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The transition from classical to digital thinking
Reflections on Tim McLoughlin, James Barry and collaborative work

Abstract

The purpose of this article is two-fold: firstly, to illustrate the collaborative work of the TEXTE programme at NUI, Galway, in order to facilitate the move that an »old-style editor« had to undertake to electronically edit the correspondence of Irish painter James Barry, and secondly to discuss certain aspects that arose from this work in reflection to editor Tim McLoughlin's observations which he describes by himself elsewhere in this volume. This article focuses mainly on what ›using‹ a scholarly edition means and problematizes what impact this has on the shift from hard-copy to electronic editing. It is argued that there is not so much a gap between print and electronic medium but much more a transition in a thinking process: from the output orientation of the classical style of editing towards a data- and user-driven new approach.

I.

The working title of this paper was »The transition from digital to printed editing«. Thinking more thoroughly about it, re-reading McLoughlin's paper which I refer to here and writing down the line of argumentation of my own reflections, I wondered more and more why the discussion about a transition from print to electronic *editing*.[1] The general argument against this is, firstly, that editing always has been and always will be a transformation from something into something different, at least as regards a text. Being educated as a historian with a certain

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[1] Gabler (2006) discusses this step: a project that had started with a purpose of creating a print-based edition and moved into electronic form. The process described here is however a transition from a print-based to digital *editor*. It is about the subject not the object; the object is transformed anyway. This involves more a change in thinking than in editing practices.

focus on medieval history, there was furthermore for me always a shift in the medium: from the extant manuscript(s) to the printed or electronic edition. This is valid for Barry's correspondence, which we are discussing here, too. »The text no longer looks like a book«, says McLoughlin, contextualising this shift, but has a collection of letters ever looked like a book before it was edited? Barry's edition will be ›digital born‹. Hence, the question arises: where is the printed step in between?

Thus, I decided to change the title of this paper. The shift of paradigm (if we have one) is not from print to digital – it is from static to dynamic, and it is from output-driven to input- and user-driven. This requires a different way of thinking which I try to make clear with the new title. ›Digital thinking‹ is not correct, though. I do not believe that there is something like digital thinking, nor do I assume that ›classical thinking‹ is totally bound to the book as the only possible medium. On the contrary: one of the arguments of this paper is, that ›thinking an edition‹ must be independent from its medium. The title remains »from classical to digital thinking«, to emphasize that a medial shift evokes a mental move.

›Collaborative work‹ in the subtitle is not about what often is summarised as ›e-science‹.[2] In this paper, collaboration is not seen from a technical point of view, it is not about distributive computing or grid networks, nor is it about the operation of collaborative tools and platforms such as document management systems, shared working environments or virtual meeting spaces, nor about any aspect of project management. What it reflects on, is division of labour in the core of the matter: exploiting various kinds of skills, interchanging experiences, transferring knowledge, the way we talk with each other and the way we think differently. It is to some extend a clash of schools: ›old-style editing‹ on the one hand, willing to break new ground and ›digital-born editing‹ on the other, happy to learn from long-term experiences.

Joining the Galway TEXTE (Transfer of Expertise in Technologies of Editing) programme in September 2007, I found myself as a member of a quite heterogenous team. Although only nine scholars overall,[3] the variety among them in terms of editorial and digital expertise was huge.

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[2] As, for instance, is defined by the UK National e-Science Centre (NeSC), see [5].

[3] In ›peak times‹ of the 2-years programme, including the colleagues from the Thomas Moore Hypermedia Archive (TMHA, see [1]) project. Both projects, TEXTE and TMHA, are directed by Sean Ryder at National University of Ireland, Galway. Apart from Tim McLoughlin, I am thankful to Francesca Benatti, Paul Caton, Milena Dobreva, John Lavagnino, John Moulden, Sean Ryder and Justin Tonra for actively taking part in the discussions that I am referring to in this paper.

Tim McLoughlin is not offended when I say here that he, while having a lifelong experience as a scholarly editor, stood at the very beginning of his career in digital editing. Being asked for the first time to create an electronic resource, he suddenly felt himself confronted with method-ologies, standards and techniques, such as encoding, TEI and web pub-lishing, which he might had heard of before but never used them on his very own.

I was then very happy when McLoughlin accepted my offer for some guidance for his ›transition‹ from the book-based edition to the elec-tronic edition, to »bridge the gap« as he expressed it in his paper in this volume.[4] I will point out later, that the main issue of this step was not so much the move from using one medium instead of the other. It was, however, the change of a working practice that always had in mind the final result, the book as its output, into a way of thinking that is driven by abstract data, meaning and potential usage.

The starting point was quite simple: McLoughlin had collected a lot of material, mainly manuscript correspondence of the Irish painter James Barry (1741–1806), and the intention was to create an electronic, web-based scholarly edition of these letters. Although, he had started his work prior to the Galway appointment and had some transcriptions (in Word format) ready, the questions that arose still were (quite logically): where to start, how to proceed and when to stop.[5]

It became clear quite early, that McLoughlin could not achieve his aims totally alone. However, all other TEXTE scholars, including myself, had their very own projects with their own deadlines that kept them busy enough,[6] so that a collaborative model such as being praticed elsewhere, for example at the *Centre for Computing in the Humanities* at *King's College London* where the work of larger projects is mainly shared among schol-ars of different qualifications,[7] for example an analyst for providing the encoding principles and the tools, while the ›pure‹ editors can concen-trate on the editorial tasks itself, following Shillingsburg's observation that »creating an electronic edition [...] requires skills rarely if ever found in any one person«,[8] was not realistic. Thus, the idea of the »Transfer of

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[4] McLoughlin (2009).

[5] Indeed, even the latter question is of high importance. McLoughlin discusses some of its aspects in his paper.

[6] The programme's website provides a brief overview of all TEXTE scholars and pro-jects. See [2].

[7] See Pierazzo's contribution in this volume.

[8] Shillingsburg (2006: 94).

Knowledge«[9] scheme came into operation: using the different available expertises and giving guidance from one to the other and vice versa: supporting the digital part of the work and ›as compensation‹ receiving support and guidance in editorial questions.

II.

To design the Barry edition, we decided to start more or less from scratch, having in mind that some transcriptions were already available; transforming them from Word-document into proper markup format could be regarded as a secondary step. The approach, we came up with was running a series of workshop sessions titled »Designing the User Interface – A creative but hopefully straightforward approach« with the aim of drafting a concept for the edition. We hoped to achieve a set of aims not only by the concept as a result but also by the progress we made during our discussions themselves. These aims were:
- to define scope, goal and intention of the project,
- to create a basis from which the needed encoding principles and schema could be derived,
- to design a concept for the ›look&feel‹ of the edition: its functionality, its features, its navigation,
- and last not least: to gradually introduce an »old-style editor« into the world of digital editing with all its facettes.

It was my job in these workshops to prepare and moderate the joint work and to document its progress and results. Consequently, I tried to bring my own ideas and visions into the discussion only at certain points when I found it necessary to stimulate it but for most of the time, I tried to be ›neutral‹, focusing on the moderation towards the workshop's aims. The workshop consisted overall of six sessions, scattered over a period of a dozen weeks or so. This does not sound very efficient, but the number of sessions was indeed needed and also the time in between them to think, re-think, prepare and document. A straighter approach would have been feasible, however, with more resources available to focus on this particular project.

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[9] The TEXTE programme is funded under the European Union FP6 Marie Curie Development Scheme ›Transfer of Knowledge‹.

We structured the workshop into three sections, driven by three major questions regarding the Barry edition: Why? What? How? This decision follows a well-established psychological principle, originally introduced for learning purposes,[10] and it turned out to be quite useful for design and presentation. Its main rationale is that it generally is not helpful to decide *how* you do something (›how?‹ in this case means for example the encoding schema, the tools to use, the layout of the web pages et cetera) before you are absolutely sure *what* you are going to do: what data are you going to encode, what functionality to offer to the user? And finally (in reverse order): before discussing and deciding *what* to do, we should have a good understanding about *why* we want to do it. An edition, besides offering some research result on its own, is mainly a resource for future research, it is not l'art pour l'art (unless you have a lot of time and money to spend), it is a »complex instrument for exploration«,[11] a tool for study purposes.

An analogy shall illustrate the purpose of this approach. You would not construct a well if there is nobody who needs water or if there is no water available at the place you dig. Answering the guiding questions in the correct sequence: Why do you provide a resource for drinkable water? Because there are people who want or need to drink and there is water to exploit. What do you do? You build a well and provide facilities for people to get the water and bring it to the place where they need it. How do you do it? Ask the architect! But do not buy a rope winch unless you are sure that you are not going to install a pump instead! Answering the first two of these questions is much like writing the scholar's business plan while the third questions leads to the concrete concept of practical implementation.

One challenge in the workshop was to keep with this sequence, to end the discussion when it became too technical at a too early stage and to postpone topics that arose prematurely. For example, one of McLoughlin's main concerns, as he outlines it in his contribution to this volume, is how to deal with detailed, elaborate annotations he wants to provide, to make the text »an archive of the culture, attitudes, customs of its day«. While it became clear in the ›Why?‹–section of the conceptual work that the Barry edition will for sure be approached by different users with a broad variety of backgrounds and different needs for annotations, de-

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[10] The »4mat«-principle by Bernice McCarthy, see [3]. The originally planned ›What if?‹-section was postponed to the end of the project.
[11] Gabler (2009).

signing the functionality of the edition in the ›What?‹–section led us to the idea of providing multi-level annotations. And only in the final section did we discuss how to encode it. This required some patience, though. On the one hand, because transcribing and some initial encoding was already undertaken synchronously to our series of workshops (this was due to practical reasons; a situation right out of the textbook would look different)[12] and McLoughlin brought urgent problems into the discussion and was probably a bit disappointed when we had to postpone the solution. On the other hand, having in mind that someday the concept had to be implemented, it caused some unease to the more technical-oriented members of the TEXTE programme. The more complex the ›wish-list‹ of the ›What?‹–section became, the more urgent the question whether we were really capable of realising it within the time and resources given. Our motto here was firstly, »Yes, we can!« and secondly, to leave the question »but, how?« to the future. And it worked, although in the final design we had to step back from some of our ideas because their implementation turned out to be not feasible within the duration of the project. If you have a straightforward conceptual approach, it is always possible to go back and re-design – the other way round would be much more difficult.

The other big challenge was a mental question, hidden in the editor's thinking process. During our discussions, I often heard the argument that something was »common editorial practice«. For example, (in hard-copy editions) it is widely accepted to put uncertain dates in square brackets, to highlight certain features of the text with a specific typesetting, to arrange the material in a particular way and so on. It is not the intention of this paper to discuss these practices, although I totally agree that some of these standards, some »style-sheets« (McLoughlin) are still missing in the electronic world, and that it might be helpful to assure that the same textual feature encoded in edition A is understood by the user in the same way as in edition B. However, all these questions, all these practices have a very tight relationship to the final design of the edition and bringing these issues into the discussion at an early stage would not only lead to awkward mark-up. What is more, the whole design process would be ruled by a picture of a static, printed edition (just in electronic format), by the »the transformation of kinetic energy into one fixed form«[13] and would, thus, hinder us from thinking towards »ex-

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[12] Lavagnino (2006:336).
[13] Vanhoutte (1998).

ploit[ing] the capabilities of electronic texts« as Shillingsburg implicitly demands.[14] For example, putting an uncertain date in square brackets is not only a way of *encoding* it (a sort of encoding not intended for further processing or visualisation as the TEI is intended for), but for putting it in the book as it is, so that the reader can *decode* it by his knowledge of its meaning. In electronic encoding, there is, on the other hand, no need (on the contrary) for square brackets, you encode the (con-)textual feature on basis of its meaning.[15] Both approaches, printed and electronic need to be systematic, though.

It is my opinion that editorial work will change with the new capabilities of electronic texts, but undoubtedly editorial principles should be independent from the medium. To have a kind of standardized output in mind at a very early stage of the work, however, is misleading not only on how to do things, but also on what to do and it implies a premature ›why are we doing it‹. Putting the uncertain date in square brackets is not an editorial *principle* as such, it is an output-driven convention. The principle of the scholarly edition in this case is, to make a feature such as the dating issue transparent and provide the user with the relevant information.

But what does this mean in the electronic world and how come it to be a »surprise for the print editor [...] that there [within the TEI guidelines] is no agreed style-sheet« (McLoughlin)? The TEI provides guidelines for text encoding, but not necessarily for editing principles. A scholarly edition (be it printed or electronic) is just one possible usage of textual data that is encoded on the basis of the TEI schema. The guidelines are capable of giving abstract data, letters, spaces, punctuations and so on, a meaning, thus, preparing them for further processing. In terms of output of this data as a scholarly edition, this approach is indeed very flexible, a fact that forms one of the strengths of the TEI and which is made possible only by the flexibility of electronic data in general. It is, however, dangerous if there are no guidelines, standards and tools available for the next step, to transform the encoded texts into something more concrete. One must be aware that, without tools, the implementation of the best plan, of the finest intention turns into chaos. This flexi-

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[14] Shillingsburg (2006: 88).
[15] One must have in mind that the use of square brackets itself is ambiguous. In other contexts than the one illustrated above, especially when applied to text, it can have a different meaning. The number of possible type-setting features is limited and must carefully be chosen along common practice and context.

bility of the TEI guidelines, however, is not a caveat, just something to keep in mind.

   In classic hard-copy editing, the editor usually fulfils two steps at once: he thinks of an uncertain date (the meaning) and he puts the date into square brackets in his manuscript, his word-processing software or in earlier times his typewriter. There is no step in between. In electronic editing, this is, of course, still possible but would just lead to a simple reproduction of the capabilities of hard-copy editions. The proposed process here is, however, to encode the meaning of the feature in question, thus to think abstractly, and to create a suitable, readable and understandable output later on, even only on demand.[16] The analogue world was much more tool-driven and the working practice was much more geared »to satisfy the technical demands [in case of the book, I would prefer to say: restrictions] of the medium« (McLoughlin) than the electronic medium is – not only but primarily by allowing different sorts of dynamic output. In order to bridge this gap, it is necessary to shift the focus from the output of your product towards its use, from layout and type-setting to the meaning of features or in other words: to separate the meaning of some feature of text or context from its layout in the edition. This was, according to my personal observation, the toughest step in order »to bridge the gap«.

III.

The ›why-what-how‹ approach chosen here led from output-driven to input- and user-driven design. I want to illustrate this in greater detail, focusing on the ›Why?‹- and ›What?‹-sections in the remainder of this paper.

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[16] In the ideal world of collaborative editing, by the way, the editor as such who does the scholarly work, needs not to think about the output at all and can leave this question to his colleagues who are creating the style-sheets and tools to transform the output.
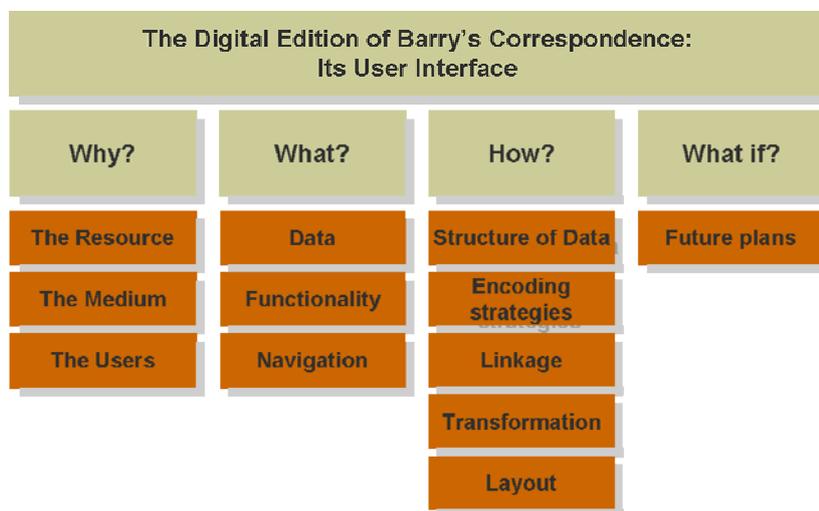
Figure 1: General structure of the workshops along the »4mat«-principle.

The first two sessions of the workshop series were devoted to the question why create an electronic edition of Barry's correspondence. We divided this section into three sub-sections, beginning with the documents (manuscripts) themselves and other resources of interest, followed by a brief discussion about the chosen medium (consequently, this should have preceded by a discussion about the medium *to choose*) and finished with the analysis of future use and users. The debate on resource (material) and users served not only to get a clear picture of the work that had to be done and to define and focus on the goals to be achieved, but it also founded the basis for the subsequent sections – a necessary step in the development of the design, as discussed earlier in this paper.

It is not the intention to reproduce the details or the results of these discussions here. Some of this is described in McLoughlin's contribution to this volume, some can be seen in the edition itself when it is published.[17] Here, however, I would like to emphasize certain aspects. The most time-consuming, maybe most important and possibly most controversial but definitely most interesting topic was about the users of a potential electronic edition of Barry's correspondence. One could cut a long story short by claiming that everyone can use this resource because it will be on the web and freely available. This is true but does not an-

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[17] The finished work will be published under [6].

swer the question whom we are going to create the edition for and for what purpose. Without excluding anyone, we reduced the purpose to scholarly usage, but had in mind that this still is a broad category. Again, McLoughlin himself gives some insight on this.

I do, however, not agree with his distinction between the ›reader‹ and the ›user‹ of an edition, at least I would again stress that this difference is not a question of the medium. You can *read* a text on the web on the one hand while you can *use* a printed text on the other. I generally just *read* the news provided by an agency on the internet (radially, though, by browsing through the headlines and reading the articles of interest, which is no big difference compared to my usage (sic!) of a newspaper), but I do not *read* a phone book or a dictionary. I *use* the latter, be it in printed or digital form. The same applies to a scholarly edition: nevertheless the medium it is designed for, it is more like an encyclopaedia to use for study purposes rather than like a novel to read for enjoyment. A *reading* edition is different, though. A mere reading text can always be a spin-off of a scholarly edition, again an advantage of the electronic data to be flexible enough to allow different types of output at the same time and using the same data. However, creating an electronic edition just for reading purposes is far away from exploiting the capabilities and answering the ›Why?‹ question might then lead to some surprising answers.

To discuss the potential users of the edition was surely the most intensive and extensive aspect of the first section of our workshop. It also reflects best the challenges in the transition of thinking as McLoughlin makes it clear in his own contribution. The question of the user of the edition is tightly bound to its usage and leads immediately to the ›What?‹-section, from which I would like to highlight two aspects: functionality and navigation. In the meanwhile, subsections ›resource‹ and ›medium‹ were (mentally) transformed into ›data‹, deciding and describing what to edit, in which way, and how to proceed. ›Functionality‹ operates on this data and ›navigation‹ is the design for the user to manoeuvre through these functions.

In terms of functionality, a brain-storming session came up with a whole bunch of functions to be implemented. We summarised them in three categories: ›find‹, ›read‹ and ›added values‹. ›Find‹ is particularly important, because the edition is not intended for linear reading. However, if you want to read Barry's letters from A to Z, you can. In a scholarly study of this kind, there is always the moment, when you finally *read* something. This is not a contradiction to the general ›usage‹ of the edition. Reading is part of using; the latter can be regarded as the sum of all three mentioned categories. Speaking of reading versus using respectively

studying, one must notice that this should not be the last word in an electronic approach. Further processing of the data or algorithm-based analyses might be the key to deeper understanding of texts and contexts. In order to prepare this for the future, the Barry edition will allow, for instance, the download of the (TEI) XML-source files as an ›added value‹ so that any sort of exploration of the data can be undertaken by the user himself, provided that he has suitable tools.

The final aspect, I want to highlight, is the question of navigation and this is once more to be answered by a user-driven approach: You use a printed (scholarly) edition, and you use an electronic edition. One of the differences is however, the way you use it. And the more dynamic the electronic edition is, the more complex it gets, the more paths can be chosen by the user and the easier he can get lost. He might need a map. In a printed text, there is a cover, clearly indicating its beginning and its end, there is a predetermined sequence of pages, usually numbered, indices at a certain position in the book and a table of contents. The very nature of the book draws the reader's attention and directs him accurately. In the text of a scholarly edition, this guidance is achieved not only by its introduction but furthermore by the above-mentioned output conventions, by providing only certain variants of the text and no others, eliminating some ambiguity of the text and so on.

The dynamic approach in an electronic edition, on the other hand, can offer the user a lot of choices, allowing him much more research opportunities. This is achieved by the computer's storage capacity, its processing power and its ability to aggregate data on demand. There is a drawback of this, though. The electronic edition usually has a starting ›page‹, but does not have a clearly visible end; there is no closing page, no back cover. The user often does not know how much of the material he has already seen, how much of the data he has accessed. Missing one tiny link in a badly designed web-site might lead to an unintended ignorance of a whole world of information. »The real issue is how best to provide guidance for the readers«, Tanselle said,[18] and this issue becomes more important because of radial reading/using of the Barry edition. And this is indeed a question of the medium. A dictionary, for instance, which is definitely not designed for linear reading, gives guidance to its user by its structure, which is normally alphabetic and explained if it is not obvious. »Such aids to radial reading can be well or poorly constructed whether

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[18] Tanselle (2006: 4).

the means of presentation is printed or electronic«,[19] argues Tanselle. But in an electronic, non-static approach, this task can be really demanding. There was a lively discussion about how to design the navigation for the Barry edition, in particular to find the right balance between offering good guidance to the user by not restricting him too much in the way he wants or needs to approach the material. McLoughlin illustrates the results of his work in his paper.

Coming back to the initial question of the ›transition from classical to digital thinking‹. Has the process as a whole which I described in extracts here been effective to »bridge the gap«? Although the work on the Barry edition is not yet finished at the time of writing this paper, the workshop has been, at least, a required step forward, and the chosen path was right to systematically address relevant questions, to discuss them and to learn from each other in a way that would not have been possible without it and surely not without the open-mindedness of all participants. The workshop has helped to shape the Barry edition and has given the ›old-style editor‹ guidance into a different way of thinking the editorial process. It has not yet overcome the »short-comings and lacunae in the present state of editing for digital editions« which McLoughlin sees and some of which he outlines in his paper. The final assessment, however, has to wait until the end of the project.

McLoughlin did not »turn a blind eye« but has faced with open eyes »what is happening« in the world of digital editing. His experience as an editor was more than fruitful to sharpen my personal view on the electronic medium, and while trying to exploit the tempting vast capabilities of digital texts, it helps to maintain my focus on the one basic question: what is the purpose of the electronic edition?

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[19] Ibd.

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