

# ART, MUSEUMS & DIGITAL CULTURES



# RETHINKING CHANGE

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# Recent Challenges to Contemporary Art Databases. Digitisation Practices and Archive Development in Artist Estates and Private Collections

Diego Mantoan

Over the last decade, databases have appeared as the only solution for artist estates and collections seeking to categorise and disseminate their artworks and thereby enhance their position and reputation. Grounded in empirical work and scholarly research, this paper examines the archive digitisation practices at three high-ranking art organisations – Douglas Gordon's studio, the Sigmar Polke Estate and the Julia Stoschek Collection – to show how the creation of databases has become central in conforming to best practices and providing valuable information to the art market. In revealing the mindset, requirements and conditions of such digitisation projects, this text offers a reflection on recent transformations, arguing that well-organised digital archives are of major importance for commercial purposes and for the study of contemporary art history. This study further suggests that, since the art world continues to lag behind other areas of study in terms of the standards that are commonly applied in digital archives, smaller organisations have embraced digitisation through their own tailor-made solutions.

## The “database frenzy” in contemporary art

Since the 1990s, digitisation practices have greatly increased in the contemporary art sector, as evidenced by the investments made at major museums, especially in relation to the digital accessibility of their collections (Beaulieu and de Rijcke, 2016). The desire to imitate the practices of these leading institutions has also spread to artist estates and private collections throughout Europe. It has become almost a frenzy, with the creation of a database seeming to be the only possible solution for small and medium-sized organisations to trace, categorise and disseminate their artworks. It remains to be seen whether the private archives of high-ranking artists and elite collectors have applied the same logic and standards as public museums, and which technological solutions they have adopted. In fact, empirical studies show that artist estates and private collections

have embraced digital transformation with homemade solutions, rather than adhering to global trends (Reed, 2017, pp. 122–123). Furthermore, they have often used databases as a means of improving the ranking of artists and artworks, as well as of enhancing their reputation (Saba, 2013, p. 104). This text argues that, at least in its initial stages, digitisation did not directly affect the nature of these private archives. Databases had to serve another purpose, since they were originally intended for internal use only, while the collected data would then be cautiously disclosed in order to guide art market requests or to satisfy scholarly interest.

This research is grounded in my decade-long empirical and scholarly work in planning, developing and implementing digital art archives for renowned institutions and top-ranking artists across Europe. A set of different case-studies will be presented, making it possible to assess the different practices and objectives adopted, according to the type of organisation. These case-studies were based on the digital activities of Douglas Gordon's studio in Berlin, the estate of Sigmar Polke in Cologne and Julia Stoschek's private collection of time-based art in Düsseldorf. The aim is to show and discuss how the creation of databases became crucial, both for staying in tune with the best practices in the evolving art world and for providing valuable information to the art market. This paper also aims to provide an insight into the back-office practices of small and medium-sized organisations, analysing the mindset, requirements and conditions under which they have approached digitisation, proposing a reflection on recent transformations in the digital acquisition and dissemination of contemporary art, and highlighting how artists and collectors were able to rapidly catch up with the need to digitise, manage and protect their works, both for copyright purposes and in order to systematically enhance their own cultural relevance.

## **Humanists chasing after digital developments**

Although secondary when compared to the digitisation initiatives promoted by leading museums, the parallel phenomenon at small and medium-sized art organisations was not entirely overlooked in the scholarly debate. Over the last decade, researchers from various disciplines have generated case-studies examining the influence of database programming on our understanding of art archives (Bernardi and Dimmock, 2017; Berry, 2017; Cocciolo, 2014; Elragal, and Päivärinta, 2017; Fuchsgruber, 2019; Knifton, 2015; Reed, 2017). Typically,

the debate has focused on three main questions: the conceptual and practical distinction between an archive and a database (Gorzalski, 2016, p. 167); the reliability of the materials and sources made accessible via online repositories (Fuchsgruber, 2019, p. 93); the procedural changes and professional clashes arising from the necessary coexistence of traditional archivists and data asset managers (Cocciolo, 2016, p. 124).

As far as the dispute over the correct definition is concerned, the terms "archive" and "database" are both now widely used interchangeably, which is a consequence of the continued growth of digital initiatives in the humanities. The expanded concept of the archive is now more commonly applied, having greatly superseded the original idea of a physical space with a predetermined collection (Theimer, 2012). Nevertheless, the point of divergence relates to whether digital repositories may combine primary and secondary sources, namely primary sources from various collections that are both historically and geographically distinct (Kramer, 2014).

An archive in the traditional sense is a closed circuit centred on a collection, but both digitisation at individual organisations and cross-institutional research projects have allowed for the creation of platforms that connect various collections of primary sources (e.g., the artworks of a specific artist preserved at different museums), where they are joined by secondary sources that contextualise the collections (e.g., essays, pictures, bibliographies, press clippings) (Gorzalski, 2016, p. 167). Regardless of its physical or digital constitution, digital humanists consider an archive to be a selected, ordered and searchable grouping of materials that is made accessible for research purposes (Theimer, 2012). It can be a varied ensemble of collections and physically dispersed items gathered together solely in the digital realm, as in the case of the William Blake Archive, or a coherent collection of items enhanced through secondary sources in a hypertext mode, as in the case of the Vincent Van Gogh Letters.<sup>1</sup>

The advantages of digital repositories lie in the addition of secondary sources, thematic cross-references and research tools, making it possible to achieve scientific goals that extend far beyond those of physical archives (Palmer, 2004, p. 352). The added value is not represented by the digitised material alone, but also by the contextual information retrieved for the digitisation process

1 For more information about these two archives, see <http://www.blakearchive.org/> and <http://vangoghletters.org/vg/>.

and displayed together with primary sources (Bernardi and Dimmock, 2017, p. 188). This operational method of building digital repositories emerged as a leading principle for open database development in the humanities and thus formed a "contextual mass", which placed different items and subjects together and allowed for profound multifaceted inquiries in specific areas (Palmer, 2004, p. 353).

Given the nature of digital repositories in the humanities, the question of reliability became paramount, being concerned with the provenance and truthfulness of displayed data. Most digitisation projects frequently turned into a sort of "augmented collection", intermixing materials of different origins, whereby digitised primary sources often lost track of their physical context and its related meaning, such as their position or arrangement in boxes, folders, parent collections or donations (Gorzalski, 2016, p. 170). Unless the digitisation process sets out to acquire all information relevant to the records, as would be the case in a traditional archive, the risk with digital repositories is that they may inadvertently discard data relating to principles of provenance and integrity. Moreover, one must further consider that digital repositories, such as databases, archives or websites, are created as intentional reconstructions or representations, which are necessarily biased by the scientific approach of the creators and sometimes even of the clients (Sternfeld, 2011, p. 547).

When building a digital repository, it is essential to ask what its purpose is, as the intentions of the original creators or clients may extend far beyond mere scientific curiosity (Bernardi and Dimmock, 2017, p. 193). Especially in art, any kind of analogue or digital archival work holds a specific cultural, social and economic meaning designed to enhance the accessibility, reputation and value of a certain collection or artist (Cook, 2001, p. 26). Records are shaped to be reliable, while also establishing narrative consistency for the benefit of the author, thereby fostering position, status and capital (Reed, 2017, p. 121). Just like any archive, digital repositories are a social construct used to frame a particular environment, which means that the database structure, metadata system and authenticity checks are based upon the aims of the creators and clients, as well as those of the potential users of the digital collection (Gorzalski, 2016, pp. 179-180). The initial steps in building a digital archive already represent a critical point in the project's development as scholarship, since 'in digital space, taxonomy functions as a powerful rhetorical tool, unmasking the curatorial process of creating the collection as well as its capacity to make meaning' (Bernardi and Dimmock, 2017, p. 192).

One last criticality emerged at an organisational level due to the clash between old and new archive professionals and the assets they curate (Berry, 2017; Gorzalski, 2016). Traditional archivists working on analogue collections were increasingly accompanied by data asset managers or database developers placed in charge of digital records (Cocciolo, 2016, p. 124). Since they have different competences, these professionals continue to adopt diverging concepts and procedures in their archiving practices. According to David M. Berry, archivists preserve the stored items in a collection in order to freeze their contents, whereas data asset managers acquire a digitised representation of the items in order to transpose their contents and set them in motion via relational connections (Berry, 2017, p. 104). The archivist's approach is therefore centred on the collectibles and their long-term physical preservation, while digital professionals stress a user-centred perspective and the urge for subsequent technological migrations (Cocciolo, 2014, p. 239). This organisational friction arising from professional divergences lay bare the fact that digitisation projects in the humanities require, first of all, a general strategic plan to reformulate processing policies, acquisition processes and data transfer procedures (Berry, 2017, p. 106). Far from being an automatic solution, a database needs effective data processing, which is performed by all collaborators, not just archivists or data asset managers (Cocciolo, 2016, pp. 126-128). Consequently, the human factor, particularly its pre-existing organisational form and dynamics inside a particular institution, is the true starting point of any attempt to digitise an art collection.

### **Three art enterprises embarking on digitisation**

With the former framework in mind, I carried out three distinct digitisation projects between 2008 and 2020 in my capacity as a database developer and digital archive curator. They each pertain to the domain of contemporary art and are all geographically based in Germany, although their scope extends to the international art world with a remarkable artistic and relational capital set that legitimises their authority. They are the archives of a) Douglas Gordon, a new media artist firmly ranked among the world's top practitioners; b) the Julia Stoschek Collection, a renowned time-based art reference; c) the Estate of Sigmar Polke, a late and well-known Pop Artist.<sup>2</sup> Despite their different roles,

<sup>2</sup> Timeframe of the three projects: Douglas Gordon, Berlin 2008-2010; Julia Stoschek Collection, Düsseldorf, 2010-2020; Sigmar Polke Estate, Cologne 2012-2016.



all three subjects displayed similarities at an organisational and art-related level, helping to make comparisons and draw tentative conclusions about digitisation in contemporary art regarded as an elite sector.

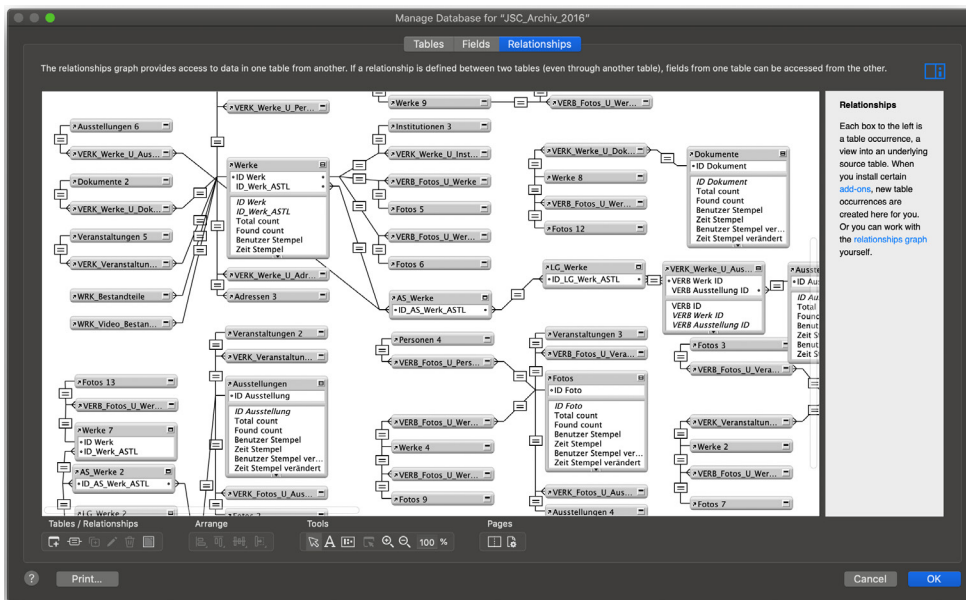


Fig. 1 → Diego Manton, Database Prototype for the Julia Stoschek Collection (relationships between individual tables), 2016. © 2021 Diego Manton.

At the start of the project, they all enjoyed some standing in the international art world, but wished to enhance their reputations through a database providing accurate information (e.g., art historical references, high-quality images, bibliographies) and consistent workflows (e.g., loans, authentications, permissions) for the benefit of other relevant agents (Graw, 2009, p. 9). Although they did not have a precise idea of what kind of database they wanted, nor could they imagine what it would look like, they all sought to find a solution that strengthened their individual position inside the art field by offering contextual information (Fuchsgruber, 2019, p. 94).

In all three cases, the archive was born digital, since materials that were already present at the organisation were put together for the first time in an orderly manner, producing a huge amount of data and documentation over a short period, which then faced problems of digital representation and long-term preservation (Saba, 2013, p. 113; Cocciolo, 2014, p. 247). Hence, for these organisations, the scholarly distinction between a traditional archive and a digital repository had no relevance whatsoever because what they had in mind was, instead, an organised form of knowledge like a catalogue raisonné (Gorzalski, 2016, p. 170). From their perspective, the database was associated

with the idea of a "catalogue", intended to serve as a collection of information, materials, data and ephemera that conventionally make sense in contemporary art (Phillpot, 1995, 23).

Each of the mentioned organisations are small-to-medium-sized, which, for the art world, means five to twenty employees. This characterises them as managerially stable enterprises whose human resources covered a range of different skills, although they were too small to have a dedicated information technology specialist or database developer (Cocciolo, 2014, p. 240). However, during the digitisation process, they each hired a data asset manager. They all needed external help and entrusted a digital humanist – not a mere IT specialist – with the development of the digital archive and the associated process management.

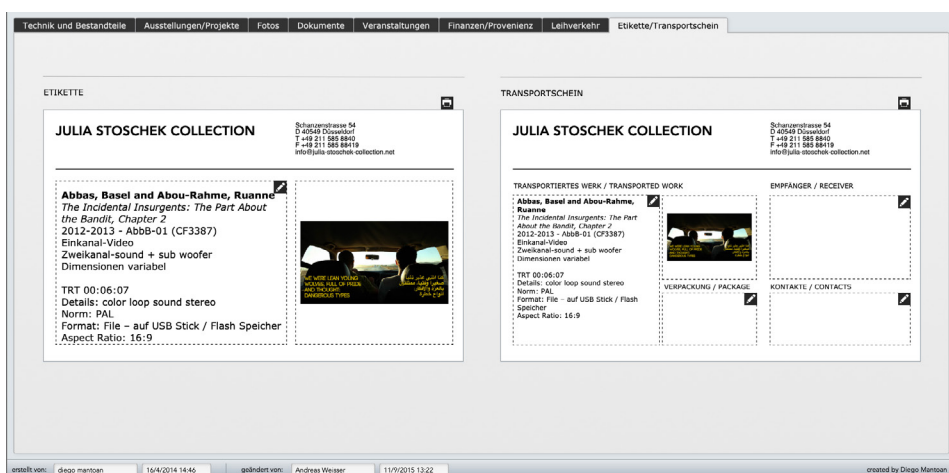


Fig. 2 → Diego Mantoan, Database Prototype for the Julia Stoschek Collection (loans and shipping layout), 2016. © 2021 Diego Mantoan.

My role in each project was to function as an interface between the client's initial expectations and my desired solutions, in accordance with what I considered to be their organisational or procedural needs. In providing a tailor-made database, the client cooperated in the planning of the prototype and in the implementation to suggest corrections and adaptations. Curiously, in the three organisations, as well as in other cases, I was requested to employ FileMaker Pro as a software solution.<sup>3</sup> This request was most probably passed on by word of mouth among the top-ranking cultural institutions, which often tend to adopt solutions already implemented by other similar agents – simply

<sup>3</sup> This software is also used by the Venice Biennale, the Vedova Estate in Venice and the Olafur Eliasson Studio in Berlin, among others.

to conform to unwritten standards, and regardless of the actual benefits, thus confirming the kind of "development by trend" described by Alfred Chandler (1990). It must also be said that FileMaker Pro found widespread acceptance among the art sector because of its versatile solutions and reasonable costs, allowing for deep structure and back-end customisation (tables, fields, scripts, outputs). Needless to say, aesthetic sophistication is of paramount importance in marking quality in the art world, even more so than technological efficiency (Mossetto, 2003).

To stick to recognised benchmarks, I recommended that the database should be developed in accordance with a general structure derived from the categories used in museum catalogues, art libraries and artists' files, enabling the inclusion of several meaningful items and ephemera that could be significantly interrelated (Wilson and Dowell, 2003).<sup>4</sup> There was no main table, which the other ones had to refer to, but, instead, a set of independent tables interconnected via bridge-tables that could be activated upon request via unique links: for example, an artwork could be connected to an exhibition, a catalogue and installation photos (Fig. 1). This multiple-table structure was particularly appreciated, since it avoided a strict hierarchical order, favouring a flexible relationship among records and further allowing for the emergence of overlooked interconnections (Knifton, 2015, p. 28). This was the case, for example, at the Polke Estate with the discovery among some installation photographs of an artwork that had been present at an exhibition but was not originally featured in the catalogue of that show, or the complete overview of artworks exhibited at a specific gallery or owned at some point by one collector.

My own training and experience as both an art historian and a digital humanist enabled me to understand the mindset of the three organisations and to recognise specific requirements, such as the need to adjust the general structure of the relational database to each case. For the artist Douglas Gordon, the aim was to organise his archive for the first time, offering high-quality data (texts and images) and protecting his artworks from copyright infringements (Mantoan, 2015). The database was thus planned with tools for bibliography and clippings, plus a section for installation photographs, with metadata for copyright purposes (Bertacchini and Morando, 2013, pp. 65–67).

4 The main categories were Artworks, People, Exhibitions, Photographs, Bibliography and Documents.

The screenshot shows a web-based database interface for the Sigmar Polke Archive. At the top, there is a header with the text 'SIGMAR POLKE ARCHIV' and 'WERKE'. Below this is a navigation and search area with various buttons and dropdown menus. The main part of the interface is a form for entering or editing artwork information. This form includes fields for 'Titel' (Title), 'Inventar Nr.' (Inventory Number), 'Abbildung' (Image), 'Anerkennung' (Recognition), 'Edition/Werkgruppe' (Edition/Workgroup), 'Credit', 'Jahr' (Year), 'Notizen zur Datierung' (Notes on Dating), 'Gattung' (Category), 'Technik' (Technique), 'Materiale' (Material), 'Maße (cm)' (Dimensions in cm), and 'Maße Rahmen (cm)' (Dimensions of Frame in cm). There are also checkboxes for 'gerahmt' (framed) and 'Mitarbeit' (collaboration). A small thumbnail image of a Polke artwork is visible on the right side of the form. At the bottom, there is a status bar with 'Details', 'Verknüpfungen', 'Bildmaterial', and 'Tools' buttons.

Fig. 3 → Diego Mantoan, Database Prototype for the Sigmar Polke Archive (artworks with technical details and provenance), 2014. © 2021 Diego Mantoan.

In the case of the Julia Stoschek Collection, the goal was to foster its museum circulation and to strengthen its artistic reputation (Julia Stoschek Foundation, 2009). In view of the peculiarities of time-based artworks, special attention was given to adopting international standards for media preservation, with a section reserved for reports about the condition of artworks and their digital storage location (Saba, 2013, p. 108), as well as for tracking loans and shipments (Fig. 2).

The circumstances surrounding the Sigmar Polke Estate were, in some respects, quite urgent and peculiar, since the German artist had left a rich legacy, but there was little certainty about the authenticity of pieces (Fuchsgruber, 2019, p. 99), a situation made even more delicate by the tensions that existed among the heirs and the unfortunate appearance of counterfeits at private sales.<sup>5</sup> The database helped in the development of a central archive and catalogue raisonné as stable reference points for scholars and collectors (Fig. 3), consequently re-establishing the painter's reputation with an itinerant solo exhibition that travelled between MoMA, the Tate, Museum Ludwig and

5 This information was gleaned from a conversation with Michael Trier, the curator of the archive at the time of the digitisation activities.

Palazzo Grassi (Pinault Collection, 2016). Digitisation also set up the Estate's workflow for vetting the *oeuvre's* provenance and creating automatic authentication certificates (Fig. 4).

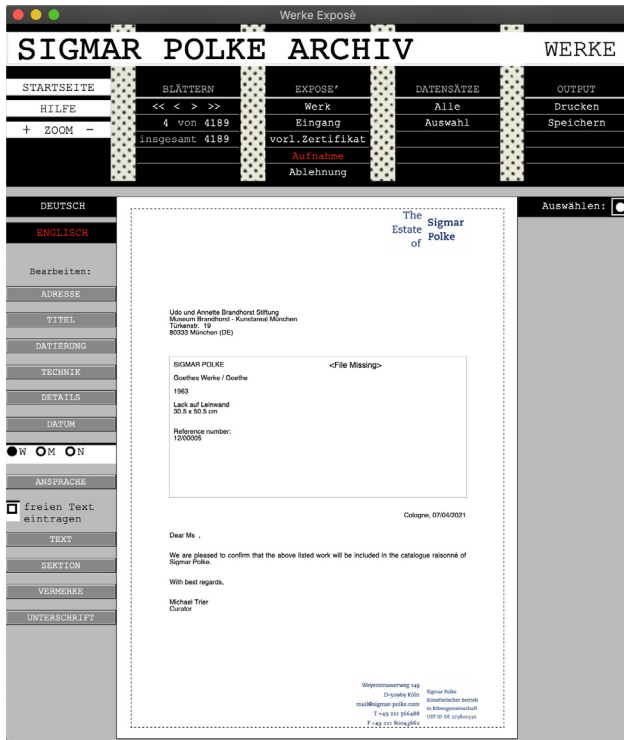


Fig. 4 → Diego Mantoan, Database Prototype for the Sigmar Polke Archive (automatic authentication certificates), 2014. © 2021 Diego Mantoan.

## Tailor-made databases and cross-organisational trends

To some extent, the cases described above revealed the mindset and expectations that generally inform digitisation processes in contemporary art. Since these organisations are among the most reputed in their sector, they are important examples of the specific requirements and possible difficulties that digital humanists face in planning and developing digital archives. First of all, they stress the importance of a tailor-made approach to art digitisation, because such projects are designed to enhance artistic reputations through private archives used to protect and guide information or data (Reed, 2017, p. 125). What they require is not just an empty database, but a full-scale workflow for an archival process designed to balance institutional goals and external dissemination. Secondly, the private nature of these endeavours constitutes a challenge to the interoperability of the adopted database, as well as to the categorisation of standards (Elragal and Päivärinta, 2017, p. 7).

Considering that small and medium-sized art organisations prefer to opt for tailor-made solutions, it is the responsibility of digital humanists to insist on respecting best practices for relational spillovers, metadata definition and migration capability (Saba, 2013, p. 109). As the archive risks being biased due to the client's aims, the database is better suited to the "catalogue" idea enhanced by digital tools in a relational setting. The third takeaway relates to the sprawl of organisational and digital trends that can be observed inside the art world's closed circuit. Smaller enterprises tend to adopt the solutions of reputed organisations; thus, it was predictable that archives, which were better organised and were able to manage a successful digitisation project, would have better opportunities for enhancing their position in the art sector because of their superior data vetting process, even if the database was not made public (Cocciolo, 2014, p. 240).

## Conclusions

I end this paper with some practical conclusions regarding the human factor, which are essential for any successful digitisation project. The database planning needs to be user-oriented, featuring self-evident tools and default procedures, a facility for tracking changes, as well as unique account logins in order to avoid or retrace human mistakes. From this viewpoint, the graphic layout was pleasing to the eye and assisted users in their workflow, bearing in mind that the digital archive is primarily a management tool designed for everyday use, and not a fancy website for attracting attention. Training the many changing employees and interns that access the database becomes the crucial aspect for its wellbeing and the accuracy of fed datasets. Taking care of the human factor before, during and after digitisation is the most valuable asset that guarantees the effectiveness, reliability and longevity of the digital archive. Hence, the last step in the cases considered here was a training programme devised for the employees to secure the continued long-term existence of digital information. For this latter reason, it is crucial to foster a collaborative relationship with the client, based on an open-source approach permitting the full reuse and transfer of data. The digital humanist thus supersedes the mere service provider to become the cornerstone of a good digital repository, even with contemporary art clients that often reveal a cautious approach towards openness. And, suddenly, digital humanists are at the centre of art digitisation, with databases turning into the asset that everyone wants to have exclusive access to, as happened, in my own

experience, when the disputes among the heirs threatened to tear the Estate of Sigmar Polke apart.

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