# Variety of Simultaneity. Early Modern Urban Landscapes of Collections in Halle, Leipzig and Dresden

Twin talk at the virtual conference "Science in the City 1500–1800", 6–7 April 2020

English version (translation)

The project idea presented here was jointly developed and worked out by employees of the Research Centre of the Francke Foundations in Halle, the Leopoldina Centre for Science Studies and free contributors from Dresden and Leipzig (Rainer Godel, Holger Zaunstöck, Jenny Brückner, Karsten Hommel, Theresa Witting, Ronja Steffensky and Torsten Roeder). An application to fund the project was submitted to the German Research Foundation (DFG).

This paper is given as a "twin talk" from two different perspectives. The first part, presented by Jenny Brückner, will discuss the historical setting of the project and address the main questions of interest. The second part, presented by Torsten Roeder, approaches the project from the view of data modeling and digital humanities.

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This article is also available on the project website at the address: <a href="https://sammlungsraeume.de/science-in-the-city\_en.html">https://sammlungsraeume.de/science-in-the-city\_en.html</a>

Other papers from the conference "Science in the City" are available at the Metropolitan Science Blog: <a href="https://metsci.wordpress.com/category/metropolitan-science/science-in-the-city/">https://metsci.wordpress.com/category/metropolitan-science/science-in-the-city/</a>

## Part I

# by Jenny Brückner translated by Neil Bristow

- We are living in a time in which cities and whole countries are being compared with one another with grim statistics about the number of people infected and dying, bed capacities, and restrictive measures to try and bring the pandemic under control. During this process, we are learning from one another and scientists and research institutions are joining forces, as here, too, the variety is rooted in simultaneity the simultaneity of trying to find a vaccine as quickly as possible. Simultaneity also applies to the lockdown, in which every distinct individual has to follow restrictions at the same time. After all, social variety depends on the individual. It is also possible to apply this concept to our research topic, even if the relevance is not of the same gravity. And so, despite the crisis the world is currently facing, we would like to introduce our new project to you, which compares early modern collections of one city with those of other cities. In this case, too, the individual is key to judging the situation in one city, in order to then be able to make a broader comparison.
- Our project was planned by the Leopoldina Centre for Science Studies and the Research Centre of the Francke Foundations. The application for funding was submitted to the German Research Foundation (DFG) in the autumn. This is a "twin talk". I will begin by introducing the historical approach to the project; Torsten Roeder will then discuss the database and the approach taken by the digital humanities.

### Historical approach

- For some time now, the collecting culture of the early modern period has attracted considerable §3 interest in the international research community. It is almost impossible to maintain an overview of all the studies on individual collections, groups of objects and individual objects. The main focus is the "cabinets of artefacts and curiosities" of the 16th and 17th centuries, which presented collections as showrooms of "wonderful" and "curious" objects and attempted to reflect the macrocosmos in the microcosmos (COLLET 2007, SEGELKEN 2010). In the 18th century, a process began which would fundamentally change the purpose of collecting. The aim of wanting to represent the unity of God's creation increasingly gave way to collections whose focus was on teaching, learning or representation (GROTE 1994, BREDEKAMP/BRÜNING/WEBER 2000, BREDEKAMP 2007). Recent research has focused on this change and stressed that there was no abrupt shift in the 18th century due to the Enlightenment and the development of the natural sciences at the universities; rather, it was a complex process in which different types of collections existed simultaneously in terms of both location and time (see in particular DOLEZEL 2017 and 2019). Collection spaces thus increasingly became specialised research spaces in which a socially accessible culture of knowledge established itself (cf. VALTER 1995, BECKER 1996, Schindling 1999, te Heesen/Spary 2001, Mencfel 2018, Spary 2018).
- As part of this process, the functions of collections also began to change. Collections increasingly came to be places where people met and were seen, as well as places of communication, pleasure and consumption. At the same time, they were also places of education, and places where knowledge was produced and discovered (cf. Siemer 2004, Savoy 2006, Dolezel/Godel/Pečars/Zaunstöck 2018). The various types of collections, including of natural objects, books, maps, scientific instruments, paintings, charts and diagrams, coins, and ethnological objects, gained a new focus thanks to a new and more nuanced classification of the objects within collections as well as their accessibility to different sections of the public.

- Since the 1990s, research has shed more light on this process of differentiating the characters of collections from the late 17th to the early 19th century (e.g. JAEGER 1997, BÄHR 2009, FELFE/WAGNER 2010, KASE 2010, KERNBAUER 2011). Up to now, the focus was on individual collections, and on this basis the broad thematic spectrum of the collections' contents became more nuanced and diversified (e.g. SAVOY 2006, JAEGER 2007, SCHEPKOWSKI 2009, BUßMANN 2010, KÖRNER 2013). However, not enough attention has been paid to the fact that, against a backdrop of greater public accessibility in the 18th century, both a large number and a great *variety of collections* existed *simultaneously*.
- We therefore wish to reconstruct and trace the outline of collection landscapes throughout the 18th century. We propose that only a synopsis of many collections at one location makes it possible to contextualise early modern urban landscapes and to describe "science in the city" (see also ZAUNSTÖCK 1999A on the example of enlightenment societies or SCHNEIDER 2016 on aristocratic landscapes). Analysing the variety of urban collections in a multi-location study makes an important contribution to research in the field by enabling research issues to be investigated on a broad basis i.e. beyond individual objects and collections.

Halle (Saale), Leipzig and Dresden

- We would like to test this approach with respect to three selected cities. The cities are situated in Central Germany, and possess distinct urban characteristics within a closely-linked cultural environment: Halle (Saale), Leipzig and Dresden. A broad social, cultural and educational-historical research is available on the three selected cities (including ZAUNSTÖCK 1999B, DÖRING 2000/02, Blaschke 2005/06, FREITAG/RANFT 2006, ROSSEAUX 2007, Geffarth et al. 2012, Henkel 2014, Hofmann-Polster 2014, SCHOPFERER 2016, JOHN 2015–2019).
- Halle (Saale) was a well-known university city in the 18th century. In 1694, Frederick III the Elector of Brandenburg who would later become King Frederick I of Prussia founded a university in Halle which was committed to the prominent contemporary trends of Pietism and Enlightenment, as embodied by August Hermann Francke, Christian Thomasius and Christian Wolff. As a so-called Reform University, it was the most-frequented university in German-speaking countries in the 18th century and also a centre for the humanities and natural sciences. In addition, there are the Francke Foundations, which had very close ties to the university. They were founded as an orphanage in 1698 by the professor of theology August Hermann Francke and became a focal point of German Pietism.
- Another important university city was **Leipzig**, situated 35 km from Halle, and whose university, founded in 1409, is one of Germany's oldest. However, at the intersection of two important historical trade routes, the via regia and the via imperii, Leipzig had been above all famous in Europe since the Middle Ages as an important fair and trade city. The city was thus characterised by a well-financed local merchant class and business community which had close private and societal ties to the university-based scholarly community.
- A very different section of the population was to be found in **Dresden**, approximately 100 km away. The city was home to the Saxon Electors, one of whom, Frederick August I, also known as Augustus the Strong, became ruler of Poland in 1697. Particularly under August I and his son Frederick August II, the city on the River Elbe became one of Europe's most splendid baroque royal cities in the 18th century. Home to a flourishing arts and cultural scene, it attracted international architects, sculptors and painters. Alongside artists, the city was also home to the Court of the Electors and the Court's administrative bodies.

- We assume that, due to the respective social, economic and scientific potential, different collecting cultures developed in these three cities, and that these cultures, based on the correlation of urban society, the formation of institutions and the collecting interests, can be described according to specific collection profiles.
- By analysing these specific collection profiles, the project aims to trace the knowledge practice of the three selected cities using an approach which comprises diversity and quantity. The aim is to regard the collections not as isolated phenomena, but as diverse aspects of the everyday environment. Specifically, this entails looking beyond the collections which are regarded as particular highlights of a city and instead focusing attention on the totality of collections which exist simultaneously in a city.
- Halle, for example, is famous for the Francke Foundations' exceptional historical Cabinet of Artefacts and Natural Curiosities, in which the fascinating relationship between knowledge, exhibiting and seeing can still be experienced today (essentially Müller-Bahlke 1999 and 2012, Hornemann/Veltmann 2013, Whitmer 2015, Laube 2018, Ruhland 2018). Another collection of natural curiosities, this one with a European format and belonging to the famous Linck family of pharmacists, was located in Leipzig (Habel 2011). Today, the collection is housed at Waldenburg in Saxony and is among the oldest, almost fully preserved museums of its kind in Germany. Meanwhile, the origins of Dresden's Staatliche Kunstsammlungen (State Art Collections) can be traced back to the Kunstkammer, or "art chamber", founded by the Elector August in 1560. That said, the city experienced a true flourishing of the arts and collecting in the 18th century under the two previously mentioned electors as well as the prime minister Count Heinrich von Brühl. Their collections and the scientific focus they placed on the objects and the founding of museums characterise and dominate the entire museum landscape in Saxony to the present day (Sander 2011, Koch 2016, Koch/Ruggero 2017).
- However, it was not only the Electors of Saxony, Count Brühl, the Linck family or the Francke Foundations which established collections and exhibited objects in their own galleries and cabinets. Their passion was also shared by the population in the individual cities (cf. on the bourgeois Dresden accountant Johann Heinrich Christian Spahn: BRÜCKNER 2011 and 2012). But it is precisely these collections among the noble classes and the general public which remain relatively unknown and under-investigated. How, for example, can it be claimed that Count Brühl possessed one of the largest collections of paintings or weapons if we do not know what other people in the city possessed and in what quantities? How can general statements on the interconnections of a city's collecting culture be made where there is still no basic assessment of the entire breadth of the collections landscape?
- The project we have applied for will thus begin by systematically investigating early modern urban collection landscapes. Only by describing and comparing the landscapes will it become possible to grasp the full breadth and variety of the collections and to differentiate the collectors and the types of collection. In addition, the individual collections and stand-out collections which have already received significant attention from researchers will be seen in the broader context of a collections landscape which had previously not been investigated.

How will we proceed?

- Research into urban collection landscapes comprises several steps: first recording the findings, then §16 analysing them, and finally operationalising the results. In order to explore the collection topographies described above, we will begin by systematically examining contemporary publications. This will involve close analysis of selected city and travel guides, academic journals, magazines and weekly newspapers, as well as auction catalogues from all three cities. The systematic examination of these sources involved filtering to identify collections which were already labelled and perceived as such by contemporaries, and thus bore the designation "collection" (or a similar term or description). We do not assume that the surviving sources will allow us to fill every category for every single collection: We must accept that there will be "blank spots" in the collections landscape, which will however be compensated by the overall picture. A collection must be clearly named in a source for us to include it in our survey. The growing presence and significance of collections in the urban environment of the 18th century is initially reflected in city topographies and chronicles. Contemporary travel reports are another important source. They also help to indicate how accessible collections were. Academic and other journals and weekly newspapers are also included as they contain advertisements for and descriptions of collections as well as more scientific information about the contents. Another source is advertisements for auctions and auction catalogues, as collections were often sold and auctioned after the death of their owners. All information regarding collections and collectors are entered into a data collection which serves as a recording tool and thus as a first step towards the planned research database.
- These sources contained sufficient amounts of information about private collections to enable us to identify not just a representative cross-section but a majority of the collections in a city. With this approach, it was possible to identify around 280 collectors in Dresden, including collectors of paintings, gems, graphs and diagrams, books, coins, medals, and even shoes, tobacco boxes, erotica and coats of arms (cf. STÜBEL 1924/25, HERES 2006, BRÜCKNER 2017). Around 150 collections were found for Halle in the 18th century (cf. Lehmann/Ruprecht 2017, Dziekan/Pott 2008), and around 200 for Leipzig (cf. Krüger 1998, Hommel 2012 und 2016, Pabstmann 2017, Hommel 2018).
- After identifying these collections, a more thorough, primarily archive-based investigation and analysis of sources will begin. In the case of all three cities, the various types of sources are systematically aligned to the research questions. The following archive-based sources are consulted: hand-written inventories, papers and wills of collectors, court files as well as files relating to individuals and families. Analysis of literature and databases is also indispensable so as to identify possible additional sources such as contemporary obituaries, printed inventories, publications by the collectors themselves and current research literature on the respective collection. In this case, too, a strict research approach is followed. The sources are analysed according to a pre-determined system of categories, so that a retrievable profile is created in the research database for each individual collection and collector (see the graphics on the following page).



figure 1: data categories collection



figure 2: data categories collector

- In the second phase of the project, the data that has been collected for all profiles within a city is evaluated and correlated with the existing research. This provides the foundation for the source- and research-based description of the collections landscape of the respective cities. The category-based data collected from the individual profiles provide the material for placing the collections in relation to both collectors and the urban environment. Some of the examples and questions which we will investigate include the following.
  - The category "Occupation" examines, for example, correlations to collecting habits. Did, for example, doctors, pharmacists or natural scientists differ in their collecting habits? Did they only collect natural curiosities or also, for example, art?
  - The categories "Class", "Travel", "Membership in societies", "Relationships to other collectors" facilitate the analysis of social diversity within a city: How are the collections of nobles and the general public distributed within the urban collections landscape? What characterises the collecting habits of nobles and the general public? What types of collectors can be identified within an urban collections landscape? Are the landscapes dominated by professors, artists or, for example, civil servants?
  - It is also worth investigating the degree to which collections can be tied to a location within a city. The category "Location of collections" provides the basis for reconnecting with the topographical structure of collection landscapes, which is fundamental to the project. Were the collections based in the city centre or on the outskirts? Can topographical collection clusters be identified? Where exactly were the collections kept: in city houses, gardens or purpose-built premises?
  - The category "Accessibility to collections" is key to answering the question as to how socially inclusive the collections were. Were they accessible to the general public? If so, under what conditions? What "forms of presentation" and classification systems were there? This is also a way of investigating the functional aspects of collections (category "Purpose of collection"): Were collections created for teaching purposes, as a higher education standard, for entertainment purposes or as a form of financial security?
- The treatment of these topics for the respective collection landscapes in Dresden, Halle and Leipzig form the basis of a comparative study. In what ways did social change and the passing of time influence the development of the respective collection landscapes? Are the differences in the collection landscapes of the university city, the trade city and the royal city diametrical in nature? What were the differences among the collectors in the various cities with respect to economic class, education and social structure? Mapping out the differences and similarities of several collection landscapes in a comparative study will lead to a new facet of urban typology. The concluding phase involves operationalisation details will follow in the second talk.

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## Part II

# by Torsten Roeder translated by Neil Bristow

The talk by Jenny Brückner offered a clear and impressive overview of the goals which the research project on collection landscapes has set itself. Now, in the second part of this "twin talk", we will shift our perspective. While my colleague described the project primarily from an art history perspective and outlined the situation regarding sources, my aim is to look at the project from the perspective of the digital humanities and, in so doing, consider the tasks of data modelling, visualisation and operationalisation.

Broadening the view of collection topographies

- One thing has become clear: To date, research into collections has focused primarily on particularly large or popular collections whose sources are well known or whose history continues up to the present. The individual histories of collections, collectors and even individual objects are recorded in detail. This is also reflected in the digital environment: online "collection portals" are primarily intended to record, catalogue and present objects from one or several collections (e.g. HU BERLIN 2019, UNI GÖTTINGEN 2019).
- In this project we would like to shift the perspective and focus on the topography of early modern collections. The aim is to obtain a bird's-eye view of the entire collections landscape, in other words: to obtain a "distant view" (BENDER 2014) of collections from the early modern period. If the project succeeds, the approach may be transferred to similar or directly related projects. After all, Halle, Leipzig and Dresden are only three of a large number of locations which might be of interest with respect to early modern collecting culture.
- Several factors need to be considered. Firstly, the project cannot account for every object in every collection. The sheer time this would require makes it impossible. But even with sufficient time and labour it would still not be possible, as the sources for less illustrious collections are both fewer in number and provide less information. The situation regarding sources is good in the case of some collections, but poor for others. Furthermore, it is not clear whether the well-documented collections are representative of the broader picture. We assume that this is not the case.
- Initially, therefore, we would like to create the conditions for comparison and try to find comparable information on as many collections and collectors as possible. To this end, we will systematically analyse primary sources and extract the information. Here, too, the question arises as to how representative the findings are. We also have to accept that there will be many "blank spots" in the database being created. We will have to limit ourselves to only recording the collection contents in terms of the type and quantity of objects (cf. Weber 2013). Nevertheless, this approach will certainly allow us to get closer to the desired bird's-eye view and, in cases where research into individual collections already exists, we will be able to offer an additional "zoom in" option.

This approach has several consequences. In the case of some collections, we will only get incomplete information – we will be working with snapshots. It will not be possible to explain when and how the individual collections were created: this would entail a great deal of interpretation, which is only possible if sufficient sources are available and if the focus is on individual collections. However, the totality of snapshots from a particular location will enable a broader overview (cf. Oldman/Tanase/Santschi 2019). The same applies to the collectors themselves.

# Data modelling

- What distinguishes the data model of a "collection" from the data model of a "collection landscape"? One of the project's tasks will, of course, be to explore this in detail (cf. examples at Albers/Grosse/Wagner 2017). Generally speaking, however, it can be said that recording a complete inventory of an individual collection is necessarily somewhat different to recording a large quantity of collections at one location. I would like to look briefly at three categories which show which tasks arise during data modelling:
  - 1. The relationship between "collector" and "collection". The two categories are often regarded as a unity. Historiographically, the purpose of this is essentially to put boundaries on the subject matter. In the collections landscape, however, we have to assume that (a) a collection may change its owner and (b) a collector may own several collections during their lifetime. In other words, the relationship between collector and collections is characterised by interaction or, more specifically, by collection-related activities.
  - 2. The relationship between "state" and "change". A collection can be recorded as a fixed state, ideally as a catalogue. A collections landscape is never fixed. On the contrary, large quantities of non-harmonised information co-exist at various points in time. Furthermore, the projects aims to cover a long period of time. Consequently, it is possible and necessary to record the changes that a collection undergoes.
  - 3. The relationship between "information" and "interpretation". The main work of the project will involve extracting individual pieces of information about collections and collectors from sources. Additional research will only be possible in individual cases. Essentially, the project data will consist of snapshots and only rarely of interpretation of data. For this reason, it will not be possible to record in the database why, for example, a collection was created or ceased to exist.
- Broadly speaking, it will be necessary to create the following types of data: The primary focus is on (1) the individualisable collection and (2) the individualisable person at the heart of the database, and both require standard characteristics (at least: name, identifier, if possible also authority file; cf. e.g. Weber 2013). From the various (3) sources (4) records of the states of the individual collections and persons as well as of activities relevant to the collections and persons are created. In addition, each of these descriptions as a rule, these are text-based excerpts from the sources can be classified under an analytical category. Markup is then used to add details about location and date, as well as object classification, to the excerpts.

## Analysis and evaluation

- The work will thus involve developing a database from sources relating to collections and collectors and using this database to perform analyses. The plan is for the analytical categories and the evaluation procedure to mainly be developed during the course of the project itself. The historical questions that have already been mentioned are intended primarily to serve as examples. Answering these questions in individual cases depends largely on whether the sources, which we do not yet have a complete overview of, allow us to provide the answers, or whether the available data is insufficient for the respective question. At the same time, it can be assumed that various questions which we have not yet anticipated will arise as the project develops.
- Visualisation processes which enable "distant viewing" on various levels temporally or geographically, in networks or statistics are intended to help with the process. The degree to which the data can be explored will play a key role in stimulating the development of questions based on the available material (cf. DÖRK/CARPENDALE/WILLIAMSON 2011). The intention is to also develop these processes during the project period, starting with basic search and output mechanisms and extending to complex visualisations which offer the project team as well as future users a variety of visualisation methods as well as search, filter and grouping mechanisms.
- All data, including data from the data model and analytical categories, will be made available in an open data model which other researchers will be free to use. In this way, we hope to create a theoretically-sound, digitally implemented model which can be applied to other cities, regions and countries and which will set a standard that can be adapted for future comparative research into the collections landscape.
- To conclude, I would like to return to a point which Jenny Brückner raised at the start of her talk. While preparing this talk, we discussed the degree to which the current situation in the world and in particular in our respective countries influences the practical work of historians. At times, the distance between our work on the one hand and the pandemic on the other hand seemed almost unbearable. But perhaps there are ways to bridge the gap. Might one contribution that historians can make be in the understanding of our work as a collective enterprise and to thus focus even more clearly on broad collaboration, on the bigger picture, and thereby set a positive example for the global future? That is certainly how we would like to think of our project.
- To mention just a few possible questions for the discussion: To what degree do similar approaches already exist which use large amounts of individual data to create a big picture? Are there obstacles which you can anticipate with respect to the data modelling? What standards do you consider appropriate? And in what way would you most likely be able to make further use of the data?

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