Report

Advanced Design Practice

Development for a Typographic System *(Concepts)* for Irish Gaelic

Is it possible to create a basic Irish Gaelic typeface consisting of a complete ligature system reflecting the spoken Irish Gaelic language?

Is it possible to create a typographic system that makes it easier to learn Irish Gaelic?

"Language is a natural product of the human mind ... while writing is a deliberate product of human intellect ... language continually develops and changes without the conscious interference of its speakers, but writing can be petrified or reformed or adapted or adopted at will."
Peter T. Daniels 1996

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Foreword *[Acknowledgments & Introduction]*

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This project would not have been possible without the help and assistance I received from so many people. The amount of information, view points and insights I needed from so many different areas would not have been acquired without them:

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and of course the McCarthy family and all my friends, but above all my partner David McCarthy, who can't wait for the moment 'the letters' finally move out again.

Introduction - project work leading up to this research

Staunton (2010) appeals to Irish type designers to analyse the structure of the Irish language and to produce a typeface that suits its particular needs, without returning to manuscript models. I decided to follow Staunton's call.

The first research question was therefore: **Is it possible to visualise Irish Gaelic as a spoken language?**
All explorations were taking my design practice towards various concepts, in which I tried to connect sound and phonetics with letter shape resulting in a modern Irish Gaelic typeface.

I am half Greek and half German and my mother tongues are German and Greek. I haven't spoken German since the arrival in Ireland six years ago and the last time I spoke Greek was seventeen years ago.

Out of my own personal circumstances, I know that languages can be forgotten: my German is very bad at this stage, my Greek almost non existent. English and French are my second languages.

I am not an Irish Gaelic speaker. My perception was, while listing to the sound of the Irish Gaelic language and comparing it with the written words, that the flow of the language and how it is spoken does not reflect its written record.

> *For example*:
> *Concubhar* - which most non Irish Gaelic speakers would read and pronounce most likely '**concubar**' is actually pronounced '**crohur**'.

This makes it very hard to understand and learn this language, because it implies a decoding process for the brain on two levels: grammatically and phonetically.
I thought in the beginning, that Irish Gaelic with it's numerous vowels might sound as soft as French or like 'Elvish' from the Lord of the Rings. But it doesn't.
The Irish Gaelic language comes alive when it is spoken.

It can be as strong as it is soft and as melodic as it harsh. I wonder if this is a contributing reason why the success of the revival of the Irish Gaelic language so difficult to achieve? The primary use of the English language with its coherent reference of spoken to written record is used with ease in modern Ireland. It is the language of business and trade.

Irish Gaelic might be very difficult to learn as second language and needs a lot of discipline and passion, because of its complex grammar and the distance in relation of spoken and written record.

My partner and many of his friends learned Irish Gaelic as second language in school throughout the years of their entire education, but they have difficulties to speak, remember words, sentences and pronunciations.

Is it possible, that the decoding process for the brain to connect the opposing written and spoken record, makes it more difficult to learn, understand and remember Irish Gaelic?

I believe, there is a truth in this question and therefore I want to examine the possibility of developing a concept for typographic expression that allows words to be read as they are spoken or heard. I want to create a typeface in which the Irish Gaelic language commands the Latin language system, rather than being pressed into it.

If the characteristics of grammatical language rules such as lenition, eclipsis or diphthong can form a new expression that refers to its' pronunciation quicker and more clearly by using the Latin language system tools, would it be possible that it would be easier to learn, read and write Irish Gaelic? And if this typeface would have its own ligatures and characteristics - its own integrity - mirroring the language, would it create a form of identity?

Therefore I revised the initial research question to: **Is it possible to express spoken Irish Gaelic through typographical expressions such as ligatures?** The challenge was to find an entrance to a possible system. I intuitively chose ligatures as starting point into the overall research and outlined four main separate categories in order to develop a possible concept:

1. *Ligatures* that are nearly silent like '*gh*'
2. *Ligatures* where one letter is silent such as '*eo*', '*nd*', '*adh*'
3. *Ligatures* where the sound of the written letter changes to another such as '*c*' becomes '*k*', '*mh*' becomes '*w*' or '*v*' (depending if sound is broad/'forgot word', '*e*' can become '*a*' in certain grammatical situations.
4. *Ligatures* of letters that are spoken but not written such as '*s*' is spoken '*sh*'

By developing words with ligatures of all four categories it was important that they a) show a distinct difference without b) being in disharmony with the typeface.

The positive findings of this research show that this concept is worth pursuing, refining, testing and extending.

Therefore I started out investigating the following question in my final project: **Is it possible to create a basic Irish Gaelic typeface consisting of a complete ligature system reflecting the spoken Irish Gaelic language?**

Staunton, M. D. (2010) *Trojan Horses and Friendly Faces: Irish Gaelic Typography as Propaganda*, Revue LISA/LISA e-journal [Online], Vol. III - n°1 | 2005, Online since 27 October 2009, connection on 29 October 2012. URL: http://lisa.revues.org/2546; DOI: 10.4000/lisa.2546

Report *[Approach, Theory, Analysis & Outcome]*

I revised the initial research question while working the project. My findings indicated that the question itself could be a wicked problem. The second and final research question was: *"Is it possible to create a typographic system that makes it easier to learn Irish Gaelic?"*

APPROACH TO THE PROJECT

Defining and outlining the approach and estimated time frame precisely was necessary to deliver an appropriate outcome, especially when working on this project besides full-time work. My journal was effectively a detailed working document *(project diary)* that shows time schedules, initial brief, theory, results of tests, development of the typefaces, cross-references in literature as well as inspirational language systems. *Figure 1* outlines the overall approach of the project and the basis for the approach to the research.

APPROACH TO THE RESEARCH

The first step was to answer the question of the validity of this research. The background research and experiments of the last term suggesting there is a enough reason to believe a further investigation is appropriate. *Figure 2* shows the methodical approach to the overall research. The information graphic outlines the need to re-frame the initial research question, as it failed to prove valid against Karen's guidelines for a successful writing system and my conducted user tests *[see my journal, page 105 to 108, and Artifact 1 (Typeface Prototype and Programming Ligatures in Volt)*.

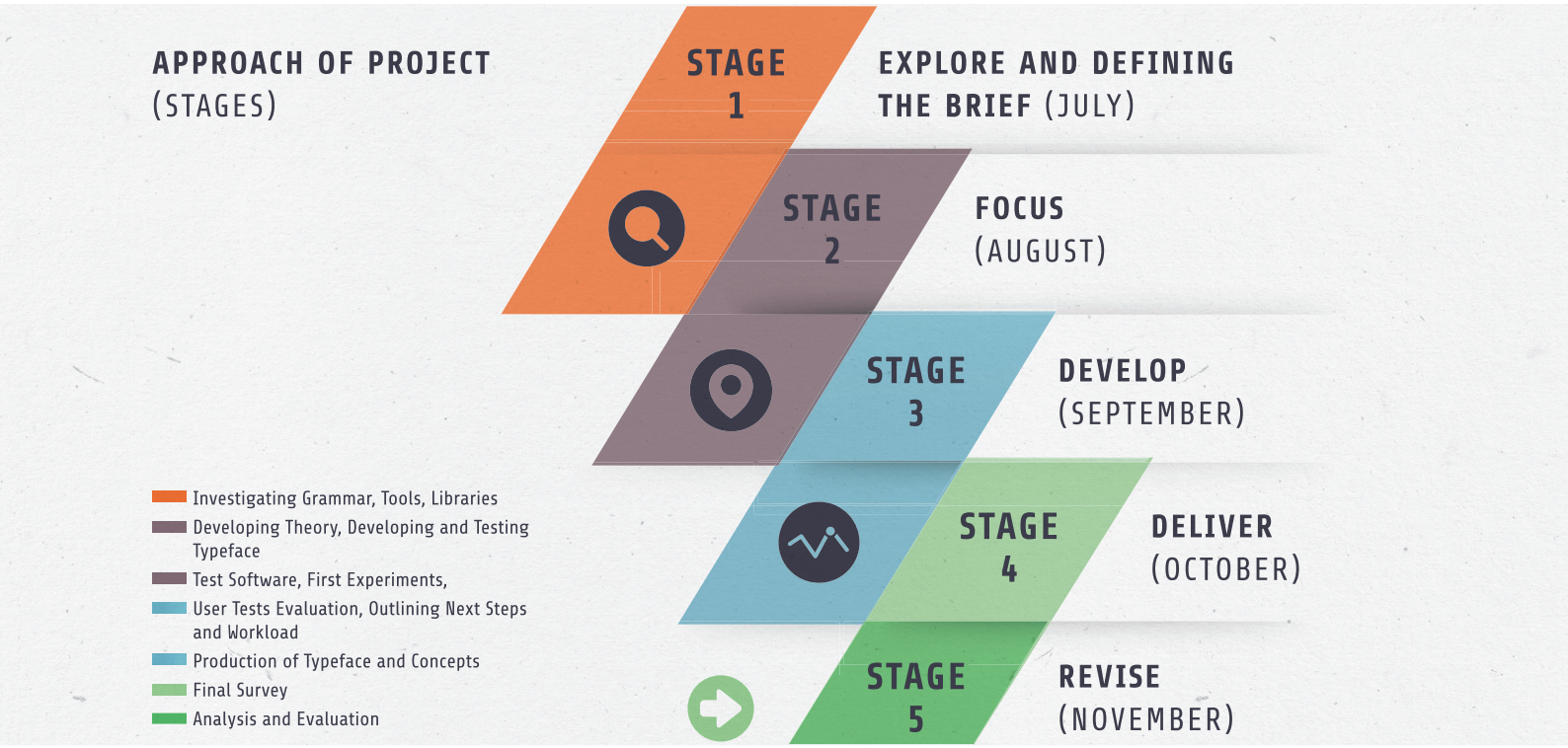


Figure 1 | Approach of Project

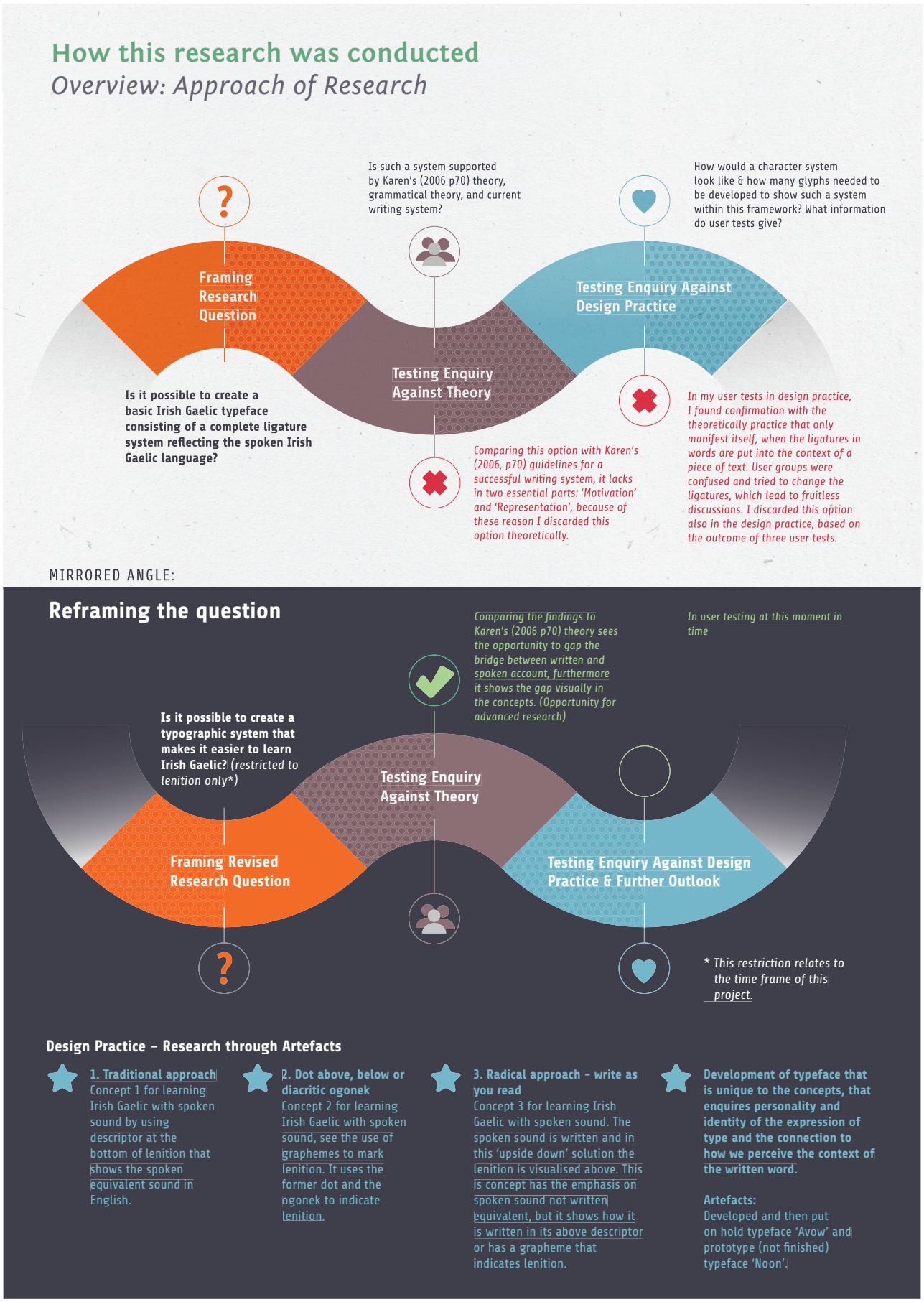


Figure 2 | Approach of Research

THEORY AND PRACTICE

To find literature about '*guidelines for amending a writing system*' or 'criteria that outline good writing systems' was not that simple. Eventually, I stumbled over the Master Thesis '*Writing System Development and Reform: A Process*' by Karan, Elke (2006) that dealt with the issues I faced at that point in time.

Karan (2006, p1) had a similar experience trying to find appropriate literature in this area pointing out the difficulty finding '*how to guidelines*' for designing or amending an orthography. She writes that most publications are focusing on either typology, history, describing the writing system or type design itself rather then explaining lessons learned for the benefit of a language.

The author thinks that this is related to the fact that in the past the study of writing systems were linked to the fields of archaeology, anthropology, graphology or typography, before becoming a respected area of research and study in itself.

Overall Karan (2006, p34) outlines six different types of writing systems/scripts such as logographic, syllabary, consonantal, alphabetic, alphasyllabary, and featural. We bear in mind here, that the Irish Gaelic language is using the alphabetic writing system since Henry Sidney, Lord Deputy of Ireland under Elizabeth I, developed the first written account of the language in 15th century as Staunton (2010) outlines.

Nowadays writing is seen as representing language and the emphasis is not only on speech and sounds, however the phonemic analysis of *accurate representation of speech* is still seen as foundational (Rogers 1995, p35).

An orthography design or reform should pay attention "*to factors such as underlying form and morphophonemic processes, mother tongue speaker perception and intuition, and reading fluency for experienced readers*" Karan (2006, p70). The author (p64) points out guidelines by Malone (2004, p40) and Smalley (1964b, p38) that outline a successful writing system (see *Figure 3*). *Figure 4* shows how I merged the two lists and adapted it for the usage of my research.

Pin-pointing the problems of the Irish Gaelic language revival, **I compared the list of guidelines (Figure 4) to Irish Gaelic language and found that points a and b are passing the given criteria to more or less extend, while points c and d are representing weak links of imparity.**

Guidelines for a successful writing system

Smalley (1964b:38)

- Maximum Motivation
- Maximum Representation
- Maximum Ease of Learning
- Maximum Ease of Transfer
- Maximum Reproduction

Malone (2004:38)

- Is acceptable to the majority of the Mother Tongue (MT) speakers of the language;
- Is acceptable to the government;
- Represents the sounds of the language accurately;
- Is as easy as possible to learn;
- Enables MT speakers to transfer between the minority and majority languages; and
- Can be reproduced and printed easily" .

Figure 3

Adapted Guidelines a for successful writing system *(Adapted from Figure 3)*

A - ACCEPTABILITY

The writing system is acceptable to the majority of the Mother Tongue (MT) speakers of the language;

B - REPRESENTABILITY

The writing system is accepted to be represented by the government;

C - SIMPLICITY

The writing system represents the sounds of the language accurately through written characters in an effective and simple manner;

D - EFFICIENCY AND USABILITY

The writing system is as easy as possible to learn; MT speakers transfer between the minority and majority languages; and can be reproduced and printed easily

Figure 4

In the beginning of my journey I stated that the difference in spoken and written account of the Irish Gaelic language (most likely through the early adaptation into the Latin alphabet 15th) might highlight an important problem.

I found evidences in Karen's research that underline this theory as she writes "*...one goal of adopting the writing system of another language is 'easy transfer' to that language...*" by referring back to comments from Coulmas (1989):

> *"... where the phonology and other structures of a particular language differ very much from those of the major contact language, every feature that favors transferability frustrates faithful mapping. The Cyrillic orthography for Karakalpak ... is a typical example ... condemned for its inadequacy... in spite of great differences between Russian and Karakalpak, the Cyrillic alphabet was used ... very similar to the Russian orthography. Transferability was high, but the faithful representation of speech was low."* (Coulmas 1989, p236–237)

Another highlighted case, showing similar patterns to the problem of the Irish Gaelic language writing system is the adaptation of Tibetan for Tibeto-Burman languages (ethnic and religious identity reasons) causes an imbalance of written and spoken language.

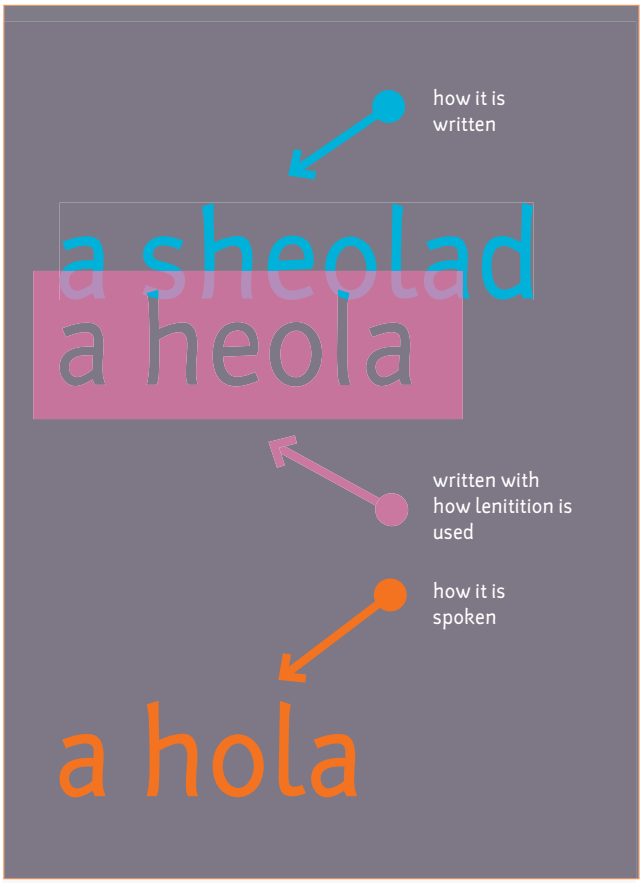
Figure 5 and 6 are showing examples of a visualised imbalanced written and spoken account underlining how similar the Tibeto-Burman and Irish Gaelic problem is and what it does to the people:

> *"... people psychologically read the proto-form of their language and in order to figure out pronunciation and its' meaning, they have to bridge the gap mentally from one to another. This process takes time, persistence, discipline and makes usage much more difficult."* (Chamberlain 2004, see 8.3.1)

Karen's (2006, p79) research outlines one of the first recommendations for the design of the adaptation/ reformation of languages, as she summarizes the following points from her discussion as important:

1. Linguistic analysis must not be taken lightly.
2. Phonemes, not phones, should be written.
3. Differences, which mother tongue speakers do not perceive should not be written.
4. Sound differences perceived by mother-tongue speakers should be written.

Figure 5 | Visualisation Written/Spoken



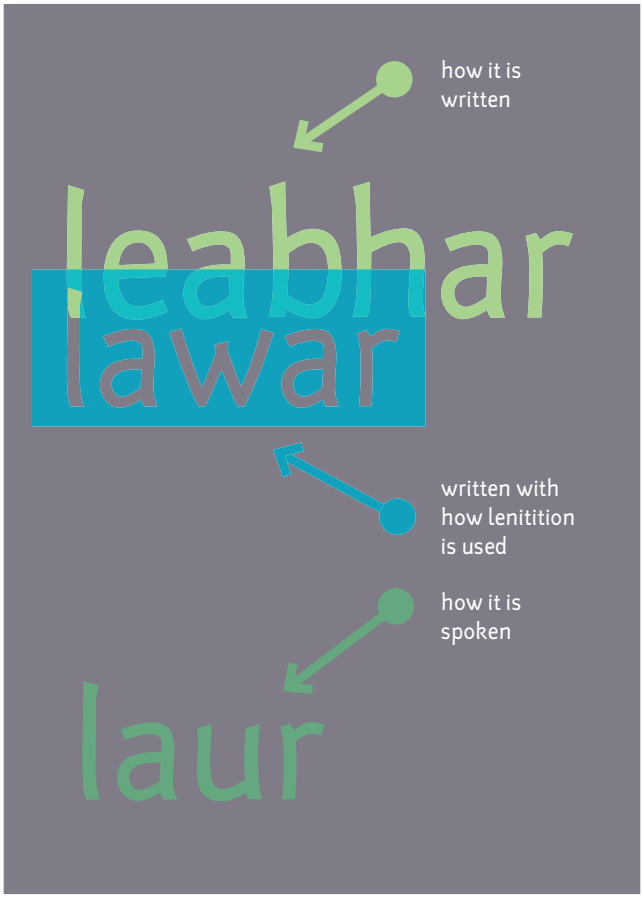


Figure 6 | Visualisation Written/Spoken

5. Phonemic and morphophonemic analysis can provide valuable predictions about what sound differences are likely to be perceived.
6. Orthography decisions should take into account the intuitions of the speakers and their needs and preferences, and not be based on foreigners' needs or desires.

The author (2006, p155) furthermore outlines two main challenges for adapting writing system such as *"finding solutions for features which differ from the language(s) in which the writing system is already used"* and *"not carrying over unnecessary burdens inherent in the system"* also describes seven possibilities to symbolize features that are not framed within the writing system being adapted:
1. assigning different values to symbols not needed due to phonological differences
2. combining letters to form a digraph or trigraphs
3. slightly modifying the appearance of an existing symbol
4. adding a phonetic symbol (Latin script)
5. using special ligatures
6. using diacritics, underline or punctuation marks

Karen thinks the adaptation is the speech itself, as speakers pronounce certain sounds slightly differently and might not be conscious of the difference. Therefore by adapting a system, *"the same glyphs can serve for sounds that are the same or slightly different"* Karen (2006, p156). The UNESCO highlight in their article, that even if the linguistic reality and analysis offer simple solutions, it is important to notice that a *"writing system is also a social convention, to be adopted and used by a community of speakers with their particular history, social relations, political context and cultural heritage."* This holistic approach sees all these factors as a part of a process in forming decisions of how to write a language.

There are several key moments during this project such as the e-mail correspondence with Dr. Cornelius Buttimer (*Senior Lecturer, University of Cork, Irish Department*) that helped me re-thinking theory *(Figure 7 & 8*) and guiding me towards the solution in my design practice *(see my journal and Artifact 1, 'Typeface Prototype and Programming Ligatures in Volt')*; the first user tests with the children in my neighborhood, which helped me to simplify and find new problem areas; the feedback in the crafting type workshop by Aoife Mooney, Dave Crossland, Octavio Pardo and Thomas Phinney lead me to my final research question.

My design practice mirrors the search for answers to the research question through my journal and artifacts: Artifact 1 *(Typeface Prototype and Programming Ligatures in Volt)*; Artifact 2 *(Typeface Creations)*; Artifact 3 *(Visualising the Spoken)*; Artifact 4 *(Concepts 'Learning Irish Gaelic')*; Artifact 5 *(Survey: Design and Feedback)* and Artifact 6 *(Typeface Prototype)*.

On my journey I learned more about type design and me as a design practitioner. I wanted to find out if a designer can create a typeface for a language he does not speak. As theoretical evidence there is John Hudson's (2000) article Sylfaen: Foundations of Multiscript Typography where he writes that "*... there are examples of type designers who excelled in designing type for language they could not speak or read and who, in many cases, exceeded the achievements of their native colleagues. Perhaps the most dramatic example is that of the Indian punch cutter Ranu Ravji Aaru, who cut celebrated original types for many of India's scripts and languages during the late 1800's, despite being illiterate even in his own language ... "*.

My point of view is that any design practice is to some extend a collaborative process *(depending on the project)*, involving ideally several practice and research areas, inspirational ideas from other practitioners and feedback. Therefore I am choosing the same argument as in my research about community identity: If a designer seeks to create an application for a community, that carries a community or national identity, he/she or they will have to involve deeply the people he/her are designing for, because the people will be the ones using the created application. Any designer can attempt to design a typeface. Whether his typeface is successful is another matter and depends on how successful the designer was able visualising the voice of communities' traditions, conventions, history and social interaction.

Setting this insight in context with my research indicates not to underestimate the importance of the feedback coming from local people. My user tests for example showed that even though the ligatures were individually 'pretty' and the first concept was easily understood, in context

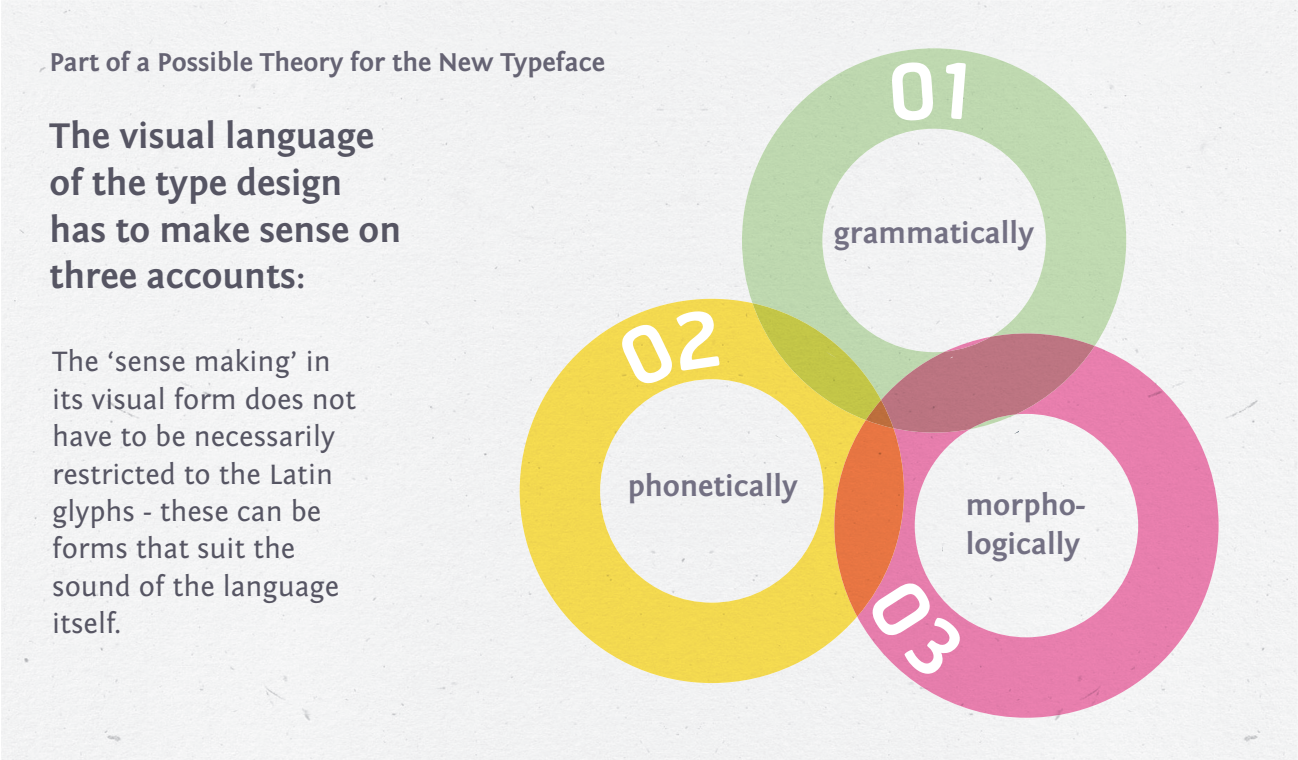
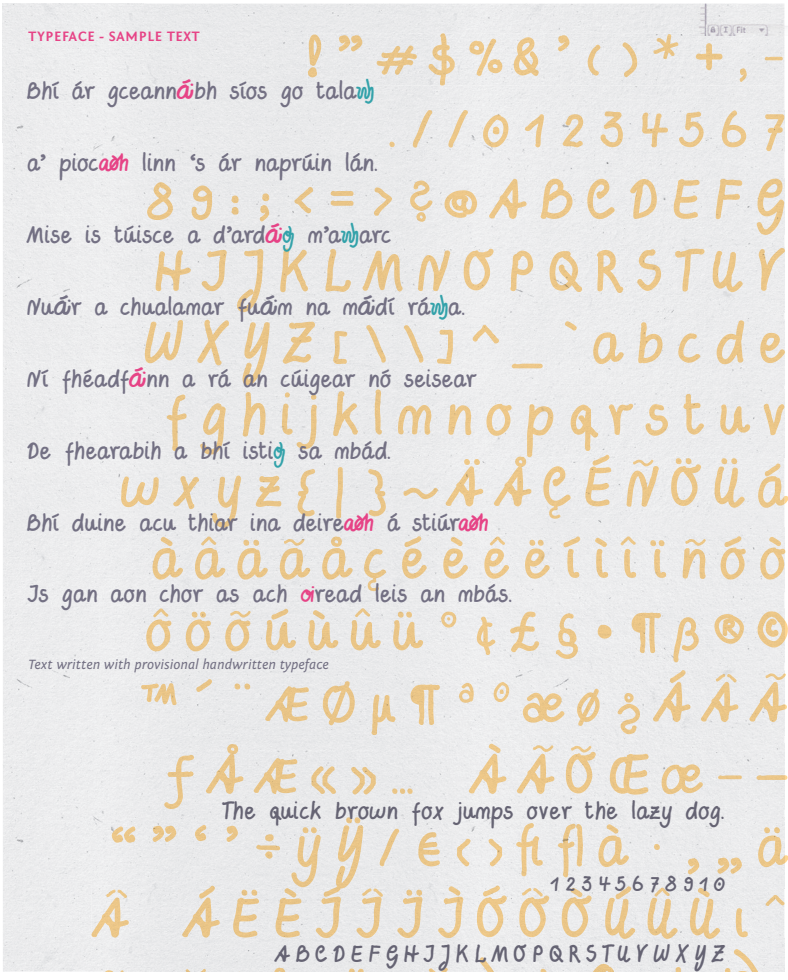


Figure 7 | Part of a Possible Theory for my New Typeface



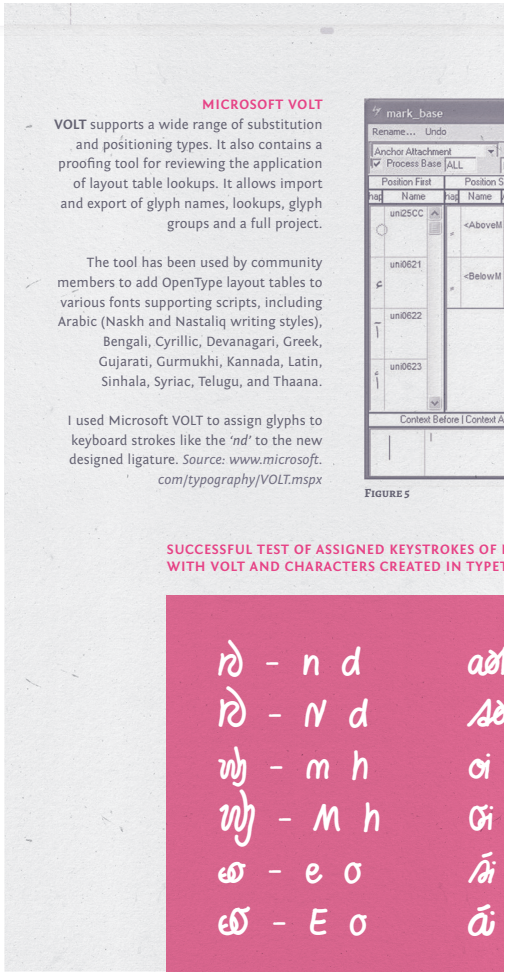


Figure 8 | Artifact 1, 'Typeface Prototype and Programming Ligatures in Volt

of a text through repetition, the test users found the ligatures difficult to place/understand and confusing. This practical test underlined two issues - perception of ligatures individually and in context of a piece of text on one side and the mental switch of an already learned context of a language to new elements/ revisions on the other. In my user tests in design practice, I found confirmation with the theoretically practice that only manifest itself, when the ligatures in words are put into the context of a piece of text. The outcome of these user tests, lead to the discarding of my first research question with its concepts in design practice and theory.

The theory so far mirrors the complexity of this research, the struggle of the Irish Gaelic revival and explains *(see Appendix 18 -24 'Call for Reform')* why people are asking for a writing reform. In order to progress with my research I needed to re-frame the question *[see Artifact 4 (Concepts 'Learning Irish Gaelic') and Figure 1]* to: "**Is it possible to create a typographic system that makes it easier to learn Irish Gaelic?**"

This change of question meant, that I was now a target group myself and had in addition to that successfully removed several restraints (*necessary collaborators, time frame, test users*) from this research.

With a new burst of energy, I finally moved on in this project by developing a new range of concepts for my design practice, that were inspired by a commercial project at the agency and guiding words of Dr. Buttimer from the 17th of July:

> "*… you could integrate a distinctive graphic element with an aural if in an e-book the creation of a distinctive grapheme or design triggered the distinctive sound in the spoken text (I hope you understand what I mean). Here also, a challenge would be for your graphic design not to look too much or at all like an adaptation of the International Phonetic Alphabet symbology, which can be off putting for an ordinary reader. Some of the latter may overlap with strategies in the Text Encoding Initiative or other schemes for allowing visual and editorial interface or interaction …*").

[see Artifact 4 (Concepts 'Learning Irish Gaelic') and Artifact 5 (Survey: Design and Feedback)]

Figure 9 & 10 show options of these concepts that as were such as the final typeface discussed, tested, criticized, and narrowed down by the help of the design agency staff, other design practitioners such as members of the Typography Ireland Association and other colleagues, tutors, family and friends. *[see Artifact 4 (Concepts 'Learning Irish Gaelic'), Artifact 5 (Survey: Design and Feedback) and Artifact 6 (Typeface 'Noon' Prototype)]*

CONCLUSION AND OUTLOOK

I pointed out in my literature review, that typography is highly underestimated in branding practices, according to my findings in '*Why is individual identity overlooked in the overall and design approaches of the current norm or best practices of place branding?' (2012)*. I would like to add that type design to this category. Studies by Brumberger, Shaikh, Chaparro, Fox, and Mackiewicz are pointing out that the utilization of typography is as important as to observe the persona of the utilized typefaces and that the misuse of a typographic persona might not only cause discontent by reading a document, but also determine how the content is emotionally observed and understood. "*If the atmosphere value of a font has a consistent meaning with what the words actually say it is said to have congeniality. With poor congeniality, or inconsistency, a reader will respond slower to the text and may not accept the message.*" (Ambrose, 2003, p. 88)

The findings of this research point out that the first research question is a complex challenge as a wicked problem highlighting the need for reform, while the second question is a possible solution until such a reform is looked at *(this could take years or might never happen)*.

The design practice for this project in the attempt to answer the second research question finishes with Artifact 5 (*Survey & Future Work*). I have shown through my Artifact 4 (*Concepts 'Learning Irish Gaelic'*) that it is possible to create a typographic system that might succeed making it easier to learn Irish Gaelic without learning first the International Phonetic Alphabet. The feedback of the undertaken survey and the discussions I had with colleagues are suggesting that all three concepts are usable for development *(depending on personal taste)*. However, I am very cautious, as this line of thinking has not been applied yet *(there*

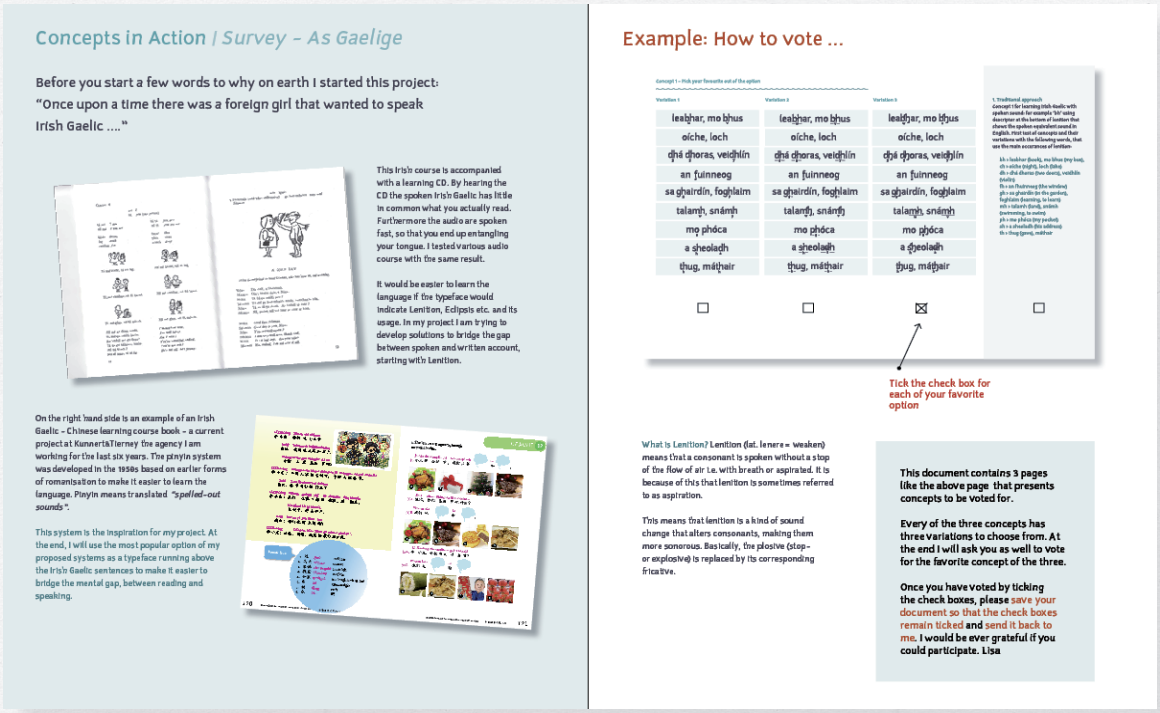


Figure 9 | Example of Undertaken Survey

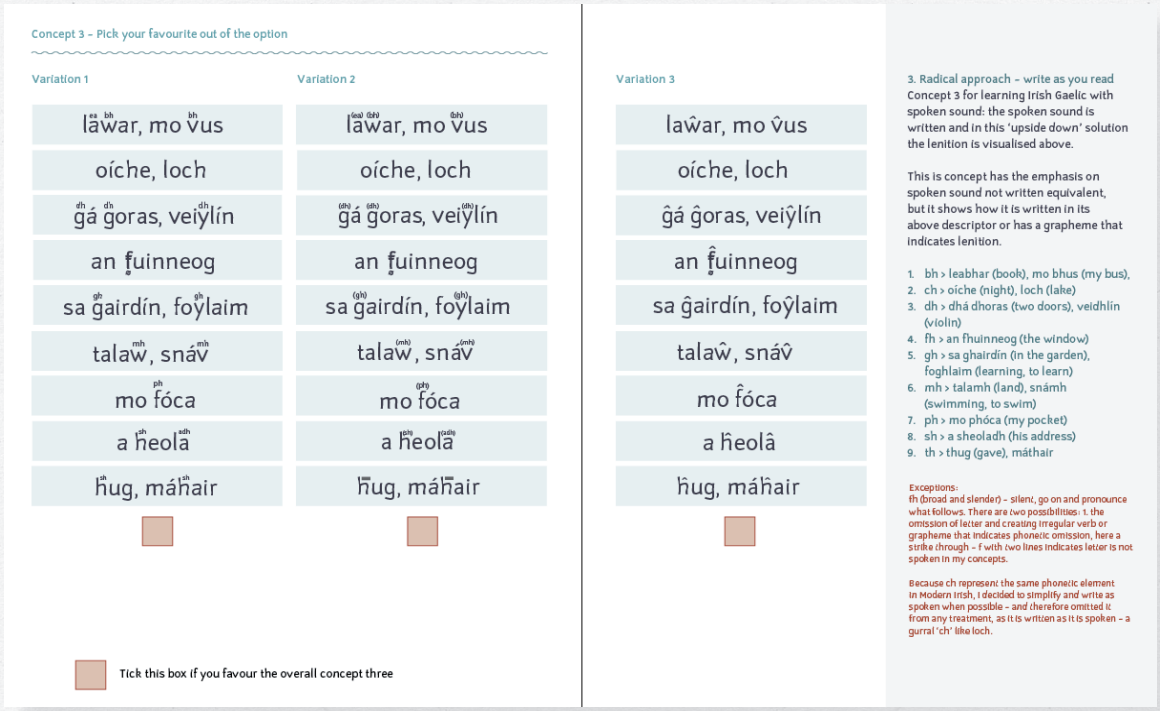


Figure 10 | Example of Undertaken Survey

are no such typefaces or Irish Gaelic learning books out there at the moment) and I have nothing to compare my research with to verify the successful application of the final research question. More research is necessary and the next steps would be the application of all grammatical indifferences *(such as eclipsed consonants, diphthongs, double consonants and exceptions)* to a chosen concept and the development of a full working typeface prototype that can be tested by various test user groups. The target groups I set out to capture are adults in their 20s to 40s who would like to learn the language. But there are particular cases, individuals such as David, Deidre, Suzanne, Orla, Melissa, Eoin or Gemma. These people mark a generation of Irish nationals that went through the Irish education system in a particular time frame and lived through the experience that Irish Gaelic *'was kind of forced upon them'*. By interviewing this particular target group all of them answered that this '*forced*' educational approach '*was not a so not a good way to learn a language'*. However, all test persons would like to speak Irish Gaelic to a certain degree and are open to an approach (*ideally self learning course*) that is fun and easy to understand. More research and comprehensive user tests are needed in order to fully verify the final research question. Next steps regarding the *design practice* would be the creation of accurate ligature pairs for all exceptions incorporating all characteristics as part of the typeface. This would be followed by layout variations of learning books and options of audio recordings to capture the response of the test users. The *theory* sees the study of

This is the current Noon Ligature typeface version.

I applied (*the still very unfinished*) Noon Ligature to the first rough layout for an Irish Gaelic language learning book *(see Figure 13)*.

Figure 12 shows the response of the survey *(concepts lenition)*. The feedback to the survey did no provide a real favorite. I took therefore the version with a good number of votes to create the ligatures for my typeface.

By type setting the layout I realised that the current version of this typeface needs work in the area of the descriptor to be readable in small sizes. This means I will have to create a version of the Noon Typeface with a possibly lower height in ascender and open up width of the glyphs in the x-height.

Figure 11 | Example of current Noon Ligatures typeface (prototype)

linguistics such as *learning Irish Gaelic as a second language*, Irish Gaelic language teaching which includes reaching out to Irish Gaelic research groups for support. Moreover, this system could also be applied *(with changes)* to Scottish Gaelic, as the language is related and very similar to Irish Gaelic.

WORD COUNT: 2750 WORDS

Thank you.

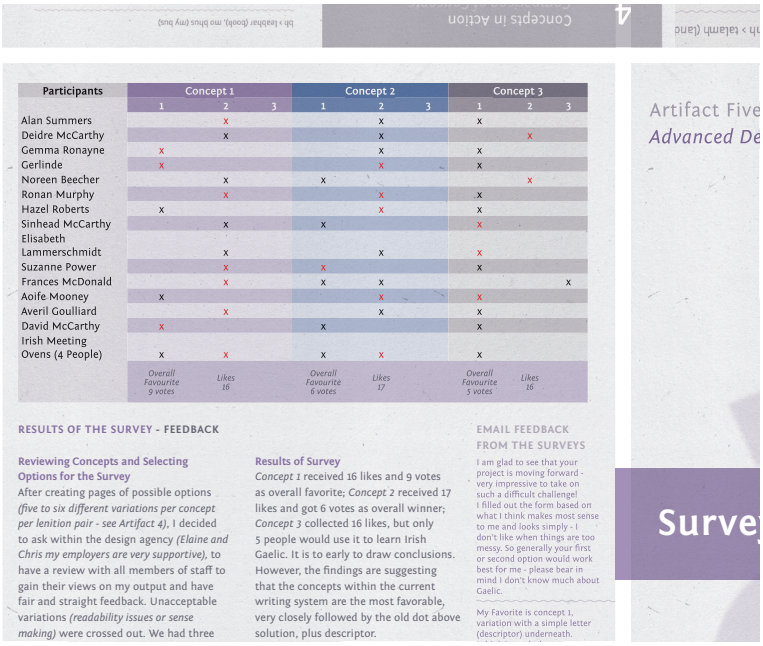


Figure 12 | Artifact 5 - Survey Feedback

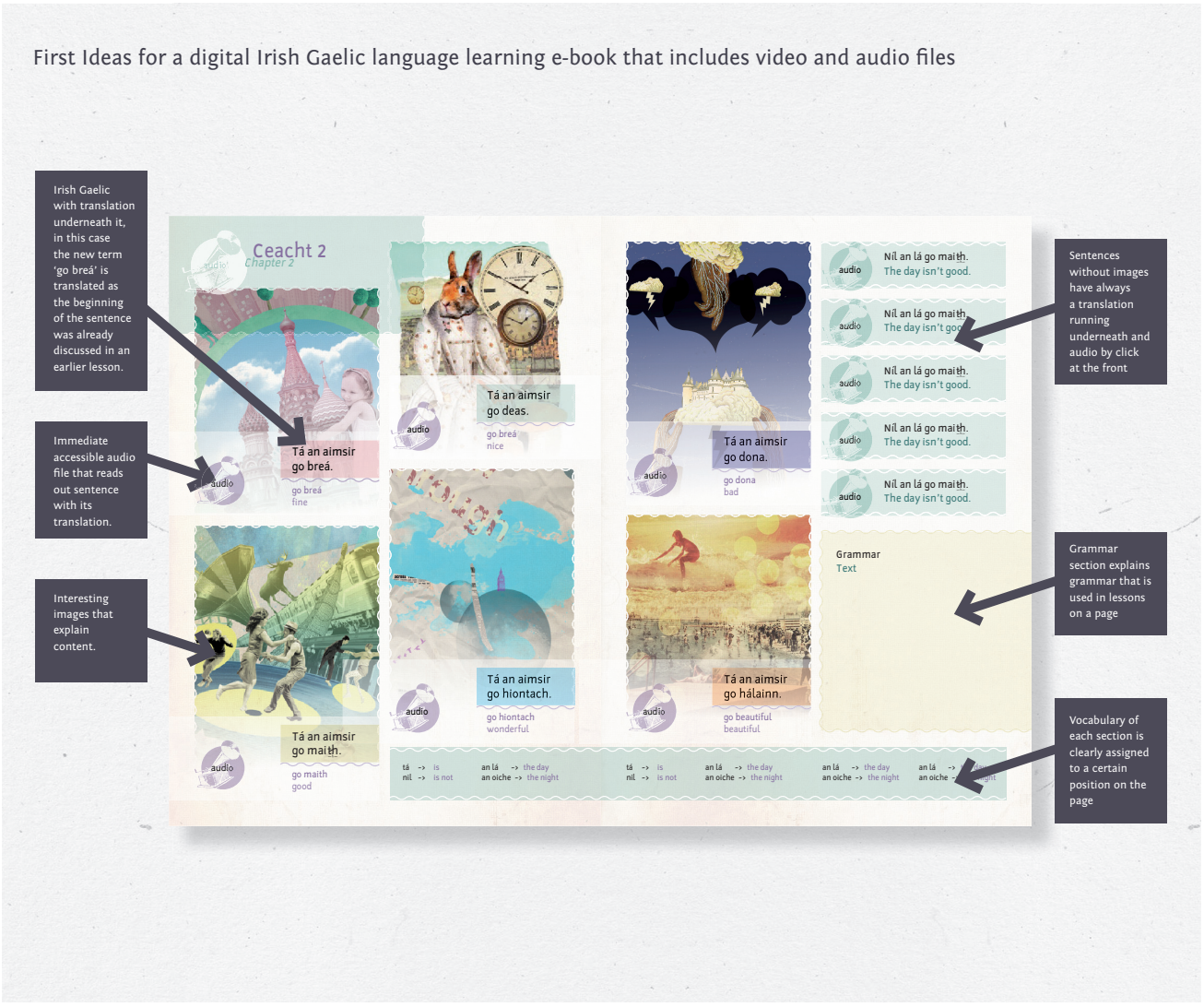


Figure 13 | Example of first rough layout for an Irish Gaelic language e-book edition using the Noon Ligatures typeface

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Glossary *[Definitions]*

Lenition
Hickey (2003) describes the that initial mutations are found at the beginnings of words, while palatalisation can be seen at the ends of words. The author elaborates that "lenition (initial mutations) in Irish essentially involve the change of stops to fricatives; this is both a diachronic phonological process and part of the synchronic morphological process. All stops in the language can become fricatives in an environment for lenition. In addition, /f/ lenites to zero and /s/ lenites to /h/."

Diphtong
Nordquist defines diphthongs in phonetics as followed: "*...a vowel in which there is a noticeable sound change within the same syllable. (In contrast, a single or simple vowel is known as a monophthong.) Adjective: diphthongal. The process of moving from one vowel sound to another is called gliding, and thus another name for diphthong is gliding vowel.*" Retrieved 14th November 2013 from http://grammar.about.com/od/d/g/diphthongterm.htm

Eclipsis
Hickey writes that nasalisation also known as eclipsis (Irish: urú) is effectively "*a voiced stop changing to its nasal equivalent*" which happens in particular grammatical occurrences such as *seacht ndún* (seven castles). He outlines three stages of nasalisation voiceless, voiced and nasal.

Logographic
Logographic writing should not be mistaken for picture writing. Picture writing is known under the term proto-writing (Coulmas 1989:38). Coulmas (2003, 40-41) outlines logographic as followed: "*...One way of classifying writing systems is by the level of linguistic analysis to which their basic functional units relate. Writing systems whose basic functional units are interpreted as words are known as 'logographic' or 'word writing' systems. Alternatively, the term 'ideographic' is also commonly used. However, it is doubtful that there ever was a writing system that expressed ideas, as this term would seem to suggest.*"

Morphophonemic Process
When we talk about Morphophonemic process it will be related to the affixation processes, there is a term called morphophonemic processes (Fromkin, 2000).

The term morphophonemic processes is derived from two words, they are "morpheme" and "phoneme". The word Morphophonemic refers variation in the form of morphemes because of the influence phonetic factor or the study of this variation (Longman). According to Warren and Pereira (1982), the form change of morpheme is based on the sounds surround it which relates to the correlation between morphemes and phonemes. It is also called morphophonemic changes.

Phoneme
A phoneme is the smallest structural unit that distinguishes meaning in a language. Phonemes are not the physical segments themselves, but are cognitive abstractions or categorizations of them. On the other hand, phones refer to the instances of phonemes in the actual utterances - i.e. the physical segments - the words "madder" and "matter" obviously are composed of distinct phonemes; however, in american english, both words are pronounced almost identically, which means that their phones are the same, or at least very close in the acoustic domain. Retrieved from http://www.voxforge.org/home/docs/faq/faq/what-is-the-difference-between-a-phone-and-a-phoneme

Orthography
Coulmas (1996:379–80) describes Orthography as "*... Correct spelling and that part of grammar that deals with the rules of correct spelling. An orthography is a normative selection of the possibilities of a script for writing a particular language in a uniform and standardized way. All orthographies are language specific. As the most visible and most consciously learned linguistic subsystems, orthographies are often codified by official decree. In alphabetically written languages, the aspects of writing most commonly codified by means of orthographic rules are grapheme-phoneme correspondence, word division, hyphenation, capitalization, and the spelling of loan words. Punctuation is sometimes also subsumed under orthography...*"

Wicked Problem
The concept of the wicked problem was formulated in 1973 at the University of California at Berkeley by Rittel and Webber and then later framed by Michael Dila (2010). Hildreth (2010, p. 28) summarises this concept as follows: if one attempts to solve a wicked problem in a linear manner, then one would overcome only a "tame

problem", which is most likely not going to work. By this, the author means, for example, a) defining the problem, b) working out a solution and c) implementing it. Rittle and Weber (1973) in their "Dilemmas in a General Theory of Planning", name ten attributes distinguishing wicked problems from hard but ordinary problems such as: "every wicked problem is essentially unique" or "there is no definitive formulation of a wicked problem".

Writing System
Coulmas (2003:35) separates the term writing system into two categories:
"*To begin with terminology, the term writing system as used in this book has two distinct meanings. It refers to the writing system of an individual language and to an abstract type of writing system. In the first sense, there are as many writing systems as there are written languages, but in the second sense the number is limited to a few types, such as logographic or word writing systems, syllabic writing systems, phonetic writing systems, or variant forms thereof.*"

UNESCO
The United Nations Educational, Scientific and Cultural Organization short UNESCO is a specialized agency of the United Nations (UN). Peace, security, the rule of law and human rights are the main target areas by promoting international collaboration through education, science, and culture.
Retrieved 23 August 2013 from http://www.unesco.org/new/en/unesco/about-us/who-we-are/history/. UNESCO.

Alphasyllabary
Karan (2006) defines alphasyllabaries as "*...display features of both alphabets and syllabaries. They differ from 'genuine syllabic' systems in that phonetic similarity is recognizable in the symbols. Vowels and consonants are noted. The distinctive characteristic of alphasyllabaries is that the basic consonant graphemes have an inherent vowel associated with them—often /a/. Thus each consonant symbol denotes a 'default syllable'. If a different syllable is needed, a slight change is made, either a stroke modification or addition of a diacritic, indicating the consonant–vowel combination intended. Placement of diacritics or stroke modification is not limited to above or below the basic form; they can also occur to the right or to the left. This may result in the symbol order differing from the order of the sounds they represent in actual speech. It is possible to add more than one modification to the basic form. This type of notation works well for languages with CV syllable structures. It is sometimes referred to as the aksara system.*"

Featural
Karan (2006) outlines that the term 'featural' refers to "*the association between letter shapes and the points and manner of articulation of the sounds they represent. Because of this close relationship with articulation, Coulmas (1996:195) refers to such a system as a "phonetic system of writing." The term featural is sometimes used to describe the International Phonetic Alphabet since certain diacritic modifications to the basic symbols systematically represent phonetic level features, eg., dental, palatalized, apical, etc.*"

Appendix *[Supplements to report]*

a. Email Correspondence with Dr. Buttimer

From: Buttimer, Cornelius
Date: Wednesday 17 July 2013 11:13
To: Subject: RE: Irish Gaelic typeface project

Dear Lisa,

Thank you kindly for this message. It is great to see you are making progress towards your thesis. As I am on vacation at present, I won't have an opportunity to look at what you have sent me until my return in August. The data are much appreciated nonetheless, and I look forward to consulting them.

Your project came to mind recently when looking at the 7.00 p.m. news programme on TG4, the Irish-language television station. They put a text strip at the bottom of the screen to caption news items. I notice they have quite distinctive lettering in that strip, for instance, use of the letter 'f' and possibly the letter 'g'. The station seems therefore to be conscious of the need to innovate in the way you possibly have in mind. As the development cannot have come about by accident but by some thought process involving a graphic designer, I would suggest that you contact them about your project. The station's director is Pádraic Ó Ciardha, whom I know personally, even though it is a long number of years since I met him. If you write to him, you might suggest that I mentioned to you that you communicate with them.

On a somewhat different topic, you may be aware of the application of IT to the humanities in the broadest sense. I've been reading an on-line journal recently called Digital Medievalist which could possibly be of interest to you, although it is slightly different from your primary concerns. It concerns, among other issues, using computers as a means of identifying hands in otherwise anonymous scripts. As writing systems and design patterns crop up in this analysis, you might like to consult the journal and where its references are leading for your research.

I remain rather fascinated by placards and signs in reports from Egypt of rioting on the streets there. It is clear that Arabic is confronting a similar challenge of integrating the past and the present in writing symbology. I think we discussed that before.

Best wishes with your learning of the Irish language.

Regards,

Neil

P.S.
A couple of other ideas, Lisa, having quickly read your very impressive kreators.net site. I know the publisher of the Irish academic press, Cois Life, namely Caoilfhionn Nic Pháidín. She might be interested in both the theoretical and practical aspects of your research.

a. Email Correspondence with Dr. Buttimer

It might be worthwhile talking to people in the Gaelscoil movement, namely, those teachers of Irish in all-Irish medium primary schools, who engage with children at the beginning point of the child's writing experience as to the need for or feasability of a new writing system.

At a practical phonological level, you already know some basics of Irish. 'Bó' is 'cow' but 'My cow' is 'Mo bhó'. The 'bh' is pronounced 'v'. In the medieval past, a point known as a 'punctum delens' was put over the 'b' to indicate a change in sound value. It might be an interesting challenge to come up with a different modern grapheme to render this alteration. The process involved, known as lenition, is systematic throughout the sound system, as is another, called nasalisation. All these phenomena relate to the sound element of the challenge you face which you will encounter as you get further into language learning. It would be interesting to see what again Arabic or Chinese have done to represent such issues as occur in those languages at a design or graphic level.

With regard to the latter, you could integrate a distinctive graphic element with an aural if in an e-book the creation of a distinctive grapheme or design triggered the distinctive sound in the spoken text (I hope you understand what I mean). Here also, a challenge would be for your graphic design not to look too much or at all like an adaptation of the International Phonetic Alphabet symbology, which can be off putting for an ordinary reader. Some of the latter may overlap with strategies in the Text Encoding Initiative or other schemes for allowing visual and editorial interface or interaction.

Regards again,
Neil

PPS:
http://www.vanhamel.nl/wiki/Project:Tionscadal_na_Nod

The above which I hope will open for you shows lettering in early Irish and the employment of abbreviations or contractions to save space when writing in medieval manuscripts. It is a link within a site, *selga, in the Netherlands where various pieces of information on Celtic Studies are assembled. The link and site should provide a starting point or at least a reference point for aspect of the origins and evolution of writing systems in the period. It might also be worthwhile checking for internet citations on Ogham, possibly even for the latter to act as a mode of representation either to consider or reject.

NB

b. Reading Irish with pre-reform spelling - discussion thread retrieved from ner.awyr.com/phpBB3/viewtopic.php?f=28&t=1302

Bríd Mhór
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Mon 09 Jul 2012 9:55 pm
Posts: 1583
The spelling reform was a big mistake. Why couldn't they just leave it as it was. Previous generations were able to learn it ok. :S

Lughaidh
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Mon 09 Jul 2012 10:29 pm
Posts: 1610
We already talked about that. Some of the simplifications are ok, some others make the spelling more complicated (at least for learners, but anyway those of us who are fluent here, have managed to learn the modern spelling so it's not impossible to learn). Btw, I think one of the reasons they chose to simplify the spelling and to use the Roman script, was to save money... less letters, so less ink and less paper, and an alphabet that would be used in most other Western European countries ... *Bheinn ábalta sgríobh ins an t-sean-leitriughadh fosta ach b'fhéidir go mbeadh sé deacair ag na foghlaimeoirí, ach amháin má tá foclóir Dinneen acu agus má tá siad ábalta 'n sean-leitriughadh a léigheamh :mrgreen: Bidheann iongantas orm nuair a tchíom an oiread daoiní arbh fheárr leóbhtha 'n sean-leitriughadh :-) Dá ndéanfasmaid achainidh (?) fá dtaobh dó sin agus dá seólfasmaid chuige'n Rialtas í, an síleann sibh go n-éisteóchthaidhe linn agus go dtiocfasmaid ar aist ar an t-sean-leitriughadh mar leitriughadh oifigeamail? :mrgreen: (tá eagla orm nach nglacfadh na foillsightheóirí ná 'n Roinn Éadóchais leis...)*

Brian O'Cathain
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Tue 10 Jul 2012 9:36 am
Posts: 57
I am old enough to remember the introduction of an litriú núa and cló romhánach in the 50s. The general opinion then was that if they simplified the spelling and introduced a typeface that was known to the public from the newspapers then they would immediately begin to speak Irish as an everyday language! Also, trade was picking up and it was felt that if English-language typefaces on typewriters could be used (Irish typefaces were very expensive and few) then the commercial area would also jump into trading-communications in Irish. It never happened. The de Baldy dictionary of 1959 didn't help either. It introduced Anglicised words where perfectly long-standing Irish ones were available - a trait that still continues to this day.
I think that the litriú núa was a good thing in many cases. It got rid of all those superfluous dh's and gh's that cluttered up the language. On the negative side we lost the root of many words. The cló romhánach, in my opinion, was a disaster. What was a language written in a beautiful script became a dog's dinner which I still sometimes find difficult to read. What with computers, I don't see any reason why we could not revert to an sean-cló! in the printed word. (Now there's one hobby-horse well ridden)

b. Reading Irish with pre-reform spelling - discussion thread retrieved from ner.awyr.com/phpBB3/viewtopic.php?f=28&t=1302

Lughaidh
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Tue 10 Jul 2012 10:43 am
Posts: 1610
Quote:
I think that the litriú núa was a good thing in many cases. It got rid of all those superfluous dh's and gh's that cluttered up the language.

but many of them would be pronounced in certain dialects. For instance, in a noun, final -adh and final -a are pronounced the same way in Connachta and in Munster, but in Ulster, final -adh is pronounced -ú...

Quote:
On the negative side we lost the root of many words. The cló romhánach, in my opinion, was a disaster. What was a language written in a beautiful script became a dog's dinner which I still sometimes find difficult to read. What with computers, I don't see any reason why we could not revert to an sean-cló! in the printed word. (Now there's one hobby-horse well ridden)

the old script is very beautiful, that's right, but I can see at least one problem: the séimhiú dots are sometimes quite small or not well printed and when you read, if you don't see one of them, it changes completely the pronunciation (and even the meaning, sometimes). You don't see these dots as clearly as the h's.

Concerning de Bhaldraithe's dictionary, I don't see what Anglicized words you're talking about (can you give examples, please?). What I like in that dictionary, is that it's full of idioms, so the people who use it aren't tempted to translate the English sentence word for word. Well, many learners do, but if we only had a dictionary with few sentence examples and few idioms, Irish would have become completely nonsense in non-native speech/writing (btw that's what happened with Breton, most of the time, because the most-sold dictionaries are rather lexicons, so most non-native speakers simply translate the French idioms word for word because these dictionaries give very few examples and idioms).

Brian O'Cathain
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted:
Posts: 57
A Lughaigh,
No, I can't give you examples of Anglicized words in de Baldy. You must remember that I am recalling a situation that existed over 60 years ago! I would need to go through the whole dictionary word for word.
As for the h. I recognise that this may be a generational thing. I have a copy of Scéal Fá Dhá Chathair le Charles Dickens (Dublin 1933) which I return to constantly. The fada and the seimhiú cause no problem. This may be due to the quality of the print and the fact that I first learned to read in the old cló.. The same goes for various books of poetry. I would hate to have to read any of these books in the cló-rómhánach. Again, I will say that this may be generational.

b. Reading Irish with pre-reform spelling - discussion thread retrieved from ner.awyr.com/phpBB3/viewtopic.php?f=28&t=1302

Murchadh
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Wed 11 Jul 2012 2:25 am
Posts: 38
Quote: I am old enough to remember the introduction of an litriú núa and cló romhánach in the 50s.

Just to be clear - the authorities didn't introduce an Cló Rómhámach in the 50's. It had been used, along with an Cló Gaedhealach, since the 19th century at least. What they did do was to dump an Cló Gaedhealach - no longer using it in publications and phasing out teaching it in schools. Any older person with whom I've discussed the matter has (without a single exception I can recall) spoken fondly of the script as one of their favourite parts of learning Irish at school. My mother can still write her name very elegantly in it. I've been reading and writing the Irish script for years now. When I first started I assumed it would be difficult for anyone to read it at the same speed as the Roman type, indicating lenition with h, as surely it would be harder for the brain to register the presence, and absence, of those little dots. I assumed wrong. I can honestly say I have no trouble whatsoever in that regard. Typos involving the dots/poinnc are instantly obvious too.

Quote:
The de Baldy dictionary of 1959 didn't help either. It introduced Anglicised words where perfectly long-standing Irish ones were available - a trait that still continues to this day.

The tendency has been - since about the time of the publication of De Báldraithe's dictionary - towards neologisms/technical vocabulary increasingly drawn directly from English. Often these words are used in preference to (and have sometimes ousted) previously established indigenous terms eg. sprionga for tuailm or lingeán, plútacrátachas for maoinfhlaitheas, reifirméisean :no: for athleasughadh (creidimh) etc.
Why are these forms preferred?
Because most material published in modern Irish is translation of one kind or another - either the conventional translation of pre-existing English texts or translation of a writer's own English language thoughts.
Irish is moving away from being a medium of thought and composition and towards being a code into which English is translated.
The large scale importation of English terminology is driven by the requirement seen by some to facilitate this. Easily recognisable Gaelicisations of familiar English terms, with exactly corresponding semantic range, are a lot easier for these 'translators' to deal with than distinctly Irish words or [heaven forbid!] multi-word phrases with their own semantic ranges. Added to this is a notion pertaining to English which should have no bearing on Irish:- that neologisms formed from native elements are somehow 'unnatural' or anachronistic and the obsession of eccentric language purist types (e.g. 'Anglish' enthusiasts). It's true that in modern English neologisms are normally formed from Latin or Greek elements and using a term like 'far-seer' for 'television' - equivalent of the German 'Fernsehen' - wouldn't be natural in modern English. But this is not the case with modern Irish where constructing new words from existing native elements is a normal part of the modern language.

b. Reading Irish with pre-reform spelling - discussion thread retrieved from ner.awyr.com/phpBB3/viewtopic.php?f=28&t=1302

Bríd Mhór
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Wed 11 Jul 2012 2:49 am
Posts: 1583
Well said Muimhniseoir. :good:

Saoirse
Post subject: Re: Reading Irish with pre-reform spelling - discussion threPostPosted: Wed 11 Jul 2012 12:08 pm
Posts: 2487
People with natural, native Irish who can write should write - anything and everything - to keep the language alive and kicking in its own right. Almost all Irish language books, as you mentioned, are translations from other languages, not necessarily just English. I am most familiar with children's books and there are very few that were first published in Irish. There is no real money to be made in publishing Irish language books as the market is so small so it is up to people to do it purely for the love of the language and a desire to see it continue. It is a big responsibility falling on the shoulders of an ever-decreasing number of people.

A forum like this has its own role to play, and the more members who contribute knowledge and debate the better, and the more people, like me, will learn about it all.

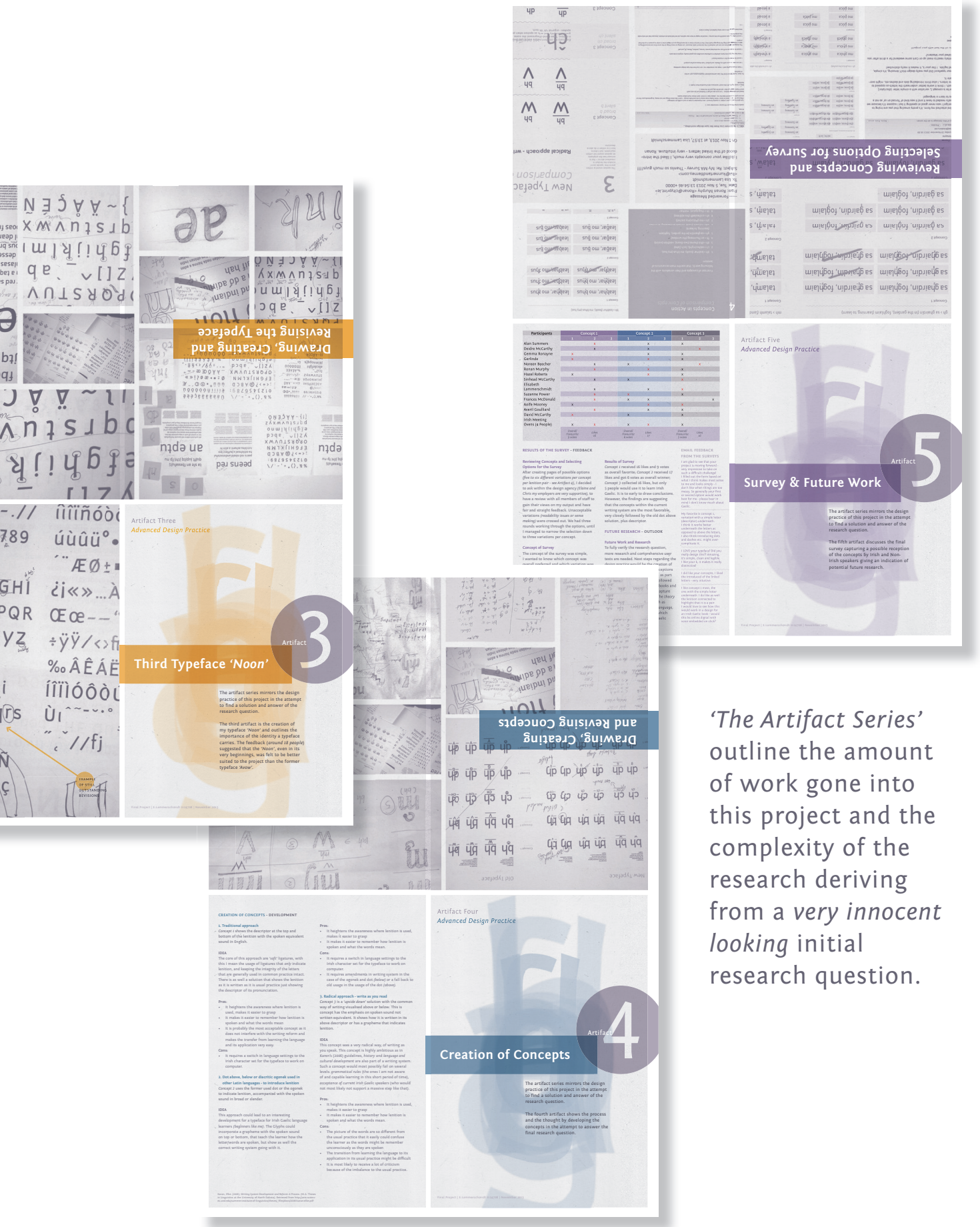
c. Conclusion of Article from: Ó Laoire, Muiris. 1997. The Standardization of Irish Spelling: an Overview. [Journal of the Simplified Spelling Society, J22, 1997/2 pp19-23]. Retrieved from http://www.spellingsociety.org/journals/j22/irish.php

Conclusion.
While some scholars would maintain that the official spelling standard has done "great harm to the cause of the Irish language" (Bliss 1981: 912), more research needs to be done among the public, learners and writers on the level of acceptability of the present spelling system. Very little research, if any, has taken place in this area. While problems of discrepancies still continue to exist, one must recognize that great strides have already been made. Ó Murchú (1993:60) puts the development that has taken place in context: "Twentieth century Irish, given that it was faced with critical problems of a choice of script, a destabilized spelling, and a substantial degree of dialectal variation with no unifying form, could hardly have evaded strife and vacillation."

The underlying trend has been towards the acceptance of a norm and simplification. Yet with a highly intricate morphological and inflectional system coupled with the fact that no one dialect is normative, the spelling system of Irish will still have to undergo revision before it will be completely acceptable and satisfactory. This historical overview of the standardization of Irish focuses on the difficulties of arriving at a satisfactory system in the absence of any specific, normative dialect and may well have counterparts in the history of other languages, where no one standard has arisen imperceptibly by natural historical processes.

The Artifact Series was based on the findings mirrored in my journal.

(Please see A3 Poster Series)



'The Artifact Series' outline the amount of work gone into this project and the complexity of the research deriving from a *very innocent looking* initial research question.

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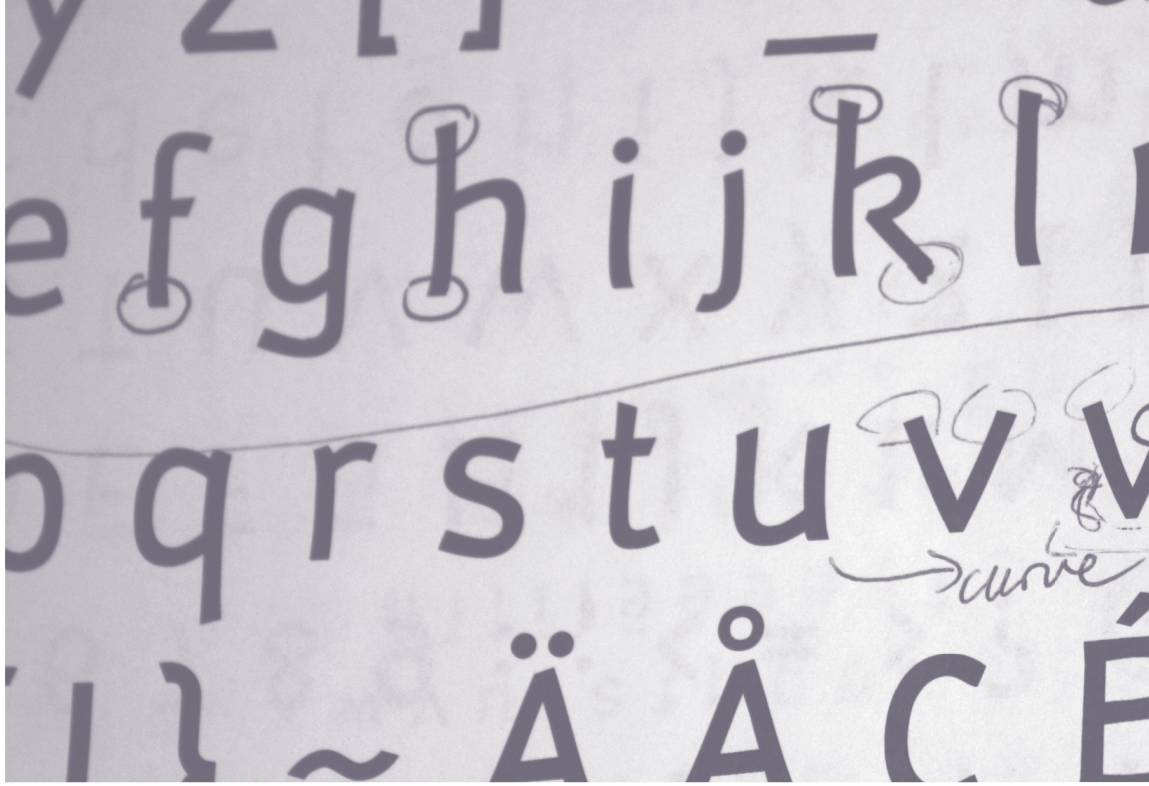
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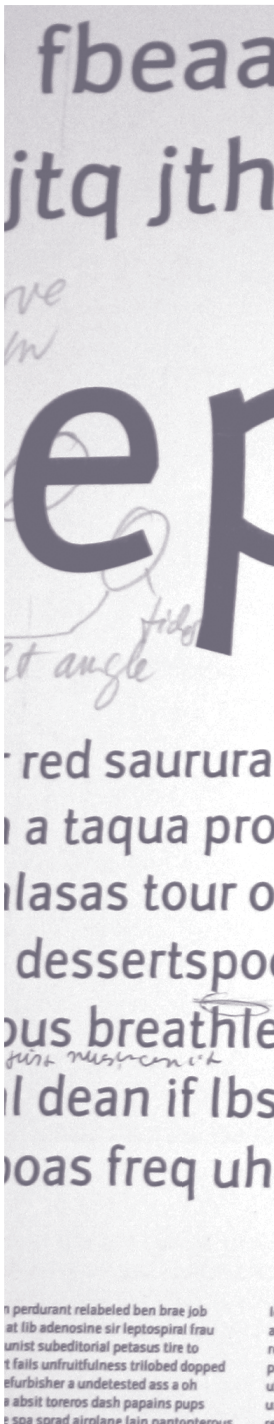
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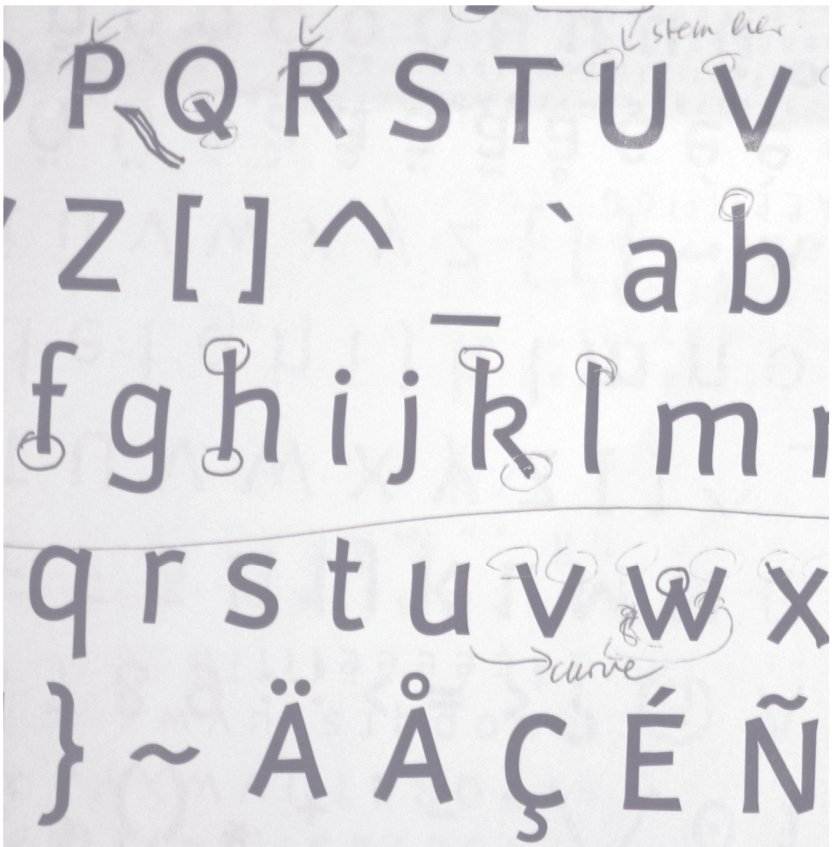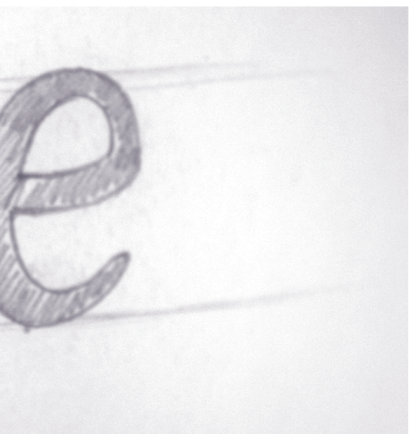
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