

Utrecht University
New Media Studies | Master's Thesis

MOVING BEYOND UTOPIA/DYSTOPIA: EUscreenXL AS PARTICIPATORY ARCHIVE

Name	Rianne de Neef
Student Number	3399168
Master	New Media and Digital Culture
Supervisors	Dr. Ann-Sophie Lehmann Prof. Dr. Eggo Müller
Date	August 2013

Certainly global access to all the wonderful things that we will be creating is a noble goal, but unless we can demonstrate that millions will demand our content, demand new content and demand new functionality from our content (...) we will remain a quaint curiosity. Likewise, unless our worlds become more sophisticated, globally accessible, easily navigable, and linked to multiple databases (...) we will not gain attention, the funding nor the credibility we need to build large libraries – D. Sanders quoted in Geser and Pereira 2004: 53.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

Please visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> to see this license.

ABSTRACT

This thesis examines how EUscreenXL, an online portal that makes Europe's audio-visual heritage accessible, could reach the potential users of the archive and create a participatory environment. In the first chapter, I briefly discuss the history of online archives for television. The second chapter of my thesis outlines and critically analyses the current academic discourse surrounding participation in the context of online archival practices. Using Eggo Müller's concept of "formatted spaces" (2009), I examine both the interactive environment and the technological set-up of EUscreen – the predecessor of EUscreenXL – in order to understand how participation gets shape and is shaped on the portal and its accompanying functionalities. In the third chapter, I use Mirko Tobias Schäfer's distinction between "explicit participation" and "implicit participation" (2011) to analyse what roles users and institutions (unwittingly) take on and how this ideology is reflected in the design of EUscreen's user interface. The last chapter looks at the follow-up EUscreenXL and proposes best practices for the design of participatory applications that enable users to effectively contribute to and work with the content of the archive. My thesis argues that EUscreenXL could achieve its goal to involve users and create a participatory environment better by implementing user-led activities into the design of EUscreenXL's user interface. This allows EUscreenXL's end-users to contribute to the archive, while EUscreenXL is at the same time able to prevent appropriation of technology and/or content in ways unintended by the partner institutions. I call this type of participation 'reciprocal participation', which emphasises the mutual benefit for both the EUscreenXL end-users and the partner archives.

Keywords: Media Studies, Participatory Culture, Participatory Archive, Cultural Heritage, EUscreen.

ACKNOWLEDGEMENTS

I would like to thank my family and friends for their support throughout the writing process of this thesis. In particular, I would like to thank my parents, Wim and Corrine de Neef, for always being there, even in difficult times, and helping me push through. I would also like to thank Gaby van der Hout for listening to my incoherent drivel and Naomi Vink for much-needed relaxation during deliciously cooked meals. Furthermore, I would like to thank Sophia Booij for her helpful feedback on the first draft, and dr. John Ashley Burgoyne for his valuable feedback on the second. Finally, I would like to express my gratitude to my supervisor, dr. Ann-Sophie Lehmann, for her patience, guidance and invaluable help during the entire process of writing this thesis.

TABLE OF CONTENTS

INTRODUCTION	6
1. THE HISTORY OF ONLINE EUROPEAN TELEVISION ARCHIVES.....	11
2. EUscreen AS FORMATTED SPACE OF PARTICIPATION.....	13
2.1 Predefinition of EUscreen.....	14
Technological Predefinition: Interoperability.....	15
Social Predefinition: Target Groups	16
Juridical Predefinition: Intellectual Property Rights	18
Concluding Remarks: Pre-Formatting EUscreen	19
2.2 Redefinition of EUscreen: A Critical Analysis.....	21
Content Selection Policy.....	21
Thumbnails: Images as Interface	24
Archival Descriptions	26
Virtual Exhibitions.....	28
Social Media Implementation: Facebook and Wikipedia.....	29
Open Content Portal: Creative Re-Use.....	30
View: Journal of European Television History and Culture.....	31
User Voice: Providing Feedback	32
Concluding Remarks: Re-Formatting EUscreen	33
3. CHANNELLING PARTICIPATION.....	36
3.1 Explicit and Implicit Participation.....	37
3.1 EUscreenXL: Reciprocal Participation.....	40
4. EXPLORING PARTICIPATORY ARCHIVES	41
4.1 Participatory Archive Options	42
4.2 Participatory Archive Models.....	44
CONCLUSION.....	48
FIGURES AND TABLE	50
BIBLIOGRAPHY.....	51

INTRODUCTION

In the past decade, audio-visual heritage institutions have started to create and archive digital replicas of physical archival objects and their corresponding information. Most organisations provide online access to these digitised reproductions through institutional webpages in order to attract a wider range of audiences. Nonetheless, access to and particularly use of audio-visual heritage material on the trans-European level remains scattered. Funded by the European Commission, Video Active was the first initiative that aimed at supporting interactive and comparative access to the hitherto inaccessible television material held by archives throughout Europe.¹ Sonja de Leeuw, professor of Theatre Film and Television Studies at Utrecht University, argues that a focus on providing access is not enough. Technological advances and growing user expectations necessitate increasing audience involvement through user-led contribution and production of meaning in order to remain relevant (2012a: 6).

Involving end-users in the meaning-making process marks a shift in archival practice. Cultural heritage institutions have traditionally held authority to act as gatekeepers of knowledge in European societies. Through transparent methods of appraising, describing and organising archival records, these organisations guarantee meaningful document retrieval and use by professionals. By determining which items are worth collecting and preserving, and – in the case of libraries and museums – exhibiting, these institutions have also defined what history is to be forgotten and what is to be remembered. Cultural heritage institutions thus play a major part in shaping cultural-historical memory and the foundations of European identity. Archival scholars have noted, however, that archival practice is biased by institutional ideas of relevance and importance and that archival records are inherently polysemic, that is, they can be interpreted in multiple ways (Cameron and Robinson 2007: 171).² In addition, studies have shown that audiences cannot always identify with the cultural and historical perspective provided by ‘all-knowing’ heritage institutions and feel like they, too, could contribute to cultural heritage (e.g. Hazan 2007). Moreover, the archive’s

¹ In this thesis archives are understood as the repositories held by audio-visual institutions – such as libraries, museums, knowledge institutions and archival holdings – that aim at providing online access to their digitised archived content for the general public.

² These ideas are inspired by Derrida’s post-modern ‘Archive Fever’, which discusses the socially constructed nature of records and the archive’s role in modern society (Cook 2001: 14-35).

authoritative role is challenged by the proliferation of digital technologies and the Internet. Media scholar Wolfgang Ernst states that digitisation transforms static archival records and their corresponding information into dynamic code, facilitating constantly changeable interlinking (2013). In an online environment, the dynamic nature of records can be used to enable contributions by volunteers. Accordingly, research and development project worker Lotte Belice Baltussen argues that the advent of Web 2.0 technologies, in combination with the assumed ability to interactively access all information, complements the main ‘pillars’ of the archival profession – appraisal and arrangement/description – with a third pillar, namely access/influence by the public (2010: 10).³ It is within this context that the notion of a ‘participatory archive’ arises.

Participatory archiving involves harnessing the collective knowledge of volunteers in order to improve or complement existing online archival collections (Huvila 2008). The concept draws upon recent trends toward participatory museums and libraries, as well as the general notion of ‘participatory culture’. Media scholar Henry Jenkins introduced the concept of participatory culture to describe the presumed new role users have obtained in the context of online cultural production: rather than passively consuming pre-fabricated media content, individuals are increasingly enabled to work collaboratively and to create and disseminate media content and cultural knowledge that is personally meaningful to them (1992, 2006a, 2006b and Jenkins et al. 2006).⁴ From the early 1990s to the bursting of the Dot-com bubble, the discourse surrounding participatory culture assumed the circumvention of governmental organisations and free access to knowledge through technological advances. The dialogue has changed, however, due to the coming of the more social, dynamic and interactive ‘Web 2.0’. The current rhetoric emphasises equality, collective production and collaborative knowledge creation by using advanced technologies correctly

³ Archival theory does not, according to Baltussen, consider access and influence by the public until the coming of post-modern and other contemporary archival theories, and even then seems to underexpose the possibilities of digital technologies and the Internet (2010: 10). Hence, Baltussen stresses the importance of including a third pillar that focuses on contemporary cultural, social and technological alterations. Within this context, the new ‘Living Archive’ paradigm highlights an archive that is – like its practice and theory – always in transition (2010: 14). Similarly, Eivind Røssaak, associate professor of Film and Media Studies, states that the concept of the ‘archive’ has changed from an archive of motion to an archive in motion (2011).

⁴ Participatory culture is not a new phenomenon; in the pre-digital age, amateurs were also actively creating and distributing their own cultural products (Giaccardi 2012: 3). Yet, the rise of the internet in the 1990s and more recently ‘Web 2.0’ have come to play a major part in its extension.

(Schäfer 2011: 27). Similarly, participatory archives are celebrated as a means for archive users to actively co-create a more balanced, transparent and democratic knowledge environment that reflects a variety of perspectives.

Examples such as the free encyclopaedia Wikipedia and the open source operating system Linux demonstrate that user participation can be an efficient and effective way to create or improve a product. Kate Theimer, author of the popular blog ArchivesNext, has stressed in her presentation ‘Participatory Archives: Something Old, Something New’ that heritage organisations increasingly expect this type of user involvement (2012). The potential of user participation should however not be overestimated, as Mirko Tobias Schäfer, assistant professor of Media and Culture Studies, has recently argued in his book *Bastard Culture! How User Participation Transforms Cultural Production* (2011). Schäfer points out that Jenkins’ understanding of participatory culture predominantly concerns intrinsically motivated user actions performed by dedicated fans, and yet participatory culture predominantly manifests itself in unaware and unintended user behaviour conducted on online information management systems to the benefit of the platform provider (2011: 44). Following this observation, audio-visual heritage institutions – which have a public role and are often funded with public money – that anticipate user participation must carefully examine how it can be appropriated.

Against this theoretical background of the potential of user participation for institutional archives, the three-year project EUscreen, founded in 2009 as the successor of Video Active and funded by the European Commission, will be discussed. EUscreen is a best-practice network for European audio-visual heritage that consists of a consortium of European broadcasters, heritage institutions, academic researchers and technical developers.⁵ It stimulates the implementation of specifications and standards for making digitised material more accessible and usable on European level. In order to present the project, EUscreen has established a project website that was launched in October 2011, following two years of research and development of use case scenarios, technology and

⁵ A best-practice network can be understood as an assembly of individuals, institutions or organisations that together research and develop techniques, processes, methods, activities and so on that are proven to be more effective than other approaches.

standards. This website provides access to EUScreen's audio-visual collections, as well as to other parts of its setup. The website is also referred to as 'portal' or 'archive'. 'Portal' denotes EUScreen's function as a unified platform on which information is available, while 'archive' is used to refer to (parts of) the database collections that are accessible on EUScreen (EUScreen 2009: 49). The partner institutions that author and manage this online archive acknowledge that volunteers have much to contribute to the project.⁶ Therefore, as stipulated in the formal 'Description of Work', EUScreen envisions to increase cross-cultural understanding through standardised access and to offer interactive options such as commenting, contributing and tagging media files in order to increase user involvement (EUScreen 2009: 48).⁷ Though the EUScreen project ended in 2012, the website is still online and EUScreen's successor, the three year-project EUScreenXL, has taken over EUScreen's aim to stimulate the use of the archive as well as to stimulate users to participate in the archiving process. This raises the question how EUScreenXL can reach the potential users of the archive and create a participatory environment.

My study has tried to describe and analyse the different ways in which a large European digitisation project like EUScreen, which anticipates user participation and is very advanced in its notion of what archive users could contribute, actually proceeds and succeeds. My thesis is organised as follows. In the first chapter, I briefly discuss the history of online archives for television because this provides insight into the European Commission's motivation for publishing audio-visual heritage and its requirements for audio-visual heritage projects. The second chapter of my thesis outlines and critically analyses the current academic discourse surrounding participation in the context of online archival practices. Because EUScreen's current setup forms the foundation for EUScreenXL, I have examined both its interactive environment and its technological set-up in order to understand how exactly participation gets shape and is shaped on the portal and its accompanying functionalities. Eggo Müller,

⁶ For everybody who contributes to EUScreen but is not professionally or institutionally connected to the archive, I will use the term 'volunteer'.

⁷ According to the guidelines of the European Commission, the 'Description of Work' or project proposal is attachment I to the Grant Agreement. This attachment describes the implementation process of the project regarding the "work packages, deliverables, milestones, resources and costs of the beneficiaries – organised in a table format – as well as a detailed narrative description of the work [part B of Annex I]" (2010: 3).

associate professor of Film and Television Studies and project coordinator of EUscreenXL, has argued that participation can be understood in relation to what he calls “formatted spaces” (2009: 51). I will come back to a proper explanation of this concept in chapter 2, subchapter 2.1 on page 14. For now, it is important to note that Müller’s concept helps me to analyse to what extent EUscreen users are participating and how these participatory practices are structured by social, economic, cultural and technological powers and conventions. In the third chapter, I use Schäfer’s distinction between “explicit participation” and “implicit participation” (2011: 11) – which I will explain in on page 37-39 – to analyse what roles users and institutions (unwittingly) take on and how this ideology is reflected in the design of EUscreen’s user interface. On the bases of this analysis of actual practices in EUscreen, I propose a solution for the design of EUscreenXL that allows user participation, while at the same time meeting the requirements of the European Commission and the single partner institutions. In order to understand how creating a participatory archive environment might work, the last chapter looks at the follow-up EUscreenXL and proposes best practices for the design of participatory applications that enable users to effectively contribute to and work with the content of the archive.

1. THE HISTORY OF ONLINE EUROPEAN TELEVISION ARCHIVES

In his article ‘Why Digitise Historical Television?’, John Ellis, professor of Media Arts at Royal Holloway University of London, states that in contemporary digital society, users store and retrieve audio-visual material at home; a process that began with the introduction of the VHS tape to the public at the beginning of the 1980s. Moreover, due to the omnipresence of online video portals and streaming options, the options for accessing recent programmes support the general presumption that older programmes must also be retrievable “somewhere” (Ellis 2012: 27). But it is not only the feeling of reminiscence that makes it appear worthwhile to publish archived television material.

Cultural heritage institutions, broadcasters, national governments and the European Commission are increasingly acknowledging that old televised material is still of interest to the public long after the original broadcast date. An increase of freely accessible online European television heritage would for instance enable academics to compare the technological, economic and cultural construction of television in a national context (Fickers and Johnson 2010: 4). In addition, the development of technologies and services for interacting with cultural heritage in innovative ways enables European businesses to place themselves at the centre by creating suitable technologies, platforms and services (European Commission 2011: 4). Moreover, as numerous media scholars have stressed, European archived audio-visual material comprises a fundamental feature of both historical knowledge and European cultural heritage. It provides insight into the impact of broadcasting on the formation of collective memory, society’s understanding of itself, and – taking into account the transnational nature of television – the construction of European identity (e.g. de Leeuw 2012a: 2-3; Bignell and Fickers 2008: 35). The European Commission has even argued in its recent report *The New Renaissance* that it is a moral obligation to preserve the basis of Europe’s civilisation:

“In a time when more and more cultural goods are consumed online, when screens and digital devices are becoming ubiquitous, it is crucial to bring culture online (...). If we don’t pursue this task, we run the risk of progressively eroding and losing what has been the foundation of European countries and civilization in the last centuries” (European Commission 2011: 9).

The European Parliament and the Council of Europe recognised the importance of creating access to Europe's televised history and culture for economic, informational, recreational and educational purposes as early as 2005. They decided to establish the *eContentplus* programme, "a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable, facilitating the creation and diffusion of information" (European Union 2005: L79/1).⁸ This four-year programme stimulated the creation of a trans-European infrastructure for online cultural heritage by supporting projects that develop best practices on multi-lingual and multi-cultural access to and use of digitised cultural heritage in online environments (European Union 2005: L79/6). Following this, the European Commission's Directorate-General for Information Society and Media – an expertise administration that manages the *eContentplus* programme – set out to promote the creation of a central access point for European online cultural heritage.⁹ This so-called European Digital Library should be accessible to all members of the European Union (European Commission 2009).¹⁰ The prototype of the European Digital Library was launched on November 20th 2008, funded by the European Commission's *eContentplus* programme.

According to cultural heritage researcher Seamus Ross, it is essential to support the creation of a central European library for digitised content. In his keynote speech at the 2007 European Conference on Digital Libraries, Ross argued that virtual libraries are taking on the role of traditional libraries as important agents in the production and transmission of scientific knowledge and culture (1-2). Therefore, virtual libraries need to ensure that this scientific and cultural legacy is passed on in a practical and reliable manner (2007: 6). Though the prototype of the European Digital Library was launched successfully, the absence of standards remained an obstacle to the expansion of the virtual library.

⁸ As described on the webpage of the European Commission, the *eContentplus* programme expired on December 31st 2008 but funding is continued under the Information and Communications Technologies Policy Support Programme (ICT PSP).

⁹ The Directorate-General for Information Society and Media supports the improvement and use of information and communication technologies to the advantage of Europe's citizens. On July 1st 2012, this Directorate-General was re-named Directorate-General for Communication Networks, Content and Technology.

¹⁰ The heads of France, Germany, Italy, Hungary, Spain and Poland provided their political approval for this initiative by sending a letter to José Manuel Durão Barroso, President of the European Commission (European Commission n.d.).

The lack of interoperable technological infrastructures, the complexity of intellectual property rights and the absence of standards for presentation and contextualisation of source material hindered the accessibility and usability of audio-visual heritage on trans-European level.¹¹ Accordingly, the Directorate-General called for project proposals that would support the visibility and accessibility of Europe's cultural heritage for all European citizens through the development of technological, juridical and informational standards. Proposed projects were also required to contribute content to Europeana – the European Digital Library's gateway¹² – and to place their future users at the centre of their approach by developing multi-lingual and multi-cultural services for leisure, education and research (European Commission 2008: 12).

As the second chapter shows, participating in the *eContentplus*-funded EUscreen project enabled universities, broadcasters and audio-visual heritage institutions to contribute to finding practical and reliable solutions to the issues addressed in the call for proposals. These issues also changed the structure of EUscreen's space of participation.

2. EUscreen AS FORMATTED SPACE OF PARTICIPATION

EUscreen's setup consists of an online repository – euscreen.eu – that contains digitised photographs, documents, sound recordings and audio-visual material relating to the history of European television and the history of Europe as shown on television. This online repository, or platform, also includes links to other aspects of EUscreen setup, such as the project's weblog, academic journal and virtual exhibits. Additionally, EUscreen manages pages on Wikipedia and Facebook, as well as a Twitter account. Through this online project, the EUscreen consortium aims at providing common access to more than a hundred diverse collections held by twenty audio-visual heritage institutions across Europe. Thereby, EUscreen opens up Europe's televised history and culture for different user groups such as scholars, students and the general public.

¹¹ Interoperability refers to the ability of different systems to work together.

¹² Content is not stored on a central server hosted by the Europeana Foundation but is instead hosted by partner projects that are directly connected to Europeana. Europeana thus acts as an entryway rather than a repository.

The interesting thing about this case is that the context of EUScreen already offers a very clear format and a large consortium has decided that it will include some degree of user participation. Participation is thus institutionalised, in that it becomes an aspect of a structured and well-established consortium (Schäfer 2011: 77). As the discussion of EUScreen will show, participation is also strongly ‘formatted’ by the consortium.

2.1 Predefinition of EUScreen

In his article ‘Formatted Spaces of Participation: Interactive television and the changing relationship between production and consumption’, Eggo Müller argues that participation can be comprehended in relation to what he calls “formatted spaces”. Such spaces are culturally determined. The following example clarifies this: The video-sharing website YouTube is generally perceived as a space that is free of the usual restrictions of television such as broadcast time and date; it offers interactivity, instant access and social networking and allows both modifying and uploading clips (Prelinger 2009). Müller has observed, however, in his historically comparative analysis of different types of interactive television, that the majority of YouTube users employ the service as a means to watch “traditional television, as ‘consumers’ of a ‘tube of plenty’” (Müller 2009: 57). In addition, advertisements and concepts such as ‘channels’ – which structure the way video files are organised, distributed and watched – reflect practices that are characteristic of commercial broadcast television (2009: 56, 58). Consequently, institutions and users structure YouTube exactly according to the restrictions of traditional broadcast television, although the television format becomes adapted to YouTube’s cultural space. Müller argues that the concept of “formatting” presents a way to understand this process, because it refers to a characteristic tension between what Müller calls “the predefinition by conceptual structures and the redefinition by practices” (2009: 51). The ‘predefinition’ can be understood as the intended setup, while the ‘redefinition’ describes the setup that is eventually applied in practice. In the case of EUScreen, the ‘predefinition’ is dictated by the requirements of the European Commission and the EUScreen consortium among other powers and conventions, as described in the ‘Description of Work’ (2009) of EUScreen. The ‘redefinition’ relates to the eventual setup of EUScreen that has been online from October 2011.

Before I take a closer look at the actual outcome of EUScreen, I will first describe some aspects of EUScreen's predefinition. These issues regarding publishing European audio-visual material on a centralised portal – in addition to the requirement of the European Commission – directly and indirectly affect what is and is not possible within EUScreen's space of participation.

Technological Predefinition: Interoperability

The aim of the EUScreen project is “to stimulate the use of television archive content for the widest range of European user constituencies and communities and thus to advance active engagement with the cultural memory of Europe both at a national and a European level” (EUScreen 2009: 4). To realise this interoperable and freely accessible online collection of digitised European audio-visual material, it is necessary to work with metadata. Metadata can be understood as structured information about resources. This information provides evidentiary status to items because it explains something about the historical meaning of archived material (Noordegraaf 2012: 110). EUScreen must link this metadata with (visual) material from EUScreen's content providers – broadcasters, archives, museums and libraries – by developing interoperable technology and metadata standards. This brings us to the heart of a central problem of EUScreen and the struggle for standards. Within the EUScreen project, the capability and motivation to digitise audio-visual collections differs among content providers. Some of the partner organisations were already digitising their collections before EUScreen began, while other institutions – for example the Romanian broadcaster *Televiziunea Română* – only started to digitise for the purpose of publishing on the EUScreen platform. The resulting difference in the amount of digitised material per country must be reconciled in order to meet the requirements of European Commission (van den Heuvel and Baltussen 2011: 4). Apart from this, the amount and the content of metadata listed per partner organisation also vary significantly. This counters cross-cultural understanding of the archived television material (de Leeuw 2012a: 9). To solve this problem and support centralised publication, the consortium has extended the Video Active portal to guarantee that EUScreen's interface is built on verified components. By doing so, EUScreen ensures trans-European publication, presentation and exchange of audio-visual material (EUScreen 2009: 9). In addition, EUScreen has mapped the EBU Core Set

of Metadata to the Europeana Data Model.¹³ Through this, EUscreen's portal is directly connected to Europeana, contributing audio-visual legacy to the European Digital Library and thus meeting one of the European Commission's funding requirements.¹⁴

Social Predefinition: Target Groups

Providing access to Europe's television heritage through the development of interoperable technology and standards does not necessarily create demand for the provided service. Therefore, EUscreen conducted a user consultation at the start of the project to examine the background, requirements and participatory needs of its future users.¹⁵ One of the main findings of the user consultation was that there is a growing need for enriched items. Respondents firstly noted that contextual description – information that defines the relationship between an item and other sources – is needed to grasp the historical meaning of individual media files. Moreover, a significant amount of interviewees emphasised their desire for meaningful connections between items, and lastly, informants argued in favour of the inclusion of analyses of the material, that is, contextualisation of individual items within a broader framework (EUscreen 2010). Consistent with these findings, scholars stress that providing contextual information is crucial to support cross-cultural understanding (e.g. de Leeuw 2012b: 22, Debuysere 2005: 54 and Treleani and Mussou 2012). Consequently, EUscreen offers several tools to examine the vast amount of published material, metadata is added to support understanding of individual items, and items are analysed in their broader historical, cultural, political, social or technological context.

¹³ The EBU Core Set of Metadata, based on open web standards and released by the EBU metadata working group at the end of 2008, is the dominant metadata model in the broadcasting domain (Oomen et al. 2009: 102-3). EUscreen has mapped this dominant metadata model to the Europeana Data Model, which can be easily implemented in different contexts, because it is not bound to a specific domain (Rendina 2011).

¹⁴ For a profound explanation of the technical functioning of EUscreen, see: Johan Oomen and Vassilis Tzouvaras, 'Publishing Europe's Television Heritage on the Web: The EUscreen Project' *Communications in Computer and Information Science* 247 (2012): 136-42.

¹⁵ In her article 'Het archief als netwerk. Perspectieven op de studie van online televisie-erfgoed' (The archive as network. Perspectives on the study of online television heritage), EUscreen's project coordinator Sonja de Leeuw notes that the value of previous studies on use case scenarios had been constrained by a focus on the amount of future users rather than on users' desires (de Leeuw 2012b: 22). To resolve this limitation, EUscreen closely examined the profiles of its future users.

The user consultation also revealed crucial diversity among respondents. In accordance with this diversity, users and their needs were divided into the groups ‘Education and Research’, ‘General Public’, ‘Creative Industries’ and ‘Cultural Heritage Institutions’. The ‘Education and Research’ group consists of the sub-groups primary education, secondary education, and higher education and research, within which researchers are either independent from or associated with EUscreen. Each of these sub-groups requires specific forms of access to and use of audio-visual legacy.¹⁶ Additionally, as for instance reported by John Corner, media and cultural theory professor at the University of Liverpool, researchers require access to audio-visual material that has not been filtered by heritage institutions. During a conference on the uses of digitised archives, Corner has argued that this will enable scholars to methodologically select content based on detailed information (2007). To meet the needs of academics, EUscreen provides a large amount of content and supports sufficient search options (EUscreen 2009: 8). Due to the diversity between and within user groups, EUscreen’s interface includes both simple and enhanced searching methods to provide for the diverse skills and needs of all user groups (Oomen and Tzouvaras 2012: 138).

The ‘General Public’ is a diverse group of users with various backgrounds. This user group could be interested in a country’s (television) history and culture, the history of European television, or in specific events. In addition, the general public – similar to the educational user group – might want to use or re-use EUscreen’s content, either on the portal or by downloading material for external use. To facilitate this, EUscreen envisions inviting its visitors to interact with the published material through the implementation of rating, commenting, contributing, and labelling tools. Also, EUscreen anticipates sharing options for users to reflect upon the published television legacy on external media platforms such as Facebook and Digg (EUscreen 2009: 13, 30).

Because EUscreen increases the visibility of Europe’s television material, commercial organisations may use source material for advertising or

¹⁶ In primary education, pupils could for instance gain additional knowledge from watching videos related to their course material. Students in secondary education could benefit from learning how to find, select and use audio-visual sources for homework. Higher education students and researchers could for example study audio-visual sources to develop an understanding of cultural differences, or to clarify specific phenomena (van den Heuvel and Baltussen 2011: 13). To facilitate this, functionalities that enable one to export and download content and metadata into e-learning format must be developed (EUscreen 2009: 4).

documentaries. Therefore, the ‘Creative Industries’ need access not only to EUscreen’s material, but also to the original source material of EUscreen’s content in high resolution. EUscreen meets this requirement by providing a ‘window’ to the external sale platform of its contributing partners. This in turn benefits the user group ‘Cultural Heritage Institutions’ financially. This target group consists of professionals working in the field of cultural heritage, varying from archivists to broadcasters. This user group can benefit from contributing its archival material to EUscreen for revenue purposes since every item’s Terms of Use redirects to the content provider’s information for ordering. Additionally, these professionals benefit from the portrayal of their audio-visual content on EUscreen because of the new meanings that are potentially created when their material is placed within a diverse collection (van den Heuvel and Baltussen 2011: 13-4).

Juridical Predefinition: Intellectual Property Rights

EUscreen has developed numerous solutions to the problems of providing unified access to Europe’s television heritage, but the legal milieu remains a problem because rights frequently include multiple persons per item and cross-border publication is often prohibited.¹⁷ In addition, many copyright policies were written at a time when the Internet did not yet exist. This entails re-negotiating rights specifically for repurposing material on EUscreen (EUscreen 2009: 28). As a consequence, the EUscreen consortium has chosen the pragmatic near-term solution of only streaming material that is cleared from copyright (van den Heuvel and Baltussen 2011: 21).¹⁸ This means that the portal mainly offers factual material because it is more difficult to clear rights of popular programmes such as sport and drama.

¹⁷ EUscreenXL’s coordinator Eggo Müller emphasises that problems concerning cross-border distribution of audio-visual material are mostly faced by West European heritage organisations, because most East European institutions entitled no longer exist (Müller 2013 interview).

¹⁸ Some of EUscreen’s partner institutions already hold the rights to the audio-visual material they are preserving, but content providers that do not hold the rights themselves must go through the process of clearing rights per item. For an explanation of the steps that an audio-visual archive must take to publish copyrighted material online, see: Adrian Sterling, ‘Broadcasters’ Archives – National, International and Regional Copyright Aspects’ Digitisation and Online Exploitation of Broadcasters’ Archives. Ed. Christina Angelopoulos, Susanne Nikoltchev and Stef van Gropel. IRIS Special, Strasbourg: European Audiovisual Observatory, 2012. 11-5.

Given the fact that pertinent laws differ per content provider, the law not only defines what items are to be published on EUscreen but also constrains what one is able to do with those items. Within the EUscreen project, all content can legally be watched on EUscreen's portal and most partner institutions also allow the addition of comments and the creation of personal playlists. However, only a few content providers have cleared rights for downloading and remixing EUscreen content (Martilla 2011). As a result, EUscreen's pragmatic approach is also reflected in the functionalities of the portal. As stipulated in the formal 'Description of Work', "[t]he basic principle here is that the tools respect the specific access rights that the content providers give, and in effect therefore determine the type of interactions that can be supported" (EUscreen 2009: 67). The functionalities of the EUscreen portal are thus designed in accordance with the limitations imposed by intellectual property rights. At this moment, this means that every tool's affordances – except for the Open Content Portal that will be covered on page 30-31 – are in line with the most restrictive copyright policy for that specific tool; tools' affordances cannot presently change per content provider or per item.

Apart from limiting user participation through design, the consortium legally restricts participation to watching, embedding and sharing EUscreen's content via the item's hyperlink or the integrated social media sites selected by the consortium. As stated in the Terms of Use, EUscreen grants its users "a non-exclusive, non-assignable, non-transferable, limited right to access and use the Website solely for personal and non-commercial purposes" (EUscreen, Terms of Use). Copyright thus hampers participation because it defines the forms of user interaction that the portal can support.

Concluding Remarks: Pre-Formatting EUscreen

The preceding analysis has shown that EUscreen has made European audio-visual heritage more accessible and usable, and EUscreen has developed interoperable technology and metadata standards which facilitate the centralised publication of television heritage. The EUscreen project thus meets the European Commission's requirements to support the visibility and accessibility of Europe's cultural heritage for all European citizens through the development of technological and informational standards. Moreover, EUscreen examined the needs and

expectations of its end-users to provide suitable services. Some of EUScreen's characteristics – such as the virtual exhibitions and meaningful connections between items – partly result from the desires of EUScreen's users. Legal restrictions, however, counter EUScreen's ambitions.

To understand why legal restrictions counter EUScreen's ambitions, we must take a look at Müller's theory. Müller has argued, in his historically comparative analysis of different types of interactive television, that familiar formats are often employed to define a programme's space of participation (2009: 52). Similarly, EUScreen's space of participation is defined by pre-existing formats. The EUScreen project concerns the publication of archival television material, and the consortium to some extent imposes a television format onto the project. Therefore, EUScreen is an institutionalisation of broadcast television. In accordance with this format of traditional broadcast television, EUScreen faces problems with copyright and revenues. The content providers' desire to increase earnings for instance conflicts with the public's desire to creatively (re-)use EUScreen content free of charge. Thus, although EUScreen's users have some power to define EUScreen's space of participation via the user consultation that EUScreen conducted, user participation is restricted because of distribution legislation.

To circumvent problems with legal restrictions, EUScreen has only made material accessible on the portal that is cleared from any copyright that prevents publication within EUScreen. Often, copyrights are not cleared for activities that go beyond publishing audio-visual legacy. This affects what is and is not possible on the EUScreen portal, because it is difficult to adapt the technology per content provider, even more per collection or item. As a consequence, it seems like Müller's theory of 'formatted spaces' can be expanded. Firstly, I propose to make a distinction between "pre-formatting" and "re-formatting" rather than using the terms 'predefinition' and 'redefinition'. 'Pre-formatting' relates to the anticipated format, while 're-formatting' relates to the eventual format as adapted to local culture. This paves the way for a second proposal, which is to understand 'formatting' as an active process, enforced through design, users, institutions et cetera. In short, a programme adopts a specific format that instructs how this programme should be produced (i.e. the pre-format) but this setup is at the same time actively formatted in accordance with the local culture, resulting in the

eventual setup (re-format). EUScreen is pre-formatted by the cultural framework of television. This pre-format can, however, be redefined by practices. Based on these findings, it is necessary to take a look at EUScreen's interface.

2.2 Redefinition of EUScreen: A Critical Analysis

In this subchapter, I conduct a thorough interface analysis of EUScreen's current setup in order to understand how exactly participation gets shape and is shaped on the portal and its accompanying functionalities. EUScreen's online portal consists of a website displaying the collections and their corresponding information, as well as links to other parts of EUScreen's setup, such as the project's journal and weblog. It was launched in October 2011, following two years of research and development of use-case scenarios, technology and standards. In principle, this hybrid combination of text, television and the Internet provides unmediated access to the past by enabling users to self-determinedly interact with television heritage material on the portal and on external media platforms such as Twitter and Facebook. The following analysis shows, however, that interaction is far more shaped than it appears to be because user participation on EUScreen is directed by the provided content and by the design of the interface.

Content Selection Policy

The material that is accessible on EUScreen is restricted by a clear content selection policy in order to “stimulate interactive and comparative use of the hitherto nearly inaccessible archival television material preserved in European archives” (de Leeuw 2012b: 26). Selection is based on the perceived importance of providing a framework for comparing archived material that reveals the televised history of Europe, as well as the history of European television as captured in television material.¹⁹ Due to these two perspectives, EUScreen's collections “reflect the cultural and historical resemblances and variations across

¹⁹ This content selection policy is based on an extended version of Video Active's policy (EUScreen 2009: 8). It represents the history of Europe as shown on television and the history of European television from the 1900s to present. Regarding the latter, EUScreen primarily displays success stories and technological breakthroughs that somehow contributed to the emergence of the broadcast technology as introduced in the 1950s and 1960s in most European countries and still used today, rather than presenting information on versions of television that did not make it (such as mechanical television). Given the fact that television scholars contributing to EUScreen emphasise the exceptionally long duration and importance of television's pre-history compared to the pre-history of other media, this is an interesting choice (de Neef 2012: 14).

Europe” (de Leeuw 2012b: 26). Yet, EUscreen’s main perspectives are rather broad. Therefore, EUscreen, in conjunction with its content providers, identified additional overarching themes. In order to identify these themes, the consortium first made an inventory of the type and contents of the material that each content provider preserves in its archive. After this, EUscreen decided to group the selected material into seventeen themes, ranging from ‘arts and culture’ to ‘politics and economics’. The consortium informed the content providers about the meaning of each theme and the desired material, but the content providers’ cataloguers were responsible for the final selection of the material because they are familiar with the archive’s content. As a consequence, the selected material presents, according to de Leeuw, a mixture of the choices of the archives’ cataloguers and EUscreen’s vision regarding the various themes (de Leeuw 2013 email). EUscreen has made its selected material available via its online database.

The use of online databases to display audio-visual collections changes the way audiences can interact with these collections, as new media scholar Lev Manovich argued in his book *The Language of New Media* as early as 2001. The database facilitates swift access to, organisation and re-organisation of different media types (2001: 214). This point is also made by science studies scholars Sarah de Rijcke and Anne Beaulieu, who, in their study of the use of digitised images in Amsterdam’s Tropenmuseum, observe that the networked database (re-)defines what the collection is and how it can be used (2012: 2). They for instance note that due to the linked nature of the database, the digitised record’s historical role might shift from primarily ‘tool’ for understanding to cultural-historical ‘evidence’ (2012: 4). Moreover, while most of the archived content of EUscreen’s contributing heritage institutions would never be exhibited in traditional museums or libraries because of impracticality, vulnerability or lack of space, it is now on display in a trans-European context. One has to keep in mind, however, that the interface is by no means a transparent window into the data (Manovich 2001: 65). User options are carefully controlled through the design of the user interface. Therefore, the interface structures user participation.

The EUscreen user interface provides several options for accessing the material (see figure 1). First, one can access the content in a traditional way by searching on keywords, either by using the white bar for simple search results or by using the ‘Advanced Search’ option. Moreover, on the homepage, one can

access the material by selecting topics, genres, languages and providers. This is the second approach to the content. A third point of access, via the green tab ‘explore EUscreen’, enables one to browse EUscreen’s material without using keywords. In order to refine the results, these entry points are accompanied by the option to filter EUscreen material, for instance on broadcaster, country of production, item colour, decade and item format. EUscreen’s inclusion of different search options marks a shift away from archival science’s implicit presumption that users of an archive hold enough expertise to translate what they are looking for into archival search terms. Information management lecturer Isto Huvila argues:

“For a long time, an implicit assumption in archival science seems to have been that the people who come to an archive know what they want, are knowledgeable enough to be able to express their needs in archival terms, and, even better, are able to help themselves as much as possible both in practical matters and in analysing and interpreting the records” (Huvila 2008: 16).

The implementation of several search options, or “faceted browsing” (EUscreen 2009: 49), is important. Science studies scholars Sarah de Rijcke and Anne Beaulieu note that searching on keywords implies that a user is aware of what (s)he is looking for, whereas browsing can be classified as a type of ‘free-floating’. The latter is more related to exploration and might induce ‘discovery’ (2012: 9). Through non-textual searching, EUscreen’s visitors thus potentially interact with material they would normally not encounter. Additionally, ‘visual browsing’ could educate EUscreen’s users because it stimulates formalised knowledge of archival labels and categories (de Rijcke and Beaulieu 2012: 10). Regardless of the importance of providing various entry points, the aforementioned options, as well as the thematic arrangement of EUscreen’s items, guide the process of accessing the published material. The thematic grouping into seventeen themes is an example of ‘active formatting’.

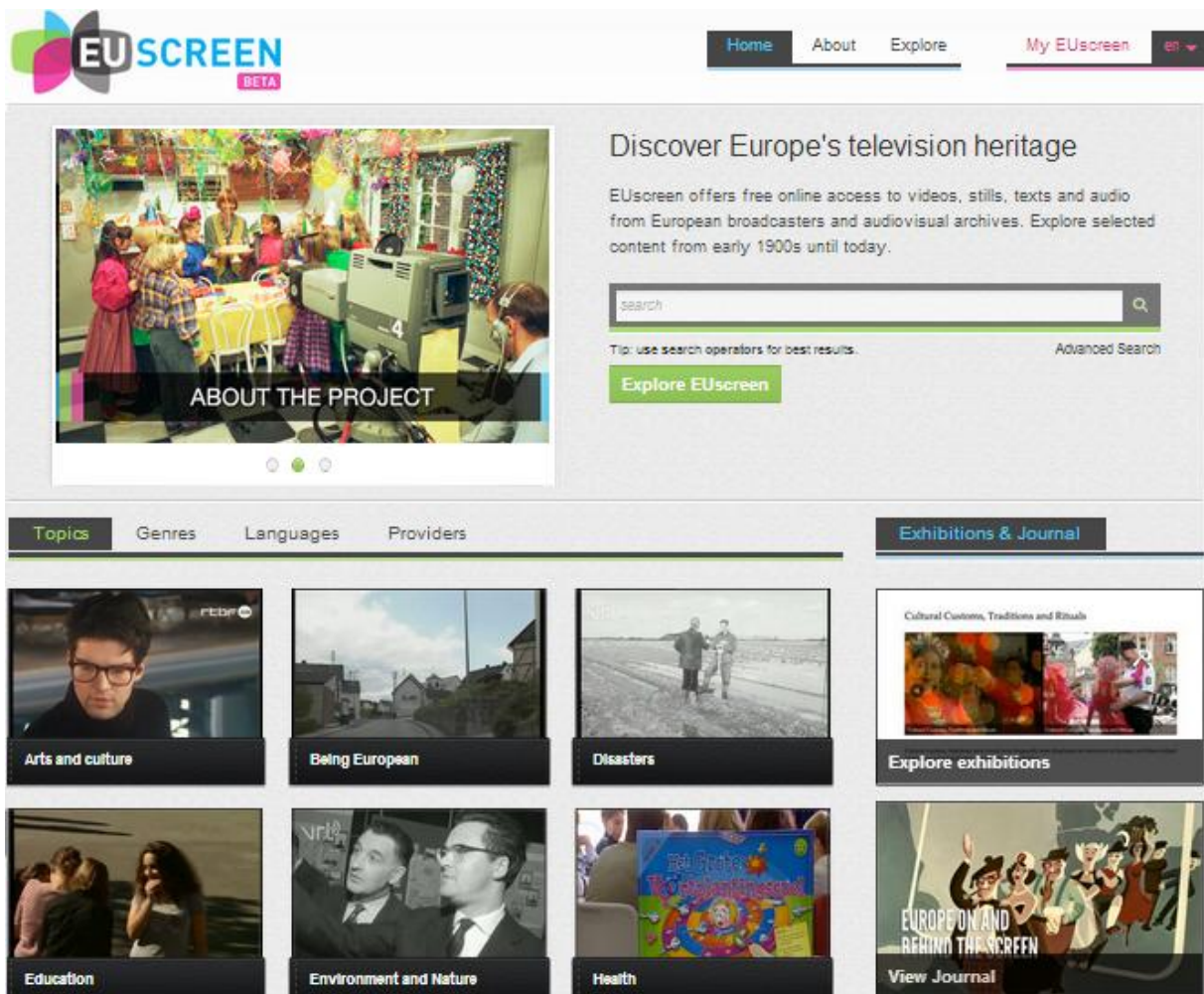


Figure 1: The Homepage of EUSCREEN

Thumbnails: Images as Interface

The outcome of the browsing process or search request is displayed in ‘thumbnails’: miniatures of the actual items. The website presents sixteen thumbnails per page, listed in random order when searching on keywords but displayed per content provider when browsing. The default display mode shows media files only, but this can be changed into a mode that facilitates quick examination because it displays the thumbnails in a list together with their metadata. As shown in figure 2, these images of physical objects – be it audio-visual recordings, pictures or articles – portray a ‘summary’ of what a specific item is about. Audio and text files are represented by a thumbnail of a sound box and a PDF-logo, while videos and images are represented by thumbnails that provide an impression of the item’s content.

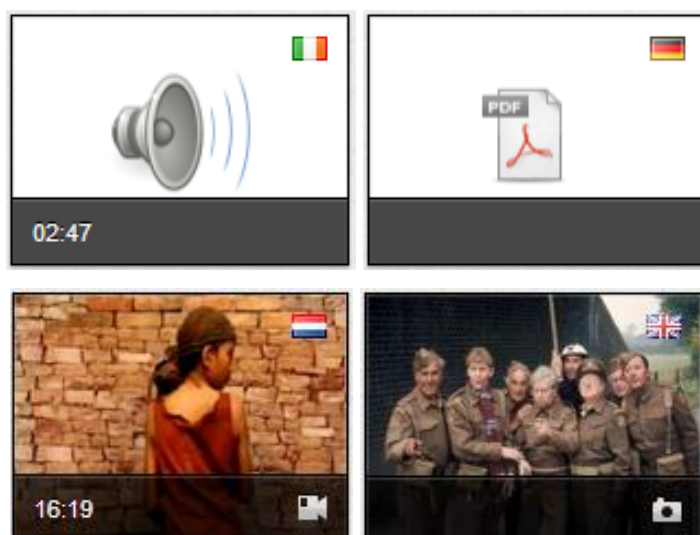


Figure 2: *Examples of Thumbnails*

EUscreen’s use of thumbnails to display physical objects affects the ways in which one is able to interact with the collections. Sarah de Rijcke and Anne Beaulieu note that due to the use of networked digital databases, items are not only relating to each other in different ways but could also relate to information outside of the collection (2012: 1). This might provoke interactions that go beyond the limits of individual items, collections and institutions (de Rijcke and Beaulieu 2012: 3). EUscreen’s thumbnails thus become an interface because of the way they take on an instrumental role as ‘spider’ in an interconnected web of audio-visual heritage knowledge. A part of this web is presented in figure 3. Upon clicking on a thumbnail, the interface displays the corresponding item together with links to other items. These suggested files are presented based on the keywords used to describe a media file (‘Tags’) or on relation to other media files (‘Related Items’). ‘Tags’ become more prominent if used more frequently to describe media files. Figure 3 shows however that either many content providers have failed to translate their keywords to English, or that the platform’s code is written in such a way that it presents the original source language rather than the English translation. Moreover, note that the relation between items often appears rather arbitrary. After searching on the keyword ‘beer’, the item ‘Bear, sweat and jobs’ for instance relates to the items ‘Buses’ and ‘A Whole New Show’. Relation here seems to be based on the thesaurus term ‘employees’. The use of the original source language and the arbitrary relationships decrease EUscreen’s value and

hinder participation, even though both ‘Tags’ and ‘Related Items’ encourage further exploration of EUscreen’s material.

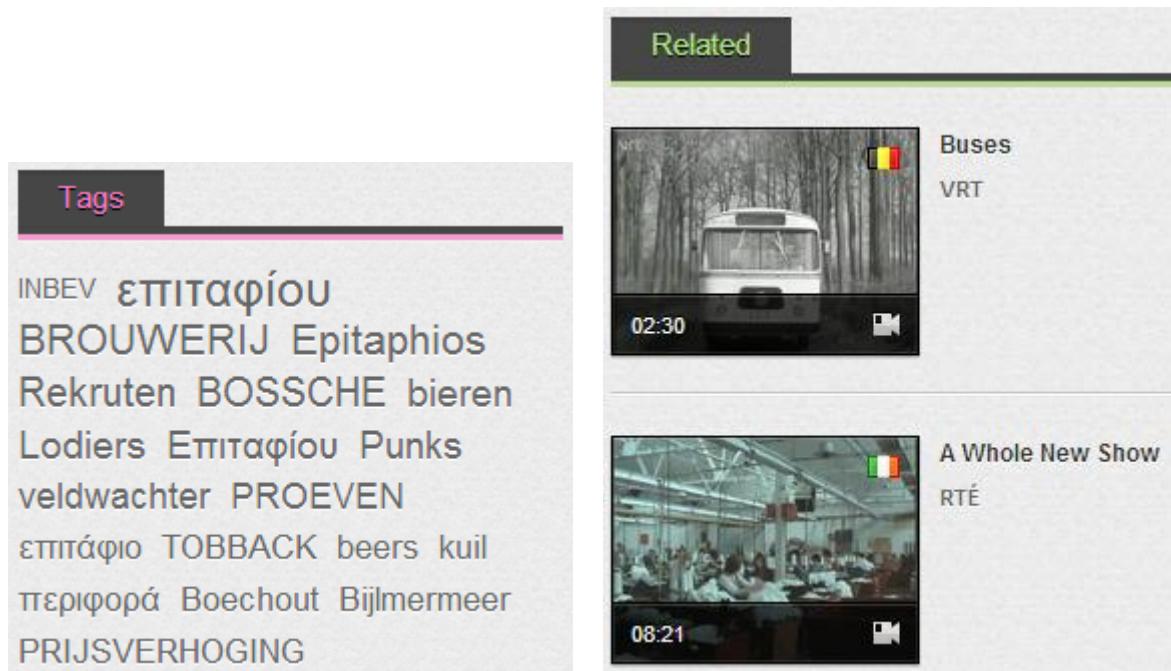
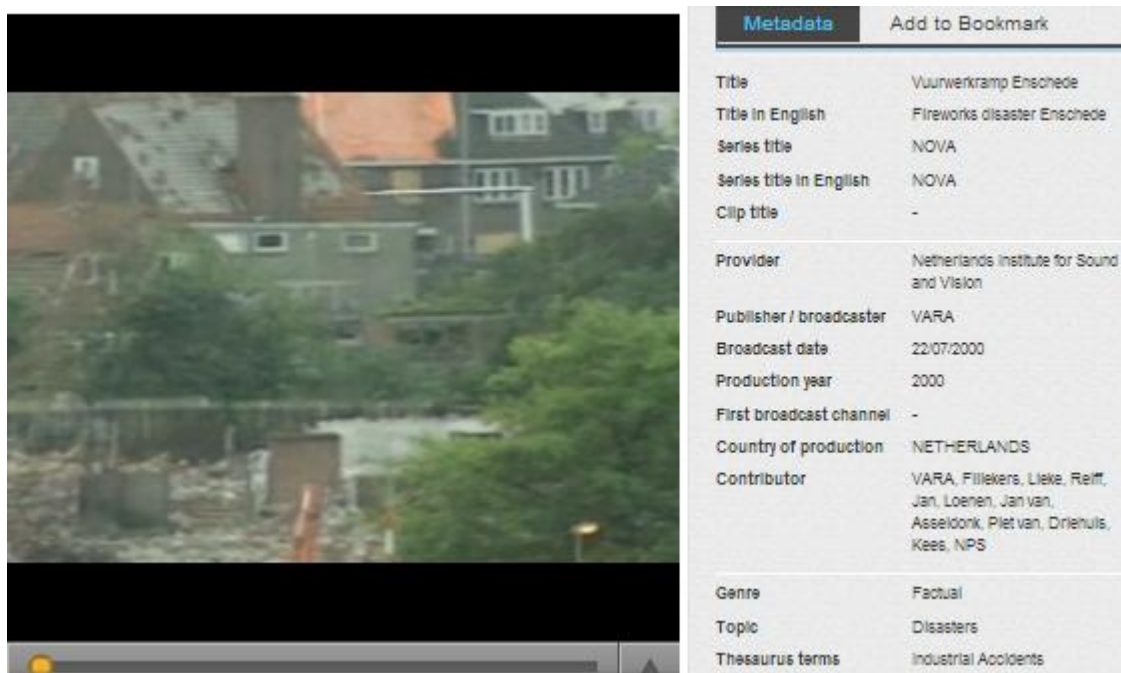


Figure 3: Related Items and Tags

Archival Descriptions

Both ‘Related Items’ and ‘Tags’ are based on the non-hierarchical labels, or keywords, allocated to EUscreen’s media files by professional archivists. As concluded from the aforementioned user consultation, users require this descriptive information – as well as contextual information – to understand the historical meaning of the material that EUscreen has made accessible. Therefore, selected media files are presented together with a comprehensive description of the original source and how it appeared (see figure 4). This information is copied from the provider’s catalogue and includes a summary, thesaurus terms and factual information, such as the production date, broadcast date and production year. If applicable, additional information is provided, consisting of the specific circumstances during the item’s creation (e.g. ‘live audience’) and an extended description of the item’s contents. Furthermore, the more technical information is included, covering for example original identifier and material type. EUscreen’s database uses this metadata to retrieve content. Therefore, user participation is not only shaped by the provided search options and the arrangement of media files, but also by the institutional description of the items. In addition, participation is

structured by the language of the interface and the original language of the media files. To support multi-cultural exploration on item level, EUscreen’s collections can be searched in various languages with the help of a multi-lingual vocabulary, meaning that the keyword ‘airplane’ presents the same results as *vliegtuig* or *samalot*.²⁰ However, every item’s title, summary of contents and key metadata elements are only presented in English – if they are translated at all – as well as in the original language of the source. Moreover, the extended summary is not translated to English, nor does the portal contain transcribed English subtitles. This clearly counters participation, not only on the level of leisure, but also regarding education and research. Teachers, students and researchers would for instance benefit from the inclusion of extended English transcriptions, because this might make it easier for them to find suitable material from other countries.²¹



The image shows a video player on the left and a metadata table on the right. The video player displays a scene of a fireworks disaster in Enschede, with a large building and a fire. The metadata table is titled 'Metadata' and 'Add to Bookmark' and contains the following information:

Metadata		Add to Bookmark
Title	Vuurwerkkramp Enschede	
Title in English	Fireworks disaster Enschede	
Series title	NOVA	
Series title in English	NOVA	
Clip title	-	
Provider	Netherlands Institute for Sound and Vision	
Publisher / broadcaster	VARA	
Broadcast date	22/07/2000	
Production year	2000	
First broadcast channel	-	
Country of production	NETHERLANDS	
Contributor	VARA, Fillekens, Lieke, Reiff, Jan, Loenen, Jan van, Asseldonk, Plet van, Driehuis, Kees, NPS	
Genre	Factual	
Topic	Disasters	
Thesaurus terms	Industrial Accidents	

Figure 4: Example of Metadata

²⁰ Multi-linguality at browse and result level is based on ‘controlled’ metadata vocabularies, meaning that ambiguity of keywords is neutralised by adding an extra layer of meaning to every term to avoid misinterpretation (Baltussen 2010: 18). These vocabularies were developed by Video Active and EUscreen has extended them in order to also capture the partner institutions that did not participate in Video Active.

²¹ EUscreenXL has recognised this shortcoming and is currently examining the potential of computer-automated transcription.

Virtual Exhibitions

The fourth approach to the content, via the option ‘Explore Exhibitions’, contains “online presentation[s] in which a curator provides a textual analysis of the displayed material” (de Neef 2012: 5).²² These so-called ‘virtual exhibitions’ are more contextual in that they help one to obtain an understanding of EUScreen’s television heritage material in a wider setting. There are two types of exhibitions. On the one hand, there are exhibitions that present comparative themes of research, demonstrating the possible research subjects that academics could explore with the help of EUScreen’s audio-visual sources. Using material from different content providers, these ‘Comparative Virtual Exhibitions’ are created by scholars associated with EUScreen and cover aspects such as ‘Food and Drink’ and ‘Religion and Faith’. On the other hand, EUScreen provides ‘Content Provider Virtual Exhibitions’. These are created by curators associated with the different organisations that contribute content to EUScreen. By focussing on national and European issues, these exhibitions clarify relationships between the content within the presentation and provide additional information that is not necessarily part of an item’s description as documented in the provider’s catalogue. Theoretically, this empowers the curator to show diverse and intricate relations between items, enabling EUScreen’s visitors to interact with the published material in new ways (Badenoch 2011: 305). Indeed, by selecting and arranging specific media files or parts of these media files, the curator is in the position to create and communicate a desired framework for understanding to the viewer who in turn must subscribe to this ideological stance in order to participate.²³ Yet, the EUScreen curator is also structured by the project’s requirements because the Content Provider Virtual Exhibitions must be created by using material from one specific content provider to highlight this provider’s interests, strengths or development. Additionally, the affordances of the standardised Builder²⁴ used to create a virtual exhibition direct

²² The term ‘virtual exhibition’ is used in numerous contexts. Accordingly, Alexander Badenoch, Media and Cultural Studies lecturer at Utrecht University, states that it is probably impossible to find an agreed-upon academic definition that captures the characteristics of EUScreen’s virtual exhibitions (Badenoch 2012).

²³ Clearly, one can never read an archival document in the way it was read by its contemporaries because current use retrospectively affects earlier meanings due to present discourses and ideologies (Ketelaar 2001: 138). Thus, even if a curator does not deliberately communicate a specific framework for understanding, interpretation is still shaped by every selection and arrangement, as well as by the viewer’s own beliefs and ideas.

²⁴ EUScreen’s expositions are designed using a standardised ‘Virtual Exhibition Builder’ developed by Noterik BV. This builder enables one to combine audio, video, images and text into

the options of all EUscreen-curators. The Builder for instance does not support hyperlinks on every page, nor does it support the use of external media files (such as one's private recordings or YouTube videos) to avoid copyright infringement (de Neef 2012). In combination with the fact that EUscreen has not made accessible a considerable amount of historically important items due to publication restrictions (Hogenkamp 2012 interview), this seriously restricts a curator's options.

End-users who are not associated with EUscreen are also able to create virtual presentations after registering to the website. Upon selecting 'My EUscreen' on the main page of the portal, one enters a personal workspace that makes it possible to save, or 'bookmark', content that seems interesting or useful. After creating this personal gallery, one is able to create a new exhibition within the 'My EUscreen'-environment. These curators, who are not associated with EUscreen, are allowed to use material from different content providers, but they face the same technological constraints because they use the same Builder as EUscreen-curators. Moreover, exhibitions created by curators who are not associated with EUscreen can only be viewed by their creator within 'My EUscreen', because the interface does not support the publication of 'unofficial' presentations on the main portal, nor does it support downloading one's own exhibit. As a consequence, although enabling non-EUscreen curators to participate in a more meaningful and playful manner, the Builder currently adds minimal additional benefits (de Neef 2012: 21-22).

Social Media Implementation: Facebook and Wikipedia

Apart from being able to create (non-publishable) personal galleries and exhibitions, EUscreen users are in the position to share EUscreen's content via an item's hyperlink or the integrated social media services selected by the consortium. Upon selecting an item, one is provided with the option to share the item on one's own social network, for instance on Facebook or Google⁺. In order to build a community around content, EUscreen also shares items on its own

a storyline, thereby presenting contextual information and interesting stories to the viewer. For a detailed analysis of the Virtual Exhibition Builder's functions and operation, see de Neef (2012) 'Internship Research Report EUscreen'.

Facebook page and Twitter account. Often, these items present interesting stories or relate to important events that happened in earlier years (see figure 5).



Figure 5: An EUScreen Facebook Post Relating to a Specific Historical Event

On EUScreen's official Facebook page and Twitter account, the institutional message or archival description forms the foundation on which users are allowed to comment. User contributions are therefore understood as supplements and, as stressed by Isto Huvila, this limits participation to a conversation about an item instead of using an item and its description as an arena for participation (2008: 27). Members of EUScreen's audience who want to become actively involved in EUScreen could, however, go beyond the space of participation as formatted by the EUScreen consortium. While EUScreen remains in control of its institutionalised social media accounts, it cannot delete commentaries made on non-EUScreen pages. EUScreen's audience could thus for instance re-use EUScreen material, so to speak, by sharing EUScreen's published items, tweets or Facebook messages via their personal user account together with their own comments and ideas. In addition, members of the EUScreen audience could contribute to EUScreen's Wikipedia page or write blogs about the project. The impact of these different contributions, however, seems to be negligible.

Open Content Portal: Creative Re-Use

Clearing copyright for activities that go beyond making archived television heritage accessible on EUScreen's closely controlled platform is difficult. Only a

few content providers allow their content to be downloaded, rather than embedded or shared on social media services. Therefore, EUscreen's portal does not include downloading options. The platform also does not include remixing options, because even fewer content providers cleared rights for re-using material in derivative works. However, as argued by the American archivist Rick Prelinger in his article 'The Appearance of Archives', the increasing popularity of commercial video-sharing platforms and streaming options contributes to end-users' expectation about easy access and use (2009). Accordingly, in order to provide for end-users who wish to download material for personal use or for re-mixing, EUscreen has implemented a link to Open Beelden (Open Images). Open Beelden is an open media platform operated by the *Nederlands Instituut voor Beeld en Geluid* that provides access to audio-visual collections that can be shared, re-used, or both. Upon selecting 'Open Content Portal' on EUscreen's main page, one is directed to the video portal and presented with online access to 59 video files under a Creative Commons License, contributed by for instance *Televisió de Catalunya* and *Cinecittà Luce*. The licenses assigned to the video files differ per content provider; some contributors have made their content accessible for downloading and sharing only while others also allow open cultural production, sometimes even commercially. Currently, more than half of the EUscreen videos that have been made accessible on Open Beelden can legally be re-used. This enables end-users to interact with EUscreen material independently, even though the video files that are made accessible on Open Beelden only cover a minor part of EUscreen's television material.

View: Journal of European Television History and Culture

Another point of entry, via the option 'View Journal', provides articles on European television history and culture written by media scholars. The first issue of this e-journal is dedicated to various aspects of researching television history and culture using digitised audio-visual sources, such as Andreas Fickers' article concerning the importance of developing digital source criticism (2012), and contains hyperlinks to the EUscreen fragments covered in the articles. The use of hyperlinks among other things, however, hindered participation because journal readers had to switch between different windows in order to read the article and examine the related EUscreen material. Hence, EUscreen redesigned the journal's

appearance and format before publishing the second issue. EUscreen for example developed a tool that makes it possible for authors to embed relevant video files, rather than linking to them in footnotes. This enables one to access the covered EUscreen fragments directly within the journal, instead of having multiple windows opened. In addition, the journal is now divided into different themes and approaches, enabling scholars to highlight the various aspects taken into account when studying audio-visual sources and the history and culture of European television more generally. Currently, the *View*-journal is edited by researchers associated with EUscreen. Its contributing authors, however, are not necessarily related to the project. This enables academics to participate in the debate surrounding the study of source material made available by EUscreen. Yet, these contributions must support the main purpose of the journal, thus structuring participation.

User Voice: Providing Feedback

To enable the audience to contribute to the project, the EUscreen portal includes the option to provide feedback. After selecting ‘Contact and Feedback’ at the bottom of EUscreen’s homepage, the user is redirected to the ‘Uservoice’; an external webpage that also provides the visitor with options to examine the frequently asked questions, or ‘knowledge base’. In order to comment on the project, or on certain aspects thereof, one must sign in using Facebook, Google⁺, or a valid email address. Even though this might decrease one’s willingness to leave comments, some valuable as well as merely critical remarks were made. Four examples will be discussed, namely commentaries by Johnny, Nick Sanders, Kristof Vydt and Anonymous. First, after noticing the absence of videos about the 15th anniversary of the Chernobyl disaster in 2001, a commentator named Johnny argues that including these would help contemporary viewers learn from how people at that time looked at past accidents. Although this comment precisely touches upon the aim of the EUscreen project, Tim Koch, project manager at EUscreen’s partner institution *Deutsche Welle*, simply notes that this footage is available on the webpage of *Deutsche Welle*. Instead of acknowledging the value of this statement, Koch seems to prioritise the broadcaster’s visibility. In another post, Nick Sanders argues that even Google Translate would provide better Dutch to English translations than currently used on EUscreen. Following this very

unspecific critique, EUscreen's administrator asks Sanders to list exactly what problems he encountered with which items. Admittedly, this is an easy and convenient solution from a producer's perspective but – given the fact that neither Sanders nor any others with similar remarks responded – asking end-users to perform unpaid labour without actively enabling them to change anything seems cumbersome and deficient. Another example is provided by Kristof Vydt who notices that the names of some filter options on the Dutch version of the interface are not translated to Dutch, and finally, Anonymous reports that the metadata of a specific media file does not match the file's content. Interestingly, while Vydt's comment is currently under review, EUscreen's administrator has not yet responded on the metadata inconsistency nor has it been solved on EUscreen's portal. In fact, although users voted for the importance of specific comments to draw the administrator's attention, only seven of the 21 comments have been closed, that is: accepted or declined. Moreover, the majority of these closed commentaries relates to the absence of material provided by Spain's national broadcaster or the technology that EUscreen uses. This means that remarks concerning the portal's functionalities – such as the absence of subtitles and the non-operating comments function – are disregarded. As a consequence, because the consortium – or a representative thereof – remains in control of both the feedback and implementation process, it seems like the implementation of EUscreen's User Voice provides users with merely the illusion of participation, rather than effective contribution.

Concluding Remarks: Re-Formatting EUscreen

The proliferation of digital technologies and the Internet has been celebrated for enabling archive users to free themselves from the institutionalised authority of archives and contribute to the construction of historical knowledge (Featherstone 2000). Although this may be true in some cases, the analysis of EUscreen has shown that power relations, which are embedded in the project's approach and setup, structure interaction of participating EUscreen users. The goal of EUscreen is to make European audio-visual heritage more visible and accessible for all European citizens in order to obtain funding from the European Commission. This has certainly been achieved by developing technological infrastructures and standards for presentation and contextualisation of source material. These

developments enable end-users to interact with the archived material, but participation is necessarily shaped by the arrangement of the media files. EUscreen cannot circumvent this, because even publishing the material without any structure is a form of structuring. Therefore, there is an inevitable relation between archiving and formatting. Participation is also shaped by the presence, or absence, of specific media files, and by their archival classification and description. There are also other factors that determine how one is invited, or not, to participate.

EUscreen has examined the needs and expectations of its end-users to be able to provide suitable services. The participatory expectations are, however, often in contrast with the ideas, motivations, regulations and standards of EUscreen's partner institutions. As stated in the 'Description of Work', EUscreen expected to implement various interactive functionalities with which its end-users could contribute to the repository in meaningful ways, such as contributing reminiscences relating to the published material (EUscreen 2009: 5). Yet, the need to gain revenues, the importance of providing contextualised material and the difficulty of clearing rights for interactive options that go beyond following 'pre-determined' paths on EUscreen's portal decrease content providers' willingness to support some types of user-led activities. Developing technology that suits these conflicting aspects is costly, time-consuming, and difficult, especially on item level. Moreover, a fundamental problem of large-scale digitisation projects is that technology advances faster than the project does, thus making fairly 'recent' implementations such as social networking functionalities seem rather outdated. In addition, the involvement of unskilled end-users in the production of archival knowledge is seen as a threat to the institutionalised authority of audio-visual archives. Participants could make mistakes or their contributions might not meet the requirements and standards of the archive, which could cause a breakdown of the retrieval system (Noordegraaf 2010: 10). Moreover, the difficulty of implementing content and knowledge created by non-professionals is that archival material is no longer categorised by a pre-defined classification system but is instead categorised according to one's perceived meaning of an item. Because of this, opponents of user participation in heritage projects fear that the potential inaccuracy and irrelevance of volunteers' input will contribute to the establishment of knowledge by consensus (Noordegraaf 2012: 113-114). If this

(erroneous) non-professional information is treated in the same manner as information provided by professional archivists, the authority of the archive could be compromised (Oomen and Aroyo 2011: 147). Apart from this, if end-users would be enabled to contribute to the archive, the enhancement of user participation implies the necessity of increasing means to monitor the workflow. If users are allowed to contribute personal media files or to re-use EUscreen content, EUscreen must also develop models to contextualise this new material (de Leeuw 2012b: 23).²⁵ The requirements of EUscreen's end-users are therefore redefined by the consortium in such a way that they meet the desires and attitudes of EUscreen's contributing heritage institutions, and the functionalities of the portal are designed accordingly. This demonstrates that the EUscreen consortium is flexible enough to adapt its ambitions in order at least to ensure the publication of Europe's audio-visual heritage on a centralised portal.

Three years after its invention on paper, EUscreen meets the end-users' desire for contextual description, meaningful connections and analyses of the material. EUscreen also takes into account the diverse skills and backgrounds of its end-users by implementing various search options that enable users to interact with the published material. Moreover, EUscreen circumvents economic, legal and technical issues regarding interacting with EUscreen material by enabling its users to work with some of EUscreen's material on the external platform Open Beelden. EUscreen also implemented the external website User Voice to enable end-users to provide feedback, even though it is unclear what the consortium does with the provided suggestions. Additionally, EUscreen created a Facebook page and a Twitter account for users to comment on the posted material. Nonetheless, EUscreen defines a very narrow space of participation in which interaction of EUscreen's users is shaped by the interface and its structure. The platform primarily enables one to follow pre-determined thematic paths for accessing the

²⁵ Besides the challenges posed by participatory initiatives, the central role of the information professional is also threatened by the digitisation of production and archiving. As noted by Julia Noordegraaf, professor of Heritage and Digital Culture at the University of Amsterdam, recent production and storing technology automatically create accompanying metadata, such as the time, date and location of creation. Moreover, additional information is manually added at various stages by several people involved in the process of creation. As a result, the task of the archivists shifts from providing knowledge produced within the archive to determining whether the document and its corresponding metadata are worthy of preservation (Noordegraaf 2010: 9). Accordingly, as argued by Noordegraaf, the role of the information professional alters to “*editor* of knowledge and information generated by a variety of agents” (2010: 9 emphasis in original).

material. Moreover, EUscreen does not enable its end-users to complement or improve the provided archival descriptions, although scholars such as de Rijcke and Beaulieu state that the linked nature of thumbnails could function as a foundation for “mediated social interactions such as discussion [and] annotation” (2012: 1). Furthermore, although one is allowed to provide one’s aesthetic interpretation by creating virtual exhibitions, these presentations cannot be published on the portal, nor is the user allowed to be overly critical because (s)he can only work with the material provided by the consortium in a clearly defined format. While anticipating user-led activities, EUscreen thus actually precludes this by legally and technically limiting participation to ‘active consumption of information’ – so to speak – rather than real contribution. Also, the EUscreen consortium continues to control the functioning, content and meaning of the platform. Hence, EUscreen obligates its interacting audience to submit to the ideological perspective of the project as defined by the European Commission’s requirements and the traditional authority of the contributing heritage organisations.

EUscreen’s end-user can resist the ideological perspective of the project by refusing to use the platform. Users who participate, however, necessarily affirm the framework. It could thus be stated that EUscreen does not simply impose this framework upon its users. Rather, these frameworks are co-created because users look for and confirm familiar frameworks (cf. Müller 2009). The preceding analysis of EUscreen’s space of participation has shown that the technology, the audio-visual heritage material, the end-users, the usages and the ideas of the creators all adapt or change EUscreen’s format within the framework of the format. This is exactly the problem of such a large project: it does not necessarily move in one specific direction.

3. CHANNELLING PARTICIPATION

EUscreen’s successor ‘EUscreenXL’ has recognised many of the difficulties regarding EUscreen’s current setup and aims to solve these. In the formal ‘Description of Work’, EUscreenXL states that much progress can be made in the amount, geographical origins and accessibility of the published material. Therefore, EUscreenXL aims to expand the EUscreen consortium with additional

content providers in order to increase awareness for the importance of establishing a pan-European audio-visual standard for publication and contextualisation of source material (EUscreenXL 2012: 37). In addition, EUscreenXL currently examines and evaluates the potential of computer-automated metadata extraction using open source speech-to-text conversion applications. This extracted metadata will be added to the existing metadata schemes in order to improve accessibility. The transcribed subtitles resulting from the process of extracting metadata will automatically be translated into various other languages that could be displayed in combination with the related video (EUscreenXL 2012: 69). Thereby, items will be made more meaningful and understandable on cultural and linguistic level.

EUscreenXL also aims to solve EUscreen's problems regarding user participation. It is important to note, however, that a platform such as EUscreen cannot easily support user participation on a technological level, even though this significantly limits users' options and thereby maybe even their willingness to consult EUscreen in the first place. This chapter proposes a solution by taking a closer look at both participatory culture and the different strategies businesses might employ when approaching this phenomenon.

3.1 Explicit and Implicit Participation

In their report '*Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*' Henry Jenkins and colleagues define participatory culture as:

“a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing creations, and some type of informal mentorship whereby experienced participants pass along knowledge to novices. In a participatory culture, members also believe their contributions matter and feel some degree of social connection with one another (at the least, members care about others' opinions of what they have created)” (Jenkins et al. 2006: 3).

This understanding seems to confine participatory culture to a community-based phenomenon that is characterised by collaboration, social interactions, collective decision-making and mutual understanding. Schäfer points out that this user-driven type of participation can best be described as 'explicit' participation.

Explicit participation denotes intended and intrinsically *or* extrinsically motivated user activities, often in combination with the appropriation of technology or products and the development of technical skills (Schäfer 2011: 52). The free, multilingual and collaboratively edited online encyclopaedia Wikipedia is a good example. Individuals collaboratively spend their “cognitive surplus” on the creation or improvement of Wikipedia’s articles (Shirky 2010). Wikipedia’s methodology and style guide are cooperatively established and the project is based on the assumption that together all contributors are more knowledgeable about a topic than an expert alone can be (cf. Surowiecki 2005).²⁶ There are also examples of explicit participation that concern the appropriation of corporate technology in ways unintended by the producer, such as the hacking of the Xbox (Schäfer 2011: 20). The ‘blurring of boundaries’ between consumer and producer that results from these activities – or at least the assumption of thereof – poses problems for an organisation such as EUscreen.

Explicit online cultural production often involves skilled participants and the appropriation of technology or content. Heritage organisations might lack the knowledge or resources to direct or make use of user appropriations, even though these practices could in many instances contribute to the improvement of products, services or user interfaces (Schäfer 2012 presentation). Moreover, many types of user participation are in conflict with contemporary audio-visual copyrights and with the content providers’ desire to earn revenue. Therefore, EUscreen simply cannot allow an all-encompassing type of participation. In effect, the restrictive attitude of EUscreen resembles the opposite: a business model aimed at preventing participation. According to Schäfer, organisations that oppose user interactions through legal restrictions and design – as EUscreen does – are driven by the fear of losing control over the creation and distribution of cultural knowledge and/or artefacts. These businesses reflect a conservative reaction to user participation, and the appropriation of content and technology specifically (2011: 127). EUscreen has solved this problem to some extent by implementing implicit participation.

²⁶ Note that it is questionable whether the success of Wikipedia results from a large group of individuals contributing small amounts of time or from a small ‘core’ group who contribute consistently. For more information, see for instance: Aniket Kittur et al, ‘Power of the Few vs. Wisdom of the Crowd: Wikipedia and the Rise of the Bourgeoisie’ *World Wide Web* 1.2 (2007): 1-9.

Implicit participation is a corporate-driven type of participation, which has been made possible by the emergence of 'Web 2.0'. In implicit participation, "users are participating – often without acknowledgement from the companies offering such services – in shaping and expanding the information infrastructure" (Schäfer 2011: 44). This often disregarded type of online cultural production draws on certain habits users have, such as searching for material, watching videos and sharing information. These intentional activities can be channelled through design and this results in implicit participation: users could participate explicitly or implicitly in terms of motivation, but on a technical level, users always participate implicitly (Schäfer 2011: 52). Therefore, the boundaries between consumer and producer do not blur but rather those of user and information technology, because both users and information system participate in performing labour (Schäfer 2011: 78). Platform providers benefit from the labour performed by the individuals who use their information management systems. The social networking website Facebook for instance encourages users to annotate pictures by providing date, time, location and names of the photographed persons. Users' participative behaviour is directed by the design of the website's interface. The back-end of the website simultaneously gathers the provided information to improve Facebook's 'services'. More importantly, Facebook earns revenues because it sells the data resulting from annotation activities to advertisers. In short, Facebook – and other corporate-driven information management systems – facilitates user activities that emerged over the past years in online culture by implementing them into easy-to-use interfaces. Behind these user interfaces is a back-end design that generates a surplus value that only the platform provider can exploit. It is within this context that Schäfer states that these media "mostly are platforms like oil platforms, and the users are more or less the oil for the advertisers to exploit" (Schäfer 2012 presentation).

EUScreen has implemented implicit participation and benefits from end-users' participative behaviour. Channelled by the design of the portal, EUScreen's participants unintentionally or unknowingly create value and contribute to the improvement of the EUScreen platform by merely using it. EUScreen for instance collects information regarding users' surfing behaviour, browser type, IP-address

and cookies.²⁷ This so-called ‘Automatically Generated Information’ is used for promotional purposes and for the enhancement of the website (EUscreen, Privacy Statement). Apart from collecting this data, EUscreen gathers information that results from explicit participation. EUscreen’s Terms of Use for instance points out that if one creates a virtual exhibition, all rights are automatically transferred to EUscreen. Moreover, the Terms of Use stipulates that by using EUscreen one grants EUscreen the right to use, distribute and publish all content contributed to EUscreen or created by using EUscreen’s material, even though contributing material is not yet possible (EUscreen, Terms of Use).²⁸ Interestingly, studies have shown that very few users read privacy policies and terms of use (e.g. Goldman 2002; Vila et al. 2003). Still, their presence on the EUscreen website implies that EUscreen’s users agree with the conditions imposed by EUscreen. As a consequence, EUscreen users ‘consciously’ submit to extensive monitoring and the generation of data.

In conclusion, EUscreen’s current format counters explicit participation while it benefits from the data obtained through implicit participation. This is a convenient solution from a producer’s perspective. Participatory culture in the context of non-profit organisations does, however, not simply mean using participants to extend and improve information management systems.

3.1 EUscreenXL: Reciprocal Participation

Schäfer’s distinction between explicit and implicit participation is based on a different context, namely corporate-driven or user-driven but not non-profit. I argue that within the context of non-profit organisations such as EUscreenXL one must consider another possibility, namely ‘reciprocal participation’.²⁹ In reciprocal participation, EUscreenXL harvests the traces of implicit participation while it also implements functionalities that enable users to participate explicitly within the framework provided by EUscreenXL. This channelling of both implicit

²⁷ A ‘cookie’ is a piece of data sent from a website to be automatically stored on the computer of the person who visits the website. Upon accessing the website again, stored cookies are send back to the website’s server so that the website recognises the visitor. Moreover, cookies can be used to reshape the website to the needs of a user.

²⁸ Even though EUscreen is granted these rights, the contributor or creator of the content retains all intellectual property rights, that is, all copyrights, patents and other rights.

²⁹ Reciprocal participation is not a new phenomenon within the context of heritage institutions. Jennifer Trant, consultant in the strategic management of cultural heritage information, for instance wrote a paper “with the participants in the steve.museum project” (Trant 2006: 83).

and explicit participation through design enables volunteers to contribute to the archive, thereby potentially improving the information management system. Moreover, end-users could feel more connected with the archive and become increasingly aware of the function of archives as protector of historical knowledge (Theimer 2012 presentation). In addition, by establishing a platform that facilitates two-way interaction between institutions and community, EUscreenXL is enabled to present a view on history that values and acknowledges the information provided by its end-users as well as the end-users from which it came (cf. Russo and Watkins 2007: 156). Reciprocal participation requires, however, high-quality user interface that engages users and counters the appropriation of technology and content in ways unintended by EUscreenXL. It might prove challenging for EUscreenXL to adapt or design its platform accordingly. Still, channelling user participation through design enables EUscreenXL to offer its users the possibility to actively engage with the provided heritage, while EUscreenXL's policy and regulations are not threatened. This raises the question which participatory archiving options EUscreenXL could support.

4. EXPLORING PARTICIPATORY ARCHIVES

Ernst has argued that digitisation transforms static archival records and their metadata into dynamic code. This entails “a shift from read-only paradigms to a generative, participative form of archival reading” (Ernst 2013: 81-82). Heritage institutions and projects acknowledge that these collections require them to rethink contemporary modes of display and narration. EUscreen for instance presents comparative analyses and creates meaningful connections between items. The participatory turn might, however, even mean providing the visitor the option of interacting with and influencing the material. Elisa Giaccardi, professor of Interactive Media Design at the Technical University of Delft, argues:

“[W]e socially construct heritage in the context of our own lives and imaginations to interact meaningfully with our past and shape our vision of the future (...). This fundamental understanding emphasizes that heritage meanings and values are not attached to art[e]facts, buildings or sites. Neither are they frozen in time. They are the results of repeated and

ongoing interactions in the lived world of ordinary people” (Giaccardi 2012: 2).

This recent conception is one of the pillars that facilitates the pre- and re-formatting of projects such as EUscreenXL. In fact, EUscreenXL justifies its existence by aiming to provide its users with suitable services; end-users want to engage (inter-)actively with archival material in their spare time, their research, their education et cetera (EUscreenXL 2012). This chapter discusses the different participatory archive options that enable users to engage with heritage and proposes an approach that EUscreenXL could take.

4.1 Participatory Archive Options

Although extensive involvement of volunteers in online archival endeavours has recently manifested itself in the concept of ‘participatory archiving’, the use of volunteer support is not a new phenomenon. Amateur historians and scholars have for instance studied their family history and contextualised content by writing scientific articles.³⁰ Also, heritage institutions have invited engaged and interested members of the public into the archive to assist with the cataloguing of curatorial tasks (Oomen and Aroyo 2011: 145). Participatory archive initiatives in an online context could thus be seen as a ‘remediation’: “the formal logic by which new media refashion prior media forms” (Bolter and Grusin 2000: 59). This does not imply a superseding of the traditional archival process, but rather an extension of the on-going process of reforming archival information into the online domain. The options most often implemented to extend the participatory archival process are shown in table 1.

The participatory options presented in table 1 primarily concern the crowdsourcing of specific collections or parts thereof. In these cases, end-users are invited to correct errors in documents that were converted into electronically searchable texts or – as is the case in the ‘Old Weather’³¹ project – transcribe

³⁰ The negative connotation of the word ‘amateur’ is a recent development (Owens 2012). In his book *Cognitive Surplus: Creativity and Generosity in a Connected Age*, Clay Shirky, professor of Interactive Telecommunications, notes that the original meaning of ‘amateur’ derives from the Latin word *amare*, which means ‘lover of’. Therefore, the essence of amateurism is, according to Shirky, intrinsic motivation; amateurs perform activities for the love of it (Shirky 2010: 64).

³¹ The Old Weather project invites one to transcribe mid-nineteenth century ship logs in order to recover worldwide weather observations that can be used to improve climate models.

records that cannot be electronically converted, for instance because they are hand-written. Moreover, end-users are participating in the process of contextualising published material. With the help of volunteers, the ‘Remember Me’ project, initiated by the United States Holocaust Memorial Museum, for example tries to reveal what happened to the children who were documented by relief agencies after surviving the Holocaust. In addition, heritage organisation sometimes actively pursue the addition of a specific collection by inviting the audience to contribute their own material. “Wir waren so frei”, initiated by the *Bundeszentrale für politische Bildung* and the *Deutsche Kinemathek*, is such a project. Contributed by the public and digitised by the *Deutsche Kinemathek*, the “Wir waren so frei” project has assembled an extensive collection of images and stories related to the fall of the Berlin Wall. Furthermore, as is the case with projects related to co-curation, institutions might seek to improve the interaction between institutions and users concerning the selection process prior to publication (Oomen and Aroyo 2011: 139-44).

Crowdsourcing type	Short definition
Correction and Transcription Tasks	Inviting users to correct and/or transcribe outputs of digitisation processes.
Contextualisation	Adding contextual knowledge to objects, e.g. by telling stories or writing articles/wiki pages with contextual data.
Complementing Collection	Active pursuit of additional objects to be included in a (Web)exhibit or collection.
Classification	Gathering descriptive metadata related to objects in a collection. Social tagging is a well-known example.
Co-curation	Using inspiration/expertise of non-professional curators to create (Web)exhibits.

Table 1: Classification of Crowdsourcing Initiatives

For an audio-visual heritage project such as EUscreenXL, user-led classification is of particular relevance because it not only improves the accessibility of specific items but also decreases documentation costs and reduces the working pressure of documentalists. Describing audio-visual material is highly labour-intensive. A documentalist spends at least one hour on describing an hour of footage in general terms, but high-level item descriptions could even take up to four hours per hour

(Baltussen 2010: 24). Therefore, records are usually described in accordance with their perceived value as historical source; highly valued (and merchantable) material such as sport, news and actualities are described in detail while entertainment programmes are only described on item-level. Media producers, the dominant user group of many broadcasting archives, often search for specific material for which detailed descriptions on shot-level are required. As a consequence, the lack of high-level descriptions not only decreases the accessibility of the repository as a whole, but also reduces revenues (Noordegraaf 2012: 113). Archive users could be invited to generate descriptions of these less-valued records. The video labelling game ‘Waisda?’ for instance invites players to classify excerpts of ‘Boer zoekt Vrouw’ (Farmer Wants a Wife) by assigning labels based on what one sees or hears on the video file. Apart from improving accessibility by generating additional descriptions, participatory classification is also helpful in bridging the so-called ‘semantic gap’. The semantic gap refers to the difference between the search terms the general public uses in order to find a document and the keywords assigned to that same document by professional annotators, usually from a controlled vocabulary.³² Participatory classification is based on the assumption that participants annotate material using words they would also use when trying to find that same material through a search query, thus improving the information management system (Noordegraaf 2012: 113).

In conclusion, EUscreenXL could benefit from user-led activities because they potentially improve the information management system. The following section discusses how EUscreenXL could approach this.

4.2 Participatory Archive Models

In his presentation ‘Television Heritage Online: From Accessible to Participatory Archives’, Eggo Müller has argued that most scholarly articles regarding participatory initiatives in online archival contexts concern a radical shift away from collecting heritage objects of marginalised groups in favour of a bottom-up approach to archiving (2012: presentation). In accordance with theories held in science and technology studies, as well as cultural and television studies, advocates of this bottom-up approach state that, in order to grasp the meaning and

³² The semantic gap can also refer to the discrepancy between the search terms used by humans and the automatically generated annotations and keywords by computers (Baltussen 2010: 7).

contextual value of an object, a researcher must engage in a conversation with the community where the archived material originates, rather than simply acquiring a certain amount of objects (2012: presentation). Information studies scientists Katie Shilton and Ramesh Srinivasan for instance propose a methodology for participatory archiving that enables volunteers to contribute to the preservation of a record's contextual value through conversation (2007). As shown in figure 6, the participatory archiving model encourages community participation during the creation of an archival record by expanding the phases of appraisal, arrangement, and description into interactive focus group meetings where representatives of various communities discuss the value of heritage objects. Shilton and Srinivasan state that this will ultimately enable archivists to assess, preserve and order records in accordance with the understanding of the community where records originate, thus facilitating the creation of culturally relevant repositories (2007: 93-97). Moreover, contributors benefit from this participatory, community-oriented process, because it enables them to communicate their views to a wider public (2007: 87).

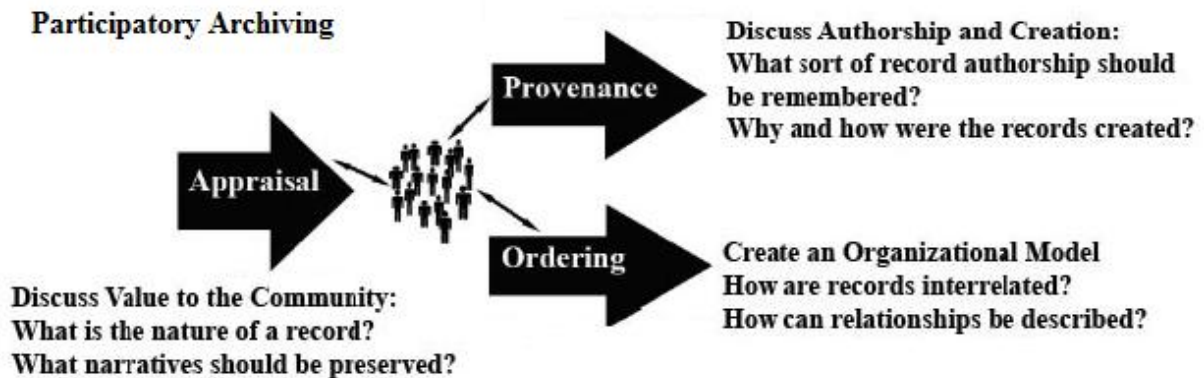


Figure 6: Participatory Archiving Model

The participatory archiving model proposed by Shilton and Srinivasan (2007) supports the actualisation of a more balanced and relevant repository. It draws attention to knowledge and understandings that is usually not available to the archivist but that might be important when engaging with the material. Yet, seen from EUscreenXL's perspective, a problem of this approach is that it is likely to be time-consuming. The model for instance involves identifying relevant communities and representatives within these communities. It might proof

challenging to find these persons within the context of audio-visual heritage from as early as the 1900s. Apart from this, the participatory archiving model involves not only participative appraisal of records, but also participative arrangement and description. An archive that approaches participation in accordance with the model proposed by Shilton and Srinivasan must thus actively incorporate volunteer knowledge into its structuring. Although EUscreenXL's partner archives would with this approach maintain the authority to make the actual changes, the participatory archiving model threatens the established archival structure. Even more challenging is the participatory archive proposed by Isto Huvila (2008).

In his article 'Participatory archive: towards decentralised curation, radical user orientation, and broader contextualisation of records management', Huvila proposes an approach to participatory archiving that allows volunteers to edit actual records. Huvila argues that this will support user collaboration, facilitate swift updating, and ultimately contribute to the generation of richer descriptions and connections between records (2008: 26). This approach does not assume the community of volunteers as a pre-coordinated entity, but instead allows the participants to form their own framework within the archive (2008: 30). Moreover, Huvila stresses that the professional archivist must maintain the participatory platform, provide adequate tools for working with the records and guarantee the technical findability of individual items, rather than pro-actively assessing user participation (2008: 26). Huvila notes:

"Otherwise than from the technical point of view, information managers are equal to the other users of the archive. Their role is not to direct the process of how an archive emerges, how something is described or appraised or what provenances relate to the materials. (...) Participatory archive assumes (...) just the necessity of keeping information findable" (Huvila 2008: 26).

The participatory archive that Huvila proposes thus assumes the heritage organisation as platform provider. On this participatory platform, users of the archive contribute their own records and cooperatively develop a shared methodology (2008: 26). The archivist moderates and supervises this process by making sure that end-users contribute following certain frameworks, but these

frameworks are created by the participants (2008: 26). This approach would enable users to contribute content and information to EUscreenXL's archive, but it completely debases the consortium's authoritative position.

Although the participatory archive models proposed by Huvila (2008) and Shilton and Srinivasan (2007) are both not feasible in the context of EUscreenXL, many ideas about participatory archiving start with the assumption that in an online environment, one desires to contribute (Müller 2012 presentation). Interestingly, Jakob Nielsen, human-computer interaction scientist and director of Nielsen Norman Group, emphasises that of all internet users, nine per cent contributes sometimes and ninety per cent – the so-called 'lurkers' – only consume content. This means that only one per cent consistently and actively contribute the majority of all user-generated content (Nielsen 2006). Moreover, research has shown that the potentially incomplete and subjective nature of the contributed information might discourage archive users, and that those end-users that do contribute have no desire to be fully responsible for the interpretative process (Cameron and Robinson 2007: 179). Consequently, an element in EUscreenXL which connects to participatory archiving could be encouraging user participation by acknowledging the subjective nature of record interpretation, while also providing authoritative, meaningful and trustworthy archival information.

In conclusion, participatory archiving is something that ideally happens in EUscreen, but the technology is lacking. Participatory archiving could, however, work nicely on the platform of EUscreen's successor EUscreenXL. EUscreenXL envisions to explore new means aimed at "integrating user-led activities such as tagging, rating, commenting, blogging in the practices of searching and creatively reusing content on EUscreenXL and Europeana" (EUscreenXL 2012: 42). Nonetheless, a model for user participation is still developing because EUscreenXL is a unique project and should therefore be its own normative model.

CONCLUSION

In this thesis, I have shown that EUscreenXL could achieve its goal to involve users and create a participatory environment better by implementing user-led activities into the design of EUscreenXL's user interface. EUscreenXL should, however, not implement these activities in line with the distinction between user-driven and corporate-driven participation. The context of EUscreen as non-profit organisation asks for an approach in which EUscreenXL harvests traces of implicit participation while it also implements functionalities that enable users to participate explicitly within the framework provided by EUscreenXL. This allows EUscreenXL's end-users to contribute to the archive, while EUscreenXL is at the same time able to prevent appropriation of technology and/or content in ways unintended by the partner institutions. I call this type of participation 'reciprocal participation', which emphasises the mutual benefit for both the EUscreenXL end-users and the partner archives.

Channelling user participation through design requires a user interface that allows some participatory practices while it counters others. It has proven difficult for EUscreen to design such an interface. The analysis of EUscreen's space of participation has shown that the audio-visual legacy, the users, the practices, the technology and the ideas of the creators all adapt or change EUscreen's format within the framework of the format. This is exactly the problem of such a large project: it does not necessarily move in one specific direction. As a consequence, participatory archiving is something that ideally happens in EUscreen, even though it does not currently happen. It could, however, work nicely on the platform of EUscreenXL if EUscreenXL is able to implement participation in a reciprocal manner. An element in EUscreenXL which connects to participatory archiving could be encouraging user participation by acknowledging the subjective nature of record interpretation, while also providing authoritative, meaningful and trustworthy archival information. This enables the users of EUscreenXL to co-create a more balanced, transparent and democratic knowledge environment that reflects a variety of perspectives, while EUscreenXL at the same time maintains an authoritative position. It is important to note, however, that a normative model for participatory archiving can only evolve over the years, exactly because of critical analyses of projects such as EUscreen. In that sense, this thesis is a contribution to the creation of such a participatory archiving model.

If EUscreenXL decides to implement reciprocal participation, the consortium must be aware of two pitfalls. Firstly, EUscreenXL must not overvalue activities performed within EUscreenXL's institutionalised space of participation. Participatory archiving activities enable EUscreenXL's end-users to engage with the material in a personal and meaningful way. The EUscreenXL consortium can monitor these user activities on its platform and accordingly 'measure' whether EUscreenXL fulfils its mission as enabler of user engagement with heritage. Yet, measuring engagement as "number of tagged items" or any equivalent disregards the fact that EUscreenXL's users might use a 'consumed' record in a way that cannot be monitored by the participatory platform, for instance by writing a blog post about it. Although these activities cannot be monitored, they can still be valuable and engaging. Secondly, a collection's participatory potential must not determine whether a collection is worthy of digitisation and publication on the EUscreenXL platform. Many successful participatory archive initiatives attract only a small number of well-informed and interested people who collaboratively make a project successful. The majority of archive users will, however, not participate consistently, if they participate at all. Therefore, determining whether a collection is worthy of digitisation and publication based on its participatory potential disregards the value of making collections available that cannot easily be turned into a participatory project. Apart from this, digitising a collection because of its potential to serve the participatory needs of a small group of EUscreenXL users resonates the old archival model of only serving academics.

FIGURES AND TABLE

Figures

1. The Homepage of EUscreen
EUscreen. *EUscreen – Providing Access to Europe’s Television Heritage*.
EUscreen Consortium. Web. June 22nd 2013.
2. Examples of Thumbnails
EUscreen. *EUscreen – Providing Access to Europe’s Television Heritage*.
EUscreen Consortium. Web. June 22nd 2013.
3. Related Items and Tags
EUscreen. *EUscreen – Providing Access to Europe’s Television Heritage*.
EUscreen Consortium. Web. June 22nd 2013.
4. Example of Metadata
EUscreen. *EUscreen – Providing Access to Europe’s Television Heritage*.
EUscreen Consortium. Web. June 22nd 2013.
5. An EUscreen Facebook Post Relating to a Specific Historical Event
EUscreen. *Facebook – EUscreen*. Facebook, Inc. September 13th 2012. Web.
June 22nd 2013.
6. Participatory Archiving Model
Shilton, K. and R. Srinivasan. ‘Participatory Appraisal and Arrangement for
Multicultural Archival Collections’ *Archivaria* 63 (spring 2007): 87-101. 98.

Table

1. Classification of Crowdsourcing Initiatives
Oomen, J. and L. Aroyo. ‘Crowdsourcing in the Cultural Heritage Domain:
Opportunities and Challenges’ *Proceedings of the 5th International
Conference on Communication and Technologies*. June 29th – July 2nd 2011.
Brisbane, Australia. 140.³³

³³ Oomen and Aroyo also identify a sixth type of crowdsourcing, namely ‘crowdfunding’. Crowdfunding refers to the shared effort of individuals in gathering a certain amount of money or resources to support endeavors initiated by others. For the purpose of this thesis, crowdfunding is disregarded.

BIBLIOGRAPHY

Literature

Anonymous. 'Metadata doesn't match content' *Userveice - EUscreen*. Dynamic Network Services, Inc. September 6th 2012. Web. January 13th 2013.

Badenoch, A. 'Harmonized Spaces, Dissonant Objects, Inventing Europe? Mobilizing Digital Heritage' *Culture Unbound* 3 (2011): 295-315.

---. 'Re: definition virtual exhibition' Message to the author. October 9th 2012. Email.

Baltussen, L.B. *Barbarians versus gatekeepers? Tagging as a way of defining the emergent Living Archive paradigm*. MA Thesis. Universiteit van Amsterdam. 2010.

Bignell, J. and A. Fickers. 'Introduction: Comparative European Perspectives on Television History' *European Television History*. Ed. Jonathan Bignell and Andreas Fickers. Oxford: Blackwell Publishing Ltd, 2008.

Bolter, J. and R. Grusin. *Remediation: Understanding New Media*. London: MIT Press, 2000.

Cameron, F. and H. Robinson. 'Digital Knowledgescapes: Cultural, Theoretical, Practical, and Usage Issues Facing Museum Collection Databases in a Digital Epoch' *Theorizing Digital Cultural Heritage: A Critical Discourse*. Ed. Fiona Cameron and Sarah Kenderdine. Cambridge, Massachusetts: MIT Press, 2007. 166-91.

Cook, T. 'Fashionable Nonsense or Professional Rebirth: Postmodernism and the practise of Archives' *Archivaria* 51 (2001): 14-35.

Corner, J. 'The Cultural Politics of Archives' *Proceedings of the Heard – Seen, The uses of Digitised Archives for Sciences Conference*. Ed. Kurt Degeller, Ursula Ganz-Blättler and Ruth Hungerbühler. The Swiss-Italian University: Lugano, 2007.

Debuysere, S. 'Culture intercom redux. Audiovisual media in a network culture' *Content in Context. New Technologies for Distribution*. Amsterdam: Netherlands Media Art Institute, 2005.

Ellis, J. 'Why Digitise Historical Television?' *Journal of European Television History and Culture* 1.1 (2012): 27-33.

Ernst, W. 'Underway to the Dual System: Classical Archives and Digital Memory' *Digital Memory and the Archive*. Ed. Jussi Parikka. Minneapolis: University of Minnesota Press, 2013. 81-94.

European Commission. *eContentplus Work Programme 2008*. Online Report, 2008.

---. 'i2010 – A European Information Society for Growth and Deployment' *Europe's Information Society*. European Commission. 2009. Web. January 24th 2013.

---. 'Origins of the digital library initiative' *About the Digital Library Initiative*. European Commission. n.d. Web. January 24th 2013 via cache memory.

---. *Structure of Annex I to the Grant Agreement (Description of Work)*. Online Report, 2010.

---. *The New Renaissance: Report of the 'Comité des Sages' Reflection Group on Bringing Europe's Digital Heritage Online*. Online Report, 2011.

European Union. 'Decision No 456/2005/EC of the European Parliament and of the Council. *Official Journal of the European Union* L79.48 (2005): 1-8.

EUScreen. *Annex I: Description of Work*. Internal Report, July 2009.

---. *D5.1 User Group Definitions and Internal User Requirements*. Internal Report, 2010.

---. 'Terms of Use' *EUScreen – Providing Access to Europe's Television Heritage*. EUScreen consortium. n.d. Web. January 18th 2013.

---. 'Privacy Statement' *EUScreen – Providing Access to Europe's Television Heritage*. EUScreen consortium. n.d. Web. May 1st 2012.

EUScreenXL. *Part B of Annex I: Description of Work*. Internal Report, September 2012.

Eveleigh, A. 'Welcoming the World: An Exploration of Participatory Archives' *International Council on Archives*. Brisbane, Australia. August 2012. 1-10.

Featherstone, M. 'Archiving Cultures' *British Journal of Sociology* 51.1 (2000): 161-84.

Fickers, A. 'Towards A New Digital Historicism? Doing History In The Age Of Abundance' *Journal of European Television History and Culture* 1.1 (2012): 19-26.

Fickers, A. and C. Johnson. 'Transnational Television History: A Comparative Approach – Introduction' *Media History* 16.1 (2010): 1-11.

Geser, G. and J. Pereira. 'The Future Digital Heritage Space: An Expedition Report' *DigiCULT Thematic Issue 7* (2004): 5-76.

Giaccardi, E. *Heritage and Social Media: Understanding heritage in a participatory culture*. Hoboken: Taylor and Francis, 2012.

Goldman, E. 'On My Mind: The Privacy Hoax' *ericgoldman.org*. October 2002. Web. January 17th 2013.

Hazan, S. 'A Crisis of Authority: New Lamps for Old' *Theorizing Digital Cultural Heritage: A Critical Discourse*. Ed. Fiona Cameron and Sarah Kenderdine. Cambridge, Massachusetts: MIT Press, 2007. 133-47.

Heuvel, W. van den and L.B. Baltussen. *D7.6.1. Online Access to Audiovisual Heritage Status Report*. Online Report, 2011.

Hogekamp, B. Personal interview. Nederlands Instituut voor Beeld en Geluid, Hilversum, the Netherlands. October 18th 2012.

Huvila, I. 'Participatory archive: towards decentralised curation, radical user orientation, and broader contextualisation of records management' *Archival Science* 8.1 (2008): 15-36.

Jenkins, H. et al. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. MacArthur Foundation. Online Report, 2006.

Jenkins, H. *Textual poachers. Television fans and participatory culture*. New York: Routledge, 1992.

---. *Convergence culture: Where old and new media collide*. New York: New York University Press, 2006a.

---. *Fans, bloggers, and gamers: Exploring participatory culture*. New York: New York University Press, 2006b.

Johnny. 'Deutsche Welle in English' *Userveice - EUscreen*. Dynamic Network Services, Inc. July 17th 2012. Web. February 11th 2013.

Ketelaar, E. 'Tacit Narratives: The Meaning of Archives' *Archival Science* 1 (2001): 131-41.

Kittur, A. et al. 'Power of the Few vs. Wisdom of the Crowd: Wikipedia and the Rise of the Bourgeoisie' *World Wide Web* 1.2 (2007): 1-9.

Koch, T. 'Re: Deutsche Welle in English' *Userveice - EUscreen*. Dynamic Network Services, Inc. July 18th 2012. Web. February 11th 2013.

Leeuw, S. de. 'European Television History Online: History and Challenges' *Journal of European Television History and Culture* 1.1 (2012a): 3-11.
---. 'Het archief als netwerk. Perspectieven op de studie van online televisie-erfgoed' *Tijdschrift voor Mediageschiedenis* 14.2 (2012b): 10-28.
---. 'Re: Thematische indeling EUscreen' Message to the author. July 4th 2013. Email.

Manovich, L. *The Language of New Media*. Cambridge, Massachusetts: MIT Press, 2001.

Martilla, S. *D5.2.1 Review of IPR limitations and recommendations*. Internal Report, 2011.

Müller, E. 'Formatted Spaces of Participation: Interactive television and the changing relationship between production and consumption' *Digital Material: Tracing New Media in Everyday Life and Technology*. Ed. Marianne van den Boomen, Sybille Lammes, Ann-Sophie Lehmann, Joost Raessens and Mirko Tobias Schäfer. Amsterdam: Amsterdam University Press, 2009. 49-63.
---. 'Television Heritage Online: From Accessible to Participatory Archives' *Final EUscreen International Conference on Television Heritage and the Web*. September 13th – September 14th 2012. Budapest, Hungary. September 14th 2012.
---. Personal interview. Universiteit Utrecht, Muntstraat 2a, Utrecht, the Netherlands. January 7th 2013.

Neef, R. de. *Internship Research Report EUscreen*. Universiteit Utrecht. 2012.

Nielsen, J. 'Participation Inequality: Encouraging More Users to Contribute' *nngroup.com*. Nielsen Norman Group. October 9th 2006. Web. April 10th 2013.

Noordegraaf, J. 'Crowdsourcing Television's Past: The State of Knowledge in Digital Archives' *Tijdschrift voor Mediageschiedenis* 14.2 (2012): 108-20.
---. 'Who Knows Television? Online Access and the Gatekeepers of Knowledge' *Critical Studies in Television* 5.2 (2010): 1-19.

Oomen, J. and L. Aroyo. 'Crowdsourcing in the Cultural Heritage Domain: Opportunities and Challenges' *Proceedings of the 5th International Conference on Communication and Technologies*. June 29th – July 2nd 2011. Brisbane, Australia. 138-49.

Oomen, J. and T. Tzouvaras. 'Publishing Europe's Television Heritage on the Web: The EUscreen Project' *Communications in Computer and Information Science* 247 (2012): 136-42.

Oomen, J. et al. 'Television Heritage and the Semantic Web: Video active and EUscreen' *International Conference on Dublin Core and Metadata Applications* (2009): 97-105.

Owens, T. 'The Crowd and the Library' *Trevor Owens – User Centered Digital History*. Trevor Owens. May 20th 2012. Web. August 13th 2013.

Prelinger, R. 'The Appearance of Archives' *The YouTube Reader*. Ed. Pelle Snickars and Patrick Vonderau. Stockholm: National Library of Sweden, 2009. 268-74.

Rendina, M. 'The Europeana Data Model'. Interview by Anna Dabrowska. *EUscreen Webcast*. Museum of the Italian Society of Cinematographers, Rome. July, 2011. Web. February 9th 2013.

Rijcke, S. de and A. Beaulieu. 'Networked knowledge and epistemic authority in the development of virtual museums' *Museum Transfigurations: Curation and Co-creation of Collections in the Digital Age*. Ed. Chiel van den Akker and Susan Legene. New York: Berghahn Books, forthcoming. This version 2012: 1-23.

Ross, S. 'Digital Preservation, Archival Science and Methodological Foundations for Digital Libraries' *Keynote Address at the 11th European Conference on Digital Libraries*. September 17th, 2007. Budapest, Hungary. 2007. 1-19.

Røssaak, E. 'The Archive in Motion: An Introduction' *The Archive in Motion: New Conceptions of the Archive in Contemporary Thought and New Media Practices*. Ed. Eivind Røssaak. Oslo: Studies from the National Library of Norway, 2011. This version p. 1-10.

Russo, A. and J. Watkins. 'Digital Cultural Communication: Audience and Remediation' *Theorizing Digital Cultural Heritage: A Critical Discourse*. Ed. Fiona Cameron and Sarah Kenderdine. Cambridge, Massachusetts: MIT Press, 2007. 149-164.

Sanders, N. 'Hire a new translator for the Dutch to English translations for program descriptions' *Uservice - EUscreen*. Dynamic Network Services, Inc. November 1st 2011. Web. February 11th 2013.

Scannell, P. 'Broadcasting Historiography and Historicity' *Screen* 45. 2 (2004): 130-41.

Schäfer, M. T. *Bastard Culture! How User Participation Transforms Cultural Production*. Amsterdam: Amsterdam University Press, 2011.

Schäfer, M. T. 'A Critical Perspective on User Participation' *Economies of the Commons Conference 3: Re-Imaging the Archive*. October 11th 2012 – October 12th 2012. Amsterdam, the Netherlands. October 12th 2012.

Shilton, K. and R. Srinivasan. 'Participatory Appraisal and Arrangement for Multicultural Archival Collections' *Archivaria* 63 (spring 2007): 87-101.

Shirky, C. *Cognitive Surplus: Creativity and Generosity in a Connected Age*. New York: The Penguin Press, 2010.

Surowiecki, J. *The Wisdom of Crowds: Why the Many Are Smarter Than the Few*. New York: Anchor Books, 2005.

Sterling, A. 'Broadcasters' Archives – National, International and Regional Copyright Aspects' *Digitisation and Online Exploitation of Broadcasters' Archives*. Ed. Christina Angelopoulos, Susanne Nikoltchev and Stef van Grompel. IRIS Special, Strasbourg: European Audiovisual Observatory, 2012. 11-5.

Theimer, K. 'Participatory Archives: Something Old, Something New' *Midwest Archives Conference*. April 19th 2012. Grand Rapids, Michigan. Keynote. 2012.

Trant, J. and the participants in the steve.museum project. 'Exploring the potential for social tagging and folksonomy in art museums: Proof of concept' *New Review of Hypermedia and Multimedia* 12.1 (2006): 83-105.

Treleani, M. and C. Mussou. 'Retelling the Past With Broadcast Archives: Context Makes Sense' *Journal of European Television History and Culture* 1.1 (2012): 61-6.

Vila, T. et al. 'Why we can't be bothered to read privacy policies: Models of privacy economics as a lemons market' *Proceedings of the 5th international conference on Electronic commerce*. New York: Association for Computing Machinery Press, 2003. 403-7.

Vydt, K. 'Incomplete translation' *Uservice - EUscreen*. Dynamic Network Services, Inc. November 24th 2011. Web. January 13th 2013.

Applications and Websites

Boer zoekt Vrouw. KRO. Hilversum. 2004 – present. Television.

Creative Commons License. Creative Commons (CC). Lawrence Lessig. Mountain View, California, United States. 2001.

EUscreen. *EUscreen – Providing Access to Europe’s Television Heritage*. EUscreen Consortium. 2009 – 2012. Web. June 22nd 2013.

EUscreenXL. *EUscreenXL – The pan-European audiovisual aggregator for Europeana*. EUscreen Consortium. 2013 – 2016. Web. June 22nd 2013.

Farmer Wants a Wife. ITV. Thames Television, London. 2001 – present. Television.

Noterik. Noterik BV. 2001.

Old Weather. *Old Weather - Our Weather's Past, the Climate's Future*. Old Weather Consortium. October 2010. Web. June 22nd 2013.

Open Beelden. *Open Beelden*. Nederlands Instituut voor Beeld en Geluid in conjunction with Stichting Nederland Kennisland. n.d. Web. June 22nd 2013.

Open Images. *Open Images.eu*. Nederlands Instituut voor Beeld en Geluid in conjunction with Stichting Nederland Kennisland. n.d. Web. June 22nd 2013.

---. EUscreen. *Open Images – EUscreen*. n.d. Web. June 22nd 2013

Remember me. *Remember me: Displaced Children of the Holocaust*. United States Holocaust Memorial Museum. n.d. Web. August 17th 2013.

Video Active. *Video Active – Creating Access to Europe’s Television Heritage*. Nederlands Instituut voor Beeld en Geluid. 2006 – 2009. Web. June 22nd 2013.

Waisda? *Woordentikkertje*. Nederlands Instituut voor Beeld en Geluid in conjunction with the KRO and the Vrije Universiteit. May 2009. Web. June 22nd 2013.

Wir waren so frei. *Wir waren so frei*. Deutsche Kinemathek and Bundeszentrale für politische Bildung. 2009. Web. June 22nd 2013.