has exerted a significant influenced on the semantic structure of a number of common English words, with the changes appearing not only in the contextual meaning, but also in the spelling and morphology. Some nouns are converted into verbs; some verbs acquire new meanings as nouns. Moreover, the rise of global digital corporations functioning in the Internet (such as Google and Twitter) promotes the emergence of new words and new lexical meanings of "the old" English vocabulary. One should not overlook the fact that all these lexemes enter other "Internet" languages in the form of linguistic calques or semantic borrowings, and Russian is no exception. We could use guglit', shjerit', postit', haknut', lajk, tvit as examples of this process.

The above cited examples are by no means the only semantic transformations that have taken place in the English language due to technological changes (consider "post", "posting", "torrent", "troll", "screen", "scroll", "swipe", etc.). The assessment of the global "semantic shift" in the English language and its influence on the English and global culture requires further thorough research and detailed linguistic description.



4. Conclusions

The conducted analysis indicates serious changes that are taking place in the lexical system of the English language due to technological developments. These changes also reflect the rapid change in our thoughts and cognitive operations, in general. Modern dictionaries scrupulously fix these changes in lexis; nevertheless, to get a true insight into these new meanings, one needs to consider the whole process of their development taking into consideration the interrelation of human, social and digital / technological components. Anyway, many phrases used in today's computer-mediated discourse would sound Greek to our grandparents and would certainly mean little to any classic of the English literature, don't they?

References

- [1] Berwick, R.C., Friederici, A., Chomsky, N. and Bolhuis, J.J. (2013). Evolution, brain, and the nature of language. *Trends in Cognitive sciences*, vol. 17, issue 2, pp. 89-98.
- [2] Fedzechkina, M., Chu, B. and Florian, J. T. (2018). Human Information Processing Shapes Language Change. *Psychol Sci*, vol. 29, issue 1, pp. 72-82.
- [3] Galichkina, Y.N. (2012). *Computer communication: linguistic status, semiotic means, genre space*. Volgograd: Volgograd State Pedagogical University Publ., pp. 373.
- [4] Gee, J. P. (2010). Reflections on understanding, alignment, the social mind, and language in interaction. *Language and Dialogue*, vol. 5, issue 2, pp. 300-311.
- [5] Glance, D. (2015). How technology is changing language and the way we think about the world. *The Conversation*. Retrieved February 18, 2020 from https://theconversation.com/how-technology-is-changing-language-and-theway-we-think-about-the-world-35856
- [6] Herring, S. (2004). Computer-mediated discourse analysis: an approach to researching online communities. In S. A. Barab, R. Kling, and J. H. Gray, (Eds.). *Designing for Virtual Communities in the Service of Learning*. New York: Cambridge University Press, pp. 338-376
- [7] Herring, S. C., and Androutsopoulos, J. (2015). Computer-mediated discourse 2.0.
 In D. Tannen, H. E. Hamilton, and D. Schiffrin, (Eds.). *The handbook of discourse analysis, Second Edition*. Chichester, UK: John Wiley & Sons, pp. 127-151.
- [8] Hillert, D. (2014). The Nature of Language. Evolution, Paradigms & Circuits. New York: Springer, pp. 203.



- [9] Karasik, V.I. (2002). *Language circle: personality, concept, discourse*. Volgograd: Peremena. (In Russian).
- [10] Kondrashov, P. Y. (2004). Computer discourse: sociolinguistic aspect. Krasnodar: KubSU Publ., pp. 189.
- [11] Lutovinova, O.V. (2013). Language personality in virtual discourse. Volgograd: Volgograd State Pedagogical University, pp. 437.
- [12] Weiss, G. and Wodak, R. (2003). Introduction: Theory, Interdisciplinarity and Critical discourse analysis. In G. Weiss and R. Wodak (Eds.). Critical Discourse Analysis: Theory and Interdisciplinarity. UK: Palgrave Macmillan Ltd., pp. 1-32.
- [13] Wittgenstein, L. (1986). *Philosophical investigations*. 3rd edition, Translated by G.E.M. Anscombe. Oxford: Basil Blackwell Ltd, pp. 250.
- [14] British National Corpus. (2020). Retrieved February 19, 2020 from https://www. english-corpora.org/bnc/
- [15] Collins Dictionary. (2020). Retrieved February 20, 2020 from https://www. collinsdictionary.com/
- [16] Corpus of Contemporary American English. (2020). Retrieved February 19, 2020 from https://www.english-corpora.org/coca/
- [17] IMPACT. (2020). Retrieved February 8 2020https://www.impactbnd.com/blog/ facebook-engagement-how-to-get-more-likes-shares-and-clicks
- [18] Oxford Learner's Dictionaries. (2020). Retrieved February 17, 2020 from https://www. oxfordlearnersdictionaries.com/
- [19] Post Planner. (2020). Retrieved February 19, 2020 from https://www.postplanner. com/blog/ways-to-get-lots-of-likes-on-facebook/
- [20] Reverso Context. (2020). Retrieved February 19, 2020 from https://context.reverso. net/
- [21] Urban Dictionary. (2020). Retrieved February 8, 2020 from https://www. urbandictionary.com/