View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by Greenwich Academic Literature Archive

Citation: Davies, Rosamund, Jewell, Michael and Rissen, Paul (2013) *Adapting historical drama for the web: a model for metadata backed publishing of historical drama programmes.* In: NHT'13: Narrative and Hypertext at the ACM Hypertext Conference Proceedings. ACM Digital Library, pp. 1-4.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

Adapting Historical Drama for the Web: a model for metadata backed publishing of historical drama programmes

Rosamund Davies
Communication and Creative Arts
University of Greenwich,
London SE10 9LS
r.davies@gre.ac.uk

Paul Rissen
BBC
United Kingdom
paul.rissen@bbc.co.uk

Michael O. Jewell
Electronics and Computer Science
University of Southampton
United Kingdom, SO17 1BJ
moj@ecs.soton.ac.uk

ABSTRACT
In this paper we describe how creative writing techniques were used to develop a non-linear model of narrative structure for historical drama and how an ontology was developed to facilitate publishing it on the web as transmedia content.

Author Keywords
Narrative; Transmedia; Linked Data; Modeling

ACM Classification Keywords
H.1.0 Models and Principles, General

H.5.4 Hypertext / Hypermedia

General Terms
Design, Theory.

INTRODUCTION

In recent years, a range of different terms have emerged to refer to mutually dependent developments in storytelling and media distribution across different platforms. The term 'transmedia storytelling,' popularized by Jenkins [3] is often used to describe both web driven, highly fragmented narratives, demanding a high level of audience participation, and Hollywood franchises, such as *Star Wars*, or *The Matrix*, of which the story universe spans films, books and games and fandom [10].

Terms such as 'cross-media' and 'multiplatform' are more often found in broadcasting and cover a multitude of approaches from a basic website and twitter feed to accompany a programme to more developed online fictional content, such as character blogs, games and specially designed apps for second screen viewing.

Jenkins describes *transmedia storytelling* as 'a process where integral elements of a fiction get *dispersed systematically across multiple delivery channels*…to create *a unified and coordinated entertainment experience*' [3], while *cross-media storytelling* has been described as 'the same program re-edited for different screens' [2] but which, unlike transmedia storytelling, does not attempt to immerse the audience in a story universe which 'becomes invasive and permeates fully the audience's lifestyle' [2]. In this interpretation, cross-media focuses on the first element in Jenkins' definition, rather than the second.

Both forms of storytelling can take many guises, which may not involve hypertext. However, they most typically feature a web based element.

In our previous work, we developed an ontology to facilitate flexible and creative cross-media content, using the BBC drama series *Doctor Who* as a case study [1, 13]. Building on this work, our current project is to investigate an approach, which is closer to transmedia storytelling, in the sense that, as well as facilitating the re-purposing, re-editing and re-organising of a single narrative across different platforms, it also seeks to facilitate the viewer's immersion in a whole universe of stories, in which fact and fiction collide.

PREVIOUS WORK – THE BBC STORIES PROJECT

This project aimed to develop a domain model, compatible with the BBC's metadata backed publishing platform, which could facilitate greater integration between the organization's web and broadcast content, thus opening up new possibilities in cross-media programming.

At the core of this work was the Stories Ontology [8], designed specifically for the project. This ontology was developed as a collaborative effort with the BBC, with the aim of creating a model for narrative representation that could be applied across a diverse set of cases. These included accounts of events in Northern Ireland, the storylines of *Doctor Who* episodes, and key events of the Battle of Britain.

The Stories Ontology draws on original work by the authors on the OntoMedia ontology.([4]). The latter was conceived

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.
NHT'13, May 1, 2013, Paris, France.
Copyright 2013 ACM 978-1-4503-2005-4/13/05... $15.00

as a means for the representation of heterogeneous media, and took inspiration from the ABC Ontology [11] and the CIDOC Conceptual Reference Model (CRM) [12]. The ABC Ontology was designed primarily for the cataloguing community, with a focus on information representation. OntoMedia shares its separation of entity and temporal classes, but adds in comprehensive fictional elements. The CIDOC CRM was created for cultural heritage data: the top-level structures of this map closely onto OntoMedia, but the latter's scope is directed more towards textual fiction and film.

While the OntoMedia ontology has a comprehensive collection of classes for fictional representation, it lends itself more to the annotation of existing works, much like the ABC Ontology and the CIDOC CRM: it is simpler to 'label' sections of media with the more specialized classes. Under the Stories project, we sought an approach that would allow for the creation of narrative annotations alongside the production of the media, with minimal work needed by an author to create an initial high-level representation of a narrative. Furthermore, OntoMedia was created prior to several ontologies that provide some aspects of its data model, many of which are now accepted and well-used by both the Semantic Web community and the BBC.

As such the Stories ontology was created, both as a distillation of the original OntoMedia ontology and as a layer on top of existing work. It makes use of the Event [5] and Timeline [6] ontologies for its temporal representation: the former allows for the description of an event, together with participating people and produced entities, while the latter provides for the placement of Events into Intervals on a timeline. The Stories Ontology also uses FOAF (Friend of a Friend) [6] for the description of people and groups, and GeoNames[1] for the representation of geographical locations by features, GPS positions, postal code, or various other methods.

By building on top of these ontologies, it is straightforward to reference other resources that make use of the same representations. For example, dbPedia[2] provides a structured version of Wikipedia that conforms to documented ontologies and is thus machine-readable, with information provided by both the public and by automatic extraction. For a person, this includes data of birth, birthplace, nationality, depiction, and much more. Henry Jenkins is defined in dbPedia as a foaf:Person, and thus has all of this data available. GeoNames also provides references back to dbPedia: their entry for Southampton contains an 'rdfs:seeAlso' to the relevant dbPedia resource as well as nearby features, population information, and location data.

The main focus of the Stories Project was what might be called intratextual, in that it explored the potential for different elements within the text of a television series, such as *Doctor Who,* to be combined in different ways. For example, a viewer could browse all occasions that the character River Song had been in the show, or view a narrative built around the origins of the Daleks, with key events (their origin, evolution, etc) curated by an editor.

However the use of existing ontologies within the Stories ontology also opens up the possibility of intertextual relationships between the story elements and external linked data. A documentary with non-fictional people could make use of the FOAF ontology to refer to them in other repositories, such as dbPedia (this does not provide for characters *based on* that person, however). Alternatively, if it is known that an event within the piece took place during a certain time period, this can be queried in other repositories to see what other events occurred at that time.

One particularly fruitful possibility appeared to be offered by episodes of *Doctor Who* set in particularly historical time periods, such as World War II or Ancient Pompeii. Audience experience could be enriched by the possibility of access to data relating to these historical events. For example the character of Winston Churchill appears in *Victory of the Daleks* and could give the means for a viewer to navigate from an episode to resources about the real person, were there a link between the character and the person. These links are not possible in the Stories Ontology as it stands, though we suggest an approach later in this paper. Alternatively, *The Fires Of Pompeii* takes place before and during the eruption of Mount Vesuvius, and includes the character Lucius Caecilius Iucundus: external links can take viewers to both classics resources and geographical resources.

The value of such an approach is backed up by research, which found that search traffic on the search term 'Pompeii' reached an annual peak after transmission of *The Fires of Pompeii* [1].

The fact that audiences are interested in the wider context of historical dramas, beyond the immediate plot of the drama itself, is further confirmed by the recent German/British TV co-production, *The Sinking of the Laconia* (2011), dealing with the sinking of the ocean liner RMS Laconia by a German U-boat. Online discussion groups, linked to the drama, prompted extensive discussion and debate over the role of these events in German and British cultural memory. These examples suggest there is clear benefit to be obtained in finding new ways for future programming to integrate historical drama with relevant historical sources, archives and personal and community experience. Our current research is therefore focussed on exploring this possibility.

[1] http://www.geonames.org/ontology/

[2] http://www.dbpedia.org/

METHODOLOGY

There were two aspects to this research. First, creative writing techniques were used to develop a non-linear model of narrative structure for historical drama, which was flexible enough to accommodate a wide range of data in a wide range of combinations. Second, the Stories Ontology was expanded and adapted to model this narrative structure.

NARRATIVE STRUCTURE

The starting point for the narrative structure was a treatment for a three part historical thriller romance, *100 Sidney Street,* written by Rosamund Davies. Set amongst suffragettes, anarchists and spies in Edwardian London, the story involves two characters based on real people, Latvian anarchist Peter the Painter and British Spymaster and founder of MI5, William Melville. It is also based on real events, the most famous of which is the Siege of Sidney Street, which pitted anarchists against the British constabulary and army. Not only does the story reference specific people and events, but it is set in London's East End and involves both the womens' suffrage and anarchist movements, in relation to which extensive historical records and archive material exist in digital form. Thus, as well as the linear story, which might form the basis of a television programme, there is also scope for introducing viewers to a much wider story universe. They might for example be able to read about the history of the anarchist movement, look at photos of life in the East End, read letters written from prison by suffragettes or watch the Pathé footage of the real life Siege of Sidney Street.

A non-linear narrative structure was therefore devised, which consists of a series of story strands, each of which represents a possible starting point for exploring the story universe. There is a story strand for each of the main characters and story strands representing key story worlds within which the action unfolds. These story worlds might be actual places, such as The East End, or they might be themes, such as Votes for Women. Each story world opens up further story strands. For example the story world 'East End Tales' includes the story strands 'Sidney Street' (all material relating to the Siege of Sidney Street) and 'Immigration', as well as all the scenes from the TV programme, which are set in the East End. The story strand 'Melville's story' includes dramatic scenes involving the character of Melville from the TV programme, as well as the story strand 'The Spymaster' relating to the real man William Melville and the story strand 'Sidney Street'.

This allows for historical sources, usually confined to the research and development process of the writer, to be included in the story presented to the audience.

ONTOLOGY

Taking the suggested narrative paths of the Sidney Street project into account, we can see three main requirements emerge for additions to the Stories ontology. The first is to support the linking of distinct, modeled events, to primary sources. The second is to connect fictional constructs, be they events, characters or other elements, to their real-life inspirations or counterparts: the Stories Ontology does not provide for the representation of characters based on real-world people. The third is to allow a wider definition of a Story, to encompass not just a main narrative of events, but a more evocative snapshot of the world in which the main narrative is set.

In order to describe the primary sources used in the creation of a narrative, we made use of the PROV Ontology, which allows for the representation of provenance. Provenance is information about entities, activities, and people involved in producing a piece of data or thing [9] and the PROV Family of Documents provides, amongst others, a model and corresponding serializations. This is ideal for our purposes, as the linking of a dramatic storyline to historical sources could be likened to modeling the provenance of a story - from the eventual creation of the final artifact back to its inception - with relevant activities and inspiring items recorded along the way.

We use PROV to describe the creative process and thus associate a narrative, and its sub-elements, with the artifacts involved in their creation. The process of writing a scene of a show can be described as a PROV Activity, with the activity associated with the author, using a set of artifacts (photographs, videos, other stories, etc), and producing others (versions of scripts, notes, storyboards, etc). There may be several such activities, such as researching at museums, location scouting, etc, that inform the writing process when it occurs. As such, a simple approach can be applied (the Story was created as a result of an Activity, which used some specific sources), or a complex one (the Story was created after a number of other Activities which made use of other artifacts). The level of detail can be tailored depending on the requirements from the data. In the case of Figure 1, we relate the creation of the story of Melville to two entities (though this is just a representative subset), and was associated with Rosamund Davies.

It is also valuable to indicate when a character, event, or location is inspired or based on another. The PROV Ontology again provides for this: the wasDerivedFrom predicate can link from the inspired item to the inspiring item. For example, the character Winston Churchill in Doctor Who can be described as being derived from the actual person. We believe there may be scope to provide subproperties of this predicate at a later stage: a 'wasBasedOn' predicate, whereby an element serves as a representation of another, is subtly different from a 'wasInspiredBy' predicate, where an element might resemble the other. Figure 2 shows an example of this in *100 Sidney Street*, with the character Melville shown as being derived from 'The Spymaster', William Melville.

Finally, we created a StoryWorld class as an addition to the Stories Ontology. A StoryWorld is a collection of Stories, thus allowing for a grouping under a single context.

Combined with the sequence of events within a single Story and the PROV ontology indicating the entities involved in its creation, this allows for an aggregation of the sub-stories and the items involved in the authorship. The StoryWorld is the only alteration to the Stories Ontology, with the rest of our required functionality achieved by the use of existing ontologies.

These three new approaches combine to form a valuable whole. Take, for example, an episode of a TV show that refers to factual events. By placing the Story of that episode into a StoryWorld, it is now possible to obtain the set of artifacts that inspired the series as a whole: a novel binding of the fictional and factual is possible.

EXAMPLES

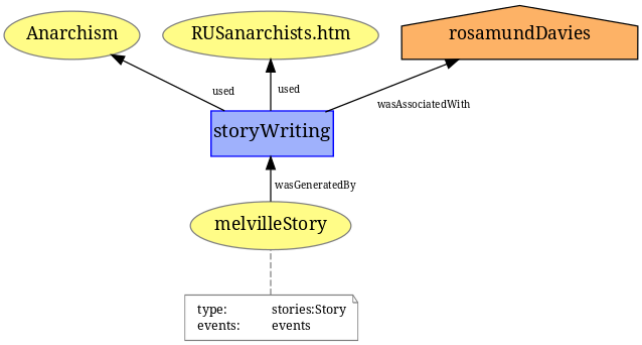

Figure 1. The process of writing the story of Melville, making use of the concept of Anarchism and an online resource, and associated with Rosamund Davies (the author of the piece). Entities are shown as yellow ellipses, agents as orange `houses', and activities as blue rectangles.

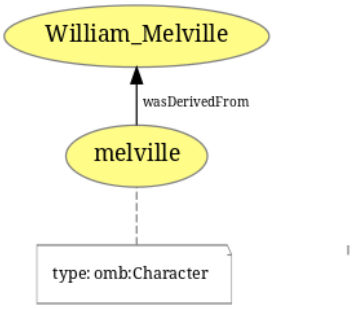

Figure 2. An example of using the wasDerivedFrom predicate to indicate that the character Melville was derived from the actual person, William Melville.

CONCLUSION

As part of the process of researching and writing a historical drama, extensive archive resources are drawn upon. We propose that there is great potential for much of this research to be made available to the audience as part of the wider universe of the story. During the writing process this material would be structured into the script as part of a story web, within which the linear storyline of the TV series would be one pathway, but which would also feature many other interlinking strands. If the PROV/Stories ontology was used by the writer to annotate the story structure as part of the writing and development process, it would then be possible for the transmedia elements to be compiled and produced by a transmedia production team, along with the production of the television programme elements, using the same script.

ACKNOWLEDGEMENTS

This research is funded in part by the EPSRC and AHRC PATINA project through the RCUK Digital Economy programme (EP/H042806/1), and in part by the EU DESIRE network.

REFERENCES

1. T. Harris. Digital Narratives at the BBC, 2010. http://qmat.net/2011/10/digital-narratives-at-the-bbc
2. N. Iacobacci. Lunch over IP: from crossmedia to transmedia: thoughts on the future of entertainment. http://www.lunchoverip.com/2008/05/from-crossmedia.html
3. H. Jenkins. Confessions of an Aca Fan. www.henryjenkins.org
4. M. O. Jewell, K. F. Lawrence, M. M. Tuffield, A. Prugel-Bennett, D. Millard, M. S. Nixon, m. c. schraefel, and N. R. Shadbolt. OntoMedia: An Ontology for the Representation of Heterogeneous Media. In, Multimedia Information Retrieval Workshop (MMIR 2005) SIGIR, ACM SIGIR.
5. Y. Raimond and S. Abdallah. The Event Ontology, 2007. http://motools.sf.net/event/
6. Y. Raimond and S. Abdallah, The Timeline Ontology, 2007. http://motools.sf.net/timeline/
7. D. Brickley and L. Miller. FOAF Vocabulary Specification 0.97. Namespace Document, January 2010.
8. M. O. Jewell. Semantic Screenplays: Preparing TEI for Linked Data. *Proc. Of Digital Humanities* 2010

9. L. Moreau, P. Missier (eds.), K. Belhajjame, S. Cresswell, R. Golden, P. Groth, G. Klyne, J. McCusker, S. Miles, J. Myers, and S. Sahoo. The PROV Data Model and Abstract Syntax Notation. W3C first public working draft, World Wide Web Consortium, October 2011.
10. A. Phillips. *A Creator's Guide to Transmedia Storytelling*. London/N.Y McGraw-Hill 2012
11. C. Lagoze and J. Hunter. The ABC Ontology and Model. *Journal of Digital Information*, 2(2), November 2001.
12. M. Doerr, J. Hunter, and C. Lagoze. Towards a core ontology for information integration. *Journal of Digital Information*, 4(1), April 2003.
13. P. Rissen and K. F. Lawrence. Re-imagining the Creative and Cultural Output of the BBC with the Semantic Web. *Proc. Of Digital Humanities* 2010