

Institution: University of Birmingham		
Unit of Assessment: UoA 26 Modern Languages and Linguistics		
Title of case study: Alfonso el Sabio and the Estoria de Espanna: Bringing the past into the digital present		
Period when the underpinning research was undertaken: January 2013–July 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Professor Aengus Ward	Professor in Medieval Iberian Studies	September 1994–present
Dr Polly Duxfield	PG Research scholar	Jan. 2013–Dec. 2016
Dr Ricardo Pichel Gotérrez	Research Fellow	July 2015–Dec. 2016
Period when the claimed impact occurred: January 2017–July 2020		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact		
<p>Ward's work, and in particular the AHRC-funded Estoria de Espanna Digital project, had impact in three broad ways. First, it effected change in the preservation and restoration of unique medieval Spanish manuscripts, ensuring that these culturally highly significant artefacts remain accessible to the public. Second, it enhanced public understanding of the Middle Ages in Spain and made the wealth of medieval culture more accessible to a range of different users by extending public appreciation of manuscript culture through digital and physical exhibitions. Third, it fostered participation by, and altered the attitudes and practices of, non-academic stakeholders in respect of the historical and literary culture of the Iberian Middle Ages through the use of crowdsourcing of transcriptions of medieval manuscripts.</p>		
2. Underpinning research		
<p>The <i>Estoria de Espanna</i> is the most significant medieval Castilian work of history and historiography, and it was a key piece in the cultural, political and legal programme of its author, Alfonso X of Castile and Leon, known to posterity as 'el Sabio', or 'the Learned'. Although presented in print as the uncomplicated product of Alfonso's court, the 40 <i>Estoria</i> manuscripts represent a complex interpenetration of three major versions of the chronicle composed during, or shortly after, the king's reign. The Estoria de Espanna Digital project (2013–16) was a four-year research investigation into the texts and contexts of Alfonso and his <i>Estoria de Espanna</i>, as well as the theory and practice of digital editing of medieval texts. It was devised and led by Aengus Ward (PI) and it involved ten international scholars at the University of Birmingham (Bordalejo (SRF, 2013–14), Jerez Cabrero (RF 2014–16), Maguire (RF 2013–16), Smith (programmer) <i>et al.</i>).</p> <p>The culmination of the research project was Ward's publication of the digital edition (R1) based on TEI5-compliant xml transcriptions and the collation of the most significant manuscripts of the <i>Estoria</i>. The Estoria Digital is the first large-scale attempt to edit digitally medieval Peninsular prose in the Spanish-speaking world; thus the Estoria Digital made a cutting-edge contribution to the theory and practice of digital philology in Spanish. In consequence, the <i>Estoria de Espanna</i> is now fully and freely available to a specialist and non-specialist readership. The principal output (R1) provides a snapshot of current knowledge and is, by virtue of its digital nature, available for constant revision and expansion. Additional outputs provide state-of-the-art findings on technical and theoretical questions of digital editing and on historical and philological issues in respect of the composition of the <i>Estoria</i> and medieval cultures more widely. All of the data</p>		

and metadata of the project have also been made freely available for re-use in other projects, academic or not.

Research findings can be categorised under three interlinked headings:

Furthering knowledge and understanding of the *Estoria* and medieval Iberia. In creating a space for the formulation of advanced scholarly knowledge of the place of the *Estoria* in the history and historiography of medieval Iberia, the project contributed to ongoing revisions of the political contexts within which the versions were composed — in particular the reigns of Alfonso X and Sancho IV (R6). The knowledge and understanding garnered in the project subsequently fed into the construction of the digital exhibitions and teaching materials.

Advancing the field of medieval and manuscript culture. The research and related publications (R1, R6) further demonstrated the importance of treating each manuscript on its merits, thereby permitting a better understanding of the dialectic relationship between manuscripts and their contexts of production and consumption.

Expanding the horizons of the conceptual architecture of digital cultures. The *Estoria Digital* and related outputs demonstrated the practical possibilities of overcoming what Leonardo Funes has termed the ‘book effect’ — the unacknowledged influence of the print format on our way of comprehending manuscript culture — by providing collatable transcriptions of manuscripts of the three principal *versions* of the *Estoria*. Ward’s articles made a significant contribution to the theoretical and practical development of the field of digital editing generally (R2), and collation more specifically (R4). Duxfield’s article on crowdsourcing was based on work carried out in the project and led subsequently to the crowdsourcing trial, and other articles sought to critique the theory and practice of digital editing (R5). The digital methodology, which was central to the research, in turn inflected the development of impact of a specifically digital mode.

3. References to the research

- R1. Aengus Ward (general editor), *Estoria de Espanna Digital* v.1.0 (Birmingham: University of Birmingham, 2017) <estoria.bham.ac.uk>; edition proper at estoria.bham.ac.uk/edition
- R2. Aengus Ward, “[Editar la Estoria de Espanna: retos y problemas de la edición digital](#)”, *Incipit*, XXXVII (2017), 13–43.
- R3. Polly Duxfield, “The Practicalities of Collaboratively Digitally Editing Medieval Prose: The *Estoria de Espanna Digital* Project as a Case Study”, *Digital Philology*, Volume 7, No. 1 (Spring 2018), 46–64. DOI: [10.1353/dph.2018.0003](https://doi.org/10.1353/dph.2018.0003)
- R4. Aengus Ward, “The *Estoria de Espanna Digital*: Collating Medieval Prose – Challenges ... and More Challenges”, *Digital Philology*, Volume 7, No. 1 (Spring 2018), 65–92. DOI: [10.1353/dph.2018.0004](https://doi.org/10.1353/dph.2018.0004)
- R5. *Digital Philology*, Volume 7, No. 1 (Spring 2018). DOI: [10.1353/dph.2018.0000](https://doi.org/10.1353/dph.2018.0000)
- R6. *Bulletin of Hispanic Studies*, special issue on the *Estoria de Espanna* in context(s) (May 2020). DOI: [10.3828/bhs.2020.25](https://doi.org/10.3828/bhs.2020.25)

4. Details of the impact

The *Estoria de Espanna Digital* project **effected the preservation** of unique cultural artefacts and **transformed public understanding** of medieval history and manuscript culture. The digital nature of the research allowed the *Estoria Digital* team to **collaborate with and influence a range of stakeholders** (cultural and heritage institutions, educators and students, general publics), both in the composition of the research (in the form of crowdsourcing) and in its dissemination (in the form of physical and digital exhibitions and education initiatives). The digital means employed to generate and disseminate the findings **engaged a wider audience** than was possible in print; and crowdsourcing prompted a virtuous circle of research and impact enhancing each other. Consequently, Ward and the project team were able to foster a greater sensitivity to the complexity of manuscript culture, and that of the *Estoria* specifically, outside the

academy, thereby **transforming perceptions** of medieval manuscript culture more generally. In short, Ward and his team have been at the forefront of driving understanding, interpretation and preservation of medieval Iberian manuscripts for scholars and the Spanish people.

The digital research has had the following impacts:

- **changed the practice of cultural institutions** (E4–E7), principally through the restoration, preservation and digitisation of unique cultural artefacts;
- **changed cultural understanding of manuscript culture** by engaging a variety of stakeholders (visitors to museums, as evidenced in E1, and more generally through press reporting, E3) with the substance of manuscript culture both digitally and physically, and by challenging school-level (E2) and university-level students to counter stereotypes about medieval culture in general and manuscripts in particular; and,
- **fostered non-academic participation in aspects of digital cultural interactions** and digital literacy through crowdsourcing (E8).

1. Impacts on creativity, culture and society by changing manuscript preservation and access.

Collaboration with museum professionals resulted in enhancements to cultural heritage preservation through the restoration, exhibition and digitisation of 19 fourteenth-century manuscripts held in libraries in Madrid, Minnesota, Salamanca and Santander. In line with the project's focus on the materiality of manuscript culture, key heritage preservation actions were effected by a range of cultural actors, thereby **preserving cultural objects and widening access to them**. Each of the partners has the aim of advancing understanding of cultural heritage; the digitisation of unique cultural artefacts and the consequent facilitation of access to them outside the academic community therefore facilitated their public remit.

At the request of the Estoria project (R1, R2), and in advance of the exhibition, the fourteenth-century manuscript M-550 of the [Biblioteca de Menéndez Pelayo](#) in Santander was completely restored and rebound for the first time, at the [Instituto del Patrimonio Cultural de España](#) (E6, E7). Similarly, the 14 manuscripts displayed in the [Estoria Digital/Hallazgo del Pasado](#) exhibition at the [Biblioteca Nacional de España](#) were cleaned and prepared for exhibition, thereby guaranteeing their ongoing preservation (E4). Additionally, the medieval manuscripts 2022, 2628 and 2684 at the [Biblioteca Histórica de la Universidad de Salamanca](#) were, at the request of Ward, digitised and included in the physical exhibition held there in the first half of 2017 (E6). The University of Salamanca has a particular connection with Alfonso el Sabio, as it was the first ever institution to be accorded the title of 'university' when its royal charter was granted by the king in 1254. The digitisation of the manuscripts, which includes the provision of full metadata and digital markers, has allowed them to be seen and read by a wider public for the first time. To date, the images of the manuscripts, which had only ever been accessible to very small numbers of visitors to the library, have been downloaded 352, 147 and 125 times respectively. Finally, manuscript Z946.02/fC881 at the [James Ford Bell library of the University of Minnesota](#) was digitised at the request of the project and is now fully available to the public in this medium. This is an especially important act of preservation, given the fragmentary and delicate state of the codex. The project therefore guaranteed the preservation of unique cultural artefacts and facilitated future access to them by a range of non-academic stakeholders.

2. Enhanced cultural understanding by transforming public understanding of medieval manuscript culture in Spain internationally and across generations.

By facilitating engagement with medieval manuscripts and breaching the mystique of otherwise impenetrable materials, the project was able to create a new understanding of the past and of the means by which we access it (R1, R5, R6). Emerging organically from the digital nature of the [Estoria Digital](#) project, simultaneous exhibitions of medieval manuscripts of the *Estoria* and related texts were held at the [Biblioteca Nacional de España](#), the Universidad de Salamanca, the Biblioteca de Menéndez Pelayo (Santander) and the University of Minnesota between January and April 2017. The physical exhibitions were accompanied by a [digital exhibition](#)

produced in collaboration with the University of Sheffield's Humanities Research Institute (HRI). The *physical and virtual exhibitions* engaged a range of stakeholders. (i) At the Biblioteca Nacional, visitors from over 34 countries ranging in age from seven years old to 97 were among the 2,200 who signed the visitors' book. A typical comment was that the visitor had "[...] loved [...] the exhibition which reminds us of the importance of written expression and the diverse forms it has taken over the centuries." Amongst the 208 who filled in questionnaires, 90% expressed a positive view of the exhibition and 80% indicated an increased knowledge and understanding of the period and the text. Further feedback demonstrated **significant transformation of public understanding** through engagement with and appreciation of manuscript culture and the history of the book. Qualitative and quantitative written and digital feedback from the exhibition visitors (E1) covered a wide range of areas and indicated **significant alteration in the views of manuscript culture** on the part of visitors; e.g., "It gives a better material vision of the importance of our history", "I am interested [in consulting the digital exhibition] the exhibition has motivated me to do so and I have more time at home", "it is incredible that the combination of manuscripts can be accessed" and "that these manuscripts are compiled from parts of others is something new for me"(E1). The Biblioteca Nacional de España (BNE) exhibition space has a national and international footfall of 10,000 visitors per month and, to complement the exhibition, *a series of workshops* (on medieval music, book binding and illumination) were arranged to engage the public actively. Additionally, members of the Estoria Digital team conducted *regular guided visits* in the exhibition and 9,000 printed copies of the catalogue were produced by the BNE for distribution in the exhibition, in English and Spanish. (ii) The [exhibition at the Cielo de Salamanca](#) at the Universidad de Salamanca was one of the opening events of the celebrations of the 800th anniversary of its founding and generated similar feedback (E1, "It was wonderful to see the different hands, to realise the continuous effort to transfer knowledge"). (iii) The exhibition in Santander was visited by multiple schools in the city and its surroundings; as a result of the initiative, and in order to disseminate the results of the research to a wider audience, the Biblioteca de Menéndez Pelayo produced a printed catalogue of the manuscripts and a report on their significance.

The launch of the exhibitions in Spain over three consecutive days was covered by reports on the national and regional television news programmes RTVE *telenoticias* (31.1.17 and 2.2.17) and press, including *ABC*, *La Vanguardia*, *La Razón*, *La Libertad Digital*, *El Diario Montañés*, *La Gaceta de Salamanca*, *El Norte de Castilla* ("The university of Salamanca gives the green light to a better understanding of the medieval history of the university and of Spain") and in a report by the culture correspondent of *El Mundo*, which describes the exhibition as clearing up the confusion that surrounds the *Estoria*, "Crucial work for understanding medieval Spanish literature" (E3). Details of the exhibitions at [Madrid](#) and [Salamanca](#) and the videos to accompany them are also available in YouTube films: [Madrid](#), [Salamanca](#). The reach of the impact is indicated by unique hits: the digital exhibition has been accessed by over 6,000 unique users from 85 countries.

Further enhancement of cultural understanding was brought about in the educational sphere. In collaboration with the HRI in Sheffield, the Estoria Digital project constructed a range of [teaching materials](#) relating to Alfonso X, the *Estoria* and medieval culture. These were employed by team members in four Spanish schools in 2017 and have also been employed in the Universidad de Alcalá de Henares, Georgetown University and the University of Birmingham, and additionally in outreach activities at the Universidad de Alcalá since 2018. Feedback (E2) was elicited from staff and students in all of the classes (some of which had the opportunity to visit the physical exhibitions); this indicated a **change in attitude** to the significance of medieval history, the Alfonsine project and manuscript culture (R1, R2, R4). Many students reported that they had previously thought of the period as a "dark age" but that after the exhibition they "saw it differently, thanks to this project [...] the work they have done". All of the teachers reported greater interest in the subject matter by virtue of the digital format ("students are more accustomed to this medium") and several stated they would build these materials into future classes, whilst some students said they would pursue the topic further outside of school. Of 113 students, 90% were positive or very positive about the materials and classes, citing the digital medium and the practical format of the sessions as key reasons for this. The digital version was,

they described, “more interactive and enjoyable,” “easier to remember and more interesting” because “with digital support [...] you get a better idea of the life of Alfonso”, and can better understand “how a manuscript is created.”

3. Changed participation by fostering non-academic participation in aspects of digital cultural interactions and digital literacy through crowdsourcing.

The digital transcription methodology **engaged a broad public** in the transcription of medieval manuscripts and thereby **transformed knowledge and understanding of medieval history and manuscripts** and **enhanced skills** by facilitating guided digital access to primary texts. The original research project initially employed (and helped to develop) the [Textual Communities](#) editing tool. This was used to engage non-academic audiences in crowdsourcing transcriptions for which project members designed a publicly available [xml training course](#). An additional proof of concept crowdsourcing tool, the digital [Transcriptorium](#) (developed in conjunction with the HRI), was put in place for the digital exhibitions to gauge interest in what would be the first large-scale attempt at crowdsourcing in the Spanish-speaking world for transcriptions of medieval Peninsular manuscripts (R3, R6). The crowdsourcing of the research project led some of those involved to partake in MOOCs, academic conferences and Masters programmes. Building on all of these, an open digital transcription platform [transcribeestoria](#) was built at the University of Birmingham in summer 2019. Elsewhere, crowdsourcing has been focused on what citizen scientists could provide for scholars, but [transcribeestoria](#) takes a different approach; one which allows members of the public to access the manuscripts and build skills (R1, R3). This platform, accompanied by the exhibition and training materials, was used in 2019–20 to engage 301 members of the public in transcribing medieval manuscripts over a ten-week project period. Participants were recruited virtually through social media and in person by a research fellow. Digital training in palaeography and digital skills more generally was provided including via a YouTube channel which has had over 600 unique visitors. 419 unique complete transcriptions were saved in the ten-week period. Additionally, there were approximately 32,000 Twitter impressions and transcribers contributed to discussions on Facebook (780 followers) and in the project blog, which had over 4,400 individual page hits. Impact was evidenced by baseline questionnaires completed by transcribers before and after transcribing (E8). Transcribers ranged in age and educational attainment from primary school children to over 65s, with particular interest shown by those in the 18–35 age bracket. Initially, transcribers reported good digital skills but lower knowledge and understanding of medieval texts and textuality. The closing questionnaire reported that over 80% had improved in all of these areas. The crowdsourcing project has thus been a key tool for extending public participation. Additionally, those who wish to continue transcribing beyond the limits of the project also have the option to do this and thereby contribute to the ongoing research and impact. All of the materials and resources continue to be freely available.

5. Sources to corroborate the impact

- E1. Feedback from exhibition questionnaires;
- E2. Feedback from teaching questionnaires;
- E3. Newspapers, television coverage, Salamanca webcast;
- E4. Testimonial from the Biblioteca Nacional de España;
- E5. Testimonial from the Instituto del Patrimonio Cultural Español;
- E6. Testimonial from the Biblioteca Histórica de la Universidad de Salamanca;
- E7. Testimonial from the Biblioteca de Menéndez Pelayo;
- E8. Feedback from crowdsourcing: this takes the form of questionnaires for all users and ongoing bulletin board activity etc. to interact with those transcribing.