

Digital Curation in collections and digital environments of women's museums

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CHAPTER 5

DIGITAL CURATION IN COLLECTIONS AND DIGITAL ENVIRONMENTS OF WOMEN'S MUSEUMS

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ABSTRACT

The collections of women's museums present themes that enhance the possibilities of creating a female protagonism in various social practices. In this context, we seek to understand how the convergence between Digital Curation and Information Science contributes to the construction of collections on digital environments from information organization, presentation, and representation, aimed at access and sharing. The general objective is to contextualize the concepts and definitions of such areas to identify effective articulations for the construction of digital collections for women's museums. The results demonstrated the need for a reflection on the methodology designed for continuous improvements in information access and sharing. The implementation of Digital Curation strategies and actions for the construction of collections in digital environments is believed to expand the objectives of women's museums.

Keywords: Information Science, Digital Curation, digital environments, women's museums.

RESUMEN

Los acervos de los museos de lo femenino presentan temáticas que amplían las posibilidades de construcción de un protagonismo femenino en diversas prácticas sociales. En ese contexto, se busca entender como la convergencia entre la Curación Digital y la Ciencia de la Información contribuye en la construcción de acervos en entornos digitales, a partir de la organización, presentación y representación de la información, con vistas a su acceso e intercambio. El objetivo general es contextualizar los conceptos y las definiciones de tales áreas, a fin de identificar articulaciones efectivas para la preservación de acervos digitales de los museos de lo femenino. Los resultados demostraron la necesidad de una reflexión sobre la metodología de la planificación pensada en mejoras continuas de acceso e intercambio de la información. Se considera que la implementación de las estrategias y acciones de la Curación Digital para la construcción de acervos en entornos digitales expanden los objetivos de los museos de lo femenino.

Palabras clave: Ciencia de la Información, Curación Digital, entornos digitales, museos de lo femenino.

1 INTRODUCTION

Changes in daily life and in the way subjects relate to information through Information and Communication Technologies (ICTs) have been constant and, consequently, have expanded the forms of interaction in the infocommunication process on the Web.

On the Web, by providing information related to memory and culture, digital environments of cultural facilities potentiate relationships across different contexts. However, such information requires treatment that includes all the complexity of information systems and informational subjects, in addition to other stakeholders, to provide possibilities for access and sharing.

Coherently, in the museum context, digital collections have assumed structures formed by multiple languages in their organization, representation and presentation which can be experienced in the scientific, cultural and social spheres. Museums that display collections in digital environments, in addition to keeping, preserving and giving access to memory, provide the opportunity to create narratives guided by cultural and social circumstances, which allow information exploration and reflection from different perspectives.

To create meaningful narratives, museums need to cope with functional and educational content and information according to the informational subjects' relationships of perceptions, motivations and expectations on the digital environments of their collections. In this sense, given information organization and presentation, language convergence must understand the structures and attributes of the Web as a communication channel that allows content curation to facilitate information access and retrieval referring to memory and culture, and provoke expressions and ideas to stakeholders.

For the curation of women's museum collections, it is important to provide collections that present themes that favor visibility and expand the possibilities of building a female role in various social practices, by rescuing and giving visibility to the memory of the feminine in search of women's participation in "[...] social, political, cultural and everyday life, both in the past and in the present" (Vaquinhas, 2014, p. 2, our translation).

This chapter aims to understand how Digital Curation (DC),

converged with Information Science (IS), contributes to the development of collections and digital environments with functional proposals for information organization, representation and presentation with a view to access and sharing. The general objective is to contextualize DC concepts and definitions to identify possible articulations for women's museums' digital collections.

For this end, firstly, a bibliographic survey was carried out directed to the treatment of the relations between DC and IS in the women's museums on the digital scope. Subsequently, as a result of the exploration on the Web, a collection of data related to the number of initiatives and women's museums existing on the Web was carried out. The subjects dealt with by genre collections were also described to correlate them with DC practices.

Based on the areas of DC and IS, this set of research actions demonstrated the need for a reflection on the methodology for planning and creating digital environments as a laboratory process, continuous, in perpetual beta, iterative and in successive improvement. Furthermore, these environments' maintenance and support must be constant. Given their complexity; actions designed from the observation and participation of the community, so that improvements in information access and sharing are continuous and the digital environment is efficient and effective for reaching informational subjects.

In this scenario, it is important to highlight that the implementation of DC strategies and actions for the creation of digital environments and, on them, the collections, favors the expansion of the objectives of women's museums through collaborative activities on the Web with the use of ICTs. Various dimensions of women's memory and their preservation can be suggested to promote greater participation for grounding social issue discussions in contemporary times.

2 DIGITAL CURATION ACTIONS IN INFORMATION SCIENCE

The articulation of languages, technologies and humanities benefits the communication across systems and their interoperability, and provides an opportunity for the interdisciplinarity of Digital Curation (DC) with Information Science (IS). DC addresses approaches based on

methods and strategies for information organization and presentation in digital environments. In this section, DC's actions that contribute to subjects' interaction and participation through information access and sharing are explored.

DC emerged at a time of continuous growth in digital information and the expansion of the internet and ICTs in the end of the 1990s, with interests in digital preservation (Beagrie, 2004; Higgins, 2011). Since its inception, actions for managing digital objects have been presented aiming at providing long-term access and adding value to information; actions linked mainly to digital storage and preservation processes (Beagrie, 2004).

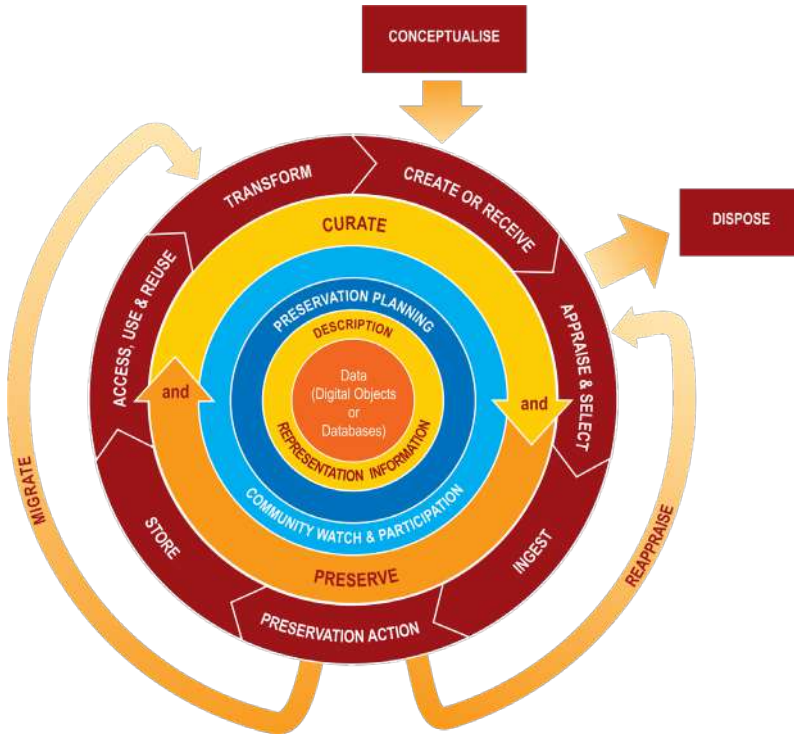
According to Dayse Abbott (2008), there are short-term and long-term advantages in DC implementation. In the short term, the benefits lie in: improving the quality of digital objects; using common patterns; verifying authenticity; formally recording; making the best use of the initial investment; and speeding up information access and sharing (Abbott, 2008). In the long term, the advantages refer to: preserving and protecting digital objects against loss and obsolescence; allowing continuous access and encouraging its reuse; providing information about the context and its provenance; ensuring that they remain meaningful; and creating management infrastructure aiming at preservation and sharing (Abbott, 2008).

Thus, DC has played an extensive role in the managing process of digital objects throughout their lifecycle, as “[...] it reduces threats to their long-term research value and mitigates the risk of digital obsolescence” (Digital Center Curation (DCC), c2021). DC is applicable in different digital object management activities, such as planning, creation, digitization and documentation practices, as well as future availability of access and reuse (Abbott, 2008).

The effectiveness of the described advantages requires an implementation planning, a fundamental step. To this end, the Digital Curation Life Cycle (DCLC), developed by Sara Higgins and used by DCC, is a planning tool comprising continuous processes that require attention and investment, and which adapts to different situations and allows for the identification of the best activities for DC application (Higgins, 2008; DCC, c2021).

The DCLC “[...] ensures that all required stages are identified and planned and necessary actions implemented, in the correct sequence” (Higgins, 2008, p. 135). The model (Figure 1) presents the DC stages divided by blocks of: essential actions, sequential actions and occasional actions.

Figure 1 - Digital Curation Lifecycle



Source: Higgins (2008).

The essential actions block is at the center of the model and comprises: information description and representation, preservation planning, community watch and participation, and curation and preservation. These are interrelated and guiding actions for the development of the entire DCLC, such as the attribution of metadata, planning, watch and verification of curation and preservation activities

(Higgins, 2008).

The sequential actions are distributed in: conceptualizing, creating and receiving, appraising and selecting, ingesting, preserving, storing, access, using and reusing, and transforming. According to Higgins (2008), they are interconnected and following them as a sequence is crucial for an efficient and effective DC, even if not all of them are identified as necessary, due to the contexts in which they will be applied.

Occasional actions are composed of discarding, reappraising and migrating. They are performed in specific periods and in situations defined by policies, legislation, validation failures and the need for format modifications (Higgins, 2008).

Arjun Sabharwal (2015) exemplified each DCLC action from the perspective of Archives, Libraries and Museums, and concluded that the model has useful resources for the conceptualization, implementation and appraisal of digital information. For the author, conceptualization is the most important and necessary task prior to the DCLC implementation, as it analyzes each organizational structure and its types of collections and interests, variables that directly impact action planning (Sabharwal, 2015).

This chapter presents an excerpt highlighting the actions of community watch and participation (described in the center of Figure 1); and access, use and reuse, referred here as information access and sharing (described in the last band of Figure 1). We point out, in this perspective, that the action of community watch and participation is a two-way road that can refer both to professionals – community behind the system – and the subjects who will have access to that information.

Therefore, this chapter seeks the point of view of informational subjects and stakeholders in preparing the information in custody so that it is centered on their contextual needs and on their contribution to discussions about the multivocalities of narratives and stories, through direct communication between the subjects and the museum institution, so that it is also centered on its circulation flow, on the perspective of access in the post-custodial paradigm.

In this context, DC linked to the area of IS, becomes a resource

for actions of planning and management that seek to approach stakeholders. The interdisciplinarity aspect of the area is growing and is essential for collaborating with theories and practices related to the processes of selection, maintenance and preservation of digital objects. Such theories and practices favor scientific, cultural and memory activities, and are concerned with information in its various aspects, moments and instances (Araújo, 2018).

IS is an interdisciplinary area situated as an applied social science, and its convergence with other areas offers improvements in personal and institutional communication efforts. Interdisciplinarity brings out perceptions of properties for the improvement of the infocommunicational process supported by information organization, representation and presentation, mainly by language and system interoperability offered on the Web.

The confluent development of the two areas, and their recent maturation, corroborates to claim that the points of intersection and the interdisciplinary nature of IS and DC also lack multidisciplinary teams, in which it is necessary and imperative to bring together academics, information professionals, designers and technologists to produce solutions to the communication problems that arise.

Thus, the mere availability of information is no longer sufficient, in the same way that the digital object should not be seen in isolation or only in the field of digital preservation. Building a satisfactory relationship among museums, collections and digital environments and their stakeholders is, precisely, to understand the potential offered by all the elements that are part of the systems involved in the actions: they are influencing factors for information access and sharing of collections and, in this way, they expand the discussions and guarantee the social function of these spaces.

3 OVERVIEW OF WOMEN'S MUSEUMS CONVERGED WITH DIGITAL CURATION ACTIONS ON DIGITAL ENVIRONMENTS

The role played by culture and information facilities foster debates that contribute to expanding visibility, empowering groups, developing projects and public policy practices among other

opportunities originating from their actions. For Alice Semedo (2015, p. 11, our translation), museums are “[...] more than institutions for object exhibitions; they are places of interaction between personal and collective identities, between memory and history.”

In this sense, the growing agendas related to gender can provoke and support necessary dialogues from actions of memory access, sharing and preservation. Women’s museums, in this sense, become fundamental for women’s representation and to support their sociocultural confrontations. Women’s museums are cultural facilities that can provide other perspectives in the creation of women’s history narratives with possibilities of accessing and sharing their collections.

[...] women’s and/or gender museums are opening new doors both in the specifically historiographical field and in raising issues that help to understand the way in which women have shaped their lives and have articulated (and articulate) them with social changes. (VAquinhas, 2014, p. 10, our translation).

The International Association of Women’s Museums (IAWM) is an initiative that strives to preserve female memory through cooperation between institutions dealing with women and/or gender around the world (IAWM, 2021). Its three main services are: monitoring associated museums in a database; promoting and publicizing activities and exhibitions via official channels; networking globally to organize conferences, meetings, and discussions with members and non-members; and cooperating to create collaborative projects with other museums (IAWM, 2021).

For the IAWM (2021), women’s museums aspire to be their own spaces aimed at education, training and encouraging women’s self-confidence, by working to raise awareness through actions aligned with their goals. In its latest update, published in 2021, 146 women’s initiatives (projects) and museums around the world were counted, among on-site and on-line. Table 1 presents the numbers according to each region.

Table 1: Number of initiatives and museums around the world

Region	On-site museums	On-line museums	Initiatives	Total
Africa	06	0	08	14
Asia	13	06	04	23
Australia	04	0	01	05
Europe	25	06	23	54
North America	26	04	02	32
Latin America	05	05	08	18
TOTAL	79	21	46	146

Source: prepared by the authors (2021).

Note: data collected from IAWM (2021).

There is a significant performance of women's museums around the world, which is fundamental for memory preservation, for information exchange and for collaboration among them. Of this total, 108 museums have digital environments; however, only 44 display their collections. It is understood, therefore, that the creation of digital collections on the Web would facilitate access, integration and their reach.

Part of the museums' communication structure for the relationship with stakeholders is their presence on the Web. The potential offered by ICTs can be adopted as a means to share their simulacra through multiple languages and different supports resulting in integration and interactivity (Padua, Jorente, & Semedo, 2019).

In addition, access to and sharing of collections on the Web provide greater participation of informational subjects, which can influence perceptions of both individual and collective identities (Semedo, 2015), even considering the contrasts between the numbers of women's museums in the different regions.

The actions of community watch and participation and of information access and sharing proposed by DC allow the planning

of the creation of digital environments to be guided and enhanced by practices of information organization to promote better interaction in the communication process. Due to the information scalability on the Web, curators of women's museums can work with a range of themes that guide the potential of narrative constructions according to their collections.

The project *Patrimonio en femenino* in Spain, from 2010 to 2016, brought together objects held by various museums to

[...] outline visions of the feminine presence from different angles, contextualizing their protagonism in the most diverse civilizations and from the origins of humanity to the present day. (Carrasco-Garrido & Nuevo-Gómez, 2016, p. 82, our translation).

According to these views, six catalogs were created, consisting of representations of paintings, sculptures, photographs, clothes, furniture, from different Spanish museums.

A final catalog, also part of the project, added items from collections from Argentina, Brazil, Chile, Colombia, Mexico, Portugal and Uruguay as for the partnership with Ibermuseum (Carrasco-Garrido & Nuevo-Gómez, 2016). The central themes unfold into thematic sections, as shown in Chart 1.

Chart 1: Themes incorporated in the *Patrimonio en Femenino* catalogs

Title of the catalog	Section (themes)
<i>Patrimonio en Femenino</i> (2011)	Works carried out by women Discourses and models of femininity Women's work and knowledge Breaks and transgressions Perpetuating memory
Absences and Silences (2012)	Authority and power Science and education Creation and exhibition Work and labor Rights and equity
Women in adversity: times and setbacks (2013)	Social change Subsistence and survival Political conflicts and transformations Personal territory First names
Tradition and modernity (2014)	Faithful to tradition The difficult conquest of modernity Until the end Roundtrip paths First-singular person
Eros and Anteros: views on female sexuality (2015)	Eros and Anteros Unconfessable secrets From Eva to <i>la femme fatale</i> : archetypes Otherness images Living sexuality The construction of eroticism Curious eyes The woman object

Title of the catalog	Section (themes)
Women's memory (2016)	Women and identity: community and interculturality
	Rights and equity
	Symbols and myths around genre
	Heritage's territory

Source: prepared by the authors (2021).

Note: data collected from the *Patrimonio en Femenino* website (2020).

The set of catalogs and the social themes worked on demonstrate how vast the possibilities of converging women's representations are. According to Semedo (2015),

The growing interest in the field of social sciences has focused on representations of people and places through heritage, both in the historical and contemporary contexts, giving special attention to issues of representation and identity in museums. (p. 12, our translation).

Additionally, sharing museum collections in a digital environment expands physical collections and generates new presentations, contextualization and interpretations based on their objects (Sayão, 2016). Actions aimed at information access and sharing, according to Sayão (2016), manifest in the DC planning open to the possibilities of aggregating content, languages and materials through a collaborative and cooperative space for education and scientific research.

In this way, community watch and participation is an auxiliary method for technical processes - as information representation and organization - to its creation and presentation as form and content. Although the flexibility brought by the Web in information search does not follow the hierarchical patterns based on librarianship practices, allowing collective activity in interpretations, classifications and categorizations opens space to the perception of the community as a resource in the post-custodial context, which has been discussed in IS third paradigm.

From such an interdisciplinary perspective between DC and IS,

the Web platform combines favorable environments to communicate collections' simulacrum, fosters dialogue between women's museums and simultaneously considers the relationship of museum institutions with their stakeholders, since the number of museums that have digital environments is significant. In this sense, it is essential that the DC resources are implemented in practices and methods of organization, representation and presentation of the collections in custody.

4 FINAL CONSIDERATIONS

The described Digital Curation (DC) actions present reflections on the possible application techniques on digital environments, and establish a promising relationship with the community. The planning for such actions must be guided towards an efficient and effective digital information organization, representation and presentation on the Web environments in that information is shared to different subjects, simultaneously and ubiquitously.

From the point of view of museum institutions, it is vital to use such methods and resources to improve their digital environments to promote communication strategies related to their collections, promoting convergence with other online channels and optimizing their visibility, among other objectives.

Although most women's museums have digital environments, the number of collections available online is relatively low, as described above. When analyzing the themes of the *Patrimonio en Femenino* catalogs, clearly, broad narratives can be developed if worked with stakeholders associated with institutions and collections.

In this way, converging the DC actions with the features of Information and Communication Technologies (ICTs) favors the growth of themes related to women on the Web, expands information access and sharing, and provides opportunities for dialogues built through stakeholders' and informational subjects' collaboration and interaction.

By contextualizing DC, which is interdisciplinary to Information Science (IS), we identified contributions to the development of projects within the scope of the digital collections of women's museums. With the community watch and participation, the construction and creation

of digital and informational environments that work as two-way road is proposed, that is, that the resources offered for stakeholders' use can be parameters for information professionals' practices and techniques.

Aspects related to language and system convergence are also discussed within the scope of these collections' organization and presentation of representations and need constant reassessment to find the appropriate solutions in preserving women's memories in different cultures and societies. The extension of such representations to digital-virtual museums results in initiatives that go beyond physical boundaries and are projected in a decentralized way.

Finally, the DC application actions in digital collections of women's museums must be developed and executed from the understanding of the complexity of each of the areas and the actors of the entire infocommunication process as subsystems of a mosaic culture characteristic of postmodernity.

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