Abstract. Most authors admit that code-switching is the process of switching different languages, their varieties, speaking styles, etc. Today the majority of people in the world are multilingual and often mix languages in different ways, which makes code-switching a quite common global phenomenon. Code-switching incorporates government, cultural, religious and network contexts, and the frequency of code-switching in such multilingual conversations is an indicator of the global dominance of multilingualism. Online communication fosters social communicative practices consisting of code-switching and marks the development of verbal behaviour of multilingual communities. Code-switching also affects language visuality, its images are tools for the social construction of reality. The developed verbal practices support effective communication and affect the expression of new meanings. The article aims at presenting the features of code-switching in digital communication with 8 examples of different length, topic and author, in which the native Lithuanians code-switched to English and used elements of the Internet language. These examples were taken from the social networks Instagram, YouTube, Facebook and Twitter, and the authors analyzed the grammar, spelling and punctuation of both Lithuanian and the English words, the type and use of the code-switched English elements, special characters, abbreviations, emoji and other features of the Internet language. The results show that online communication is not entirely textual, with various means of text composition communicators make their code-switched English elements more visible and alter the appearance of messages. Such practices correspond to the features of social networks and seem to follow the popular Internet culture trends.

Key words: code-switching; computer-mediated communication; multilingualism; verbal behaviour; Internet language; social networks; visuality

The linguistic phenomenon of code-switching is usually defined as alternation and contact of two or more languages, styles, dialects, paralinguistic cues, prosodic registers (contextualisation cues) in the act of multilingual communication [4; 19; 20; 35; 47]. However, the definition of code-switching varies according to the different aspects discussed [26; 38; 48] and due to its close relationship with the terms ‘code-mixing’, ‘code-shifting’, ‘diglossia’, ‘borrowing’, ‘style shifting’, etc., for many authors try to provide explanations for their similarities and differences [33; 37]. Even though there have been various multilingual practices since the distant past and numerous attempts to study them, the term ‘code-switching’ was


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borrowed from physics and political anthropology and first mentioned in linguistics in 1954 by Hans Vogt in his review of Uriel Weinreich’s work *Languages in Contact: Findings and Problems*, the first system study of language contact [1; 4; 17; 48]. Vogt defined code-switching as “…perhaps not a linguistic phenomenon, but rather a psychological one”, with “obviously extra-linguistic” causes [48]. However, code-switching was neglected and considered rather negatively until the 1980s, when it became a focus of many publications. In the 1990s, the researchers aimed at revealing its universal limitations, proving its dynamic nature and variable behaviour, and finding determinants of its universal and variable practical aspects [8; 17; 40; 53].

In the article, we consider code-switching as syntactically and phonologically consistent and fluent switches between native Lithuanian and foreign English of one or multiple interlocutors in the single act of written textual communication in social networks — Instagram, YouTube, Facebook, and Twitter. Linguists examining code-switching in multilingual settings usually focus on “the grammatical constraints of code-switching and understanding how its grammar should be characterized in relation to those of the bilingual’s distinct languages” [58. P. 74]. Many researchers argue that code-switching has numerous accountable meanings and effects due to the codes composed of speech varieties. Fewer researchers believe that certain types of code-switching cannot and should not have any specific meanings, thus, questioning the validity of code-switching, distinction of codes, and their conceptualisation [4; 7; 49; 50]. There are also studies of code-switching in the linguistic, psycho-linguistic, socio-linguistic, anthropologic, socio-pragmatic, discourse-analytic and other perspectives which aim at understanding how multilinguals use multiple languages in everyday life, what factors or mechanisms trigger or hinder code-switching, and what its cognitive costs are [26].

While there are theories and methods for explaining the morphology, syntax, semantics and other aspects of code-switching (Carol Myers-Scotton markedness model, Howard Giles speech accommodation theory, Peter Auer and Li Wei sequential analysis, etc. [7; 18; 39]), they seem to be useful only in certain situations and reflect academic disagreements and lack of knowledge in this sphere [57]. Therefore, our way to study code-switching is to identify texts with code-switching of three main types: tag-switching, intra-sentential switching, and inter-sentential switching described by S. Poplack [41; 42] and widely used [6; 23; 25; 47:]. Tag-switching is the insertion of tags (quotations, interjections, idioms, filler words or phrases that have a weak connection with the rest of the sentence and can appear anywhere in it) from one language into a sentence in another [40. P. 596; 44. P. 122; 47. P. 24–25]. Intra-sentential switching occurs within the same sentence when two or more languages are alternated [25. P. 270]; it is considered a more intimate type of code-switching and occurs in ‘a high proportion’ [1. P. 345]. Inter-sentential switching occurs at the boundaries of sentence. Both intra- and inter-sentential switching are closely related for “the end of a sentence is potentially a turning transition point” [25. P. 270].
There is a number of research methods to analyse code-switching: interviews and tape recordings, language-use surveys and ethnographic observations are the best known methods of the linguistic code-switching analysis together with the analysis of written texts applied here. Due to the numerous reasons for code-switching depending on situation, the analysis of its examples can provide information about the communicators, their manner of using languages, their ways of code-switching, means to make some parts of texts more distinguishable, etc. [28; 29]. Moreover, code-switching occurs not only in real life but also in digital communication — exchanges of information in digital form and via electronic means [43; 59]. Digital communication has developed considerably for about two decades, but its origins date back to when “Samuel Morse introduced telegraphy in 1837” [59. P. 1]. The key reason for the rapid expansion of digital communication is the increasing availability and development of technologies and “the advantages of digital with respect to analog” [59. P. 1].

Since its predecessor ARPANET in the late 1960s, the Internet has grown significantly and consists of a huge user-base and amount of information. Due to its extent and continuous development, the Internet is a commonplace for an increasing number of people, and the new media are invented to provide a wider access to communication for users [43; 52]. Social networks, e-mail, blogs, chats, etc. effectively alter the way people communicate and “created a new social structure governing how, when, and with whom people interact” [43. P. 32]. However, digital communication has its price for it operates via “costly channels and complex systems” [59. P. 1] and its technologies can be misused: users often send messages “without considering who might see them or how they might be interpreted” and forget that the deleted messages are archived on some server and can be restored [43. P. 32].

In the cyberspace, both code-switching and digital communication are only parts of the computer-mediated communication. In linguistics, it is described as “coding and decoding of linguistic and other symbolic systems between sender and receiver for information processing in multiple formats through the medium of the computer and allied technologies… and through media like the Internet… and many more to be invented” [9. P. 6; 34. P. 552]. The linguistic analysis focuses on the everyday use of languages in the Internet and on “the new forms of language that are being produced” [9. P. 6]. This analysis considers digital communication in the institutional and organizational contexts together with social communication, recreational communication and multimodal social-media communication — all being parts of the computer-mediated one [9].

Computer-mediated communication is fundamentally different from traditional speech due to the ‘lack of simultaneous feedback and of nonsegmental phonology’ and due to ‘its ability to carry on multiple interactions simultaneously’. It is different from traditional writing due to its ‘dynamic dimension’, ‘ability to frame messages’ and hypertextuality [14. P. 1]. Another significant feature is the language of the Internet — ‘unofficial and informal, spontaneous and unconsidered’
(abrupt phrases, self-correction, bywords, ellipsis, inversion, means of economy, etc.) [45. P. 4]. Moreover, the Internet users write increasingly more, and these online writings contribute to the development of the oral verbal culture — ‘looser, casual, not-always-grammatical. sounds much more like spoken than written language, even on-screen’ [13. P. 89]. All of these features of computer-mediated communication expand the functional and expressive capacity of language — there are new words, phrases, and other written means of expression [13].

When studying the online code-switching, linguists seek to explicate motivations, functions and meanings of multilingual practices and language choices of the Internet users on different platforms and in the specific Internet contexts [32. P. 389]. It seems that the text-based online code-switching does not always follow the conventions of the offline face-to-face conversation due to the availability of digital contexts, networked audience, online graphic and visual resources [5; 31; 52]. There are examples of the online code-switching based on the speech-based communication, i.e. Internet users do not consider the languages they use as different entities and “draw variously on whichever languages are in their repertoires… whichever languages have currency in a particular digital situation” [52. P. 130]. Such code-switched texts allow users to manage relationships, perform multicultural identities and build communities [31].

However, there is a lack of research of the online code-switching on the multiple computer-mediated communication platforms and with many different languages, which measure linguistic diversity online [30]. The existing theories “cannot capture new forms of multilingual encounters on the web” [31. P. 129]; therefore, researchers have to use mixed methods and data (textual, ethnographic, etc.). Another possible way is to consider the online code-switching through its visuality — the quality or state of being visual or visible or an instance of a mental image or picture; and here — the “fine nuances and subtle shifts where the visual and textual interact” [3. P. 2].

Traditionally, a collection of signs, organized in a particular way to make meaning, constitutes text, the meaning of which depends on the types of signs, their arrangement, font, size and other characteristics of visual elements [46]. Thus, due to some degree of visuality, the traditional text is a visual representation of speech [36; 51]. Internet texts are more complex than the traditional ones, since there are visualized hypertexts that link with other hypertexts via hyperlinks and make them easily navigable, blur the line between textual and visual, and slowly destroy their traditional hierarchy in which the textual has a priority over the visual [30; 51]. As the Internet content consist mainly of both texts and graphics, the visual often dominates the textual, which “changes not only the deeper meaning of textual forms but also the structure of ideas, of conceptual arrangements, and of the structures of our knowledge” [30. P. 16]. This makes understanding of the typical Internet text a complicated task for it is hard to identify which visual elements are constituent elements of the text and which are the illustrative ones [10; 15; 51; 56]. Nevertheless, visually literate people can read, evaluate the composition and use
various means to express, comprehend and interpret the purpose and message of not only the traditional text, but also of its visual elements for they are interconnected. Thus, the interpretation of textuality changes and becomes subordinated to the logic of the visual [30; 51]. This shift towards the visual has not only changed the production and consumption of visual culture, but “also raised new questions and new versions of very old questions about the place of visuality in language” [36. P. 109].

Our analysis aims at revealing the features of code-switching in the computer-mediated communication on the examples from the social networks Instagram, YouTube, Facebook and Twitter, which are globally popular and support large active user-bases of millions of people from all around the world often speaking more than one language, alternating between them, producing numerous unique messages that combine text, audio, video and graphics and present various characteristics of code-switching. Eight examples were chosen by browsing the above mentioned social networks and finding messages on Lithuanian as native with some English elements, which represent code-switching in digital communication. These examples are presented in their original form — unedited and with the features of digital communication, including the emoji of the Google standard (their names were taken from the Full Emoji List of the Unicode Consortium). The texts that are code-switched from Lithuanian to English and their unique features are marked in bold.

(1) aguonaruke: ‘Čia šitas mėzgaliukas kur stūlei užsukt paragaut?’ 😳
justasvigl: ‘@aguonaruke panasiai. Tik sitas#ne#toks#geras buvo#though, argentinos mesgaliuks geresnis siek tiek 👊 bet jo, gera vieta isleist likusias gyvenimo santaupas 😳 worth it 👊🔥’

This example (1) was taken from the Instagram. The author of the post 'justasvigl' answers to the user 'aguonaruke' comment and asks if the photograph shows the steak he once invited her to taste). 'Justasvigl' explains that this is a different steak and not as delicious as another one, but the restaurant is still good and the steaks are more than worth their price. 'Justasvigl' expresses this idea by code-switching intra-sententially from Lithuanian to English, uses the English phrase 'worth it' and encloses a graphical 'Ok' emoji at both sides of the passage as if emphasizing his point and making it more visible and stressed. Unusual spelling conventions and a lack of a full stop are also noticeable — the passage is closed with a 'fire' emoji: the Internet users break the rules of grammar quite often and use various stylistic means to express their thoughts in a certain way. The 'fire' emoji corresponds to the topic of food and restaurants and also signifies relevance and approval (ideas of popularity, attractiveness, excitement, etc.).

(2) elvinaveckyte: ‘OMG#turbūtpo10metų#bet kai draugai pasistengia ir padaro TAU specialiai su varške 😘Ačiū Martynui#geras laikas su draugais 😊

In another example (2) from the Instagram, the user 'elvinaveckyte' expresses appreciation to her friends, especially Martynas, for preparing cepelinai and
spending time with her, and presents a photo of the dish. She begins her message with a now common intra-sententially code-switched Internet English abbreviation 'OMG' ('oh my God/Goodness!'), which indicates satisfaction and sets a pleasant tone for the rest of the message in Lithuanian. The text follows irregular grammar conventions, lacks full stops at the end of sentences (there are 'smiling face with smiling eyes' and 'smiling face' emoji), spaces between words and text coherence at the end of the message. Instead of categorising the post, hashtags ('#turbūtpo10metų', '#bet', and '#geras') make it stand out. In addition, when searched or clicked on, the hashtag '#turbūtpo10metų', leads to this post, which suggests that it is either a kind of reference understood by this social circle or simply an emphasis on this part of the text.

(3) T — series Sucks:

'Kažkodėl jaučiu, kad 2019 bus geri metai :)
*Jazzu ikelia savo naują daing
*Faith in humanity has left the chat'

Similar features can be seen on the video hosting platform YouTube. In (3), user 'T — series Sucks' writes his comment below ‘Wild’, a new music video by the popular Lithuanian singer ‘Jazzu. In the first line, the user writes that he believes the year 2019 will be a good one. In the second line, his good year prediction is abruptly interrupted by the message that the artist has just uploaded her new song. This message author leaves the third line blank as if waiting for some reply. After a break, the user resumes his text in the fourth line and inter-sententially code-switches from Lithuanian to English saying that ‘*Faith in humanity has left the chat’, i.e. that the audience reacted to the event and evaluated the new music video negatively — by many negative comments and dislikes not only on YouTube but also on other popular Lithuanian websites.

By code-switching from Lithuanian to English, the author expresses a sudden change in tone of the message from a positive to a negative one. Both sentences start with an asterisk (*) that makes them look as a retelling of consecutive events and separate them from the first one expression. The specific arrangement — each sentence in a distinct line — seems to show the passage of time, with the blank line separating ‘before’ and ‘after’, which is also a convention of the popular Internet meme culture meant to effectively deliver the message to others aware of such conventions. Furthermore, the tendency to express thoughts in an exaggerated way via hyperboles is seen in the last sentence, where the consequences of the event are as if a loss of faith in humanity, which is a common meme. While it is often difficult to tell if the user is in a serious disposition due to a lack of the face-to-face communication elements (tone of voice, body language, etc.) online, here, due to the hyperbole, it is obvious that the user is ironic, sarcastic, and derisive.

FAKE CONTEST organizatoriai. Paskutinis pavyzdys - laimėtoja iš Izraelio, kas yra protu nesuvokiami.'

(4) is a similar example of using another language to emphasize some point, but in this YouTube comment, user 'Dainius Pal' assesses ‘Jurijus — Run with The Lions’ — one of the songs selected to represent Lithuania at Eurovision 2019, and expresses his attitude to the voting system, the jury of the national song selection, and the song contest. The intra-sententially code-switched part is written in English and in capital letters to visually highlight the essence of the comment: this annual event is a 'FAKE CONTEST'.

(5) Audronė Valaitienė: 'Nebeplauksiu į Norvegiją NIEKADA. (Pause.....NOT!) 😅

We see the same linguistic phenomena on Facebook. In (5), user 'Audronė Valaitienė' comments a news article at the official Facebook news page ‘15min’. She says that she will never travel to Norway by ship after the accident with the cruise ship near Norway reported in the article. However, in the next sentence, she inter-sententially code-switches from Lithuanian to English and writes '(Pause.....NOT!)' as if cancelling her previous statement with a single negative 'NOT'. The way the word 'Pause' is written with five full stops right after it also expresses the passage of time. The two capitalised words 'NIEKADA' and 'NOT' contrast with each other. Finally, the 'face with tears of joy', 'rolling on the floor laughing', and 'beaming face with smiling eyes' emoji suggest that this is a humorous comment that should not be taken seriously.

(6) Viktorija Grimovič: 'Liepa maciau, kad palaikinai, bet this is what we call f a s h i o n'

A new way of writing words is presented by the example (6) from Facebook: the user 'Viktorija Grimovič' comments on her friend’s ‘Liepa Babaliauskaitė’ like under the post at the page Humans of Trūlai for the user-submitted curiosities noticed while using public transportation in Lithuania. By code-switching intra-sententially (although the case can be considered as tag-switching) from Lithuanian to English, the author says 'this is what we call f a s h i o n' as if explaining reasons for liking the post and its context. The way the user writes the word 'fashion' with spaces between letters adds additional emphasis on the style of dressing.


Similar communication patters are present on Twitter: despite the maximum length of the message (140-280 characters), in (7), it is sufficient for 'Bukoptimistas' to express his ideas. The negative 'NOT' is used to change the meaning of the previous sentence to the opposite. At first he tried to recharge his bus e-ticket at the website at the beginning of the month, which at first seemed to work, but actually did not. The use of the traditional emoticon (':/') depicting a sad, confused or depressed face, instead of its emoji, is an exceptional feature — it sets the mood of the tweet but in a less colourful and visible way, i.e. previous conventions of using emoticons still occasionally work in online texts and are sometimes preferred over the newer emoji.
In (8) from Twitter, the user 'Artur Preobraženski' writes about finding himself in Seville, the ‘wrong’ Venice at the end of summer, and considers this fact hilarious: he uses the now common hashtagged abbreviation '#lol' ('laugh out loud'). He intersententially code-switches from Lithuanian to English in the first sentence to make his post more specific and provides a hyperlink to his Instagram post providing more information on his trip to Seville. Nine hashtags explain the meaning of this tweet and make it more visible to other users searching for similar information.

Thus, Internet communication is not textual anymore, most texts are enhanced with video, audio and pictures, i.e. the emphasis is on the visual part of communication. With abbreviations, capital letters, spaces, fonts, bolding, italicization, symbols, emoji, and other means of making and editing texts and code-switching from Lithuanian to English, the authors of messages in social networks change the visual appearance of their texts. Such conventions follow various features of social networks and change according to the popular Internet culture trends.

**References for the analysed examples**

(1) https://www.instagram.com/p/Beal3XVltH7/
(2) https://www.instagram.com/p/BcfjQHlQas/
(3) https://www.youtube.com/watch?v=YilDv-11mxk&lc=Ugyc2N4eKbS4hCKzBvR4AaABAg
(4) https://www.youtube.com/watch?v=Hom7KEF6RM&lc=UgwdDmnXfH4GdWh29t4AaABAg
(5) https://www.facebook.com/15min/posts/10156617792388860?comment_id=1015661796739860&comment_tracking=%7B%22tn%22%3A%22%22%22%7D
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Большинство исследователей признают, что переключение кодов — это процесс чередования языков, стилей речи и т.д. Сегодня большинство людей в мире многоязычны, часто вариативно смешивают языки, на которых говорят, что делает переключение кодов довольно распространенным явлением. Переключение кодов задействует правительствственные, культурные, религиозные и прочие контексты, т.е. частота переключения в мультиязычных коммуникациях является признаком распространенности многоязычия в мире. Онлайн-коммуникация способствует возникновению коммуникативных практик, содержащих условия для переключения кодов и сигнализирующих о вербальном поведении многоязычных сообществ. Переключение кодов влияет на визуальность языка и его образность — незаменимые средства социального конструирования деятельности. Способы использования языка обеспечивают коммуникационную эффективность и влияют на выражение новых лингвистических значений. Цель статьи — обозначить особенности переключения кодов в цифровой коммуникации, для чего в социальных сетях Instagram, YouTube, Facebook и Twitter было отобрано и проанализировано восемь примеров. В каждом случае рассматривались грамматика, орфография и пунктуация как литовских, так и английских слов, а также использование элементов английского языка с переключением кодов, специальные символы, аббревиатуры, эмоции и другие особенности интернет-языка. Согласно полученным данным общение в Интернете не является полностью текстовым, так как, используя различные средства составления текста, авторы сообщений делают кодовые элементы английского языка более заметными и изменяют визуальный вид текстов. Эти приемы взаимодействуют с особенностями социальных сетей и, похоже, меняются в соответствии с тенденциями популярной интернет-культуры.

**Ключевые слова**: переключение кодов; компьютерно-опосредованная коммуникация; многоязычие; речевое поведение; интернет-язык; социальные сети; визуальность