

Archives without a Lobby:

On the Situation of Institutional Holdings in Galleries and Art Museums

Philipp Messner

The subject of this article is the situation of archives of art institutions with regard to their public accessibility and usability. After some introductory remarks on the importance of an archive policy for a democratic culture and the problem of terminology when talking about archives, I will take a look at the project *Folding the Exhibition*. This research project is one of the first in the European context to deal with the situation of institutional archives holdings in the field of art from a practical perspective. This will be complemented by a look at the specific practice in North America, where archivists of galleries and art museums are much more integrated in the archival professional discourse than their European counterparts. As a result, they are also better equipped to meet the challenges of digitization—the subject of the last part of this contribution.

In the case of the archives, these challenges are not limited to questions of storing and mediating digital objects but bring to the fore the question of how to organize the historical transmission of processes that no longer leave a “paper trail” in the literal sense. In this respect, the difficulties associated with digitization are also not primarily technical, but rather organizational in nature. The possibility of mastering these difficulties is primarily dependent on the availability of appropriate resources and trained personnel. In the case of art institutions, this is usually the biggest problem.

Critical to my examination is the fact that I am not approaching the subject of art institutional archives primarily as a researcher, but as someone who shares responsibility for managing an archives. My primary interest is more in practical questions and less in philosophically grounded

reflection. In no way does this perspective negate the value of a discourse about the archives and archiving that has been cultivated in media and cultural studies since the 1990s, and also intensified in the field of contemporary art.[1] I am convinced that neither a professional archives practice nor an archival science derived from it can do without philosophical preconditions.[2] However, there is a discrepancy between “the archive” as a theoretical problem and the task of practical archival care. In archival science, “archives” is a plural noun. When the singular “archive” is used, it refers to the records of individuals and communities. Outside of this professional discourse, this distinction is seldom made. This paper deals with an archival science discourse, so I will use the according terminology. While the archive is prominently discussed, the subject of practical archival care all too often falls by the wayside. This discrepancy is particularly striking in the field of contemporary art. Against the background of my professional experience as an archivist, my participation in the academic discourse on the subject must take the form of an opinion paper.

Archives and Democracy

In contrast to the broad concept of “the archive” in cultural studies and contemporary art discourse, which encompasses very different forms of historically oriented collection, in the following I will use a narrower definition of the archives as an institution, to preserve and make available evidence of activities of a defined, file-forming body. In this archival-scientific understanding of the archives, its object is process-generated information, the historical transmission of which is inseparably linked with the functionalities of current records management at the body to be archived.[3] Ideally, for example, when a document is created, it is already decided which archives will be responsible for its preservation or destruction when this document is no longer needed for day-to-day matters.

As multifunctional institutions, such archives play an important role in a democratic culture. Firstly, as the premise of their practical work is the maintenance of accountability, archiving can be understood as one of the instruments designed to bind power and place it under the control of the people; secondly, archives preserve an abundant documentary heritage that can be used to stabilize societal or communitarian identities, but also serves as a reservoir feeding essential skepticism.[4]

Whereas private stakeholders are in most cases free to configure their archives as they see fit, in the case of government agencies and other public facilities, a distribution of operations has been established in most advanced democracies. Archival laws oblige taxpayer-funded institutions to transfer noncurrent records to their associated state archives; these are then tasked with securing these documents and—in compliance with privacy protections—making them publicly accessible.

Generally in universities, the practice is that documents are not transferred to a state archives, but that the university maintains its own public archives, which is responsible for institutional preservation and making the archival material it administers available to an interested public, in accordance with relevant laws. In the case of museums and related institutions there is also a strong interest in their own history, but no comparable archival tradition. The need of art institutions for direct access to their own historical records, for which good reasons can be argued above all in the context of collection management, often results in the fact that the corresponding archival holdings are de facto withdrawn from the public.

The reasons for a lack of accessibility to the archival holdings of galleries and museums—whose activities not only concern the public interest, but which in many cases are financed by public money, or at least co-financed—are not only based on the nearly complete absence of a public, utility-oriented archival tradition in these institutions. In many cases, the funds for professionally maintaining their archives are simply lacking. Regardless of the reasons, the lack of public accessibility to public art institution archives constitutes a democratic deficit that must be addressed as such.

Archives of Art Institutions and Archival Science

Specialist literature on the subject of “art institutional archives” is extremely sparse. If such archives are referred to, they are often included among “art archives.”^[5] In addition to corresponding specialist archives, this category also includes library-oriented documentation centers in which specific archival problems hardly play a role.^[6] In this context, in addition to the above-depicted distinction between library and archival methods, it is necessary to differentiate between multi-collection archives and single-agency archives. While the former *collects* archival material with a thematic focus,^[7] the latter *assumes* the noncurrent records of an institution by virtue of its responsibility. Although hybrids are not rare in this field, the institutional archives of a gallery or museum should be typified primarily as a single-agency archives. Thus, they are closer to the practice of the classic public archives than the collecting specialist archives in the field of art. For this reason, the theoretical and practical examination of archives in art institutions should also be based more strongly on the referential framework of “classical” archival science than previously.

In the European context, the *Folding the Exhibition* brochure, published in 2014 by the Museu d'Art Contemporani de Barcelona (MACBA), can serve as an example and a milestone for an art institution's approach to the practical fundamentals of archival science.^[8] The brochure is the product of a MACBA-based curatorial and artistic research project within the framework of the research focus group *MeLa – European Museums in the Age of Migration*. The starting point for the project was the research-based examination of the preservation situation

within the context of contemporary art at the MACBA Study Center, which was established in 2007 with the mission of collecting, developing, and disseminating source material on Catalan contemporary art. Examined as part of the work of this research entity at an art institution was the fact that the archival holdings of its own institution are insufficiently documented and, in particular, that the exhibition documentation is hardly usable for research. To remedy this situation, the research project was developed, which sought, in addition to addressing the relationship between institutional archival practice and art historiography, to develop a practical guide for dealing with exhibition archives institutionally.

In addition to visiting a number of entities involved in archiving exhibition documentation, the project conducted a survey with international institutions of art in order to evaluate the state of the management of documentation generated by their exhibitions. The survey revealed that out of eighty-three institutions that responded to the questionnaires sent out by the research group, only about one third had an online database. In general the survey found that, for art institutions, communicating their own institutional archives is rarely the focus. Even if an art institution has made archives available, the private archives of individual artists capable of bringing prestige to the institution are foregrounded, "while dealing with the institution's own documentation has been postponed, as this is considered more of an administrative process than a source of heritage with historical interest."^[9] Against such systematic neglect, they base the value of institutional archives on source-specific art historiography.

The archive is the primary source of unequivocal value for understanding the lines of investigation of the artistic institution, for showing the processes of conceptual construction, and for reflecting on the intellectual and artistic influences of the society that surrounds their activities.^[10]

The art institutional archives is specifically addressed in the context of *Folding the Exhibition* as an art historical research infrastructure that must be developed from this perspective.

Developed within the framework of the research project, the practical archives strategy for institutional preservation at MACBA, generalized as recommended practices for archiving documentation of exhibitions, comprises the main part of the brochure. Space is allotted here to the pre-archival domain as well as the processes of transfer to the archives. This corresponds to the currently prevailing conviction in the field of archival science that, under the conditions of digital information, the archives can only fulfill its function if its requirements are actively incorporated into how the filing system of the administration system is organized, thus extending its scope of activities towards the present.

In other areas as well, the recommendations developed within the framework of *Folding the Exhibition* largely follow practices established in public archives in the context of government and administrative agencies subject to tax liability and reference context-relevant norms and standards. However, the guidelines are not sufficient for all areas of the stated needs. For example, the increasingly important

domain of digital transmission and its associated challenges are hardly considered. The recommended transfer process is also very bureaucratic and barely satisfies digital requirements. It is likely that there was little practical experience at MACBA at the time of the investigation. Nevertheless, the brochure can serve as an important milestone in the development of strategies for a systematic expansion of institutional preservation in the field of contemporary art.

Organizational Traditions

While a publication such as *Folding the Exhibition* can be regarded in the context of the European archival landscape as a first step into largely uncharted territory, preservation considerations in North American art institutions have long been dealt with in the context of general specialist discussions on the institutional foundations of museum archives. This problem was addressed more than fifteen years ago, for instance, by Sammie Morris, the archivist at the Dallas Museum of Art at the time.^[11] In an article entitled “Starting from Scratch: How to Create a Museum Archives,” Morris emphasizes in particular the need to view archival work as a professional activity that cannot be carried out without appropriate specialist knowledge. On the one hand, this concerns the somewhat presuppositional arrangement and description of archival records; on the other, an archivist at a museum or related institution, as stated in *Folding the Exhibition*, must make decisions related to the creation of an institution’s documentary heritage for the entire field. The decisions to be made in this case have consequences that go far beyond one’s personal horizon of experience and therefore call for an understanding of the mechanisms of institutional preservation that goes beyond pure empirical knowledge. It is also important that the person responsible for the archiving be provided with the authority to create and enforce record keeping and record access policies and procedures. This requires that the institution also recognizes the value of archival expertise and that this knowledge already be taken into account during the development of an archives strategy.

With the digital revolution, Morris’s stated need for professionalism in the field of archives work has become even more urgent. The possibility of a successful archival policy depends, for the most part, on the existence or absence of relevant positions in institutions with their own archives—whether there is or is not a trained or otherwise experienced archivist who understands the technical and institutional requirements for implementing digital records management and long-term digital preservation. In view of the pressure to cut costs, to which most public cultural institutions are subject, creating such positions is probably the biggest challenge in this context. Nevertheless, without this groundwork, the development of a sustainable digital archives policy is unthinkable.

Today, art institutions seldom have the means to deal with the preservation and accessibility of their archival holdings in the manner outlined above. The creation of an archival

infrastructure in this domain can hardly be realized without corresponding funding instruments. While, in the United States, “numerous funding agencies provide start-up costs for archival programs that aim at preserving and providing access to historical information of national significance,” as Morris writes,^[12] to date such programs are lacking in Europe.^[13]

However, in view of the situation in North America, where archives professionals working in museums and related institutions have been organized since 1981 as a section of the Society of American Archivists (SAA),^[14] a general professional association for archivists, it should be noted that there is no such comparable organization in Europe—and therefore no one in this domain who is concerned with the fulfilment and dissemination of archival standards and the preservation and development of knowledge specific to this area. This shortcoming makes state support for archival projects in art institutions considerably more difficult, since such projects must meet a certain sustainability requirement that, in view of the current situation in this domain, can hardly be guaranteed. How to establish a productive professional exchange between the organized archives and their specialized science therefore seems critical to me here—one that can fulfill the particular demands of the institutions in the field of art, but also understands them as part of a broader archival landscape.

Even if the North American model of linking the museum archives with the general professional association for archivists is not easily transferrable to the far more fragmented European archival landscape, it provides material for illustrating what a professional organization in this domain can do. For instance, the Best Practice Working Group of the abovementioned Museum Archives Section organized a half-day symposium on “Born-Digital Records in Museum Archives” at the SAA in 2016.^[15] This was not limited to a discussion among museum archivists; also offered was a workshop led by the Electronic Records Section Steering Committee of the SAA. Such possibilities for a transfer of knowledge across the boundaries of thematically separated archival domains are crucial for improving the institutional preservation situation in the field of art.

Born-digital Records in the Museum

For an archival preservation under digital conditions, it is critical that the efforts to organize one as such already begins with document generation. A digital archiving of relevant documents is only possible if they reach the archives in a comprehensible order. It is hard to conceive of archival work in the twenty-first century without a records management policy that covers a document’s entire life cycle. If one wants to receive processed data permanently by means of electronic systems, the question of their archiving must already flow into the design of these systems. Thus, for example, meaningful metadata is needed that allows for a simple selection of data for which the archive has to provide permanent interpretability. Last but

not least, defined processes are needed to ensure that this data reaches the archives at all.

In my experience, however, this central problem of art institutions is, from an archival perspective, far less addressed than the professional description of their historical holdings. Among the few institutions active in this field is the archives of the Museum for Modern Art (MoMA). Following an intensive exchange within the framework of the aforementioned expert committees in 2016, a pilot project was started here for the acquisition and archiving of genuine digital administrative documents.^[16] The Museum's Records Management Program "insures the orderly transition and disposition of museum documentation, including individual staff papers and departmental records, so that the institution's historical record is complete and uninterrupted."^[17] The MoMA archives can thus serve as an example for how an art institution can meet the challenges of the digital revolution in the archival field. The history of this institution illustrates how this is not based solely on the possibility of purchasing the relevant technical know-how. The archives was founded as a professionally managed facility in 1989—sixty years after MoMA's opening. The development of the archives was made possible by grants from the National Historical Publications and Records Commission, a body of the National Archives of the United States. It was founded primarily for the purpose of preserving the history of MoMA's exhibits, programs, and activities, and to provide access to the archived records for research purposes. Even though the profile of the MoMA archives has been expanded since 1998 to include documents of selected individuals and institutions related to the museum and its program, it is essentially an institutional archives. It operates in the democratic spirit of a public archives and makes a serious effort to promote participation in institutional preservation. This is evident not only in a policy of access to the holdings, which is aimed at transparency and the greatest possible openness, but also, for example, in the exemplary nature of how the institutional archives policy is communicated on the institution's website.

According to Trevor Owens, Head of Digital Content Management at the Library of Congress, digital preservation is a not a technical problem that can be solved. It is a task that requires constant attention and thus needs to be institutionalized.^[18] Digital preservation can only be successful if it is understood as an active, future-oriented process, grounded in an ongoing and unresolved dialogue with the preservation professions.

The impending danger of irreversible gaps in preservation does not allow the problem of born-digital institutional records—such as board meeting minutes, audit records, or relevant e-mail correspondence—to be put aside. Corresponding measures are possible, according to Owens, even within a framework of modest possibilities. It is critical that it be approached in a way that allows subsequent practitioners to continue to work with the results, even under altered technical conditions. Despite its new form, digital preservation does not differ from traditional preservation strategies for holdings in heritage institutions. It is about "preparing content and collections for the first time in a great chain of hand-offs."^[19] With this perspective, small and

medium-sized institutions with their own archives should focus on developing pragmatic “good-enough practices” in order to minimize the primary risks of impending information loss.[20]

In this respect, it is also critical for art institutions and their archives that digital preservation as a trade has a place within the institutional framework—that it is a specific area of responsibility written into someone’s job description. Preservation is not something that can be “achieved” within the framework of a project; instead, it requires a continual commitment.

Digitization and the Primacy of Description

In many cases the desire to digitize select analog holdings and thus make them accessible lies at the heart of archival projects developed by non-archivists. Compared to the archival challenges associated with the digital transformation of institutional administrative operations, issues arising in the context of preserving digitized documents are comparatively trivial. Nevertheless, the costs associated with the digitization of archives should not be underestimated.

Critical to any digitization effort is that an archives be thoroughly processed (i.e., structured and described). This requirement is, in many cases, not fulfilled when it comes to art institutional archives. Generally scarce resources in the archives sector suggest that smaller-scale institutions in this domain in particular should concentrate—alongside ensuring analog and digital preservation—less on realizing complex and costly digitization projects and instead on creating and publishing metadata on their holdings in accordance with archival principles and accepted standards.

Currently, only a small minority of archival holdings in art institutions can be searched online. As has been noted within the framework of the research project *Folding the Exhibition*, only a small number of art institutions with their own archives holdings have the opportunity to publish relevant description data online. But even if online finding aids exist, these only seldom meet the archival requirements that the description of archival holdings has to take into account their activity-oriented character. As records can only be adequately interpreted as traces of activities in the context of their original use, an archival finding aid cannot not be limited to the description of individual documents. Archival finding aids are rather characterized by the fact that they contain not only descriptive information on individual description units but also about them as a whole, the holding, its parts, and thus on significant *structures*.[21]

Preservation, including digital preservation, is about keeping objects together with the context that provides meaning to them, that is, the complex network of relationships—along with the system of their meanings—in which archival objects have been created, managed, and used.[22]

As a simple method of contextualization, the development of a tiered model has established itself in archiving, where the structure of archives can be represented as a simple tree

model.[23] These guidelines were codified in 1999, in the main archival description standard ISAD(G). On the one hand, a standards-based approach to the description of archives is critical to the possible subsequent reuse of description data, as required by the long-term-oriented logic of the archives. In addition to such *temporal compatibility*, a standards-based description also allows for a *vertical compatibility* of archival metadata.

The widespread adoption of the ISAD(G) description standard in archives made the construction of a number of national and supranational web portals possible, which allow archived material in various institutions to be searched simultaneously. A single-access entry approach meets the needs of users, who in most cases are more likely to search for documents by topic than in a particular repository. An example of such an infrastructure for the inter-institutional publication of archival metadata is the Archives Portal Europe, constructed with funds from the European Union.[24] The Archives Portal Europe is open as a basic principle to all archives in Europe, so that they may publish their description data. The service is free and easily accessible. Its primary prerequisite is the availability of standard-compliant structured description data. However, art institutions have hardly noticed this possibility.[25]

Regardless of whether archival description data is published on a proprietary website or on a trans-institutional portal, the possibility for adequate contextualization of individual description units must exist. These basic requirements for digital finding aids have hardly been implemented by the few art institutions that are actively seeking to make their institutional archives accessible, such as the London-based Whitechapel Gallery.[26] Here the user can only choose between a full text or an index search. Access via the archival structure, which should be based on the logic of preserving the position responsible for the creation of a holding, is not possible.

One of the reasons for the difficulties that are repeatedly observed in the context of art institutions with multilevel structured finding aids is likely also due to the fact that the databases used in museums for managing items, loans, etc., which are often also used for descriptive archival records, are not easily capable of representing such hierarchies. If a museum database is used for descriptive archival records, relevant components must inevitably be added to it. That this rarely happens is less about the technical difficulties of programming such components than the fact that this problem is apparently not given much importance by the institutions concerned. This speaks to a certain disregard for archival work and its underlying principles.

Thinking about Archives as a Network

The established foundations and standards for archival description mentioned in the previous section are currently undergoing a transformation. With the emergence of graph databases and corresponding data models, such as the

Resource Description Framework (RDF), entirely new possibilities are available for representing structural and other significant contexts of records in finding aids. The mono-hierarchical tree structure, which has thus far shaped archival description practice, is therefore being expanded in the direction of a multidimensional network. Currently under development is an authoritative ontology that defines the relationships that are relevant for archival records.^[27] Archives are therefore latecomers to a development that is already advanced in other areas. Based on RDF, the Semantic Web is not only designed to overcome the limitations of institutional data silos but has also, in the spirit of comprehensive interoperability, reconfigured the relationship between types of institutions—specifically galleries, libraries, archives, and museums (GLAM)—that have thus far operated mainly in isolation from one another.

But even in view of the looming changes in this area, older norms and standards remain relevant. Since the archives is by its very nature designed for continuity, the proper foundation for realizing new forms of accessing archival records is the ongoing possibility of integrating old data into the infrastructures underlying these new forms. This in turn means that users do not have to wait “until the next fancy new system is finished” to get started. Rather, it is necessary to address the challenges within the framework of currently available possibilities in a way that anticipates the further development of what has been achieved under altered conditions at a later date.

With regard to the possibilities in the domain of gallery and museum archives, strategies designed for improvement here, in addition to aspects of sustainability, must focus on broad applicability. Under digital conditions, the archival field is particularly interested in innovations that enable the new forms of the common. By contrast, isolated solutions have no future in this increasingly interconnected world. In a field often characterized by extremely scarce resources, the goal must be to use existing archival infrastructure solutions as much as possible.

From this perspective, museum and gallery archives might become increasingly interested in the Archives Portal Europe, referenced earlier. On the one hand, its structure allows description data to be published without having to maintain a proprietary online catalogue; on the other, its transnational orientation—as opposed to existing national portals—corresponds to an art system contingent only upon territorially defined spaces.

In view of the not inconsiderable investments associated with institutional preservation in the age of digital transformation, it must also be clarified which context-specific functions art institutions are even capable of fulfilling, for which the archives will always represent a subordinate function, and which ones specialized heritage institutions must take over. Institutions that manage archives of public interest need to be clear about their responsibilities. These must be reflected in how they are organized, and not least in their hiring practices.

I am confident that, on the one hand, the ongoing academic and curatorial interest in the archives as a place of historical

productivity and, on the other hand, an art history that increasingly focuses not only on individual artists and their works, but also on the art system, its mechanisms and institutions, will ultimately lead to an increased commitment to the field of art historical preservation. A project like *Folding the Exhibition* points in this direction. It is hoped that a corresponding need for action will be recognized and addressed, not only by the archives and the institutions concerned, but also by the academic disciplines involved.

Not only with a view toward the experiences in the United States, but also within the European context it seems imperative that supra-institutional digital infrastructures are built. These infrastructures will pool and coordinate the efforts necessary for a fruitful development of and exchange within the archival discipline. There is neither a fundamental lack of knowledge nor technology to secure such digital accessibility of institutional heritage in the field of the arts. What is primarily lacking is a strong lobby that is concerned with implementing the necessary institutional measures. This absence will have a significant impact on the possibility of achieving critical historical knowledge about art institutions in the future.

Biography

Philipp Messner (1975) lives and works in Basel, Switzerland. He studied Cultural History and Theory at the Humboldt University of Berlin followed by a postgraduate training in Archival, Library and Information Science at the Universities of Bern and Lausanne. Between 2013 and 2020 he worked as archivist and at the UZH Archives, the central archives of the University of Zurich. Since March 2020 he is responsible for the public poster collection at the Basel School of Design (SfG). He is additionally involved in a number of research and archival projects in the cultural sector.

[1] Outstanding among the numerous publications on the subject are Beatrice von Bismarck et al., eds., *Interarchive: Archival Practices and Sites in the Contemporary Art Field* (Cologne: Walther König, 2002); Charles Merewether, ed., *Documents of Contemporary Art: The Archive* (London: Whitechapel Gallery, 2006); and more recently, Markus Miessen et al., eds., *The Archive as a Productive Space of Conflict* (Berlin: Sternberg Press, 2016).

[2] See also Jeannette A. Bastian, "Moving the Margins to the Middle: Reconciling 'The Archive' with the Archives,"

in *Engaging with Records and Archives*, eds. Fiorella Foscarini et al. (London: Facet, 2016), 3–20.

[3] For an overview of the basic concepts and current discussions of international archival science, see Luciana Duranti and Patricia C. Franks, eds., *Encyclopedia of Archival Science* (Lanham, MD: Rowman & Littlefield, 2015).

[4] See Daniel J. Caron and Andreas Kellerhals, “Archiving for self-ascertainment, identity-building and permanent self-questioning,” *Archival Science* 13 (2012): 207–216, doi:10.1007/s10502-012-9189-y.

[5] See Jim Burant, “Artistic Records,” in Duranti and Franks, *Encyclopedia of Archival Science*, 107–111.

[6] See Institut für moderne Kunst, ZADIK, and basis wien, eds., *State of the Art Archives: International Conference on Archives Documenting Modern and Contemporary Art* (Heidelberg: arthistoricum.net, 2019), doi: 10.11588/arthistoricum.426.

[7] See Caroline Williams, “Collecting Archives,” in Duranti and Franks, *Encyclopedia of Archival Science*, 139–142.

[8] Museu d’Art Contemporani de Barcelona, ed., *Folding the Exhibition* (Barcelona: MACBA, 2014), accessed September 26, 2019, <https://www.macba.cat/en/essay-folding-the-exhibition>.

[9] *Ibid.*, 8.

[10] *Ibid.*

[11] Sammie Morris, “Starting from Scratch: How to Create a Museum Archives,” *Libraries Research Publications*, Paper 24 (2006), accessed September 26, 2019, https://docs.lib.purdue.edu/lib_research/45.

[12] *Ibid.*, 4.

[13] The newly created European Framework for Action on Cultural Heritage might provide a potential framework here. See European Commission, *European Framework for Action on Cultural Heritage: Commission Staff Working Document* (Luxembourg: Publications of the European Union, 2019), doi: 10.2766/949707.

[14] “Museum Archives Section,” Society of American Archivists, accessed September 26, 2019, <https://www2.archivists.org/groups/museum-archives-section>; on the organizational history of museum archives in the United States, see Alan L. Bain, “The Muses’ Memory,” *Museum News* 70 (1991): 36–39.

[15] “Born-Digital Records in Museum Archives Symposium 2016,” Society of American Archivists, accessed September 26, 2019, <https://www2.archivists.org/groups/museum-archives-section/born-digital-records-in-museum-archives-symposium-2016>.

[16] See Institut für moderne Kunst, ZADIK, and basis wien, *State of the Art Archives*, 163.

[17] “About the Archives,” Museum of Modern Art, accessed September 26, 2019, <https://www.moma.org/research-and-learning/archives/about>.

[18] See Trevor Owens, *The Theory and Craft of Digital Preservation* (Baltimore: John Hopkins University Press, 2018).

[19] *Ibid.*, 199.

[20] The printing of born-digital content on paper for the purpose of its long-term security is in many cases quite appropriate, but certainly not a promising solution.

[21] See Tom Nesmith, "Principle of Provenance," in Druanti and Franks, *Encyclopedia of Archival Science*, 284–288.

[22] Giovanni Michetti, "Provenance in the Archives: The Challenge of the Digital," in *Archives in Liquid Times*, eds. Frans Smit, Arnoud Glaudemans, and Rienk Jonker (The Hague: Stichting Archiefpublicaties, 2017), 229–246, 233.

[23] See Geoffrey Yeo, "Continuing Debates About Description," in *Currents of Archival Thinking*, eds. Terry Eastwood and Heather MacNeill (Santa Barbara, CA: Libraries Unlimited, 2017), 163–192.

[24] "Archives Portal Europe," accessed September 26, 2019, <https://www.archivesportaleurope.net>.

[25] One of the few European art institutions to use this portal for communicating holding-relevant information is the Tate Gallery Archive. Significantly, the archives is limited to the publication of selected archival collections. See "Tate Archive," Archives Portal Europe, accessed September 26, 2019, <https://www.archivesportaleurope.net/directory/-/dir/ai/code/GB-70>.

[26] "Whitechapel Gallery Archive," accessed September 26, 2019, <http://archive.whitechapelgallery.org>.

[27] See Dunia Llanes-Padrón and Juan-Antonio Pastor-Sánchez, "Records in Contexts: The Road of Archives to Semantic Interoperability," *Program* 51 (2017): 387–405, doi:10.1108/PROG-03-2017-0021.