

# Introduction

## 1. The present volume in the context of preceding experiences

The first volume of the series *LautSchriftSprache – ScriptandSound* deals with some of the topics presented during the third international LSS conference in Verona ([www.linguistic-slab.org/lss\\_3](http://www.linguistic-slab.org/lss_3)), as well as with some new ones. In chronological terms, the papers in the present volume refer to writing systems ranging from the cuneiform systems of the II. millennium B.C. to present-day alphabets; in relation to the geographical coordinates, they extend from the Middle East, and the Caucasus to continental Europe and the Mediterranean Area.

The first LSS conference in Zurich 2008 gave an overall introduction to the broad field of historical graphemics, summing up the results of many research programs on runes and other writing system of the Middle Ages. The second one, in Munich in 2010, focused on the (dis-)ambiguity of the grapheme and the depiction of sounds by characters in terms of a ‘perfect fit’, giving an overview on different writing systems. The third conference followed these traces in attempting to broaden the range of phenomena studied. A detailed list of topics is offered below.

1. Metalanguage. A scrutiny of metalinguistic thinking based on the history of the underlying concepts (e.g. grapheme, graph, character, letter, syllabogramm, phonogramm, logogramm, graphemics, graphetics, allograph, glyph, alloglyph etc.) and on their critical analysis.

2. Functions. The concept of a ‘perfect fit’ is further studied especially in the light of studies on literacy, semiotics and the theory of communication. We tried to raise the following questions: How far can we speak of (im)perfection, once we consider the roles of senders, recipients and goals in their own context and in the context of our research? Can writing systems only be classified in relation to a glotto-phonemic – grapho-phonemic ‘perfect fit’ or also in relation to the concept of ‘key’ in communication? How relevant are considerations of specialized vs. public/ official writing systems and of cultural policies?

3. Level of analysis. Analysis of the relationship between phonetics, phonology, grammar and writing systems in two perspectives: (a) on the one hand, expanding the chronological horizon from epigraphy to codicology; (b) on the other, introducing reflections on writing traditions other than alphabetic ones. Furthermore, particular attention had to be paid to the rules of transmission of graphic systems (invention – adaptation – optimization etc.) and on variation within and among systems; finally we also took a look at typologies of errors according to the individual systems.

## 2. State of the art and beyond

The volume ed. by Glaser / Seiler / Waldspühl (2011, first LSS conference) offers an overview of historical graphemics focussing on the results of running projects about runes and other writing systems of the Middle Ages. The path was set for expanding the chronological, geographical and typological horizons (not only in this present vol. (Lss, 1), but also in the forthcoming one (Lss, 2)). Thus, not only alphabets, but also syllabic, logo-syllabic and ideographic systems, which bring about different cultural traditions and deal with a different type of materiality (writing carriers) and different communicative and social functions for

written documents. We treated further topics now emerging as central in contemporary grammatology: teaching and learning, orthographic reforms, written language policies, adaptation strategies, communicative contexts, communicative choices, and, last but not least, the problem of errors in writing with their cultural and biological implications.

### 3. Topics of graphematics

In order to map the topics and the fields of the graphemic discipline, we list some of the key points resulting from the contributions to this volume.

#### 3.1. Geographical and chronological coordinates

- i. Ancient Anatolia and the Middle East in the 2nd and 1st millennium B.C. (Bernard, Busse, Collins, Marazzi, Payne, Zinko / Zinko).
- ii. Crete, Ancient Greece and the Mediterranean in the 2nd millennium (Consani, Marazzi, Muscariello).
- iii. Ancient Italy in the 1st millennium B.C. (Marinetti / Solinas, Poccetti).
- iv. Germanic Area:
  - a. Iceland (Bauer and Raschellà)
  - b. Runes (Waxenberger, Waldispühl)
  - c. Old and Middle High German (Nievergelt, Solling)
  - d. Old English (Waxenberger)
- v. Medieval Italy: Old Italian texts (Pellegrini)
- vi. Ossetian texts from 20th century (Tomelleri)
- vii. Comparison of historical writing systems and contemporary child data (Kazzazi)

#### 3.2. Cultural traditions

Writing systems are instances of local knowledge and extremely sensitive to different aspects of their cultural traditions. Topics discussed are listed below.

- i. Different uses of writing and types of inscriptions. Ancient Anatolia has a very interesting story among the 2nd and the 1st mill. B.C., illustrated in the works by Busse, Collins (logo-syllabic cuneiform), Marazzi, Payne (Anatolian hieroglyphs), Bernard and Zinko / Zinko (epichoric alphabets). For more recent times, Tomelleri describes the various ways of the Latinisation of Ossetic, as a consequence of Soviet language policies.
- ii. Manuscripts: some aspects of orthography have been highlighted for Icelandic by Bauer and Raschellà; writing errors within the Hittite cuneiform tradition by Busse; writing schools and scriptoria by Marinetti / Solinas in Ancient Italy, and by Pellegrini in Medieval Italy.
- iii. Administrative texts from the Mycenaean period are the research object of Consani and Marazzi.
- iv. Literary texts may be a specific type of written production having an influence on regularity in scripts in different traditions, both ancient (Greek texts or Latin ones from the

1st mill. B.C. by Poccetti) and modern (Middle Ages in the Italian tradition by Pellegrini, or Icelandic by Raschellà).

- v. A comparison of modern child writing samples from different linguistic backgrounds with examples from historical writing are used by Kazzazi to explain certain underlying principles of writing in comparable phonetic contexts such as preconsonantal nasals.

### 3.3. Writing carriers, materials

Different materials for written documents are brought into the discussion in order to improve our understanding of their role in the writing traditions, these include:

- i. Clay as materials for the Hittite tablets and for the Mycenaean texts;
- ii. Stones for the hieroglyphic inscriptions in Turkey in the Anatolian tradition; the material was also employed for some runic inscriptions, not only in the English tradition but also in the Icelandic one as tombstones; stone also served for vases in the Linear A tradition;
- iii. Metal was used for some inscribed object in the runic and the Mycenaean traditions as metal bars; as metal coins they are to be found in the Greek and Sidetic tradition;
- iv. Papyri have been employed in the Greek tradition, but some texts on papyri have also been found in the Sidetic traditions;
- v. Paper, finally, for the the Ossetic tradition, the Old Italian tradition, the Old Icelandic and the High German ones.

### 3.4. Functions and goals

Functions and goals of the writing systems have been highlighted in their cultural environments, where we see different strategies to master the complex spoken–visual code interface. At the same time, they also represent a consistent product of cultural identity or ideological positions.

- i. Optimisation was a topic for the runic system, Old Icelandic spelling and Linear B; this also applies to the adaptation of the Etruscan alphabet for Italic non-Etruscan languages and also in Old Italian Literature.
- ii. Differentiation and creation are factors in the spread of the use of an alphabet to write other and different languages; the Sidetic alphabet represents an innovation, as do the Anatolian hieroglyphs.
- iii. Cultural identity is a key term in understanding the use of a specific writing system due to language policy, as with the Ossetic, the Anatolian hieroglyphs in the multilingual Hittite Empire, and with Sidetic, with its peculiarities.
- iv. Sociolinguistic goals can be seen e.g. in the hieroglyphic Anatolian inscriptions, in its aspects of “visible language”, but, e.g., in the employment of the Latin alphabet in their aspects of the Ossetic tradition.
- v. Teaching a writing system is treated in the examples of Old Icelandic spelling rules in the schools, but also for Linear B, the Hittite cuneiform, and in the Italic epigraphic evidence, in varying degrees connected to the Etruscan and Greek contemporary traditions.

#### 4. Perspectives

Finally, different perspectives result from the varied approaches in the collected papers and make up the complexity and the cross-linguistic extension of graphematics.

- i. An anthropological point of view is necessary in clarifying the use of a writing system in a complex reality, such the Anatolian society in the 2nd millennium B.C. or in the Minoan or Mycenaean world. This point, under a semiological point of view, is focused mainly in both Marazzi's papers.
- ii. A purely graphemic level is highlighted by Bauer and Raschellà for Old Icelandic, and Waxenberger for the Old English runes, but this topic remains central throughout the entire volume.
- iii. The phonetic realisation is the focus of the analysis of the writing errors in Hittite cuneiform (Busse), and in Old Italian (Pellegrini). The relation between languages and writing systems is clearly displayed by Solling, Nievergelt, Waldispühl.
- iv. The use of writing systems and language-specific new creations for disambiguation is the topic of Poccetti's work on some graphic innovations in terms of serving as word separators in Latin and Greek texts.
- v. The relation between culture and writing system proves to be a central point of interest. In terms of identity and language policy, it is recurrent in Tomelleri's article. The invention and/or adaptation is central in almost all contributions, with a particular emphasis in Bernard's overview on the origins of the Anatolian alphabets, or in the emblematic case of Sidetic (Zinko / Zinko). Payne describes the interplay between multilingualism in ancient societies and the existence and functions of multiple writing systems within a population.
- vi. Multilingualism and writing systems are described in their interrelation by Kazzazi under the perspective of the relation between spelling and learning to write.

Our final suggestions for further studies (expressed during the conference in Cotticelli's concluding talk) include:

- i. Motives and motivations in writing require depth in different times and spaces
- ii. The focus of thoughts on metalinguistic terminologies and concepts from an interdisciplinary perspective is an important theoretical contribution in order to clarify some difficulties in describing systems and the uses of some concepts.
- iii. Finally, the perspective of contact among languages (and beyond) and the correlated events involving writing at all levels could be a new and interesting focus.

We hope this volume will be a fruitful stimulus for new studies and contributions, which may find from now on (we hope) a suitable place of publication.

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# Orthophonic Spelling: Providing a Different Kind of ‘Perfect Fit’

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## Abstract

Modern Icelandic shows, on the orthographic level, a striking conformance with the orthography of Old Norse, so that one could presume continuity over a very long period of time. As a matter of fact, there was a break after the Middle Ages because the language went through several considerable linguistic changes that, however, did not found a correspondence with the spelling of printed books. Be that as it may, the written evidence from the post-Reformation period provides an insight into the development of this language. A large group of *semi-literate*, who were able to read and write, left a great number of documents using a kind of orthophonic reproduction that, in a way, re-established the ‘perfect fit’ between spoken and written language that had been lost after the Middle Ages.

## 1. The Situation in the Middle Ages

Four treatises, dating between the 12<sup>th</sup> and 14<sup>th</sup> century, exist in Iceland and inform us quite precisely about grammatical items. All but the third are anonymous, the manuscripts are all untitled (they are simply called ‘Grammatical Treatises’ by modern critics), and they are numbered serially from the First to the Fourth (OI respectively *fyrsta*, *önnur*, *þriðja*, *fjórða málsfræðiritgerðin*).

As the Icelanders began to write down texts at the beginning of the 12<sup>th</sup> century, they soon realized that they had at their disposal an instrument—the Latin alphabet—which was only partly suited to record the Old Norse language. The runes were limited to an epigraphic use and could not be employed in manuscripts, the only exception being the *Codex runicus*.<sup>1</sup> This led to a conscious reflexion on the part of the Icelanders about the writing system in connection with their language.

Of the four treatises, the first and second focus on phonology and spelling and are of particular interest in regards to the topic at hand.<sup>2</sup> The efforts of the so-called First Grammarian mostly concern the description of the sound inventory and the adoption of new signs which could represent Old Norse more suitably. Thus for this purpose he states that he has created an alphabet for the Icelanders which, on the one hand, maintains the Latin letters that could be useful and, on the other hand, has introduced new letters which the Latin alphabet had lacked. Among the consonants of the Latin alphabet, some were omitted (such as k and q) and others were added (such as þ, taken from the Anglo-Saxon tradition, originally having been adapted from a runic sign). All vowels were maintained, in addition to which new signs for vowels were created. Based on the linguistic evidence, the text has been dated to the time around the middle of the 12<sup>th</sup> century.<sup>3</sup>

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1 Regarding this, see the edition of Thorsen Peder (1877).

2 Concerning the First Treatise see Haugen (1972) as well as Hreinn Benediktsson (1972); concerning the Second Treatise see Raschellå (1982).

3 Hreinn Benediktsson (1972: 31) dates it between 1125 and 1175. Haugen (1972: 77–79) enumerates a small group of editors who date the text between 1130–40 and the majority, who rather prefer a later dating between 1170–80, without stating his own position on this matter.

The author of this text seems to have been the first in Europe who investigated the phonology of a Germanic vernacular and created orthographical principles for it.<sup>4</sup> Although he based his knowledge on the theories of Latin Grammarians such as Donatus and Priscian, as well as on other doctrines well known in monastic schools throughout Europe, he is still quite innovative. Regarding the form, for example, he avoids the medieval structure of dialogue—between master and pupil, or father and son. Concerning the content, he discovers the technique of using minimal pairs to describe phonemes, which was developed in the modern times. Unlike his European predecessors, who quoted almost exclusively Latin poetry, the First Grammarian seems to be familiar with the autochthonous tradition of his own country, particularly with skaldic poetry, which he quotes twice. Yet the new aspect of his work was indeed the adaptation of grammatical topics from Latin grammar to Old Norse.

In his treatise, the author lists nine vowels, distinguished according to their length and nasality, and 14 consonants, which in many cases could be short or geminate. He also tries to describe the sound quality and the point of articulation, so that we become aware of the pronunciation in the 12<sup>th</sup> century. Having introduced specific signs for Icelandic sounds, he explains their form and gives a description of the sounds:

Við þa hljóðstafi .v. er áðr voru i latínu stafrofi. *a e i o u*. Þar hefi ek við gjorfa þetta stafi fjóra er her eru ritirn nu. *q e ø y*. *Q* hefir lykkiu af *ae* en hringinn af *o* af þvíat hann er af þeira hlióði tveggja saman blandinn kveðinn minnr opnum munni enn *a*, en meirr enn *o*. *E* er ritinn með lykkiu *as* enn með ollum vexti *es* sem hann er af þeim tveim samfelldr minnr opnum munni kveðinn en *a* ok meirr enn *e*. *Ø* hann er af hlióði *es* ok *os* felldr saman minnr opnum munni kveðinn en *e* ok meirr enn *o*. Enda ritinn af því með kvisti *es* ok með *osins* hring.<sup>5</sup>

In Hreinn Benediktsson's translation (1972: 211):

To the five vowels that were in the Latin alphabet originally, *a, e, i, o, u*, I have added these four letters that are written here: *q e ø y*. *Q* has the loop from *a* and the circle from *o*, because it is a blending of the sounds of these two, pronounced with the mouth less open than *a*, but more than *o*. *E* is written with the loop of *a*, but with the full shape of *e*, just as it is composed of the two, with the mouth less open than *a*, but more than *e*. *Ø* is composed of the sounds of *e* and *o*, pronounced with the mouth less open than *e*, but more than *o*, and therefore in fact written with the cross-bar of *e* and the circle of *o*.

After having presented the vowel inventory, the first grammarian continues his description of the consonants. At this point in time the letter þ was introduced in Iceland and used for both voiceless and voiced dental fricative:

Staf þann er flestir men kalla þorn, þann kalla ek af því heldr *the* at þa er þat atkvæði hans i hveriu mali sem eptir lifir náfnins er yr er tekinn radar stafr or nafni hans sem alla hefi ek samhlióðendr samða i þat mark nu sem er reit snemma i þeira umræðu.<sup>6</sup>

In Hreinn Benediktsson's translation (1972: 243):

4 The only parallel we find is the Irish *Auraceipt na n-Eces* dating from the 7th century. See Calder (1917).

5 Hreinn Benediktsson (1972: 210).

6 Hreinn Benediktsson (1972: 242).

The letter that most men call *þorn* I prefer to call *the* for (the reason) that then its pronunciation in each (piece of) discourse is what is left of its name when the vowel is removed from its name—as I have now rearranged all the consonants under this principle, just as I wrote early on in my discussion of them.

By means of the enlarged alphabet, the First Grammarian clearly made an effort to bring his orthographic system into accordance with the sound lore of Old Norse vernacular in the High Middle Ages. As a matter of fact, we can, at this time, observe a rather straightforward correspondence between grapheme and phoneme that we can call a ‘perfect fit’.

## 2. The early modern period and the loss of ‘perfect fit’

In the transition between the Middle Ages and the early modern period, Old Norse went through several radical linguistic changes which, however, did not become apparent in the orthography. As a consequence, a disparity between the spoken and written language arose and the spelling rules became ‘misleading’.

The changes mainly concern the vowel system—for example vowel shortenings or lengthenings and a variety of quality changes, as Küspert (1988: 5) teaches us—and, to a lesser extent, the consonant system. The whole development extended over a longer period of time, but most of the changes seem to have been completed by about 1530.<sup>7</sup>

In this regard Magnús Pétursson (2005: 1260) expressed in 2005—I would say—an overly radical judgment affirming that “[t]he sound system in particular has been completely changed”. I do not really agree with the absoluteness of his statement, but indeed one cannot deny that changes occurred.

Observing the orthography of Modern Icelandic, one could think that the language has not developed at all. This fact allows Icelanders—at least at first glance—to exhibit a linguistic continuity from the Middle Ages until today. Yet this can only succeed if people ignore the historical development of the language in the almost entirely neglected period between the 17<sup>th</sup> and 19<sup>th</sup> centuries.

About the diachronic stability of Icelandic, Betty Wahl (2008: 71) affirms:

Während die relativ hohe Stabilität des isländischen Flexionssystems noch als unbestritten gelten kann, lässt sich dies für die phonologische Ebene schon nicht mehr eindeutig behaupten. Dort ist es allenfalls die konservative, etymologische Orthographie, die über die erheblichen Umstrukturierungen innerhalb des Lautsystems hinwegtäuscht, da sie sich nur in die Entstehungszeit der Sagaliteratur der Sprachentwicklung angepasst hat, danach jedoch kaum mehr, weshalb sie gewissermaßen den Lautstand des Altisländischen konserviert.

In this regard I would like to propose a more differentiated explanation: rather than an unbroken continuity in orthographic writing through the centuries, we observe a conscious return to the old norms due to linguistic purism arising at the end of the 19<sup>th</sup> century. As a consequence, the orthophonic writing of the period after 1600 was abolished in modern times and the orthographic rules of Old Norse (that Betty Wahl calls “konservative, etymologische Or-

<sup>7</sup> Kristján Arnason (1980: 160): “[...], we do not have to assume that the change from the Old Icelandic to the Modern Icelandic structure took place in one great leap. There was probably a long period of instability. [...] It is, furthermore, quite likely that the change progressed at different speeds in different geographical areas. It seems natural for a change like this to progress gradually, since it did not lead to any clashes in the system.”

thographie”) were deliberately reintroduced. This implies, however, that the relation between sound and grapheme is much more complex in Modern Icelandic, than it was in Icelandic before the 16<sup>th</sup> century.

I would now like to focus on the linguistic period between Old Norse and Modern Icelandic and show how, in a certain unscholarly milieu, orthography was adapted to the phonological development, allowing an orthophonic spelling to arise.

### 3. Reintroducing the ‘perfect fit’ through orthophonic writing

As a result of the Reformation the many monasteries—which represented the cultural centres of Iceland—were closed and from the end of the 16<sup>th</sup> century onwards the educational mandate was consigned only to the two cathedral schools connected with the Episcopal sees, Hólar in the north of the isle and Skálholt in the south. These schools were meant to educate the progeny of powerful families and the clergy respectively; they were only accessible to a restricted group of people, i.e. to the elite of the land. From 1805 on, proper education became even more modest, with just one school remaining open, ‘Lærðiskólinn’, situated in Bessastaðir not far away from Reykjavík.<sup>8</sup>

Yet, quite unlike the situation on the European continent, several Icelanders, who could not attend the official schools got an alternative approach to education. This was achieved primarily through home education. Even in the middle of the 20<sup>th</sup> century so-called *farkennarar* (teachers who temporarily stayed at one farm, moving after a while to the next one) were the only sources of official tutoring in the remote corners of the land, such as in the Westfjords. In a travel account about a journey through Iceland, the Old Norse scholar Andreas Heusler reports at the end of the 19<sup>th</sup> century that Icelanders in general were very fond of reading and that even the farmers had a decent level of general education.<sup>9</sup> Already in the post-Reformation period, the literacy rate among common people in Iceland was much higher than in the rest of Europe.

Due to the different kind of education programs they had at their disposal, a disparity between the orthographic norm, as taught in the official schools, and the records of the semi-literate people can be observed. While the elite, inter alia, tried to express itself through printed books, the mass continued to operate within a medieval context: they still wrote manuscripts and their orthographic praxis diverged from the appointed rules, which existed despite still being unconsolidated.

Even if the manuscripts are quite modest—their layout does not, for the most part, reflect any conception of space, the script used does not follow any standardized rule, and the material is often of poor quality, paper even being partly recycled—their records can be of great interest for the study of the language in a diachronic perspective. Through these records we gain an insight into a phase of Icelandic in which the phonological changes are at least partly still reflected in the spelling (as they were in the Middle Ages). In fact, they come up with a number of solutions to reflect the spoken language of the time.

<sup>8</sup> In 1846 the school moved to Reykjavík, and still exists as high school (‘Menntaskólinn Reykjavíkur’).

<sup>9</sup> See Heusler (1969); especially p. 52: “Mit d[em] Fehlen der Standunterschiede hängt aber eng zusammen: es gibt fast keine Bildungsgrenzen. [...] Eine greifbare Bildungsgrenze gibt es: wer die Lateinschule in Reykjavík durchlaufen hat, erhält den Titel *stúdent* ein Prädicat, das sich nicht auf ein Amt, sondern nur auf den Bildungsgrad gründet. [...] Aber die *stúdentar* sind ebenso wenig die alleinigen Inhaber der Bildung wie bei uns die *doctores!*”; p. 53: “Daß jeder Isländer lesen und schreiben kann, ist bekannt; aber die Höhe der Ausbildung wird damit ungenügend gekennzeichnet. Treffender würde man sagen: jeder Isländer macht vom Lesen Gebrauch.”

Björn K. Þórolfsson (1925: xvii) affirms, for example, that even before 1600 orthographic rules had been scheduled for the books printed at Hólar. These rules had to be observed when printing, while the orthography in manuscripts still varied a lot. As the writers did not know the official orthographic norms, they created another kind of ‘perfect fit’, namely a new near 1:1 correspondence between the spoken and written language. This by no means represented a conscious attempt to establish an elaborate orthographic system; they rather wrote as they spoke, following a natural principle, just like pre-school children do, trying to reproduce the spoken word.<sup>10</sup>

However, even within the learned context of the 17<sup>th</sup> century it was difficult to respect the rules. In a letter from Bishop Brynjólfur Sveinsson to the Danish scholar Ole Worm from July 28<sup>th</sup> 1651 about the Icelandic language, he takes into consideration, among other, the rune **f** and its name, affirming:

ƒ non *fe*, sed *fe* sempre scriptum, sempre scribendum et pronuncianum est. *Je* inculcavit vitiosa recentiorum consuetudo, qva laborant inter nostrates inprimis Septentrionalis quadrantis incolæ, adeo ut *e* vocalem etiam *je* pronuncient, ab illisautem ad alios longe lateqve serpsit.<sup>11</sup>

For the elite, the so-called “Guðbrandsbiblíá” represents the canon. Oskar Bandle (1956: 22) shows nevertheless how inconsequent orthography still was, due either to the arbitrariness or just uncertainty.

Among the numerous manuscripts from the uneducated people, the phonological changes were, on the contrary, clearly perceived and appear more or less consequently in the documents in which we can, to a great extent, observe an orthophonic spelling.

In order to illustrate this kind of newly created near ‘perfect fit’, some examples taken from the manuscripts will be enumerated hereafter.

(1) Diphthongization and dissimilation of the *e* sound and its spelling. In medieval manuscripts, the grapheme <é> represented a monophthong and was written systematically as such (with or without stroke). From the 13<sup>th</sup>–14<sup>th</sup> centuries on, the non-high long vowels were diphthongized. As can be seen, the result can either be a closing diphthong, or an opening one, as in the case of <é> /e:/ > [iɛ] / [jɛ]. In order to avoid the coincidence with the original diphthong /ei/, /e:/ became /ie/ through inversion of the two diphthongal components.<sup>12</sup>

This development had already left its trace in the spelling in manuscripts from the early modern time: after 1600, we find, for the most part, the spelling <ie> or <je> in manuscripts and, from time to time, also in printed books. Today <é> represents, without exception, the diphthong [jɛ] that can be long, such as in *hér* [hjɛ:r], as well as short, as in *hérna* [hjɛɔ.na].<sup>13</sup>

10 Among the numerous studies about this kind of literacy among pre-school children see (in alphabetical order) Dehn / Sjölin (1996), Dürscheid (2006), Eichler (1976), Read (1986), Scheerer-Neumann (1996), and Schorch (1995). Kerstin Kazzazi shows some examples for German spelling in her habilitation treatise from 2011, such as <MER> *mehr* (5;8;25) and <WATEN>, <WATE> *warten*, *warte* (5;11). The same occurs among immigrants who, as adults, learn a language by hearing it (f.ex. the message of a friend of mine, who wrote “wigets” (‘how are you’) instead of *wie geht’s*).

11 Jakob Benediktsson (1948: 131). In this regard, the Bishop declares the new pronunciation as a phenomenon of the Northern part of Iceland and as bad linguistic habit (see Küspert 1988: 178).

12 Schulte (2005: 1087). See also Kristján Árnason (2001: 20ff.).

13 Stefán Einarsson (1949: 7). See also Kristján Árnason, (2011: 21).

At the end of the 19<sup>th</sup> century it was expressly decided to go back to the representation of the new diphthong as a monograph like it was in Old Norse.

In a diagram taken from Magnús Pétursson (2005: 1262) we can represent how the sound of this grapheme was before 1600 and how it developed afterwards:

Before the 16 <sup>th</sup> century	<é> [e:] él [el:] ‘snow shower’
16 <sup>th</sup> century and thereafter	<é> [je(:)] él [je:l], éls [jels] (Gen.)

(2) Diphthongization of *e* in a particular phonetic environment. A second example represents the diphthongization of *e* before /ng/, for example in the word *eingi*, which took place at the beginning of the 14<sup>th</sup> century. From this time on the digraph represents the usual spelling, such as in *dreingr*, *leingi* etc., for a vowel which became and still is a diphthong in Modern Icelandic. The same also occurred for the sound combination /nk/.<sup>14</sup>

Keeping the new pronunciation, in modern times, the orthography has been demoted anew to the medieval stage <eng> or <enk>. Ari Páll Kristinsson (1988: 33) defines the spelling as “a bit misleading”, being the pronunciation of the vowel *e* before /ng/ and /nk/ [eiŋk] and [eiŋk] respectively.

(3) As far as the other diphthongizations are concerned, orthography provides only scarce amount of evidence for phonological changes since the graphematic rendering of /au/, /ou/, and /ai/ remained basically unchanged from the Middle Ages until today, i.e. <á>, <ó>, <æ>.

Yet even if it is not recorded very often, one can find some evidence of the development of the simple *a* to the diphthong /au/ before /ng/ and /nk/ (pronounced [auŋk] and [auŋk] respectively)<sup>15</sup>, marked in the manuscripts through a single or double stroke on the vowel (i.e. <á>).

(4) On the other hand in terms of spelling, letters were occasionally dropped which were (and still are) not pronounced, such as the sound *g* in the combination *gj* between vowels. When the combination of *gj* is written inside a word, between two vowels, it is namely pronounced as a [j].<sup>16</sup> In manuscripts, such as, for example, Lbs 1349 4to, fol. 1r, the infinitive form <seia> for written *segja*, pronounced [se:ja], is recorded twice.

(5) A great variation emerges in the endings of adjectives and nouns between *-ir* and *-er*. In Old Norse and Modern Iceland *-ir* represents the norm, while in the time in between the form *-er* prevails.

Oskar Bandle (1956: 59) doubts that the change between *e* and *i* reflects a phonetic situation. The more probable pronunciation seems to have been like MIc. [ɪ]. The development seems to have been as follows: the original *i* appears as <e> in the oldest manuscripts, but *i* prevails from the middle of the 13<sup>th</sup> century onwards until 1550 (it is still the usual form in the New Testament from 1540). Yet in the 17<sup>th</sup> and 18<sup>th</sup> centuries the form *e* emerges again as the most popular, maybe because of Danish influence. In Modern Icelandic, the spelling and pronunciation are *i* and [ɪ] respectively.

14 Björn K. Þórolfsson (1925: xii).

15 Ari Páll Kristinsson (1988: 33).

16 Ari Páll Kristinsson (1988: 35).