Using a ‘multi-strategy research’ to analyse transliteration patterns in Greeklish

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Abstract

This paper reports on a ‘multi-strategy research’ which combined quantitative and qualitative methods in order to investigate transliteration variability in Greeklish. An online experiment recorded subjects’ reaction times to two main transliteration patterns (‘phonetic’ vs ‘orthographic’). Preference for one of the two patterns was interpreted as a preference for one of the two routes operating in reading orthographies, namely the ‘phonological’ vs the ‘visual-orthographic’ route. The generated results were associated with previous data from semi-structured interviews and from authentic email excerpts collected from the same group of subjects. Preliminary findings suggest that sentence recognition in Greeklish is significantly slower than Greek, while the contribution of the orthographic route appears to be more significant than originally envisaged. Also an incipient norm of the ‘orthographic Greeklish user’ emerged from a host of contextual factors operating in dynamic interaction.

Keywords: Greeklish, email, multi-strategy research, sentence recognition

1. Introduction

The recent growth of interest in text-based computer mediated communication (CMC) on the Internet has often related to English, rather than to languages from less dominant national cohorts, such as Greek. Although Warschauer, Said and Sohry (2002) suggest that the hegemony of English is not as prevalent as was in the early years of Internet use, yet, very little research has been car-
ried out in linguistic practices which are specific to languages other than English. This paper draws on a larger PhD study which analysed an idiosyncratic phenomenon of Greek-to-Greek CMC, namely ‘Greeklish’. More specifically, this investigation reports on a ‘multi-strategy research’ (Bryman 2001) which combined different methods from both the quantitative and the qualitative paradigm in order to gear different perspectives of the specific phenomenon. Thus, this is the first study to unveil experimentally the workings of cognitive processes that influence the use of transliteration patterns evidenced in Greeklish. Furthermore, findings are informed by previously acquired data from semi-structured interviews, allowing a multi-disciplinary perspective and a novel insight into the present situation.

2. Research background

Greeklish is not the first instance of Romanized Greek in the history of Greek language (Ανδρουτσόπουλος 1999), yet, it has only recently become ubiquitous with the spread of CMC, giving rise to a marginal form of ‘digraphia’ (DeFrancis 1984), as users employ two different scripts for the composition of their messages, namely the Roman (for Greeklish emails) and the Greek (for standard Greek emails). The functional motivation behind the emergence of Greeklish can be traced in the technical limitations that originally obscured language interaction in CMC in non-Roman-alphabeted languages, including Greek (Alestantis 2001). Similar cases have been recorded in other languages, such as Arabic (Palfreyman 2002, Warschauer et al. 2002) and Russian (Palfreyman 2001). Novel technological advances have enabled electronic communication in a diversity of scripts and languages. Nevertheless, Greeklish is still widely used in various forms of synchronous and asynchronous CMC, such as private emails, mailing lists, chat rooms, electronic magazines etc.

The main feature of Greeklish, as documented in Androutsopoulos’ studies (1999, 2000), is its spelling variation, as several Greek characters are transliterated with more than one Latin equivalent. Although users do not appear to be 100% consistent in their choices, their transliteration preferences can be broadly classified as ‘phonetic’ (e.g. the Greek graph [η] with the Latin [i]) or ‘orthographic/visual’ (e.g. [η] as [h] – note the visual similarity between the two). Some official practices do exist but the majority of Greek email users appear not to be aware of them (Ανδρουτσόπουλος 1999, Tseliga 2002).

2.1 Dual-route hypothesis

The research background of the first part of the study draws on cognitive theo-
ries about the mental processes involved in reading, and in particular in word recognition. Although the stimuli in this experiment comprised sentences rather than words, the structure of the tested sentences was such (see section 3) that it posed little load on memory and reduced semantic processing, so that emphasis was still placed on recognition rather than comprehension processes (for similar experiments see Frith 1980).

Research has documented the workings of different models for the processing of written language into spoken. Dual-route models have received much prominence among researchers (Henderson 1982, Coltheart, et al. 1993), the basic assumptions of which posit that two functionally different routes operate in visual word recognition. Paap, Noel and Johansen (1992) differentiate them between (a) assembled phonology, and (b) addressed phonology. The former focuses mainly on grapheme-phoneme correspondences (GPC) and it is called the ‘orthographic-to-phonological conversion’ (OPC): the reader generates phonetic realisations for each constituent letter in a word and by assembling them, s/he arrives at an internal phonological representation, prior to a lexical access.

The second routine depicts a different process, according to which the reader follows a ‘postlexical route’: s/he uses the visual information provided by a word and searches for whole-word units in the mental lexicon, before processing them into sounds. As Paap et al. (ibid: 294) explain, “in most cases the two routines operate in parallel [...] The two routines must display some degree of functional independence, although their results interact when they compete for the determination of the articulatory output”.

A basic determinant for the primacy of the one over the other route is the depth which typifies each orthographic system. More specifically, Katz and Frost (1992: 71) have formulated the ‘Orthographic Depth Hypothesis’ (ODH), which states that:

shallow orthographies are more easily able to support a word recognition process that involves the language’s phonology. In contrast, deep orthographies encourage a reader to process printed words by referring to their morphology via the printed word’s visual-orthographic structure.

The term shallow orthographies refers to writing systems where the correspondence between sounds and letters is consistent and unambiguous (e.g. in Serbo-Croatian, Spanish, Italian etc.). Conversely, in the case of deep orthographies, such as Hebrew, graphemes usually correspond to more than one phoneme, while the same phoneme is usually represented with more than one letter.
Furthermore, this study endorses Katz and Frost’s (ibid.) proposition of the weak version of the ODH which advocates that a mixture of both phonological and visual-orthographic information is used in word recognition and that the orthographic system of a language is only one of the determining factors of the strategies that a reader employs when reading, naming or trying to recognise a word.

As regards Greek orthography, this is characterised by a rather consistent grapheme-to-phoneme relationship, which should place it more towards the shallower rather than the deeper orthographies (Chitiri and Willows 1994, 1997). Arguably, as noted by Porpodas (1989), the phonetic condition of words has changed over the centuries but the letters used for their representation have remained the same, resulting in inconsistencies, such as the representation of the same phoneme with the use of different letters. However, considering that there are very specific rules which regulate the pronunciation of these inconsistencies (Aidinis and Nunes 2001), a word’s pronunciation can be most of the times easily predicted on the basis of the information provided by the word’s spelling/written form.

According to the predictions of the ODH, then, Greek orthography should promote a strong involvement of the phonological code, as a result of its overall systematic relationships between letters and phonemes. Cross-linguistic experiments conducted between English and Greek, i.e. between a less vs a more transparent orthography, appear to verify this prediction (Chitiri and Willows 1994). However, in line with the weak version of the ODH, most researchers attest to the involvement of the visual-orthographic code too (Chitiri and Willows 1994, Porpodas, Pantelis and Hantziou 1990). Chitiri and Willows (1994) attributed the involvement of the visual code in Greek word recognition to the fact that Greek orthography preserves morphological information to a great extent, Greek being a highly inflected language (see also Kehayia and Jarema 1994, Kail and Diakogiorgi 1994). Taken together, the above arguments suggest that both the phonological and the visual-orthographic code should be involved in the reading of Greek, with a predominance of the former one due to the shallow character of the Greek orthography.

As far as Greeklish is concerned, it should be noted that, as Besner and Smith explain, “transcribed words, because they are orthographically unfamiliar and hence without representation in the orthographic input lexicon, can only be read by recourse to the assembled route” (1992: 55, emphasis in the original). While this is true for the phonetically transliterated Greeklish sentences, the orthographically transliterated ones could only be read by recourse to a combina-
tion of the visual-orthographic and phonological route, because attempting to read the orthographic spelling variants (such as: w for [o] and 8 for [θ]) with the use only of the phonological route would result in totally incomprehensible sentences. However, since phonetically transliterated Greeklish sentences can be read with the use only of the assembled route, which is assumed to be the dominant one in reading Greek, they should be expected to produce shorter reaction times (RTs) than the respective orthographically transliterated ones.

2.2 Alphabet primacy

Extensive research conducted in another case of digraphia – namely in bi-alphabetic Serbo-Croatian, which is written with two partially overlapping writing systems, the Roman and the Cyrillic one – has suggested an overall precedence of the first-learned alphabet. It should be noted here that, although all Serbo-Croats are fluent in both alphabets, they are taught either first the Roman and then the Cyrillic alphabet, or vice versa, depending on which part of the country they come from. As reported by Lukatella and Turvey (1998: 1059), “mature readers, accustomed to using both alphabets daily, were biased in their explicit classification of letters toward the alphabet that they learned first” (ibid.).

In parallel with the above, the order of learning the relevant alphabets should be expected to influence Greeklish users too. In view of the fact that the majority of Greeklish users are Greek native speakers and have been formally taught the Greek alphabet prior to the Roman one, their response to reading Greek sentences should be faster than their response to Greeklish. Taking also into consideration that the Roman alphabet is neither officially taught nor as extensively used for the transcription of the Greek language as in the case of bialectal Serbo-Croatian, the difference in reaction times in favour of the Greek alphabet should be more predictable and more pronounced in this case.

2.3 Formulation of hypotheses

On the basis of the preceding discussion, two specific hypotheses were developed:

(a) Phonetically transliterated Greeklish sentences will produce shorter reaction times (RTs) than orthographically transliterated Greeklish sentences.

(b) Standard Greek sentences will produce shorter reaction times (RTs) than Greeklish sentences.
3. Methodology

3.1 Design

To address the above questions, a sentence verification task was employed, according to which participants had to read simple comprehension sentences (such as: “h 8alassa eivai mple” (=the sea is blue) or “i gi ine treagoni” (=the earth is rectangular) on a computer screen and indicate whether they were ‘true’ or ‘false’ by pressing a button on an external button box. The time elapsed between the presentation of the sentence and the button press was specified as the reaction time (RT) for each sentence. The experiment had a within-subjects design, so that the same group of participants had to read sentences presented in three experimental conditions: (a) phonetic Greeklish, (b) orthographic Greeklish and (c) standard Greek. The sentences were divided in two blocks, the first of which included 40 Greeklish sentences and the second 20 Greek sentences, while the order of their presentation was randomised within each block.

3.2 Materials

The stimuli comprised:

(a) 20 phonetically transliterated Greeklish sentences,
(b) 20 orthographically transliterated Greeklish sentences, and
(c) 20 standard Greek sentences.

The presentation modality of the sentences was varied among the participants, so that results could not be attributed to differences in the comprehension difficulty of individual sentences.

3.3 Participants

The researcher carried out the experiment with 29 participants who had had at least 2 years of experience of using Greeklish, with a minimum of 10 email exchanges per week, and came from different professional backgrounds. In the end, 22 subjects (12 male and 10 female) were taken into account when analysing the data.

3.4 Procedure

All subjects were tested individually and were informed that their RTs would be measured throughout the experimental session. Prior to carrying out the experiment, a short trial session with 5 sentences was conducted as a means of familiarising the participants with the procedure that was about to follow. All the sentences were shown at mid-screen in a 28 point type Times New Roman font
in lower case. The use of lower case characters was preferred because upper case Latin characters are infrequently used both in written Greek (Tsapkini and Jarema 2002) and in Greeklish emails. Each sentence remained on the screen until the participant pressed either the green or the red response key on the button box, depending on whether they thought the sentence was true or false, respectively. Each session lasted about 10 minutes.

4. Presentation of the experiment results

4.1 Phonetic vs orthographic Greeklish

All the participants’ RTs were recorded for every sentence they saw during the experiment. No values were removed from the dataset. It was also decided to use medians rather than means, due to the fact that the latter were not considered representative of subjects’ responses as they violated the assumption of normality, particularly in the case of orthographic Greeklish (see Appendix 1). A paired-samples t-test was conducted to evaluate the significance in the subjects’ responses to the Greeklish sentences presented under the two conditions. According to the first hypothesis, phonetic Greeklish should be read faster than orthographic Greeklish. The table below shows that, although the mean response time for the phonetic Greeklish was higher than the respective response time for the orthographic Greeklish by 155.77ms, the difference did not appear to be reliably significant at the 5% level (p = .062).

| Table I. Reaction times (RTs) to ‘phonetic’ vs ‘orthographic’ Greeklish |
|-----------------------------|-----------------|--------------------|
|                             | Mean            | Std. Deviation     |
| PHON.Greeklish              | 2675.11         | 611.75             |
| ORTH. Greeklish             | 2519.34         | 783.41             |

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<thead>
<tr>
<th></th>
<th>Mean</th>
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<th>df</th>
<th>Sig. (2-tailed)</th>
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<tbody>
<tr>
<td>PHON-ORTH</td>
<td>155.77</td>
<td>370.46</td>
<td>1.972</td>
<td>21</td>
<td>.062</td>
</tr>
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</table>

However, taking into account that the sample size was not large (n = 22), the fact that significance was obtained at the 10% level can be interpreted as a satisfactory result (see also Stevens 1996). Interestingly, when the above mentioned paired-samples t-test was repeated excluding the outliers and extreme points, it produced a significant mean difference of 186.16ms (p = .017), as displayed in the following table.
Table 2. Reaction times (RTs) to ‘phonetic’ vs ‘orthographic’ Greeklish (without outliers and extreme points)

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<th>Paired Samples Statistics</th>
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<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>Std. Deviation</td>
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<tr>
<td>PHON.Greeklish</td>
<td>2648.95</td>
<td>22</td>
<td>621.50</td>
</tr>
<tr>
<td>ORTH. Greeklish</td>
<td>2462.80</td>
<td>22</td>
<td>750.90</td>
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<th>Paired Samples Test</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std.Deviation</td>
<td>t</td>
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<tr>
<td>PHON-ORTH</td>
<td>186.16</td>
<td>336.11</td>
<td>2.598</td>
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</table>

4.2 Alphabet primacy

The second hypothesis predicted that participants’ RTs to standard Greek sentences would be significantly shorter than their RTs to Greeklish sentences. A paired-samples t-test was conducted to assess the significance in the subjects’ responses to Greek vs Greeklish sentences. The results presented in the table below suggest that the expected hypothesis was confirmed since subjects read the Greek sentences significantly faster than the Greeklish sentences, with a mean response difference of 794.09 ms (p = .000).

Table 3. Reaction times (RTs) to Greeklish vs Greek sentences

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<th></th>
<th>Paired Samples Statistics</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>GREEKILISH</td>
<td>2597.23</td>
<td>22</td>
<td>678</td>
</tr>
<tr>
<td>GREEK</td>
<td>1803.14</td>
<td>22</td>
<td>424.37</td>
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<th>Paired Samples Test</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std.Deviation</td>
<td>t</td>
</tr>
<tr>
<td>GREEKILISH-GREEK</td>
<td>794.09</td>
<td>420.17</td>
<td>8.864</td>
</tr>
</tbody>
</table>

5. Discussion

Starting with the latter hypothesis, the above results clearly establish the predominance of the native, first-learned alphabet over the use of a non-native alphabet in reading Greek. Strong evidence is provided here which shows that reading in Roman-alphabeted Greek significantly affects performance, causing
speed decrements in simple sentence reading. It should also be kept in mind that standard Greek sentences were presented after all the Greeklish sentences were tested, which could have affected results due to a greater familiarisation of the subjects with the Greeklish sentence. Nonetheless, there was a great difference in the mean RT between reading Greeklish and Greek, which reached a latency of nearly 1 second.

With respect to the first hypothesis, which predicted a primacy of the phonological route, the current findings did not appear to verify this expectation. Starting from the results presented in Table 1, the fact that no significant difference was observed between phonetic and orthographic Greeklish suggests that there is at least some involvement of the addressed/orthographic route in reading Greek. If the subjects heavily depended on the phonological route, they should have favoured phonetically transliterated Greeklish, which kept constant the whole sentence at the phonological level. In other words, if there was no lexical influence on the assembled route, then the visual similarity of orthographic Greeklish with standard Greek should not have affected the subjects’ performance. However, the fact that phonetic Greeklish was not read significantly faster than orthographic Greeklish could be interpreted by the assumption that reading in Greek is facilitated by a process whereby both routes are involved. This is partly in agreement with the proposition of the weak version of the OHD, on the basis of which both routes are in operation even in the case of shallow orthographies, such as Greek. On the other hand, the strong involvement of the phonological route in reading Greek was not confirmed by evidence revealed in this study.

In particular, taking into account the results of Table 2, it might be the case that orthographic familiarity plays a more important role in the reading process than was originally expected. The shorter RTs produced by the subjects in reading orthographic Greeklish do not of course suggest an exclusive involvement of the visual-orthographic route, since most of the orthographically transliterated sentences can only reach a partial visual similarity with standard Greek. For example, the word ‘eivai’ (= is), which is a spelling variant of orthographic Greeklish, bears a great resemblance to its normal orthographic picture in Greek, i.e. ‘eivai’. Conversely, words such as ‘aspro’ (= white) have only one possible transliteration which is used both for phonetic and orthographic Greeklish, and, thus, their similarity with standard Greek is minimal (‘áσπρο’). Consequently, reading orthographic Greeklish necessarily requires a combination of both the phonological and the visual-orthographic route with an overall tendency towards the latter.
Although unequivocal inferences cannot be made on the basis of the above results, a potential explanation could be attributed to the strong morphological character of the Greek language, as previously argued in 2.1. Irrespective of the extent to which the assembled route is involved, the fact that it appeared to be favoured by the subjects (in combination of course with the addressed route) is in alignment with previous results (Chitiri and Willows 1994), which emphasise not only the shallow character of Greek orthography but also its strong morphological affiliation.

An alternative explanation might relate to frequency effects of the specific words included in the tested sentences, which could have confounded with the overall RTs at the sentence-level. More specifically, due to the simple sentence structure that the design of the experiment required (see 3.1.), some commonly used words, such as ‘is’ or ‘has’, were unavoidably repeated a number of times. Considering that ‘eiva’ (=is) is one of the commonest words in Greek – the 15th most frequent word according to the Hellenic National Corpus – it might be the case that its orthographic variant (‘eivai’) facilitated a much faster and easier reading than its respective phonetic one (‘ine’), if one accepts Seidenberg’s (1992) proposition about the visual processing of high frequency words. Such an assumption concurs also with data that emerged from the Greeklish corpus of 10,000 words compiled earlier by the researcher (Tseliga 2003), where the variant ‘ine’ was only rarely found.

Finally, another interesting point that emerged from this experiment was the lack of normality in subjects’ mean RTs to orthographic Greeklish, when compared with phonetic Greeklish. Such a result could be explained by the fact that orthographically transliterated sentences which included specific spelling variants (such as ‘8’ and ‘3’) caused more reading difficulties than sentences which did not include such variants. This was also attested by the participants’ accounts, many of whom noted that the use of numbers sometimes confused them (in particular, in shorter words), despite their previous experience with Greeklish. This is not unreasonable if one considers that “since numbers are completely abstract entities, their symbolization [...] is a highly elaborate conceptual operation” (Coulmas 1996: 357-358). In the case of Greeklish, this operation becomes even more demanding, since the reader is forced to abandon this already systematized and automatized process of interpreting, e.g. [8] as a symbol for ‘eighthness’, and has to associate it visually with the Greek letter [θ]. However, this explanation remains at a speculative stage and more research is required to validate it.
6. Analysis of experiment findings in combination with previously gathered data

At this stage, it was decided that previously gathered information about the same group of participants would help amplify the already presented results. In particular, the participants had already given semi-structured interviews to the researcher and had agreed to give access to a sample of their authentic email communication. Hence, combining the current experimental results with the abundance of the already acquired data was deemed valuable in revealing the intricate relationships between the tested variables and the broader sociocultural context. This type of analysis is in alignment with the so called 'multi-strategy research' (Bryman 2001), according to which research methods that cross the two research paradigms can be effectively fused and integrated within the same research, facilitating a better understanding of the research issues.

6.1 Transliteration preferences in authentic emails

On the basis of evidence gathered from participants' authentic email writing, the researcher decided to investigate whether their transliteration preferences in that authentic context were associated with their responses in the experiment.

![Image of bar chart](image)

Figure 1. Transliteration preferences in the experiment vs authentic emails

What this figure suggests is that the majority of the users who employed the orthographic pattern for the composition of their emails equally preferred (= produced shorter RTs for) the same pattern in the online experiment. Conse-
quently, this could indicate a bi-directional relationship, since the adoption of the orthographic pattern could either facilitate or be facilitated by the employment of the visual-orthographic route in reading Greek. Interestingly, more than half of the participants who wrote phonetically produced shorter RTs when reading orthographic rather than phonetic Greeklish, which could also provide some support for the significant role of the addressed route in reading Greek.

6.2 Reasons for writing in Greeklish

When asked about the reasons for their adoption of Greeklish, participants suggested that it was either due to technical limitations or to a habitual use.

![Graph showing preferred pattern in the experiment vs reasons for Greeklish](image)

*Figure 2. Transliteration preferences in the experiment vs reasons for Greeklish*

The above graph shows that most of the users who attributed their use of Greeklish to a habit only, produced shorter RTs in reading orthographic Greeklish sentences. On the other hand, participants who claimed that they had resorted to using Greeklish as a result of the unresolved technical problems, appeared to favour the phonetic pattern in the experimental condition. This might be explained by the familiarity that the former participants had developed with orthographic Greeklish, possibly owing to its contribution to faster recognition
(as evidenced by the findings of the online experiment). In parallel with the above, another bi-directional relationship might be indicated here, since the quick response to orthographic Greeklish in the experiment could both be a cause and a result of the habitual use of the adoption of Greeklish email writing in general.

6.3 Frequency of email writing

It was finally thought that the relationship between the frequency of email production and the users’ preferred pattern in the experiment merited detailed investigation.

![Bar graph showing preferred pattern in the experiment vs email frequency](image)

*Figure 3. Transliteration preferences in the experiment vs email frequency*

What the above bar-graph suggests is that the majority of both the less prolific and more prolific email writers produced shorter RTs for orthographic Greeklish. The significance of this observed tendency lies in the fact that 55% of the less frequent writers, i.e. those who composed 5-10 emails per week and had not probably developed strong transliteration habits, recognised faster orthographic rather than phonetic Greeklish. This could be an additional indication of the facilitatory effect of visual information in reading Greek.

6.4 Evaluative stance towards Greeklish

Another issue of relevance were the evaluative perceptions that the participants expressed during the interviews towards the phenomenon of Greeklish. Many
positive or negative comments were noted about the idiosyncratic writing practices evidenced in Greeklish.

Figure 4. Transliteration preferences in the experiment vs evaluative stances

The results illustrated in the above figure suggest that nearly all the subjects who were positively disposed towards Greeklish took less time to read orthographic rather than phonetic Greeklish. On the other hand, those who found the innovative spelling patterns of Greeklish annoying and confusing were not as quick in the reading of orthographic Greeklish, and a few more than half of them produced shorter RTs for phonetic Greeklish. A first note to be made here is that the intuitive negative comments made by the latter group of participants could be attributed to the difficulties they faced in the process of reading orthographic Greeklish, as was proved by the fact that this condition slowed down the performance of nearly half of them. However, it seems unlikely that the opposite argument is true, i.e. that the stance held by the participants could influence their RTs, since those who ascribed no particular positive or negative value to the phenomenon of Greeklish, also ‘preferred’ orthographic Greeklish in the experimental setting.

7. Concluding comments and perspectives for future research

The above analysis has brought to the fore a multitude of parameters involved in the issue of transliteration in Greeklish. On the whole, it could be argued that
there seems to be an incipient pattern of the 'orthographic Greeklish user'. More specifically, there can be identified a group of users who are consistent in their choices, usually belong to the prolific group of email writers, are accustomed to transliterating Greeklish orthographically and are positively favoured to the whole situation. Although it might be a bit premature to make generalised assumptions, current evidence suggests that as a Greeklish user moves from the state of 'novice' to that of being more experienced and immersed, s/he will tend to adjust to the broad pattern of the 'orthographic Greeklish user'.

This view does not purport to state unequivocal predictions that can be extrapolated to all situations. On the contrary, the current part of the study provides indices for the possible development of a 'norm' within Greeklish communication and suggests that there is a host of contextual factors which operate in dynamic interaction with each other and contribute to its emergence. Hence, the results from the online experiment indicated, first of all, a dependence of Greek readers on both the assembled and the addressed route, a tendency which could be a significant – if not a decisive – factor for the adoption of the orthographic pattern. However, the hesitation to incorporate particular spelling variants within this pattern, such as ‘8’ for [θ] and ‘3’ for [ς] could be traced both to sociolinguistic parameters (i.e. reaction against linguistic innovations) and to psychological dimensions (i.e. involvement of different processes in recognition of particular symbols). This is in line with Rogers’ (1995: 42) argument, who posits that “there is probably no situation where a new writing system could be introduced uninfluenced by cultural considerations and determined only by linguistics and psychological considerations”. Although Greeklish does not refer to the introduction of a novel writing system, yet, the use of innovative spelling choices and orthographic patterns is undoubtedly embedded within the broader framework of writing practices.

Furthermore, strong evidence was provided by the experiment that reading Greeklish sentences was significantly slower than reading sentences written in standard Greek. Whether this decrease in reading speed is also followed by effects in other, higher-level cognitive processes (e.g. memory, semantic decoding), remains to be tested. This would be of crucial importance, considering that Greeklish is used in real Greek-to-Greek CMC and such decrements could seriously hamper communication. Arguably, further research is required, preferably at word-level, which would allow to control more parameters (e.g. word-frequency, word-length) and to examine whether specific morphological properties influence RTs. In fact, in the wake of this first experiment, the researcher is currently involved in the design of a second on-line experiment (Tseliga and
Marinis 2003), which will measure RTs to phonetically and orthographically transliterated Greeklish words, varying the position of specific characters and diphthongs (suffix vs stem), in order to examine the role of inflectional morphemes in word recognition in Greek.

On the whole, this study has shown how particularities of a specific situation interface with more general tendencies, bringing into light the subtleties of the research issues in question. This would not have been possible without the harmonious integration of both quantitative and qualitative methods within the 'multi-strategy research' approach. Availing itself of the strengths of both methodologies, this approach has allowed the researcher to investigate the issue of transliteration from theoretically distinctive backgrounds, providing a detailed account of the relationship between different variables involved in the transliteration variability which typifies the use of Greeklish.

References


