# Reflecting on a dual publication: Henry III Fine Rolls print and web

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## Abstract

The Henry III Fine Rolls project is a collaborative project between the National Archives in the UK, the departments of History and the Centre for Computing in the Humanities at King's College London, and the department of History and American Studies at Canterbury Christ Church University. Its aim is to produce a digital and print edition of the Fine Rolls from the reign of the 13th-century English King Henry III (1216–72). At the core of the resource are the translated summaries of the fine rolls which have been encoded in TEI XML, complemented by an overarching RDF/OWL conceptual model and digital facsimiles. In this article, we reflect on the ontological complexities of a dual publication, by bringing together various theoretical frameworks. Our aim is to take inspiration from these theories and connect them to the experience of producing two objects of different materiality but of very close scope. Ultimately, we will also explain how some of these reflections have been used to design a study for evaluating the utility of this edition.

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## 1 Introduction

The Henry III Fine Rolls project is a collaborative project between the National Archives in the UK, the departments of History and the Centre for Computing in the Humanities at King's College London, and the department of History and American Studies at Canterbury Christ Church University. Its aim is to produce a digital and print edition of the Fine Rolls from the reign of the 13th century English King Henry III (1216–72).

The Fine Rolls[1] recorded agreements made with the king to pay a certain sum of money for specified benefits. They date back at least to the 1170s and therefore are the earliest witnesses of the series of rolls on which the English royal Chancery recorded its business. The fines represent a unique resource for historians to study politics, government and society, particularly in the case of those recorded during the reign of Henry III, a period which saw major changes in English political life and the parliamentary state.

Similarly to the Fine Rolls that preceded them, the Henrician fine rolls[2] are written in Latin on membranes of parchment in Chancery cursive hands, but were never properly published before the Henry III Fine Rolls project took the initiative to do so. Indeed, at the core of the project outcome is an edition of the translated summaries of the fine rolls encoded in TEI XML, complemented by an overarching RDF/OWL conceptual model, and digital facsimiles.[3] The edition takes two published forms: the first, a full-featured website which includes browsing, search and display features; and the second, a set of printed volumes that include apparatus traditionally associated with this specific type of publication: preliminary materials in the

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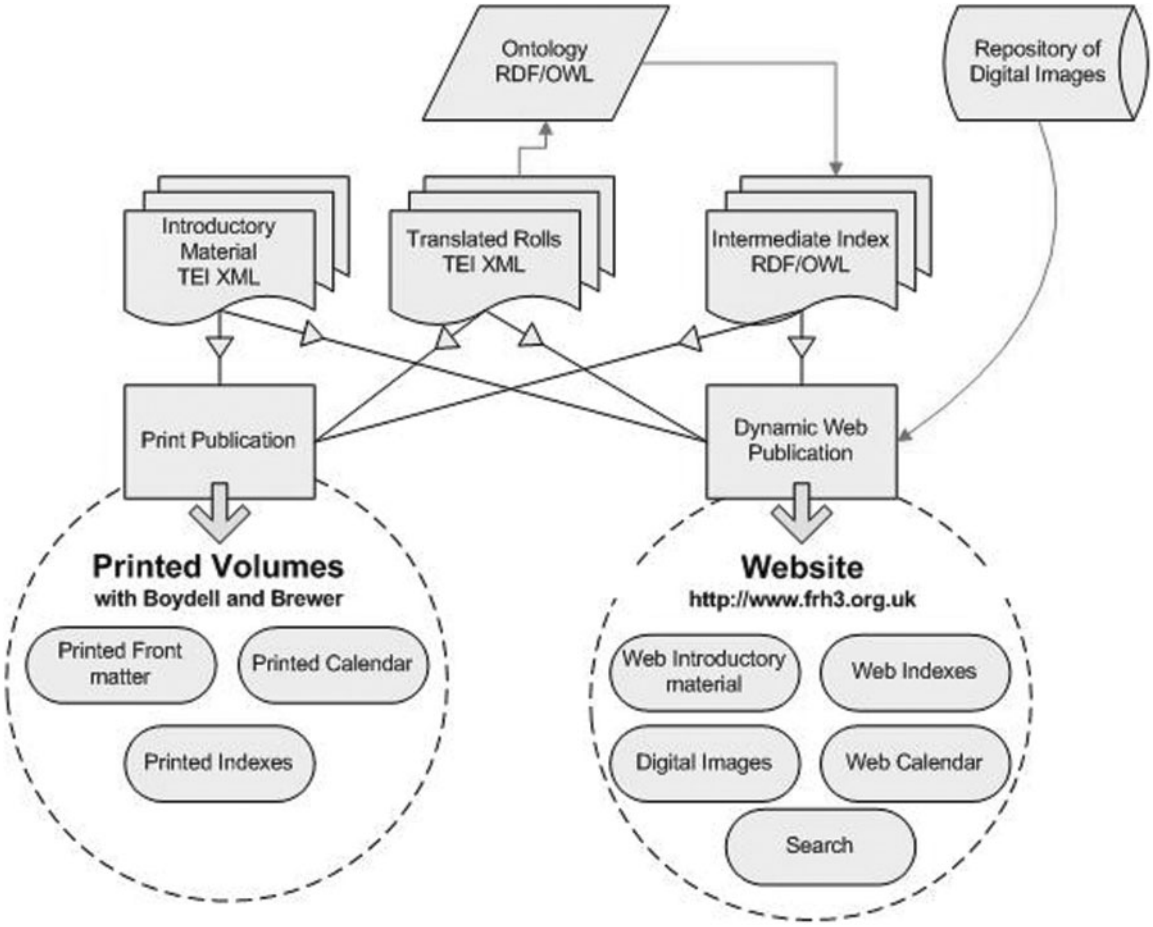


**Fig. 1** Chart that exemplifies the publication process of the Fine Rolls in print and on the web

form of essays and editorial guidelines, the core text, and topical indexes. Figure 1 illustrates the process by which digital primitives are processed into the two publication streams.

In this article, we contextualize the ontological complexities of a dual publication within various theoretical frameworks. Our aim is to take inspiration from these theories—from material culture, media and social theory to bibliography, archival and literary editing—and connect them to the experience of producing two objects of different materiality but of very close scope. We will also explain how these reflections about multimodal publication have been used to design a study for evaluating the use of this edition.

## 2 Text-based Archival Research and Editing

Who forms what Nunberg calls the 'community of readers' (Nunberg, 1993) that has created resources such as the outcome of the Fine Rolls project, and how might they be expected to use it? Given the subject matter and the genre, we expect readers to primarily consist of *scholars who perform text-based archival research with documentary primary sources that date back to the late Middle Ages.*

The research activities of medieval historians (or more generally humanities scholars concerned with the medieval period) primarily involve the reading

of primary sources and/or their editions with the aim of fostering new interpretations of those records or making new editions. Indeed, medievalists are almost obsessed with the editing of charters, rolls and records of any kind. As an anonymous reviewer of an historical project bid submitted to the AHRC in November 2007 puts it:

> [. . .] the medievalists work with such fragmentary sources, and so much of the medieval evidence has been lost, that any scraps of information that can be garnered here have the potential to transform our understanding of events, personalities and whole societies.

Though this type of scholarly investigation may be compared to—and shares common methods with—any other research activity that creates critical editions of primary sources with an aim toward interpreting their context, it also differs in that the primary editorial focus is on the re-creation of the fullness and context of documentary records.

Consequently, a first important implication arises about the centrality of primary sources within this scholarly community: the primary sources are strictly connected to the outcome of the research—the latter is impossible without a deep knowledge of the former. This is one reason why the storage and visualization capabilities of the digital environment are attractive to scholars, as it enables them to include images of the original documents in their works. In doing so, this material enters the undefined and blurred world of digital resources, where research essays, original records, reference material and edited texts co-exist without the canonical order of a print publication. However, it also represents something closer to a traditional research environment wherein familiarity with the material sources is crucial and where boundaries between different types of evidence are constantly overlooked and subsumed by the overarching aim of creating connections.

A second important aspect of this historical editing praxis is the recognition such publications garner in the wider community of scholars. Scholarly editions that hope to offer any significant glimpse to the past must allow the community of researchers to continue doing what they have done for centuries, namely connecting the pieces together. Commenting on the importance of the Fine Rolls to the historical discipline, the editors note that:

> [The Rolls] are crucial to the study of family structures and patronage networks at the highest levels and, thus, to the political history of England. As importantly, they reveal developments in the common law and the broadening of access to justice through the purchase of an expanding number of writs to transact law cases, changes to the seigniorial and money economy through farming of demesne land and the growth of markets and fairs, and the role of women, particularly widows, in society. (Dryburgh, Hartland, Ciula, and Lopez, 2008, (A) Brief overview of source and project)

While discussing the 'long shelf-life of printed scholarly editions' within the context of literary studies, Sutherland (2008) claims that 'the scholarly edition of a literary work is expected to have a far longer life than any other critical study or opinion'. Similarly, the sense one has in examining the context and history of text-based archival editing is that it results in *key publications* that will affect the research practice of scholars for generations to come.

Therefore, along with the materiality of the primary sources, the materiality of their scholarly editions about these sources is central to the research process we are examining. In studies of material culture generally and, in particular, in studies of the material book, the presentational format of text is considered to be of fundamental importance for the study of production, social reading and use. Therefore, description of and speculation about the physical organization of the text is essential for understanding the meaning of the artefact that bears that text. Similarly, in the digital humanities, the presentation of a text is considered to be an integral outgrowth of the data modelling process: a representation of the text but also to some degree an actualization of the interpretative statements about the text. Indeed, to the eyes of a reader, the presentational features of both a printed book and a digital textual object will not only reveal

the assumptions and beliefs of its creators, but affect future perception and analysis of the work. This is possibly more evident for the print tradition than it is for the digital. As the editors of the Fine Rolls project have commented:

> For almost two centuries historians have [. . .] relied upon a two-volume set of extracts printed in record type, the editor of which, concentrating on material of strictly genealogical interest, omitted around 80-85% of the entries and produced scant, unreliable indexes, with the result that the rolls have long been under-utilised. (Dryburgh *et al.*, 2008, (A) Brief overview of source and project)

## 3 Henry III Fine Rolls Project as Dual-medium Research Collection

The Fine Rolls project borrows equally from *both* the print tradition of reference publications for archive-based study and the emerging practices of design of digital collections without definite genre and material boundaries. Often conceptualized as a digital or hypertextual edition (Faulhaber, 1991), this kind of digital work may also be thought of as a 'thematic research collection' (Fig. 2), a dynamic aggregation of primary, secondary, and tertiary materials that supports research on a theme, interpreted broadly to mean an 'event, place, phenomenon, or any other object of study' (Unsworth, 2000; Palmer, 2004, 2005).

The print genre to which the Fine Rolls of Henry III publication most closely adheres is the calendar. According to the *Oxford English Dictionary*, a calendar lists or registers 'documents arranged chronologically with a short summary of the contents of each, so as to serve as an index to the documents of a given period' (OED). Calendars are also an example of what Palmer has called 'access resources' (Palmer, 2005, pp. 1140–1141): 'references to formally published or physically collected information'.

As demonstrated in the Fine Rolls, access resources need not be professionally produced by indexers, but may be created by scholars themselves, thereby becoming crucial intermediaries to the written record. These works are socially shaped, representing the judgement and expertise of their creators and embodying the values of the disciplines that produce them. When they take a digital form, these scholarly created resources often fall into the category of the previously described thematic research collections, embedding scholarship 'in the product and its use':

> The digital archives, data repositories, collaboratories, and other Internet-based resources being produced by scholars are often direct corollaries to their programs of research and reflect the information needs of their creators. They tend to be tailored to the specific cultures of research communities, rather than adhering to existing blueprints for access resources. (Palmer, 2005, p. 1142)

It follows that the Fine Rolls is a hybrid, an intersection between the 'new' genres of digital scholarship and the established ones. (Such hybridity is precisely the kind of thing that interests us digital humanists!). But the Fine Rolls is also a hybrid in another very material sense, for at the same time that the edition has been developed for online publication, its core materials have also been gathered and formatted into print volumes. It exists in print and digital mode, embodying an instance in which the new medium, as Lucius says, 'does not supersede the old one, like the wireless did not replace the concert hall and television did not replace the cinema, but joins the old medium in an often positive and invigorating interaction' (Lucius, 2008).

Consequently, for the purposes of this analysis, we must expand the operational definition of thematic research collections to include those that span media, in our case appearing in both printed and digital form. As a scholarly produced access resource, we must also consider how the components of the Fine Rolls shape *each other* when represented in different media, and how the social process that developed the printed genre is digitally manifest. Since materiality and therefore text mean different things in different media, we ask: to what extent does the 'theme' of the Fine Rolls as embodied in a hybrid materiality maintain an identity

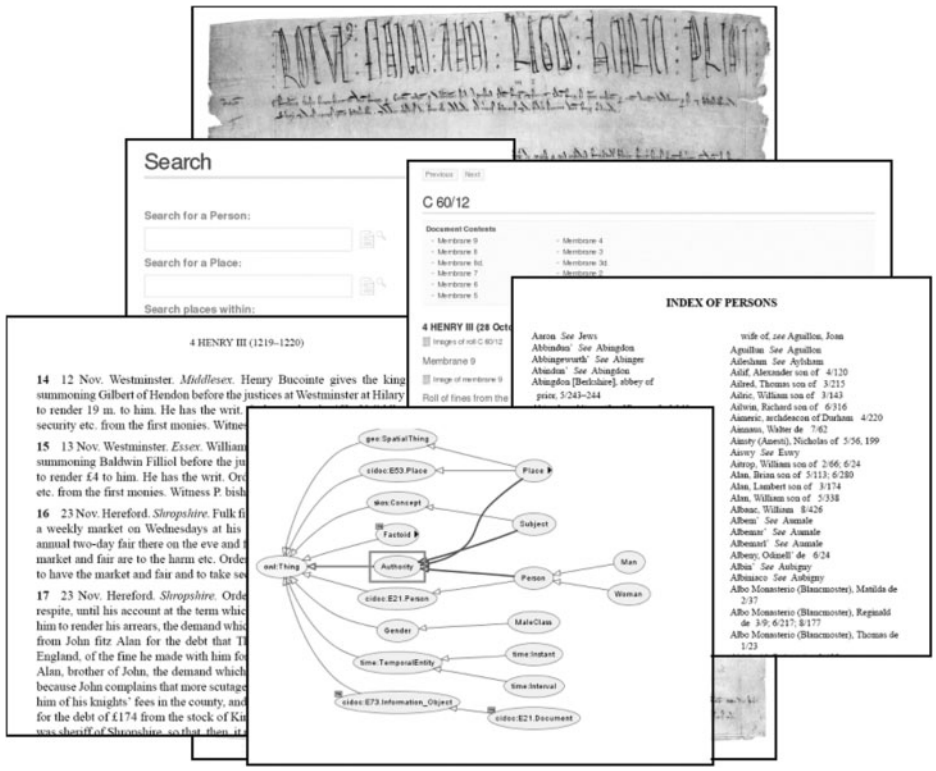


**Fig. 2** Mix of content and format—as extracted from the print and the web—that characterizes the Fine Rolls as thematic research collection

across media? What are the measurable losses and gains of qualities (Kichuk, 2007) unique to each medium?

## 4 Evaluating the Fine Rolls: Material Aspects and Reader Study

We believe that further research into the usage of these parallel publications will lead to a better understanding of scholarly needs, particularly those that draw from a strong tradition of documentary editing. Indeed, as the previous discussion has shown, these two publications are not necessarily perceived or, perhaps more importantly, used as separate resources with rigid boundaries between them. For a scholar interested in the historical record, the reading of the Fine Rolls edition and the seeking of information related to it is a comprehensive process that does not stop when the book is closed or the browser shut. Indeed, we believe that connections between the two modes of publication will be sought in a fluid manner. Thus in the following sections of the article, we refer to literature investigating the range of information activities involved in performing humanities research with print and digital resources, so as to establish an analytical framework for evaluating the Fine Rolls.

Information-seeking research has produced a number of studies that examine behaviours of particular groups of researchers using traditional and digital methods and sources.[4] Our methodological approach is thus guided by the literature and data collection methods established in this body of research.[5] As with these studies, we are not striving to achieve statistical significance but rather to

develop a nuanced picture of the work performed by scholars using this and like material. The decision to use qualitative methods has forced us to limit the number of participants to a small sample, drawn from members of the Fine Rolls research team who have written materials using the edition, but also on a small sample of researchers from the wider scholarly community who perform text-based archival research with documentary primary sources that date back to the late Middle Ages.

Our research plan is structured in three phases:

(1) Phase 1: defining the research context;
(2) Phase 2: evidence for modes of access and bridge building;
(3) Phase 3: usability testing and implications for design.

To-date, we have completed some aspects of Phase 1, in which we establish the context for work done using historical sources like the Fine Rolls. We have based our data collection methods for this phase of work, which include a combination of document analysis, questionnaire and interviewing on the following research questions, adapted from Brockman *et al.* (2001):

(1) How do medieval archival researchers think about, organize and perform their research?
(2) How are information sources used throughout the research process?
(3) How does access to electronic information sources affect work practice?
(4) What functions and characteristics make one (primary, secondary, tertiary) resource better than another?
(5) How can the traditional role of printed sources be reconciled with the use of virtual unlocated resources that may provide access to other pieces of a single Thematic Research Collection?

From the process of identifying lines of inquiry, articulating methods followed in answering these questions, developing profiles of the researchers who perform the work, we expect to gain deeper insights into the evolution of the interpretative threads within a research process answering how different types of evidence are connected, and how the analysis of sources and argument develop through the process and within the finished product.

## 4.1 Analysis: fluid paths and the bridges that connect them

Coupled with this period of data collection is the selection of information seeking theories and frameworks that we can use to understand how the profile of our researchers compares with a more general profile of humanities scholars. For this analysis, we turn to Palmer's research into the ways humanities scholars use digital information sources. Fundamentally, this work demonstrates that use of thematic collections fits into the 'centrifugal searching' and collecting mode of digital information access (Palmer, 2005, p. 1147). Much like the observations made earlier about medieval historians' work with sources, Palmer has found that research in the digital environment follows an interpretive course, starting from a set of core materials, and then proceeding outward in long, fluid paths. Reading and writing are the outcomes of deep inquiry over months or even years around this set of core materials. Other core research activities performed using digital sources include confirmation and discovery searching (to confirm ideas or form new ones), collecting materials (for future or re-use), and consultation and communication with other scholars.

A second aspect of our analysis draws from Brenda Dervin's *Sense-Making Theory* (1992, 1998), a framework that broadly speaks to aspects of the 'nature of information' and communication, and in practice is often used to learn 'what users want from systems, what they get, and what they think about them' (1992, Underlying Assumptions and theoretic foundations, paragraph 2. and Introduction, paragraph 1). Dervin has applied the framework to a number of fields including knowledge management to examine the 'sense made at particular points in time-space' by an individual. Like Palmer's humanities scholars who wend again and again through sources as they pursue lines of inquiry, Dervin's theory assumes that humans move in a 'world of gaps' as their reality changes and their understanding of the world and its meaning is made and unmade. So conceived, knowledge becomes an

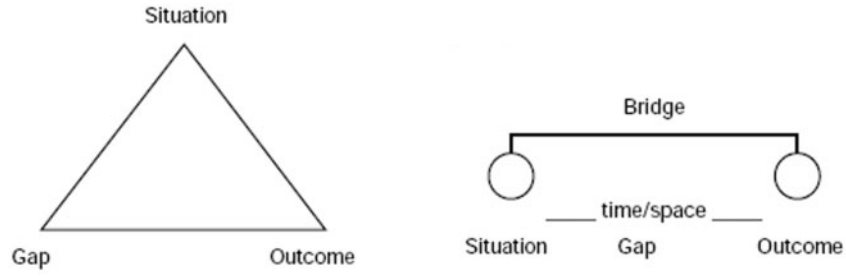


**Fig. 3** Dervin's iterative sense making approach (Wilson, 1999) and Dervin's sense-making approach as modified by Wilson (1999)

activity, 'made at the juncture between self and culture, society, organization' (Dervin, 1998, p. 36). In later work, Wilson situated Dervin's approach within a larger review of models of information behaviour, re-conceptualizing the model to de-emphasize the iterative nature of sense-making while focusing more directly on the bridging activity (Wilson, 1999; Fig. 3).

In evaluating the Fine Rolls, we have taken an orientation toward the sense making approach that draws on aspects of its metaphor and its method. Like Wilson, we also place metaphorical emphasis on the bridging activity, analogous to the research activities of confirming and discovering identified by Palmer. Methodologically we focus on uncovering the tactics of bridging by individuals, in our case readers of different mediums and materials that comprise the Fine Rolls, to understand the *nature* of the bridges themselves, particularly as they are materialized within the informational features of the print and digital components of the Fine Rolls project.

To identify these features, we look once more to Palmer's examination of the research patterns of humanities scholars, in which she finds that 'connective structures', either 'embedded in' or accompanying the access resources defined earlier are a key way in which scholars navigate the terrain of scholarly communication. Palmer defines *connective* generally as structures used to document relationships within research literature. These structures, examples of which include 'see' and 'see also' notes, link related information, forming intellectual relationships between concepts within an access resource. She notes that within the humanities, 'research library catalogs, bibliographies, and archival finding aids have been the main tools for managing access to extensive subject collections of primary materials and secondary book sources' (Palmer, 2005, p. 1141). The connective structures we are examining similarly include the topical indexes and the search engine, but also other features of the texts as they *co-exist* between media, discussed in more detail in the following section.

## 4.2 Discussion: (Dis) connective structures in the Fine Rolls

In many respects, the artefacts comprising each medium of the Fine Rolls edition have a lot in common, either because the digital medium had to mirror the tradition of its more authoritative predecessor, or for more practical but hardly insignificant reasons of workflow and foreseen usage. Furthermore, there are some areas in which the two media are converging and an effort is being made to create connective structures that will help readers use the edition as a whole. This can be seen by examining the adopted layout for footnotes. The print format was modelled on the basis of the digital layout and, although a completely unusual arrangement for this type of publication, was accepted as suitable by the publisher. Both in print and on the web, footnotes are placed at the end of each entry rather than at the foot of every page allowing for a common and convenient method of citation between print and web publication (Fig. 4).

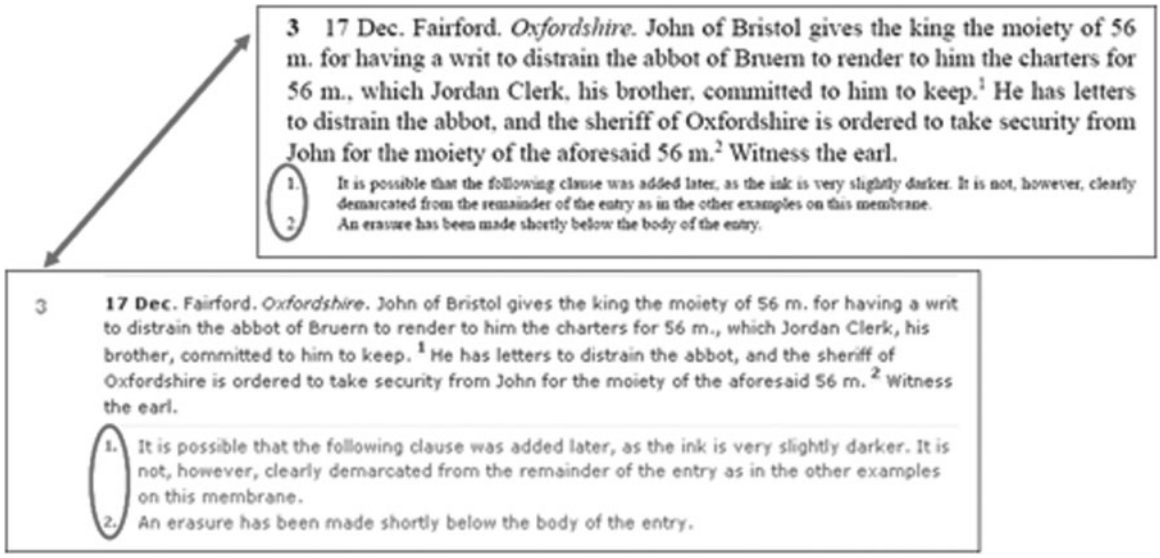


**Fig. 4** Example of the arrangement of footnotes on the web and on the printed volumes to allow for a common method of citation

More often however, the demands of the editing and publishing workflows as well as the inherent differences in the forms of the two media have initiated interdependent cycles in the evolution of the two modes of publication (Fig. 5).

The separation into volumes, for example, prescribes clear limits to the printed text that do not exist on the web. The physical volumes preclude any dynamic open-ended vision of the editorial process, while at the same time providing a sense of stability, enclosure, and completeness for both editors and readers. In more practical terms, the sequential production of volumes poses various challenges both from the editorial and the technical point of view (when it is possible to separate the two). The fact that the overall print edition is split into meaningful chunks has, for instance, the effect of introducing print-only thematic overtones.[6] In addition, the editorial coherence between volumes has to be maintained, so as to provide for the use of the edition across volumes. Indeed, modifications in style and editorial strategies have to be justified and made sustainable to the extreme that changes applied to the next volume cannot afford to make the previous volume unusable.[7]

Similarly, information architectural choices taken on the web diverge from the print: material from all rolls is treated as a single unit, with the indexes and search engine operating on the entire corpus; the web calendar is linked to the digital images and therefore provides a direct connection to the primary sources. Although the table of contents in the volumes and navigation menus on the web may seem to respond to the same basic functionality, the primary function of the former is to 'imprint' a hierarchical organization on the books and suggest a path through them. In contrast, the website is designed with the knowledge that a reader's first glimpse of the edition may be via an external search engine like Google, and therefore the design works to orient the user quickly and establish meaning both with the current page, and in reference to content that can be found in other sections of the site. Material is referenced via URLs on the web, rather than by page numbers as in the volumes. The 'about' section on the website takes as its general aim the introduction of the project as a whole, while front matter materials in the print publication focus on the thematic concerns of individual volumes, as mentioned above.

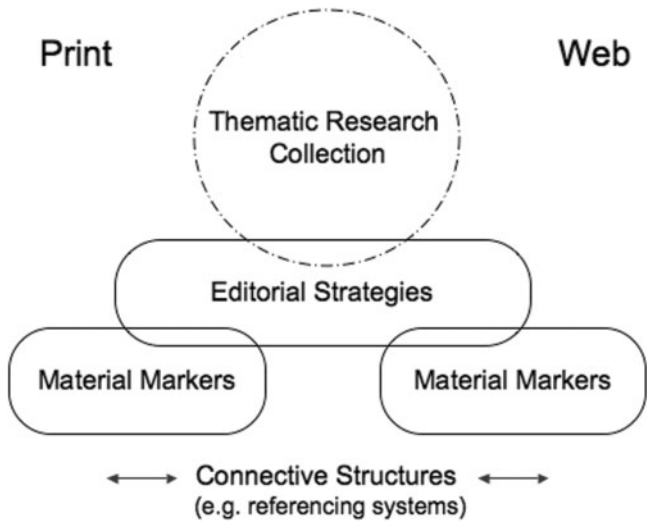


**Fig. 5** Convergence and divergence between editorial strategies and different material realizations

In general, the stratagems for navigation on the web rely much more on the internal structure of each roll and membrane. One can, for instance, browse each roll by monthly date on the web; on the contrary, text based running heads in the print facilitate a more 'visual' browsing of the volumes, while more prominence is given to the archival signatures on the web.[8] It is interesting to note that the latter may be related both to the workflow of the project and to the relevance given to the original records on the web: images were digitized and added to the website at a rather early stage thereby affecting the representation of the core text material. Hence the signatures of the national archive were accepted as a stable, recognizable convention by which to refer to the rolls before the edition brought about its own system of citation and ways of speaking about the work.

The flexibility of the overarching ontology (Ciula *et al.*, 2008) allows the texts to be fairly exhaustively indexed, just as the presentational capabilities of the digital medium allow for the display and navigation of indexes that are correspondingly large. By contrast, the print edition had to follow the refined conventions of a well-established scholarly tradition in publishing editions in general and calendar editions in particular, both in terms of formatting and, more importantly for us, in terms of content selection, creation and modelling. So, though the indexes within the printed edition are also predetermined axes along which to explore the text, the way in which they are produced is perceived to be a nuanced and intuitive aspect of the scholarship. This fact, coupled with the presentational and economic constraints of the printed medium, resulted in volumes in which indexes arrange and present information succinctly and with a minimum of conceptual repetition.

In practice this means that not only is it unacceptable for the editors to reproduce in print some visual markers considered necessary on the web,[9] but, perhaps more interestingly, that the indexes on the web 'are allowed' to exploit the connections between categories to the maximum extent possible and to mix information that would 'normally' pertain to a single, short index in a volume. Hence what would be perceived as needless redundancy in print (see Fig. 6 as an example) becomes a desirable feature in the highly hyperlinked web version. In effect, the relationships made evident on the web through hyperlinking deconstruct traditional canonical categorization[10] (indexes of persons, place, and subjects, in this case) by highlighting a less fragmented and less classifiable historical context (where, for instance, careers of individuals cannot really be separated from specific locations and institutions).

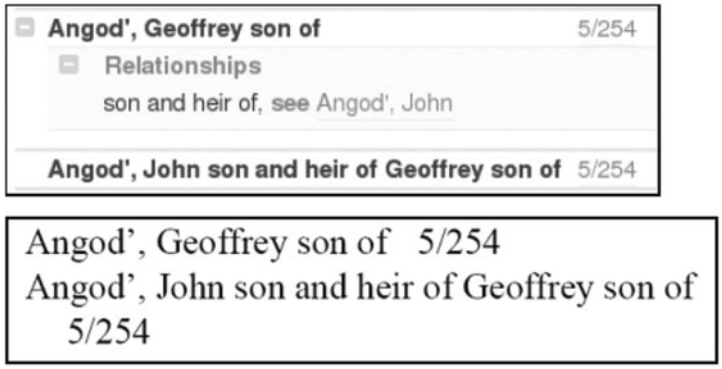


**Fig. 6** Example of visual markers and other information that is perceived to be useful on the web indexes, but redundant or inappropriate on the print ones

The separation into distinct traditional index categories revealed itself to be too tight a jacket for the rich data comprising the edition. The negotiation of presentational differences therefore became the basis from which to embark on a critique of some of the methodologies of this kind of historical research and to initiate discussion about traditional editorial practice.

## 4.3 Emerging themes

Our analyses are in their early stages and much work remains to be done. However, data collected so far already suggests that our scholars possess a high familiarity with primary sources through continuous direct access. In addition, participants tend to cite a core set of sources over and over again. These key sources mainly consist of facsimiles, editions or reference works that give access to a substantial corpus of primary sources in various forms. Although primary sources can be unambiguously defined as 'materials on a topic upon which subsequent interpretations or studies are based' (Hairston and Ruszkiewicz, 1996, p. 547), it is not straightforward to draw the line between original documents and their synthesis or interpretations, especially in the case of facsimiles and editions. Quite often sources are cited without any specification of editors or other bibliographical details: names of main editors or authors are cited implicitly to refer to their main works in the field. When online publications are cited, citations tend to be unspecific; the URL is rarely included, or a general website address may be given rather than the pointer to a specific resource. In some cases in which multiple reprints or editions of the same records exist, specific reprints and editions are mentioned and cited, while in other cases the interpretation of which edition the citation refers to is left to the reader. The ambiguity of citation is even more pronounced when the same source is published in print and digital form.

In regards to particular use of the Fine Rolls edition, initial findings suggest three areas for deeper investigation see (Fig. 7). First of all, the fact that the edition consists of dual modes of publication is not explicitly evident in the citation format; this suggests that is difficult to identify whether the Fine Rolls being cited are the ones published online or in the printed volumes.

Similarly, since materials are continuously being edited and published, it may be hard to identify whether the Fine Rolls being cited are those that have been calendared or the original primary sources. As the project progresses, more fines are edited and published, and so the thin boundary between primary sources and access resources is even more easily crossed. Furthermore, when analysing citations to the Fine Rolls publication, links to the online essays known as the 'Fine of the Month' occur, but the URLs are not displayed which may have implications if the essays are collected and printed out for later work.

| Digital or print? | |
|---|---|
| CFR,[1] 1216-34 | CFR 1216-17, no. 21 (under the heading 'From the second year') |

| Manuscript or edition? | | |
|---|---|---|
| C 60/11,[12] m. 9 (entry 106)<br><br>Note that this note appears in an essay written and published in 2006 so rather early in the project lifecycle. Indeed this same footnote was updated (September 2008) by the project editor and became 'CFR, 1218–19, no. 106'. | CFR 1223-1224 , 39, 77, 401<br><br>In the version published in 2007, the hyperlink embedded in this note leads to the main calendar page, while in the version currently published online (September 2008), the link goes to the specific edited entries. | CFR 1216-17, no. 21 (under the heading 'From the second year')<br><br>This citation links to the roll page. In the new version of the text published in June 2008, a direct link to the entry number has been added. |

| Ambiguity of online references | |
|---|---|
| Michael Ray's Fine of the Month for December 2006, *The lady is not for turning: Margaret de Redvers' fine not to be compelled to marry*. | D. A. Carpenter, 'The battle of Lincoln (20 May 1217) and William Marshal's Ransom Agreement with Nicholas de Stuteville', Fine of the Month (May 2007) |

**Fig. 7** Examples of citations of the Fine Rolls edition

## 5 Conclusion

In this article, we draw from the practical experience of producing both a print and a digital publication for the Henry III Fine Rolls project currently in his second phase to present the challenges of such an endeavour from the perspective of digital humanities research. To give a context to our analysis, we borrow from various theoretical frameworks that span from media and book studies to editing and social theories.

We reflect on the characteristics of archival text-based research performed by medievalists and on what this has in common with other humanities disciplines, in particular as far as the editing and reading activities of key publications regards. We do so both by examining closely the materiality of the Fine Rolls hybrid edition and by evaluating its use as a whole thematic research collection that span across media.

The evaluation study, which is currently in its first phase, is aimed not only at understanding better the research profile of medieval historians as drafted in this article, but, more pragmatically, at suggesting necessary refinements to model meaningful connections between co-existing resources in the future.

We believe that thematic resources like the Fine Rolls calendar are key publications that will affect the research practice of thirteenth-century scholars for generations to come, and given this, our responsibility as digital humanists to support such endeavours is greater than we have probably recognized so far. With this study we are working to read the Fine Rolls, both as it exists in a dual medium edition and by looking at its 'inherited forms' (McCarty, 2004, p. 176).

## Acknowledgements

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## Notes

1 For a full historical introduction to the fine rolls of Henry III by one of the project directors, Prof. David Carpenter, visit the project website at: http://www.frh3.org.uk/cocoon/frh3/content/about/historical_intro.html (accessed September 2008).

2 A new set of membranes was sewn together to form a roll for each regnal year (from 28 October, the date of Henry's first coronation, to 27 October).

3 For a detailed discussion of this model that combined markup in TEI XML and an RDF/OWL ontology see Ciula *et al.* (2008).

4 See for example, Ellis (1993) and a rigorous response to it: in Meho and Tibbo (2003). For studies on a particular group of humanities researchers, see: Brown (2002). For humanities research in a digital environment, see Bates *et al.* (1995) and the report by Brockman *et al.* (2001). Within humanities computing, the topic has been broached by Palmer (2004, 2005) and in Buchanan *et al.* (2005).

5 See, in particular those developed for the report *Scholarly Work in the Humanities and the Evolving Information Environment* (Brockman *et al.*, 2001).

6 An example of this is the analysis of the originalia rolls, a set of documents that have a strong relationship with the fine rolls. The significance of this only emerged during preparation of volume 2 of the Fine Rolls calendar which dedicates a substantial section of its front matter to it.

7 Take for instance the case of references to 'Margaret, daughter of Warin fitz Gerold' in the first set of Henrician fine rolls: she occurs as identified in relation to her father. However, in subsequent years such as those that fall within volume 2, she appears as 'Margaret de Redvers', since she had become by then the wife of Baldwin de Redvers. To retain the different names and facilitate searching across volumes, both names are recorded and cross-referenced, although in volume 2 the entry 'fitz Gerold, Margaret daughter of Warin' only acts as a lead-in term to the alternative identification 'as Margaret de Redvers, (entry numbers)'.

8 It may be argued that print features such as running heads as opposed to internal navigational menus on the web do not rely as much on semantic processing of the content to be read and therefore constitute a rather refined aid to the reading activity by supporting information seeking in a more intuitive manner.

9 See, for instance, the grouping of information under the index entries for each person which is displayed on the web under separate headings—'roles', 'relationships', and 'writs'—meanings which are left implicit in the print indexes.

10 Compare to what McCarty calls 'conflict over *categorization*' (McCarty, 2005, p. 123).

11 The citation format recommended for the rolls by the Fine Rolls editors suggests that the author cites the title of the publication (where 'CFR' stand for 'Calendar of the Fine Rolls'), followed by the regnal year, and the number of the entry as it appeared on the membrane (editorially calculated). However, the following text taken from the website demonstrates that scholars themselves are struggling to communicate about Fine Rolls published online versus those published in the printed volumes: '*Calendar of the Fine Rolls of the Reign of Henry III 1216–17* (available both on the Henry III Fine Rolls Project's website (http://www.finerolshenry3.org.uk) and within *Calendar of the Fine Rolls of the Reign of Henry III 1216–1234*, ed. P. Dryburgh and B. Hartland, technical ed. A. Ciula and J.M. Vieira, 2 vols. (Woodbridge, 2007–08)), no. 3 [...] naturally one only adds the detail of book publication (which is ongoing for the whole reign) where the roll cited has been published. Since the website is being regularly updated with Addenda and Corrigenda, users are strongly recommended to supply the date upon which they accessed the site when they give references: *CFR 1219–20*, no. 20. (accessed September 2008)'. http://www.frh3.org.uk/cocoon/frh3/content/links/citations.html (accessed September 2008).

12 C 60/11 is the archival signature for the Fine Roll of the 3rd regnal year of Henry III (28 October 1218–27 October 1219).