

Chapter 1

INTRODUCTION

The main objective of this dissertation is to analyse museum acquisitions and art market sales and determining their influencing factors on price development. In the literature, there are many research on the subject of the art market, but no studies in the field of museum acquisitions. In museum research, topics on visitors, exhibitions, conception and digitization of museums are the main focus. The results of this dissertation provide initial insights into an untouched field of research beyond the study of visitor numbers and exhibitions, and establish a relationship between museums and auctions. The following chapter provides a general introduction to the concept of Growth Hacking as well as the development of art history and economics, the links between museums and the art market, and why close collaboration can be of economic importance to both museums and art market in terms of sales and exposure.

1.1 What does Growth Hacking mean?

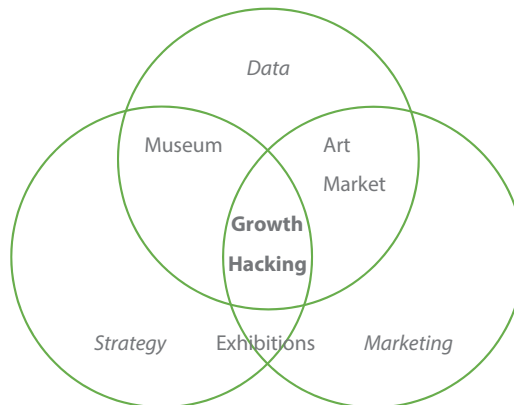
Growth Hacking is a very young term and is especially applied in the field of startups. Even in that field the strategic topic is still a niche topic. Ellis (2010) first uses the term in 2010 in an online article about startups and how the young companies find a growth hacker to promote growth and implement scalable repetitive growth phases. Ellis defines the tasks of a growth hacker as taking „*responsibility for growth and an entrepreneurial drive*” (Ellis, 2010). Accordingly, it is a marketing technique that aims to reach new users in a time- and cost-efficient manner. Lennarz writes that this requires an „*interplay of creativity, analytical thinking, programming, and social metrics in a very strategic way, always with the goal of unconditional user growth*” (2017: 1).¹ At first glance, a direct

¹ Free translation from German.

connection to museums and the art market is not apparent, as these are institutions that are already established in the market. Moreover, museums are mostly state-funded institutions that do not seek to make a profit and are at the service of society (ICOM, 2022). In contrast, auctions aim at record prices in order to achieve the highest possible profits. However, both have the responsibility of growth. In the field of museums in the form of increasing visitor numbers and in the field of the art market in the form of higher sales. Both museums and the art market want to achieve their goal by means of cost-efficient methods and strategies, which is why the term Growth Hacking can certainly be applied.

‘Growth’ stands for growing/increase and ‘hacking’ describes the method, which is innovative, requires creativity and durability as well as can be unconventional. The interdisciplinary approach of this dissertation is also innovative, unconventional, and has required tremendous patience. I venture a cross-functional linkage between museum strategies, art market concepts, and how this can create growth. Figure 1.1 visualizes the connections.

Figure 1.1: Museum Growth Hacking Connections



The figure visualizes the connections between data, strategy, marketing and their interfaces museum, art market and exhibitions, which are summarized in the term Growth Hacking. Data source: own illustration.

The first step is to collect data. Sometimes data still needs to be collected (museum acquisitions) in order to gain new and unconsumed perspectives. Other data is available at the respective locations (auction sales), this data must be recorded, compiled and evaluated. Many museums are currently developing a digital inventory of their collections but specific data about their

visitors is not available to most museums.² There is a lack of trained personnel to collect and process the data. Figures and results from the Institute of Museum Research are published once a year but the analysis tends to be one-dimensional. For example, well-attended exhibitions of various museums are mentioned but no possible connections are sought why the exhibitions were successful (Institute of Museum Research, 2021). The same is the case for the art market. Even here, figures on auction sales, art fairs, and collection perspectives are published once a year in the Art Basel & UBS Report (Art Basel & UBS, 2021). The evaluations are certainly broader and include other perspectives, but remain largely within the field of the art market. Of course, the art market is much more transparent and the results about auction sales are public. Sums about museum acquisitions, in contrast, are not public, which is why there are still no studies in this subject area. The research on the unique data in this dissertation demonstrates how museums are adapting their strategies to generate growth in visitor numbers and provides suggestions for cooperative marketing with auction houses. The term Growth Hacking is very young and so malleable and adaptable, which is why I chose the title Museum Growth Hacking for this dissertation. The title does not refer to pure revenue growth of museums using social media, as often used in Growth Hacking, but rather aims to use new ways of solving problems. Growth can be measured in terms of more visitors, which in turn corresponds to growth in name recognition and visibility. Growth Hacking is also used to achieve this. For this dissertation I therefore propose to use Growth Hacking as a kind of buzzword aimed at any growth in museum and auction operations through innovative and cooperative collaboration in the form of cross-institutional exhibitions.

For this reason, this dissertation examines temporal factors influencing museum strategies and artwork price trends, as well as relationships between museum acquisitions and auction sales. The aim of this dissertation is to provide first insights into the monetary museum world by means of empirical findings and to show how museum acquisitions affect art market prices. The following two sections form a short overview of the terms art history and economics as well as museum and art market.

1.2 Development Art History and Economics

Art history is a subfield of the humanities discipline which studies artistic products of all genres (architecture, fine and object art) from the Middle Ages to the present. The art-historical or art-scientific work includes formal, biographical, iconographical or stylistic analyses. The focus lies

² Annual visitor numbers are collected, but mostly group tickets or annual tickets are merged with day tickets here, which does not allow precise information on, for example, per capita income or visitor interests.

on theoretical and reception-aesthetic essays, and the findings are interpreted and placed in social, political, or civic contexts. Giorgio Vasari is considered the “founding father” of art history, as he was the first to record the lives and works of numerous Italian artists in writing and collect them as artist biographies (Panofsky, 1978; Blum, 2016). In the 18th century, Johann Joachim Winckelmann influenced the term art history with his major work “*Die Geschichte der Kunst des Altertums*”. For the first time, a chronological development of art history from ancient times is described as well as aesthetic criteria by which classical styles can be identified. Winckelmann develops a basis of evaluation on which he describes and classifies his objects of research (Haupt, 2014).

The development of art history as a science begins with the establishment of the first professorship in 1799 and until the Second World War various schools (Berlin School, Hamburg School, Viennese School, etc.) have formed, while today's art science is primarily shaped by renowned professors (e.g., Wolfgang Kemp, Hans Belting, Horst Bredekamp, Monika Wagner) and established universities (e.g., Ludwig-Maximilians-Universität Munich, Freie Universität Berlin, Friedrich-Schiller-Universität Jena).

Economics is a subfield of political economy that uses economic analysis to examine social science topics (including the financial and real estate markets, health care, education, law). A distinction is made between microeconomics and macroeconomics. One of the first definitions was written by the philosopher Adam Smith in 1776. With the intention of providing plenty of revenue for the people, the definition reads very close to the people (Groenewegen, 2008). In the 19th century, John Stuart Mill already defined economics as an investigative activity and included productive humanity striving for wealth (Mill, 1844). He also formulated for the first time four methodological steps for economic research. The definition still valid today comes from Lionel Robbins: „*Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses*” (Robbins, 1932). Other important economists such as Gary Becker or Jeffrey Wooldridge shaped and continue to shape research in economics as well as historical theories (e.g., Marxist economic theory, neoclassical theory, Chicago school). Today, economic analyses are used, among other things, to measure performance, on the basis of which strategies for increasing productivity are created, or for forecasting the future.

The subject fields are numerous and spread over diverse dimensions. The analyses increasingly follow interdisciplinary approaches and examine connections between social sectors (e.g., culture, tourism, health) and economic components (e.g., budget, profit maximization). Inferring from this, the term cultural and arts economics has developed. Bendixen (1998) provides an introduction to the topic and determines art and culture as „*fundamental factors of economic development*” (Bendixen, 1998: 10) and further studies follow. Much of this research relates

to art museums and studies the value of museum collections or revenue generated by visitors and exhibitions. Hutter (1998) already specializes in art museums in his paper and examines the change in their functions. He finds that museums are increasingly organizing more exhibition events as well as pushing the sale of consumer goods and devoting less time to the care of collections. Hutter links the finding to changes in technology, spending structure (price changes of artworks, personnel costs), revenue structure (grants, donations), and the use of exhibitions as a communication tool. Hutter distinguishes between 'monetary values' of objects (economics) and 'artistic value' (art history), and explores art museums from an economic perspective. He concludes that interactive effects are the source of economic growth and accentuates his cross-disciplinary research approach as insightful. In addition, he briefly circumnavigates the issue of art as investment, pointing out that profits are only generated over time (Hutter, 1998: 103). Art as investment is a frowned upon topic in art history, while economics is researching it with growing interest.

For example, O'Hare (2006) deals in his analysis with the capitalization of American art museum collections. He faults museums for failing to value their collections and treat them as if they were investments. Museums document inventory, but often the financial accounting system is incomplete.³ O'Hare argues that disclosure of art values would have a positive impact on museums and society. From most museums, only estimates of the capital of the museum collection can be made through exhibitions, and these are incomplete because only a small part of the full collection is on view.⁴ O'Hare calculates in his work exemplarily the total assets for the Art of Institute of Chicago and concludes that an open communication about the financial situation of museums and the capitalization of the collection is of advantage for lenders or donors and therefore for museums. In addition, he argues for legitimizing small museum sales as a way to purchase new works or provide free admission. Previously, O'Hagan's (1998) study explored the topic of deaccessioning in the context of the function of museums to collect, protect and generate donations. Selling museum artworks is a highly contentious field and there are numerous reasons to not sell (collecting, preservation, research, ethics) as well as viewpoints that legitimize a sale (fine selection, creating space, revenue). A distinction must be made between American and European museums, since in America museum sales are quite legal in order to generate budget for new acquisitions and to optimize the collection (O'Hagan, 1998: 202). In addition, he points to the power of donors and argues that donation restrictions should not influence the policies of art museums. O'Hagan also refers to the incomplete financial reports of museums,

³ O'Hagan (1998) already pointed out in his study of museum collections: *"As such, compared to any commercial operation, the financial reports of an art museum are very incomplete"* (1998: 205).

⁴ About ⅓ of the museum collection is in storage and probably never exhibited (statement of a museum employee I interviewed about her collection and exhibitions).

which makes accurate valuation difficult. The second contribution in this dissertation also demonstrates the incompleteness of the reports, while the fourth contribution is the first to use financial data to attempt to measure an impact of auction sales on museum collections. Other studies have also analysed the impact of donation restrictions on museum policy (Di Gaetano & Mazza, 2017; Yermack, 2017) or art as investment (Goetzmann, 1993; Pesando, 1993; Mei & Moses, 2002; Hodgson & Vorkink, 2004), which are revisited in the individual contributions in this dissertation.

The interdisciplinary study of art historical topics (museums, collections, exhibitions) using economic methods (analysis, regression) and subsequent placement in socio-political contexts allows for art economic insight and cross-functional linkage. The following section examines this linkage between museums and the art market. The next section explores this linkage between museums and the art market.

1.3 Linking Museum and Art Market

The core business of a museum „*since its invention some two hundred years ago has been the development, presentation, education, and academic study of its collection*” (Boll, 2010: 16).⁵ Today's art museum bundles social relations, power conditions and values with its collection and operates in the past, present and future (Boll, 2010). In the process of its development, the museum has often changed its configuration. Initially, it served as a princely showroom, then it was considered a place of bourgeois taste and an educational institute, and then it regressed again to become a symbol of wealth (Boll, 2010). Since the 1970s, the museum has been located in the leisure industry and thus in the field of economy (Gassler & Grace, 1980).

With the emergence of digitization, the museum definition needs to be rethought and with it the possibilities of the digital collection as well as its communication and integration into museum management. For example, Evrard & Krebs (2018) consider the visitor experience in the digital age in their study. They concretize on the Louvre and study museum visits on-site (in the museum) and virtually (website). Their results show that authenticity and the aura of artworks have the greatest value for visitors and that an exclusively virtual museum is not desired. Nevertheless, this constitutes a good complement, but during the transformation (digitizing the collection, website, creating virtual rooms and tours, etc.) the financial aspect has to be considered, so currently only medium to large museums are able to do this.

Ossmann, Seirafi & Doppler (2021) explored the advantages of augmented reality (AR) in the museum space. Their paper provides a guiding concept for the practice of museum professionals

⁵ Free translation from German.

by elaborating the goals of object annotation (continuous), object visualization (standalone), guiding (dialogue-based), and data visualization (connective), which can be implemented in museums in a targeted manner. Kamariotou, V., Kamariotou, M., Champipi & Kitsios (2021) have similarly developed guidelines for digital museum strategies to influence visitor behaviour positively. Their study helps to identify the potential of visitor interaction strategies and to use websites as a communication tool for museum collections. Other studies in the field of museum management and research are available from, for example, Del Barrio-Tellado & Herrero-Prieto (2019), Cipullo (2021), and Ranfagni, Milanesi & Guercini (2022). They examine how national museums differ from regional museums in their organization and output, how new technologies help museums develop service innovations, or to what extent a museum's brand identity matches the brand image that is shaped by visitor narratives. All of these papers contribute to addressing and improving the image of museums. An academic discussion in the thematic field of museums requires a certain awareness and importance of the respective institutions, which in turn benefit from the academic reappraisal.

The term art market is made up of the words 'art' and 'market'. Accordingly, a new word with a new meaning was created from two originally contrary terms. The creative design of a person of himself and his environment is combined with the area of buying and selling in the free economy, from which the term 'art market' was shaped. There is no universally valid definition, but the birth of the modern art market is considered to be the year 1967, when the first major fair took place in Cologne (Krüger, 1987: 88). The art market refers to the sum of all galleries, art fairs, collectors' exchanges or auctions (primary and secondary market) where works of fine art are traded. This dissertation, however, only sheds light on the auction market: „*The auction is that form of sale of goods which organizes the public sale of a thing within a (...) circle of buyers at a fixed time in a fixed place under uniform management ... [and] the goods are sold at the highest attainable price*” (Boll, 2017: 46).⁶ From an economic perspective, the art market represents a place of trade where a good (artwork) is exchanged for a price (bid) and the price is determined by the supply-demand principle.

Academics are increasingly exploring links between visitors and exhibitions in museums and the art market. Hellmanzik (2016) analyses in her study the influence of contemporary success of artistic careers on auction prices of modern paintings based on historical art exhibitions. Her results show that artists of historical exhibitions achieve higher auction prices. Moreover, the study shows that artists who have been shown in large exhibitions and exhibitions that have distanced themselves from the contemporary art scene fetch the highest prices on the art market. Accordingly, art experts and curators of the past have an indirect influence on auction results

⁶ Free translation from German.

today. In another study, Hodgson & Hellmanzik (2019) examine the effects of association with an artist movement on artists' career-creativity profiles. They use auction data for estimation. The hedonic regression results show that artist groupings defined after the fact by experts and historians have a positive effect on auction results as well as artist groupings defined by the artists themselves, whereby the first group achieves higher prices. The results support the previous study by Hellmanzik (2016) and provide evidence of the influence of art historians on auction prices. The investigations illustrate very well the interaction of museums and their exhibitions on today's auction prices and thus on the art market. Other papers shed light on similar relationships between art experts and prices, death of the artist and prices, colour intensity and art auctions, or exhibitions and the art market (Beckert & Rössel, 2004; Velthuis, 2005; Itaya & Ursprung, 2016; Pownall & Graddy, 2016; Altshuler, 2020). The papers support the thesis of an enriching, profitable, and complementary collaboration between museums and the art market, which is often representative of auction houses. Market-leading auction houses, such as Christie's and Sotheby's, benefit from artists exhibited in museums, well-designed exhibitions, a finely museum collection, and, at best, reputable donors. Admittedly, it is difficult for small museums to compete against world museums, but the same is true for smaller auction houses and the global players. As already researched, museum visitors appreciate the aura and authenticity of artworks, so there are opportunities for cooperative collaborations, which in turn are of high economic interest. Meanwhile, the fourth contribution in Chapter 6 discusses this topic more intensively. In their joint investigation, Johnson & Thomas (1998) examine the contribution that economic analysis can make to the study of museums as successful organizations, as they are also under competition and compete for every visitor, thereby increasing income. Economic analyses provide insight from which strategies can be derived. Johnson & Thomas locate economics in the function of cost and efficiency analysis of museums.

Thus, the analysis of art historical subjects by using economic methods encounters great popularity, although there is no uniform framework yet:

„It is because of the subject matter that there can be no disciplinary, conceptual, or methodological monopoly on the academic study of museums and their social embeddedness. (...) Under the term museum studies, interdisciplinary, historically argumentative and not infrequently application-oriented research activities are gathered that conceptually span from ideology critique and governmentality theory to organizational research and quantitative audience studies. Thereby, an emphatically critical relationship to the museum is regularly cultivated by describing it as a rule-supporting institution of modernity; without necessarily rejecting the idea of the museum as a public and inclusive institution of modernity in its entirety.” (Buckermann, 2020: 188)⁷

⁷ Free translation from German.

This interdisciplinary dissertation analyses empirical data and argues art-historically on topics such as museum visitors, exhibitions, museum income and expenses, museum acquisitions and relates them to auction prices and the art market. It aims to provide new insight into museum finances in order to achieve transparency in the field of institutional acquisitions of artworks. The worldwide selection of museums provides a universal insight, although the analyses were primarily focused on the European region. A large consensus of the museum staff is in the area of confidentiality and only a small dataset could be collected. This has the disadvantage that for the individual countries no specific analyses are possible, since too little data is available. However, an overview is given which allows to formulate first vague conclusions. I respond to the proposal of Pommerhne & Feld (1997), who already investigate in their analysis the influence of the acquisition policy of American art museums on auction prices. Their study primarily examines returns and distinguishes between public and private museums. The results support the hypothesis that public museums outside the U.S. pay above-average prices in auction markets that offer above-average returns to private sellers. In their conclusion, they indicate the intriguing relationship between museum acquisitions and auction prices and the investigation of a causality and its impact. I also respond to the investigation of Johnson & Thomas (1998), which also provides broader issues related to admission fees, museum growth, museum donations, exhibitions, or museum policy. The contributions in this dissertation deal with the topics above (visitors, exhibitions, other factors influencing the art market, museum acquisitions) separately from each other, although some parallels are drawn.

Chapter 2

DATA AND CHAPTER OVERVIEW

The following chapter provides a brief overview of the quantitative empirical research design, a chapter overview, and an outline of the core-datasets of each contribution.

2.1 Core-Dataset

The empirical analyses of the dissertation rely on a tailor-made and self-generated dataset that has not been used in the literature before. The first contribution in chapter 3 is focused on the description of the dataset, so the following section only briefly introduce the core-dataset and the chapter overview visualizes the spatial dimensions and presents the key results.

The dataset of this dissertation includes a total of three databases, which were filled with data from January 2020 to January 2021. The idea to create the museum and art market database is based on the comparison between art in museums and art on the art market. Due to the lack of data on museum acquisitions, I create my own database. This leads to an additional art market database and finally to a third database, which contains information from museum annual reports. The data in the museum and art market database includes information on 1,219 museum works from 326 museums worldwide and 1,219 artworks sold on the international art market by 213 auction houses. The museum database contains a total of 33 categories and the art market database contains 35 categories. For example, information was collected on the year of creation, technique and format, year of acquisition or sale, purchase or sale price, or the exhibition situation of the artworks, as well as the gender and origin of the artists. In part, some information is based on responses from the museums contacted (purchase price). However, for the purposes of this thesis and the analyses in Chapters 5 and 6, only 13 categories are examined in more detail. For the museum database, individual data were collected on the museum (e.g., country, city,