

The Impact of Social Networking and E-mail on Human Behavior

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ABSTRACT

The purpose of this research was to examine the impact of social networking and social media on human behavior. In particular, we wanted to investigate the extent of the use of Greeklish (Greek Language written in Latin characters instead of the Greek alphabet) in our society today. Greeklish began when SMS services became available on mobile phones and the initial reasoning was that most of the phones came already setup in English, the Greek language option was not always available, and/or the switch between the languages took too many steps. In the approach followed, relevant literature was examined and a case study was carried out where results show a very high use of Greeklish when communicating online. The contribution of this paper to the HCI community is the presentation of a specific situation where social networking and social media have played their role in transforming how people communicate online.

Author Keywords

Social networking, social media, internet communication, Greeklish.

ACM Classification Keywords

K.4 Computers and Society; H.5.3 Web-based Interaction

INTRODUCTION

Since the popularization and globalization of the Internet, people have increasingly been using computers to communicate with each other [8]. These Computer-Mediated Communication (CMC) activities happen mainly through written communication (e.g. forums, emails, online chats and instant messaging) and through audio and video (e.g. video-conferencing). CMC can be defined as “the process by which people create, exchange, and perceive information using networked telecommunications systems (or non-networked computers) that facilitate encoding, transmitting, and decoding messages” [5]. A characteristic of CMC is that the time lapse between messages allows for reflection [13]. CMC also stimulates linguistic interactions in a way which produces similar benefits to the ones generated by face-to-face collaborations [3]. Through the use of CMC, online communities emerge [9]. Preece [12]

states that an online community consists of people, a shared purpose, policies and computer systems. Email is one of the most popular forms of human communication using the Internet and on average there are over 290 billion email messages sent per day [11].

Researchers note that there is a growing need for sociolinguistic research on how people actually communicate on the multilingual Internet [4]. However, very little attention has been given to culture and communication in relation to CMC [7] whereas research literature on CMC has focused almost exclusively on English and has neglected development within populations communicating online in other languages [4].

In more recent years however, researchers have begun showing interest in investigating the phenomenon of Greeklish, and results are starting to be published. *Greeklish* (also referred to as Greenglish) comes from the words *Greek* and *English*, and is basically **Greek** written with **English** letters (Latin Alphabet). At the moment, Greeklish may be termed as an electronic language (e-Language) since it exists as an unofficial written “language” that occurs through social media, digitally-mediated communication, and other electronic social networking technologies. The use of Greeklish is considered to have begun when SMS services became available on mobile phones [10]. This is inline with Srivastava’s research [15] which argues that human identity and social interaction have been affected by the mobile phenomenon. The initial reasoning of the use of Greeklish was that most of the phones came already setup in English, the Greek language option was not always available, and/or the switch between the languages took too many steps. It was then further popularized in the early days of the Internet [1, 16].

In public perception, the use of Greeklish has now reached worrying proportions. Questions arise such as: Is the Greek language under threat or is Greeklish just a fad that will pass? Through our literature review and case study our paper aims to present insights regarding characteristics of Greeklish, its popularity and its perceived future.

BACKGROUND

Greek is the official language of Greece and Cyprus and uses the Greek alphabet. It is estimated that the Greek alphabet has been in use since the eighth century BC and although there were debates regarding the establishment of either ‘Demotic’ (closer to the everyday language used by most of the population) or ‘Katharevousa’ (closer to ancient Greek), the Greek writing system had not undergone significant changes since ancient times, while the Greek alphabet served as a national symbol [14]. The Greek alphabet consists of some letters which look similar to the letters in the Latin Alphabet, however even though they look the same, some of these letters have different pronunciation sounds in Greek. For instance, Greek Α is pronounced like English A, whereas Greek Β is pronounced like English V. Furthermore, the Greek language makes use of accents, some letters produce the same sounds as others, and the character of a letter may depend on where the letter is located in a particular word.

As mentioned earlier, Greeklish is the Greek language written in Latin characters instead of the Greek alphabet. The transliteration of Greek into Greeklish may be phonetic, orthographic or a mixture of the two. The phonetic transliteration comes from the pronunciation sounds of the original Greek letters. For example the Greek ‘ο’ and ‘ω’ (which are pronounced similarly) both can transliterate into the Roman ‘o’. On the other hand the orthographic transliteration comes from the visual representation of the Greek letters with Roman equivalents. For example the Greek ‘ω’ can be transcribed as the Roman ‘w’ [2,7,14]. Words written in Greeklish may also include numbers to resemble Greek letters, such as the number “8” for the letter “θ”.

Currently, Greeklish is an open and unrestricted language with no official rules. Very often transliterations of the same words from Greek to Greeklish are depicted differently from one person to another. This is mainly because each person has the freedom to transcribe it according to what sounds or seems right to them. This is not usually a problem however since the receiving person reading the message in Greeklish is usually able to immediately recognize and understand what the other person meant to communicate, even though he/she might have written it differently him/herself.

An example of how the expression “I want” translates into Greek, and examples of the variety of the ways it can be written in Greeklish are shown below:

- English – I want
- Greek – θέλω
- Greeklish – thelw, thelo, 8elo, 8elw, ...

Several discussion boards on Greek websites require their users to type in Greek and may ban users who type in Greeklish. Many people have a negative view on Greeklish and there exist several groups on Facebook who are against the use of Greeklish. In addition using Greeklish for

business communications and other formal purposes is considered unprofessional. However despite the negative attitudes towards it, the impact of Greeklish is so strong that apart from technology-mediated communication, other observations of its use include a few books written in Greeklish, the availability of summer schools to learn Greeklish, automated online Greeklish translation and converter tools, as well as uses in advertisements.

As a result of the increased use of Greeklish on the Internet, in 2001 the Academy of Athens issued a statement which was released to the press concerning the rise of Greeklish and the possible substitution of the Greek by the Latin alphabet. The outcome was a heated debate where TV time was devoted to discussions and extensive coverage of the topic appeared in the press [7].

Following this, a study by Koutsogiannis and Mitsikopoulou explored social attitudes towards Greeklish as they were represented in the Greek press identifying three main trends: “The first, a retrospective trend, views Greeklish as a serious threat to the Greek language; the second, prospective trend, approaches Greeklish as a transitory phenomenon which will soon become negligible due to technological advances; the third, resistive trend, points to the negative effects of globalization and relates Greeklish to other communication and sociocultural practices” [7].

In 2009, Spilioti [14] investigated the choice of alphabetical encoding in Greek SMS messages. Based on a corpus of 447 SMS messages, she found that writing in Greek characters was the norm in Greek SMS. As Georgakopoulou and Lytra [6] point out, Spilioti’s findings are in contrast to media representations. This may be due to the small number of participants (n = 10) of the study, however an interesting outcome was that the use of one or the other alphabet was a consistent choice for each participant, meaning that the each participant sticks to their usual choice of alphabetical encoding when sending SMS messages.

In 2012, Laghos et al. [10] investigated the use of Greeklish in the Social Network Site (SNS) YouTube. 1000 user comments on Greek videos in Youtube were collected. The audio of all selected videos was in Greek, and the people posting the comments had to be Greek-speakers living in Greece or Cyprus. The results showed that the vast majority of the messages (84%) were written in Greeklish, whereas only 9% were written in Greek, followed by 7% in English.

Our current study aimed to take this one step further. As YouTube is a relatively informal environment where users can freely post comments as they wish, we wanted to investigate the use of Greeklish in a more formal Greek language environment.

METHODS AND RESULTS

This study addresses the issue of the rising popularity of the phenomenon known as Greeklish. Following the literature

review, we carried out a case study to investigate the extent of the use of Greeklish in our society today, and more specifically in Greek speaking institutions. The data collection included the analysis of 1000 email messages exchanged between Greek/Cypriot staff (academic and administrative) at the public universities of Cyprus in 2011. A total of 48 senders (email accounts) were involved in the study. Email exchanges with staff members in universities of other countries were not included as many times the only common language of communication in these cases is English. This was done in order to limit the emails to the staff who are expected to write their emails in Greek. It should be noted that the staffs' personal computers in these institutions are equipped with Greek support.

The aim of this study was not to compare the use of Greeklish by University, by faculty gender, by type of staff or by academic rank, and for privacy and anonymity reasons statistical comparisons between the universities or their staff members will not be provided. Instead, our aim was to examine the overall usage of Greeklish in such institutions.

Once the emails were collected, they were sorted in the following categories: (i) Greeklish, (ii) Greek, (iii) English, (iv) other languages. The results (Figure 1) show that 1 in 3 emails were written in Greeklish. More specifically:

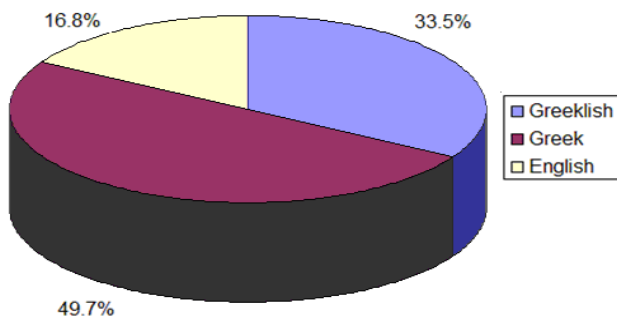


Figure 1. Results of Email Categorizations

- 335 emails were written in Greeklish
- 497 emails were written in Greek
- 168 emails were written in English
- 0 emails were written in other languages

The messages were also broken down into further categories based on which typing language was selected on the users' keyboards at the time of sending their email. In this case there were two options: (i) keyboard language set to English (which included the English and Greeklish messages), and (ii) keyboard language set to Greek (which only included messages typed in Greek). The results show a near 50/50 balance in the selected keyboard language. More specifically:

- 503 emails written with keyboard language set to English

- 497 emails written with keyboard language set to Greek

Furthermore, the communication language was examined. By communication language we mean which language a reader must know in order to understand the email's message. For instance, someone must know Greek in order to be able to understand a message written in Greeklish since Greeklish is actually Greek just written with Latin characters. Non-Greek speakers may be able to read most Greeklish, however what they read will make no sense. This automatically included Greeklish emails in the Greek category. The other category was English. The results show the majority of emails were communicated in Greek (83%). More specifically:

- 832 emails were communicated in Greek
- 168 emails were communicated in English

Analyzing only the (832) emails that were communicated in Greek, it was established that:

- 40% were written in Greeklish (English keyboard)
- 60% were written in Greek (Greek keyboard)

Future analysis will include categorizing the emails by subject, by type of message (new, reply, fwd) and by number of recipients (e.g. one, 2-5, list). Unlike the mobile phones' reasons of language unavailability or difficulty to change languages, at these institutions the computers are equipped with Greek support and, among other ways, the switch between English and Greek on computers can be done with a simple 2-button keyboard shortcut. Therefore likely reasons for this study's results and the high use of Greeklish include:

- Speed & flexibility (many ways to write the same words)
- Informal nature (spelling, syntax and grammar are not important as long as the message can be understood)
- Can include English words (e.g. references to research papers written in English) without having to switch keyboard languages back and forth

The above can be considered advantages of Greeklish and without the technological limitations, it becomes apparent that it is not just the social networks or technology that encourage the use of Greeklish, it's also Greeklish itself.

DISCUSSION AND CONCLUSIONS

In this study we presented characteristics of Greeklish and examined its current popularity through literature review and a case study. Going back to our original question "Is the Greek language under threat or is Greeklish just a fad that will pass?", Spilioti [14] points out that "the surviving of local, national languages is claimed to be threatened by the dominant status of English as a lingua franca". As far as technology mediated communication environments which were initially English language oriented, Greek language support has increased significantly, but the high use of Greeklish still remains. First indications might be worrying as in our case study 1 in 3 emails were written in Greeklish,

however as was the case with the YouTube case study [10] where 93% of the messages were communicated in Greek, in the Universities' case study 83% of the emails were communicated in Greek. This shows that the Greek language is not under threat as people want to and are communicating with each other in Greek.

As far as the encoding that people use to type their messages, it was discovered that in environments where it's not required to type in Greek (as was the YouTube case study) Greeklish accounted for 84% of the users posted comments [10]. Even in more formal environments as was the case with email exchanges between university staff, Greeklish accounted for 1 in every 3 emails. This indicates that given the option, people seem to prefer to type in Greeklish. While formal documents like for example online newspapers, sports sites, and country portals are written in the Greek language with Greek fonts, Greeklish is highly used in informal e-discussions. The main reasons seem to mainly be the speed and flexibility of using this language. Another public concern is whether Greeklish will continue to be just a digitally mediated e-language phenomenon or if will it also extend to the offline written world. Lately it has been observed that on few occasions students in the classrooms may use Greeklish to jot down their hand-written notes on paper (offline and without any technology involved). As Youtube and Email communication are just a couple of the many examples of social networking applications that people can use to communicate with each other, more research in the area of Greeklish is necessary. For instance, similar studies can be carried out to investigate the use of Greeklish in different settings and other social network sites like Facebook in order to determine whether the websites or environments also play a role in how much Greeklish is used. Future research directions can also compare the use of Greeklish by participants' age, gender, location and occupation in order to confirm its driving factors. Whether Greeklish is a just a fad or will continue to penetrate into written Greek communication remains to be seen.

Finally, although mobile phones, social media, and other social networking technologies may have been the initial cause of the creation of Greeklish, the characteristics of Greeklish itself also contribute to its widespread use. This study will be repeated periodically over the years to investigate whether any standards for the transliteration of Greeklish will arise. In addition, the continuation of this study will enable us to identify any trends in the use of Greeklish and follow its rising or declining popularity. In conclusion, at the present, using Greeklish appears to be a conscious decision for convenience rather than just a technological constraint.

REFERENCES

1. Androutsopoulos, J. Global Issues and Local Findings From Greek Contexts: A Postscript. *Pragmatics* 19, 3 (2009), 413-417.
2. Androutsopoulos, J. *Latin-Greek orthography in electronic mails: Use and attitudes, Studies on Greek language*. Thessaloniki, Greece, 2000.
3. Blake, R. Bimodal CMC: The Glue of Language Learning at a Distance. *CALICO Journal* 22, 3 (2005), 497-511.
4. Danet, B. and Herring, S. Introduction: The Multilingual Internet. *Journal of Computer Mediated Communication* 9, 1 (2003).
5. December, J. *What is Computer-Mediated Communication...* Available at: <http://www.december.com/john/study/cmc/what.html>, 2011.
6. Georgakopoulou, A. and Lytra, V. Introduction: Language, Discourse in Greek Contexts. *Pragmatics* 19, 3 (2009), 311-316.
7. Koutsogiannis, D. and Mitsikopoulou, B. 2003. Greeklish and Greekness: Trends and Discourses of "Glocalness". *Journal of Computer-Mediated Communication* 9, 1 (2003).
8. Laghos, A. Multimedia Social Networks & Written Language Communication. *Proc DIS 2011*, (2011).
9. Laghos, A. and Laghos, S. Online Communication Networks & Learning Styles: Society, Technology and Education. *Proc Web Based Communities*, (2008).
10. Laghos, A., Masoura, S. and Skordi, A. Linguistics in Social Networks. *American International Journal of Contemporary Research* 2, 1 (2012), 1-5.
11. Pingdom. *Internet 2010 in numbers*. Available at: <http://royal.pingdom.com/2011/01/12/internet-2010-in-numbers>, 2011.
12. Preece, J. *Online Communities: Designing Usability, Supporting Sociability*. John Wiley and Sons, Chichester, UK, 2002.
13. Scotcit. *Using Computer Mediated Conferencing*. Available at: <http://www.elicit.scotcit.ac.uk/modules/cmc1/welcome.htm>, 2003.
14. Spilioti, T. Graphemic Representation of Text-Messaging: Alphabet-Choice and Code-Switches in Greek SMS. *Pragmatics* 19, 3 (2009), 393-412.
15. Srivastava, L. Mobile phones and the evolution of social behaviour. *Behaviour & Information Technology* 24, 2 (2005), 111-129.
16. Tseliga, T. 2007. "It's all Greeklish to me!": Linguistic and sociocultural perspectives on Roman-alphabetized Greek in asynchronous computer-mediated communication. In: Danet B, Herring S, eds. *The Multilingual Internet*. Oxford: Oxford University Press, pp. 116-141, 2007.