



Arts and Culture

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Abstract

The economic history of the arts includes both “high culture” – like the fine arts, theater, and classical music – and popular culture, such as pop music, movies, and newspapers. This chapter focuses primarily on the high arts but also provides a cursory description of the literature addressing more popular cultural production. The four sections of this chapter correspond to four key areas of inquiry in the economic history of the arts: what are relevant data about the arts and how to capture them, how market forces encourage the consumption and supply of culture, how artistic production is linked to geography and clustering, and what drives creative output. This chapter surveys scholars’ engagements with these questions across a wide range of art forms and time periods. It concludes with a discussion of why the study of the economic history of the arts represents unique opportunities for interdisciplinary collaboration and is particularly relevant to present-day service economies.

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Introduction

A chapter on arts and culture is a necessary component of a handbook of cliometrics, if only to honor the Greek god for whom the discipline is named. According to Greek mythology, Clio was the muse of history, seated alongside her fellow muses responsible for the inspiration of poetry, music, dance, and other arts. Clio herself is sometimes credited with being the “proclaimer” of all these arts – announcing, preserving, and praising them for history (Graves 2012: 577–781). Like the muses, the economic history of the arts is multidisciplinary. Economists, economic historians, sociologists, and art historians have all made significant contributions to the subfield. Therefore, while this chapter will focus primarily on contributions by economic historians, it will necessarily summarize and engage with work originating in other fields.

Although considered a subcategory of cliometrics, the economic history of the arts is vast. It includes both “high culture” – like the fine arts, opera, classical music, and ballet – and more popular culture, such as pop music, movies, novels, newspapers, and video games. In just one chapter, it is impossible to summarize all of the work done on these many subjects. Therefore, this chapter focuses primarily on the high arts, the expertise of the co-authors. While we focus on the high arts, it is important to note that these are *cultural* products; they are a consequence of the wealth and tastes of individuals existing in a particular cultural setting. We do our best to also include an at least cursory description of the literature addressing other more popular cultural production, what Ruth Towse describes as “media economics. . . the area of the broadcasting, audiovisual and publishing industries” (Towse 2010: 6). Nonetheless, this chapter should not be viewed as a definitive survey of *all* cliometric work that can be classified as dealing with arts and culture. It is, instead, an introduction to the field, including suggestions for future reading for those interested in pursuing the economic history of the arts.

This chapter is divided into four sections, each of which responds to the four key questions in the economic history of the arts. The first section “[Problems with Data and Culture](#),” asks what are relevant data about arts and culture and how do we capture them. The research question central to the section “[Art Markets and Their Logic](#),” is: if artistic output is a response to market forces, how have these forces changed over time to encourage and form consumption and supply? “Cultural Output and Geography,” the third section, examines where artistic consumption and output are located. The market for the arts is *not* a globalized commodities market where interchangeable goods can be traded for a worldwide price. Instead, it is centered in specific places and often involves a live performance. The final section “[Capturing and Fueling Creativity](#),” summarizes the literature that explores whether it is possible to understand what drives creative output and therefore determine how to encourage it. Understanding what drives creativity is of significant policy interest

as economies become service economies. In a service economy, economic growth is driven by highly educated workers who are often employed in positions and industries that demand creativity and innovation. Understanding the economic history of artistic output can help policy makers understand what will encourage creative output in the future.

In the conclusion to this chapter, we will describe the future of the subfield and how we believe it will continue to address these lines of inquiry and which new questions may be on the horizon. We encourage readers considering delving into the economic history of the arts in greater depth to explore the reference list included.

Problems with Data and Culture

To address research topics in the economic history of the arts – such as how and why individuals create high-quality artwork and understanding how art markets function – scholars need good data about historical cultural output. Like in other areas of economic history, it is challenging to find these data. However, locating high-quality historical data takes on a couple of important new dimensions when the study of arts and culture is involved. There are several obstacles that scholars face when determining what is relevant data about arts and culture and how to capture these data.

The first obstacle faced is the ability to translate the aesthetic quality and value of a work of art, music, literature, or performance into a data point. First, scholars need to adjust their usual data-driven methods to measure the unique and often subjective quality of cultural output. For example, should scholars use artists as their level of observation – therefore aggregating professional performance across a career – or should they focus on individual works, which can capture the good and bad works by famous artists and the occasional influential work by an otherwise unsuccessful artist? There is no correct answer to this question, but it is an example of the ways in which economic historians need to adjust to the particularities of studying artistic output.

A second difficulty is related to survivor bias, which is particularly pronounced in the study of the history of arts and culture. Unlike a census or other systematic data collection, the focus of historical artistic data is *not* on average individuals, but rather exceptional ones. Data typically only exist for famous artists, those who “made-it” and are observable in the present, often decades or centuries after their deaths. Third, the market for arts and culture is particularly opaque. Even today, an important proportion of works of art are sold by private dealers for prices that are never made public; the bottom-line of movie or theater producers, if private, are similarly privileged. Therefore, when cliometricians go in search of historical artistic data, they face two problems: locating data from years past and locating data generated by markets that are relatively small and where pricing is frequently private. Because of the importance of data quality in this subfield, many contributions to the existing literature are significant in part because they provided new arts data that allowed for new insights.

One of the problems that economic historians of art struggle with the most is how to capture the *quality* of artistic output. However, before tackling quality questions, it is surprisingly difficult to even grasp the true *quantity* of art produced and consumed

over time. For the visual arts, several sources are available. Auction data can, of course, capture large samples of art produced across several centuries; art from ancient times to the present can be sold at a contemporary auction. Several online databases – such as Artnet Auctions (n.d.) and Blouin Art Sales Index (n.d.) – provide this data for the past few decades; hard copy works like Gerald Reitlinger's (1961) three-volume opus *The Economics of Taste* (1961–1970) lists works sold at auction from 1760 to 1960 (although this data has been critiqued since publication, notably Guerzoni 1995). Other sources of the quantity of output over time include exhibition data like those used in Greenwald (2019, 2021), museums' increasingly accessible lists of their permanent collections, and catalogue raisonnés – complete lists of a given artist's production – assembled by art historians. Finally, a number of scholars have located sales data for historical markets. Many recent papers, in addition to making analytical contributions about art markets, have contributed significant new troves of data about historical artistic production. Recent examples of work that contributes exceptional art market data include Federico Etro and Laura Pagani's study of art markets in seventeenth-century Italy (Etro and Pagani 2012); Kim Oosterlinck, Christian Huemer, and Geraldine David's work about the multinational nineteenth-century art dealer Goupil and Cie (David et al. 2014); and Richard Goldthwaite's recent "economic biography" of an early Italian composer (Carter and Goldthwaite 2013).

Of course, scholars are not only interested in charting and understanding greater quantities of artistic output but also in tracking and understanding what drives higher *quality* creative work. Following standard economic theory, many scholars use prices to approximate the value of goods and services, and this includes artistic output. Within visual arts, this can be done rather conveniently with past results from art auctions and under the assumption that market prices reflect the true quality of a painting. First in a landmark article (Galenson and Weinberg 2001) and then in the book *Old Masters and Young Geniuses* (2007), economist David Galenson used auction prices as a proxy for the quality of an artwork. Focusing on nineteenth-century French artists, his arguments depended on auction prices decades after the creation of an artwork as a proxy for intrinsic quality. Other scholars working on the visual arts, notably Christiane Hellmanzik and Douglas Hodgson, have also used auction prices as indicative of quality (e.g., Hellmanzik 2010, or Hodgson 2011). There is, however, some bias in these approaches in so far as prices are affected by certain unobservable trends and fashions – whether contemporary or historical – and it can be difficult to account for these. Take, for example, the significant price increases of modern art since the turn of the twentieth century, especially in comparison with, say, Baroque art over the same time period. This is unlikely a reflection of higher perceived quality and artistic merit of modern art, but rather a shift in fashions (the taste for religious art is on the decline) and market trends (the expectation of higher returns on modernism attracts further investment). While using auction data is useful for the study of artworks, it has its limitations outside visual arts and cannot be applied easily to music or literature. A composer's hand-written music manuscripts can be auctioned for a non-negligible amount, but here the link between quality and price is less clear. The manuscripts are historical artifacts, not the works of music themselves.

Another way of assessing the quality of an artist's oeuvre is to use contemporaneous expert opinion – namely, opinions formed at the time a cultural work was produced – to judge the quality and importance of a work of art. Helpfully, there are expert opinions published not only about visual arts but also about the performing arts, music, movies, and books. Economists have tried to gauge the ability of neutral experts – like critics and the awards committees – to pick “winners” in arts and culture, both financially and in terms of artistic reputation. In two 2003 articles, Victor Ginsburgh (Ginsburgh and van Ours 2003; Ginsburgh 2003) examines the role of expert opinions in a classical music competition, American movie awards, and international book prizes. He concludes that positive expert opinions or awards given shortly after the production of a work are usually correlated with economic success. However, these pronouncements do not correlate with the long-term survival or acclaim of the work of art or artist. Moreover, women appear to be systematically disadvantaged in international piano competitions in the years from 1870 to 1990 (Asmat et al. 2022a), and, in particular, expert juries are shown to be more biased than lay audiences along the dimensions of gender and nationality (Asmat et al. 2022b). In the visual arts, Kathryn Graddy specifically tested the correlation between quality rankings created by renowned seventeenth-century art critic Roger de Piles for artists active in his own period and the prices attained by those artists on the auction market over the subsequent three centuries. She finds that his highest-ranked artists attain both better financial returns on the market and art historical acclaim (Graddy 2013). It is therefore unclear how reliable contemporaneous expert opinions can be.

Therefore, many scholars choose to engage with *retrospective* expert opinion. In short, they use “best of” lists, comprehensive dictionaries of artists, writers, and musicians (e.g., Grove Art Online n.d.; Grove Music Online n.d.; and the Encyclopaedia Britannica 2014), and other retrospective compendia to gauge the importance of a given cultural producer and his or her output.¹ Using the length of entry about a producer in these compendia is a strategy to measure the significance and quality of a producer's contributions to his or her field. O'Hagan and Kelly (2005)² discuss this approach and the relevant literature in depth. They also developed their own selection algorithm using a column-inch method, in which they look at the space devoted to each artist in an art dictionary and gauge the quality of an artist by how much space is allocated to him or her. The underlying assumption that the length of entry correlates with an artist's importance finds support in empirical evidence. However, there are also drawbacks to this approach. First, artists who lived longer have naturally longer biographies, albeit longevity may also correlate with their fame; these individuals simply had more time to produce potentially famous work.

¹For example, in “The Dictionary of Composers and Their Music” (1979 & 1993), the two musicologists Gilder and Port provide information about who wrote what, and when. The dictionary is a recognized survey of the most influential classical compositions and served often as a source for composer's output (e.g., Borowiecki 2013).

²<http://www.tandfonline.com/doi/abs/10.3200/HMTS.38.3.118-125>

Second, artists in early periods, especially prior to the eighteenth century, typically have shorter biographies because documentation and historical sources from this earlier period are less common and less well-preserved. Third, and perhaps most difficult to deal with, is the existence of biases to the home or target market country of the reference work; this issue persists even in the most prestigious publications. Therefore, building on selections of artists from just one reference work will create a bias that is inevitably directed toward the country of origin of the source and, as a result, one will over-represent artists of a particular nationality or gender and under-represent others – women artists, artists of color, and artists from the global south are chronically underrepresented.

To overcome these issues, one would ideally use a larger number of international dictionaries and pursue various selection algorithms, depending on the objectives of research. An example of this kind of extensive work is *Human Accomplishment* by Charles Murray (2003). In this book, the chapter “Excellence and Its Identification” describes how Murray selected the most prominent people in various fields – including visual arts, music, and literature – and outlines his comprehensive selection methods. His selections are based on numerous international dictionaries and reference works to mitigate the risk of country- or marketing-biases. Murray’s lists of famous achievers have been often used to identify samples in other research projects (e.g., in visual arts, Hellmank 2010, or in music, Borowiecki 2013). Though not included in Murray’s sources, other data sources that can be used to gauge the importance of an artist are the collections of museums and performance programs at operas, symphonies, and theaters, which are all determined through a combination of audience demand and the subjective choice of curators or artistic directors (Alfred Loewenberg’s “Annals of Opera” (1978) is a reference work on notable performances, used by, among others, Giorcelli and Moser 2020).

Though applicable to many fields and a practical method for gauging an artist’s quality and prominence, using data from encyclopedic lists of the collections of cultural institutions is vulnerable to significant sample bias. To even qualify for inclusion in these publications and institutions, an artist, composer, or author had to have made a meaningful contribution to the relevant arts canon. The sample of creatives presented in these publications is non-random (Gilder and Port 1993; Borowiecki 2013). Hence, one may ask: what about the lives and works of ordinary artists? There is no dictionary of mediocre artists or low-quality artworks. However, recent research has proposed ways to work around this obstacle. One approach is to obtain data from censuses. For example, Borowiecki and Dahl (2021) pursue this method and collect data on thousands of average artists using the United States census as recorded in the Integrated Public Use Microdata Series database. The comprehensive decennial population census provides information from 1850 on occupational status, which can be used to identify various high art occupations, including artists (visual arts), authors (literary arts), musicians (music), and actors (performing arts). Working at the level of individual works, Greenwald (2018, 2019) explores data about historic exhibitions that captures *all* the artists who participated in contemporary art exhibitions at a series of venues around France and the United States during the nineteenth century. There are also scholars working with online

searches for certain artists or artworks, or downloads of certain types of music from streaming platforms, in order to move closer to un-curated demand by art audiences (Borowiecki and O'Hagan 2012; Waldfogel 2014; Aguiar 2017).

As is common in other research areas in economic history, there is no one perfect data source for information about arts and culture. Survivor bias related to works of art and artists – in the visual arts, music, literature, and other areas – is particularly pronounced. Greenwald (2021), in particular, aims to engage with the concept of sample bias and works with nineteenth-century exhibition data as well as data from museums to better understand the differences between what was produced historically and what has survived in institutional collections. Notable, artwork and artists dominate the available data. It is convenient to assert that famous artists have made very significant contributions to the arts and our cultural heritage, and therefore constitute a particularly appealing sample to look at. Famous artists are also the right sample if one is interested in understanding what drives outstanding creative output and genius. Though economic historians of arts and culture have conducted exhaustive archival research and come up with novel methods for capturing creative output, persistent sample bias is a reality that must be acknowledged and addressed in this subfield, perhaps more than in other cliometric disciplines. In recent years, a developing literature in the digital humanities—particularly digital art history—has also made this point (Jaskot 2020; Brey 2021).

Art Markets and Their Logic

Unsurprisingly, many works of economic history dealing with arts and culture address research questions related to *markets* for art and culture. Economic historians generally accept that the output of any good is a response to market forces; therefore, just like for other goods, scholars examine how these forces have changed over time to encourage the consumption and supply of creative output.

Art markets – particularly markets for visual arts – are peculiar in a number of ways. First, “value” in these markets is subjective. Judgment of the relative quality of cultural product depends on the combination of expert opinion and audience reception. Furthermore, judgments of a book, film, or other work of art’s value can change significantly over time. Consider the example of Vincent van Gogh, whose work received little recognition during his lifetime. Despite producing approximately 2000 paintings, he sold very few of them while he was alive and died penniless at the age of 37. Today, his paintings are among the most valuable in the world. Largely because of these subjective valuations, there are significant asymmetries in information between suppliers and consumers in cultural markets. This creates ideal conditions for the presence of intermediaries – art dealers, record labels, movie studios, publishers, etc. – to mediate interactions between the cultural producers and their audiences. Later in this section, we will describe the growing literature dedicated to these intermediaries, their development, and their behaviors. This section often focuses on the market for visual arts, because it is a large literature and engages

with research questions related to markets for other art forms; however, we also make an effort to discuss studies of markets for other cultural goods.

When studying art markets, scholars' primary research questions generally fall into one of three categories. The first category is the description of a particular historically significant moment in the history of art, including moments of significant transformation in market structure. The second category is the performance of art as an asset over time, which depends in large part on the structure of the art market. The third category consists of efforts to understand how markets for art and culture have been formed by the broader socioeconomic context in which they exist, and how, in turn, these markets have had long-term effects on communities where they are present. This section describes studies in each of these areas.

There are several major contributions to the economic history of the arts that provide specific data and historical detail about significant moments in the history of art markets. A foundational example of this type of work is the literature about art markets in Golden Age Holland. Economist John Michael Montias's examinations of seventeenth-century Dutch painting (Montias 1982, 1989) provided extensive price data about paintings produced during this period and social and economic detail about the communities where art was produced and consumed. His scholarship was the first in a series of economic history works in this area conducted by both art historians and economists, included Filip Vermeulen, Neil De Marchi, and Hans Van Miegroet (e.g., Vermeulen 2003; De Marchi and Van Miegroet 1994). Other scholars have tackled the Italian Renaissance and Baroque periods, like Richard Goldthwaite's work on Renaissance Florence (Goldthwaite 1993) and Federico Etro and Laura Pagani's study of art markets in seventeenth-century Italy (Etro and Pagani 2012; Etro 2018), which presents exceptional data from contracts between artists and patrons. A recent notable example of this kind of work dealing with another period and geography is Kim Oosterlinck, Geraldine David, and Jeroen Euwe's research about the art market in German-occupied Europe during World War II. Using novel data, they show that demand for art was booming during the war and that this demand is attributable to a wartime need for portable and saleable assets (Oosterlinck 2017; David and Oosterlinck 2015; Euwe 2007). Across this body of work, scholars seek to understand the particularities of supply (who, why, and how people are selling art) and demand (who purchasers were and why they decided to acquire artworks) at clearly defined moments in time. There is research with similar goals in other areas of the arts. For film markets, for example, Pokorny and Sedgwick (2010) chart the development of the US film markets from 1929 to 1999, focusing on a comparison of the 1930s and 1990s. In particular, they show that similar levels of profit variability existed in both decades; however, while in the 1930s the main source of profits was from low- to mid-budget films, in the 1990s the main source of profits was high-budget films.

Other research seeks to understand *transitions* from one art market structure to another. Frederic Scherer, for example, describes the evolution of European music markets from the eighteenth to the nineteenth centuries. In particular, he examines

how composers transitioned from being employed by their patrons to being entrepreneurs seeking support and income from a variety of sources (Scherer 2004). In the 1960s, William Baumol and William Bowen used a blend of historical and contemporary data to examine how the costs of producing and supplying the performing arts had increased over the twentieth-century. They attributed this increase to large fixed costs – including growing costs of labor – for the performance of an opera, ballet, or piece of theater and termed the problem a “cost disease.” In turn, they argued that this cost pressure influences demand either by making the ticket price for the performing arts out of reach of many potential audience members or demanding that the state or private foundations provide significant subsidies for productions. This phenomenon damages the economic viability of the performing arts (Baumol and Bowen 1965), although this theory has been debated and questioned since its presentation (Cowen 2000).

Baumol and Bowen were interested in an on-going transformation in the market for the performing arts. Other scholars have produced purely retrospective work that focus on past changes. One of the most studied transitions in the structure of art markets took place in France during the nineteenth century. In *Canvases and Careers: Institutional Change in the French Painting World*, sociologist Harrison C. White and art historian Cynthia A. White examine the transition in late nineteenth-century France from a system of centralized state support for the visual arts to what they call the “dealer-critic” system, a decentralized market-based system for the exhibition and sale of contemporary art (White and White 1993). Many works have followed the Whites’ lead in exploring and explaining why the market for arts and culture has changed over time. David Galenson and several co-authors have published a number of papers in direct response to *Canvases and Careers*. A paper published with Robert Jensen argues that the fracturing of a centralized state-sponsored exhibition system in nineteenth-century France can be partially attributed to artists’ entrepreneurial impulses to exhibit and sell in their own group shows (Galenson and Jensen 2002). In another article, Galenson and Bruce Weinberg describe how the new decentralized market-based system encouraged and rewarded innovation among artists and helped foster the advent of modern art (Galenson and Weinberg 2001).

We describe this literature about nineteenth-century art markets in detail not only because it is much-cited in the field but also because it introduces an important topic in the economic history of the arts: the changing importance of certifiers and intermediaries in art markets over time. Under the decentralized “dealer-critic” system, the number of individuals participating in the market grew. This created a growing role for market intermediaries like art dealers and auction houses, including Christies, Sothebys, and Drouout. Some of the most studied intermediaries are contemporary art dealers. Works including Bystryn (1978) and Fitzgerald (1995) demonstrate that dealers have become essential for the economic success – and perhaps the art historical staying power – of modern artists. The most recent major contribution to this area, Olav Velthuis’ *Talking Prices* (2005), presents compelling ethnographic research suggesting how pricing in the primary art market is fluid and depends on the ability of particular dealers to consistently adjust to the immediate conditions of supply and demand.

The role of market intermediaries is the focus of studies of other markets for cultural goods, including books, journalism, and music. In book history, publishers, printers, and booksellers are a particular focus (St Clair 2004; Dittmar 2011; Finkelstein and McCleery 2012). Scholars working on the economic history of the music industry have examined technologically driven challenges posed to traditional intermediaries like record companies and the musicians they represent. As the contemporary music market changes radically (the initial dominance and then decline of records and CDs, the arrival of legal and illegal downloads, and now the rise of streaming), what counts as the “history” of the changing music market has been accelerated. Debates over intellectual property protection and its effect on the quality, quantity, and format of music produced have been central to the literature about intermediaries in music. Many articles (e.g., Oberholzer-Gee and Strumpf 2007; Waldfogel 2012) have found that illegal downloading on services like Napster had little to no effect on the observed decline in record sales in the beginning of the twenty-first century and did not lead to deteriorating quality of music produced during the same period. As music piracy becomes less common – particularly in Europe and North America – scholars have instead turned towards assessing the effects of legal digital music streaming (Aguilar and Martens 2016). This literature about the music industry is directly related to another recurring theme in the economic history of the arts: the importance of copyright and protection of intellectual property. We will address this topic in detail in section “[Capturing and Fueling Creativity](#).”

As the art market and number of intermediaries grew from the nineteenth-century forward, buyers began to invest in art for financial as well as aesthetic reasons. Art became a valuable and easily saleable asset (Velthuis 2011). There is a large literature dedicated to judging the performance of art as an asset over the long run. In general, these papers find that art performs poorly as an investment. Useful surveys of these findings are conducted by Frey and Eichenberger (1995), Goetzmann et al. (2011) and Renneboog and Spaenjers (2013). The particularities of markets for art – persistent asymmetries of information and the influence of intermediaries like auction houses and art dealers – have a profound effect on art’s performance as an asset. David et al. (2013) and a number of papers by Orley Ashenfelter, Kathryn Graddy, and Christophe Spaenjers examine inefficiencies in auctions for art and other luxury goods and how these inefficiencies negatively impact the performance of art as an asset (Graddy and Ashenfelter 2011a, b; Spaenjers et al. 2015).

The third and final group of studies of art markets examines the interaction between art markets and the broader social and economic context in which they exist. The most cited contribution in this part of the literature is from sociology. In *Distinction: A Social Critique of the Judgment of Taste*, famed sociologist Pierre Bourdieu asserts that “there is an economy of cultural goods [with] a specific logic” (Bourdieu 1984: xxv).³ This logic is determined by the education and upbringing –

³Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, trans. Richard Nice (Oxford: Routledge, 1984), xxv.

the *habitus* – of the participants in the cultural economy. Bourdieu writes: “One can say that the capacity to see (*voir*) is a function of the knowledge (*savoir*). . . A work of art has meaning and interest only for someone who possesses the cultural competence, that is the code into which it is encoded. . . A beholder who lacks the specific code feels lost in a chaos of sounds and rhythms, colors and lines, without rhyme or reason.”⁴ Because transacting in this cultural economy demands this encoding, Bourdieu concludes that class may be not only expressed but also defined and transmitted to future generations through the consumption of cultural goods. Finally, he argues that formation of class distinction on the basis of cultural tastes is particularly effective. While upwardly mobile people may be able to accumulate financial capital in one lifetime, cultural understanding is the product of “total, early, imperceptible learning, performed within the family from the earliest days of life and extended by a scholastic learning which presupposes and completes it. . . [B]ourgeois families hand [this] down to their offspring as if it were an heirloom” (Bourdieu 1984: 59). Since its publication, *Distinction* has established as given the assertion that cultural activities, tastes, and institutions are potent sites of class formation. The effects of this assertion have been far-ranging across fields that deal with the arts, including in cultural economics and the economic history of the arts.

Bourdieu used contemporary survey data and quantitative methods to support his assertions. While cultural economists working on contemporary issues have also used survey data to study connections between artistic consumption and socioeconomic background (e.g., Ateca-Amestoy 2008), economic historians have needed to look for other sources that allow them to study this interaction in the past. Therefore, this area of the economic history literature often focuses on how demand for art is related to and enshrined in bricks-and-mortar cultural institutions. This scholarship asks: how is the particular demand for or supply of art encouraged by and preserved in museums, operas, and symphonies? Furthermore, how do these institutions continue to form art markets after their founding?

In the visual arts, there have been several studies of the relationship between demand for art and the founding of art museums. Though not an economic historian, sociologist Paul Dimaggio has made major contributions to the economic histories of museums and other arts institutions. Building on Bourdieu’s work, Dimaggio examines nineteenth-century American patrons’ socially motivated founding of new museums, operas, and symphonies. He argues that these institutions changed how cultural output was delivered, and put a solid fence around what was considered “high culture” and what was “popular culture” (Dimaggio 1982). These categories of art and their distribution remain separated from one another today, and an artist’s inclusion in a major museum collection (or the performance of a composer’s work at a major opera house or symphony) remains an important certifier of an artwork’s status as “high culture” and of its quality. Bruno S. Frey and several co-authors have made important contributions that document this phenomenon both in historical settings and today (e.g. Frey 2013).

⁴Ibid.

Currently, the most active area of inquiry into the effects of bricks-and-mortar arts institutions is related to how the founding of an institution can form the supply of, and demands for, art in a given place for centuries *after* the institution was founded. Readers will note that almost all of the literature described here deals with the arts in a particular time and place. Even financial history papers that aim to measure the returns on art as a globally traded asset must concede to the importance of local and idiosyncratic interventions of intermediaries like those described in Velthuis (2005). Artistic output is not equivalent to a commodity like wheat or coal. Instead, trading in cultural goods is often done face-to-face, depends on personal relationships and takes place in dedicated physical institutions. These geographical factors are explored in greater detail in the next section “[Geography and Art](#).”

Geography and Art

In the economic history of the arts, scholars often return to the topic of geographic clustering – both of consumers and suppliers of art. They have observed that across historical eras that the most active audiences and the best-known artists tend to be centered in particular cities. This section describes the work demonstrating this phenomenon and explores the effects of clustering on artistic output. It begins with studies of demand for arts and culture, and then transitions to research focusing primarily on supply.

Two contributions have discussed the persistence of demand for culture in cities with a long legacy of supporting the arts. In a paper titled “Phantom of the Opera” (Falck et al. 2011), Olivier Falck, Michael Fritsch and Stephan Heblich use the location of Baroque opera houses in Germany as a quasi-natural experiment to test whether or not high human-capital employees are drawn to cities with cultural amenities. They find that the presence of a Baroque opera house increases the current presence of educated workers. This suggests that there is persistence of “cultured” activities – and the reputation of being cultured – in certain cities. There have been several comments and challenges to this paper, but a recent replication study (Bauer et al. 2015) did find the same effect for Baroque opera houses; although there were also positive effects on the share of high-capital workers for historical brothels and breweries. The “Phantom of the Opera” paper did not set out to gauge demand for the arts; instead, it sought to understand why highly skilled workers choose to live in certain places, and how this clustering affects the growth path of a certain city and region. In contrast, Borowiecki (2015b) does set out to understand the persistence of support for the arts and demand for cultural goods in certain cities in Italy. He finds that cities and provinces that had high-levels of cultural activity in the past – measured by the number of active composers in the area – continue to have more concerts and operas performed in the present. Furthermore, residents still spend relatively more money on high-culture activities as compared to other entertainment, like sporting events. Demand for and support of the arts, once established in a given city, appears to persist.

Measuring clusters of demand for the arts is a new and small literature when compared with scholarship that aims to understand the geographic distribution of artists. One of the earliest quantitative studies on this topic dates back to the turn of the twentieth century, when Gustav Michaud explored the spatial spread of artists and intellectuals in the United States and described his findings in the article “The Brain of the Nation,” published by the *Century Magazine* in 1905 (Michaud 1905). This area of research has received considerable attention, especially in the last 20 years as many countries transition to a service-based economy. Studies of agglomeration economies have established as given that economic activity is concentrated geographically. However, geographic clustering of successful artists is remarkably more concentrated, and it has often been observed that throughout history the global population of prominent artists is located in a handful of cities. For example, Mitchell (2019) documents the extent of geographic clustering of a sample of 370 significant poets and writers in the UK and Ireland born 1700–1925. She identifies the Greater London Area as an unrivalled cluster, with 79 (or 21%) of writers born within this region, and during its peak more than 50% of all authors working there. Dublin, Edinburgh, Oxford, and Cambridge emerge as the only other cities that see minor clustering of authors at any point in the sample. Other major contributions that document this intense clustering include Hall (2006), Murray (2003), and Schich et al. (2014).

At Trinity College Dublin, John O’Hagan, now Professor Emeritus, leads a research group specifically dedicated to the study of creative clustering. This group has produced a series of projects compiling detailed databases that cover the lifetime migration histories of hundreds, or even thousands, of famous artists, ranging from visual arts, to music, to literary arts. Research by this group and by Maximillian Schich show that the clustering of artists is not driven primarily by large numbers of births of artists in given cities, but rather by patterns of migration. Schich et al. (2014) use a database of 150,000 notable people – including artists – to show that the median distance between birth and death place for these people has remained largely constant from the fourteenth to the twenty-first century.

O’Hagan and Hellmanzik (2008) specifically examine famous visual artists’ migration and clustering patterns for four periods (based on their date of birth): Renaissance Italy, Europe in the first half of the nineteenth century, and the Western world in general for the periods 1850–1899 and 1900–1949. These data support Schich’s conclusions that famous artists clustered at a remarkably high level in all periods. Florence and Rome dominated in Renaissance Italy, with significant clustering because of artists’ birthplaces and domestic migration. Paris and London witnessed a marked clustering of artists born in the first half of the nineteenth century. These two cities were the main work locations for 55 of the 72 artists studied. The French capital continued to dominate among artists born in the second half of the nineteenth century, while artists born in the first half of the twentieth century clustered in New York City, with all prominent American artists clustering there. The geographic distribution of music composers is studied by O’Hagan and Borowiecki (2010), who examine annual migration and clustering patterns of 522 important composers of the last 800 years. In line with visual artists, it is

Table 1 Type of movement of famous music composers by century

Century of Birth	Movement						
	None		Internal		External		All
	Total	Relative	Total	Relative	Total	Relative	Total
12th	2	0.50	2	0.50	0	0.00	4
13th	0	0.00	2	0.50	2	0.50	4
14th	2	0.18	8	0.73	1	0.09	11
15th	0	0.00	31	0.61	20	0.39	51
16th	14	0.13	66	0.63	24	0.23	104
17th	14	0.17	52	0.62	18	0.21	84
18th	16	0.17	41	0.44	36	0.39	93
19th	27	0.18	88	0.59	34	0.23	149
20th	2	0.09	16	0.73	4	0.18	22
All	77	0.15	306	0.59	139	0.27	522

Source: O'Hagan and Borowiecki (2010)

shown that Paris has been a major center for composers. The concentration of composers in this one city perhaps reflects the general prominence of Paris as a cultural city. Some composers were born in the French capital, but most migrated to it. Table 1 outlines the broad pattern of migration of prominent composers over the centuries. O'Hagan and Borowiecki find that 86% of all prominent composers spent the longest period of their working lives away from their place of birth, 59% migrated to a city within the country of their birth, while the remaining 27% migrated to work in another country.

These studies show a significant rate of migration going back several centuries for artists, musicians, and other creative people. This suggests that creatives existed in an integrated global world many centuries before average people regularly migrated towards urban clusters. Importantly, as the markets for art and culture were not (and are still not) globally integrated, the suppliers of art have had to travel to cultural centers where art markets, institutions, consumers, and other producers are located (Florida 2014). This can lead to various tensions between local and migrant artists, but evidence based on data from U.S. cities between 1850 and 2010 suggests that immigrant artists are conducive towards the development of artistic clusters (Borowiecki and Graddy 2021). In other words, cities that experienced immigrant artist inflows, also see a greater inflow of native artists and more thriving arts scenes.

These migration patterns appear to hold for more than just notable artists. In an effort to address the issue of sample bias in the subfield, Borowiecki and Dahl (2021) examine differences in the clustering intensity and location choice between famous and average artists in the United States from 1850 to the present. This is done using both census records to cover average artists and data from art dictionaries listing famous artists. They show that the geographic spread of the census artists (the "average" artists) is greater, which implies a lower clustering intensity – albeit still very noticeable – in comparison with the famous creatives. This reconfirms the

previous statements that extraordinary achievers concentrate more than average individuals. It is interesting to observe that for both populations of artists the same dominant clusters emerge: New York City, followed by Boston, Chicago, Los Angeles, and San Francisco. However, some discipline-specific clusters emerge as well. For example, New Orleans has a very high concentration of births of musicians, while Seattle constitutes an important work location for literary artists.

Often, businesses that help sell the creative output of artists also cluster, usually near the artists themselves. Several studies of the locations of art dealers over time show that like artists themselves, they cluster intensively in the same place – even in the same neighborhood in a culturally active city. Examples of this geographic work on art dealers includes art historians Pamela Fletcher and Anne Helmreich’s study of the nineteenth-century London art market (Fletcher and Helmreich 2012) and the mapping of the location of Parisian art dealers from 1815 to 1955 created by the Artl@s research group at the École Normale Supérieure (Saint-Raymond et al. 2015). Significant clusters of intermediaries have also emerged in theater and cinema. Broadway in New York City and the West End in London are dense clusters of theater activity. Organizations at the heart of these clusters – and organizations in the same city or metropolitan area but outside the principal cluster – have produced significant innovations in theater. (Castañer and Campos 2002 provide a comprehensive overview of this literature.) Hollywood is a globally dominant cluster in the film industry. Several articles have examined how this cluster emerged and how it continues to propagate its dominance. Research has particularly focused on the large budgets of early Hollywood films and the ability of films made in southern California in the early to mid-twentieth century to penetrate foreign markets (Miskell 2016; Bakker 2008; Sedgwick 2000). Just as art dealers cluster near artists, Hollywood and Broadway are two clusters that unite both the creators of the art themselves – actors, directors, writers, etc. – and the individuals and organizations who provide the funding and distribution necessary to create a movie or theatrical production (Caves 2000; Scott 2004).

Observing geographic clustering is an important contribution to economic history. However, not surprisingly, economists and economic historians are not content with just making this observation. They want to understand why clustering fosters creativity. For policy making in today’s service-driven economy, scholars seek to understand how governments and institutions can fuel innovation and creative activity, either by fostering clusters or with other policy interventions. The next section addresses these questions.

Capturing and Fueling Creativity

Is it possible to understand what drives creative output and how to encourage it? While scholarship surveyed in the first three sections of this chapter certainly touches on this question, this section presents papers that make permutations of this research question their primary focus. Therefore, this section deals more with the work of scholars who are interested in using historical data and case studies to examine how

employment and economic production in the “creative industries” – a fluid category including industries ranging from visual arts and fashion to advertising, journalism and software design – have developed over time (Towse 2010).

Importantly, this work aims to understand how creativity and creative industries develop. Creative and arts sectors are seen as a “key ingredient for job creation, innovation and trade” (UNCTAD 2010) and are believed to constitute opportunities for depressed cities and developing countries to participate in high-growth areas of the world economy. Typically, scholars working from this policy perspective describe their research area as “cultural economics.” In this literature, creativity is sometimes modeled as a result of rational decision-making (Frey 2013) or as a function of some objective and quantifiable factors, such as general education or experience (Bryant and Throsby 2006). However, the most recent contributions have looked at how education and training shapes creativity, how specific extraordinary individuals make their discoveries and produce creative output due to peer effects and emotional drivers, how creativity can be induced by an increased demand for innovation or higher competition among creatives, and how intellectual property protection can foster creativity.

Teachers can have a formative effect on the development of their students, but measuring that influence is challenging. Borowiecki (2022) overcomes the data limitation by capturing key attributes of a creative output for around 15,000 music compositions written by hundreds of composers, and then he calculates similarity measures between pairs of composers (or across compositions). The approach enables Borowiecki to provide novel insights on how teachers influence the creative work of their students, how long this influence lasts, and what the consequences are for the students’ inventive output. The findings are that teacher’s influence is large and persists throughout the next two to three generations, as many students go on to become teachers themselves, but subsequently starts to fade. But it is important with whom one studies: students of high-quality teachers are more likely to become higher-quality composers, while imitation of a low-quality teacher reduces the chances of success later in life.

Successful artists have been also shown to exhibit remarkable clustering patterns. With these observations in mind, Hellmanzik (2010) provides an important study on the existence of location premiums by exploiting a sample of prominent modern artists born between 1850 and 1945. She combines auction data with records about whether and when an artist worked in Paris or New York, the two main cluster locations of that period. The findings suggest that paintings created in Paris or New York have been valued higher by 11% and 43%, respectively. Furthermore, artists working in one of these two cluster locations are shown to reach a peak in the age–price profile of their work significantly earlier than artists working elsewhere. Similar results are presented by Mitchell (2019) for writers. Mitchell finds that an author becomes more productive by around 12% each year when residing in London.

When teasing out the causal effects of clustering, scholars must ask whether geographic clusters attract the most creative artists, or whether artists who cluster are more productive because of positive externalities associated with cluster locations. In other words, is self-selection driving the empirical evidence on better performance

in geographic clusters, or does a clustering benefit exist? This question – and escaping the endogeneity problems one faces in answering it – is of considerable policy importance not only for the arts but also for other sectors (see Rosenthal and Strange 2004). Borowiecki (2013) uses data for a global sample of 116 prominent music composers born between 1750 and 1899 to them to answer this question. A historical approach enables him to exploit the variation in the geographic distance between a composer's birthplace and a geographic cluster as an exogenous source of clustering, and thus to credibly assert that the association between clustering and productivity is a causal relationship rather than simply a correlation. Borowiecki finds that geographic clustering increases creativity: composers were writing around one additional influential work every 3 years they spent in a cluster. Drilling down further into the dynamics of notable artistic clusters provides some clues as to how clusters encourage higher-quality artistic production. Borowiecki (2015a) develops a simple theoretical framework explaining the trade-off between agglomeration economies (peer effects) and diseconomies (peer crowding), which suggests that the productivity gain due to the presence of peers is characterized by an inverted U-shaped relationship and eventually decreases if the peer group size becomes very large. These theoretical predictions are supported by data for music composers: a composer was about 10% more productive when an additional prominent composer was located in the same city. However, the effect is nonlinear and may begin to decrease for very large numbers of peers.

What drives the benefits from clustering with peers? The literature has provided three distinct answers about the internal dynamics of a cluster: knowledge exchange between peers in the same field, interaction between individuals from diverse creative fields, and competition between peers. Geographic proximity facilitates spillover effects between individuals in the same field (Marshall 1890). Therefore, in cities with a particularly high concentration of artists, synergies and spillovers may positively impact the individual's ability to innovate. Porter (1996) suggests that local competition in specialized, geographically concentrated economic activities may constitute a significant stimulus for growth. The competitive working environment experienced by artists when they are concentrated forces innovation. One can find anecdotal evidence for this argument. In 1778, Mozart was in Paris, the most crowded creative market he ever lived in. His productivity peaked in this year, and he wrote 19 influential compositions, which is three times higher than his annual work-life average of around 6.6 compositions.⁵ More systematic evidence is provided by Borowiecki (2022), who explores what is the effect of competition between composers on the originality of their music. The findings imply a lower similarity across composers who are exposed to greater competition. To put it differently, music composers are more original when working in more competitive environments.

The literature has suggested further factors external to clusters that can both foster the creation of a creative cluster and innovation more generally. These factors

⁵The category of "influential compositions" is recorded by the the musicologists (experts' selection) in Gilder and Port (1993).

include specific market demand for innovation, differing levels of intellectual property protection, and political competition for creative talent. In their influential study about modern art, Galenson and Weinberg (2001) suggest a significant shift in demand for innovation in art. The authors explore how an artists' quality of artworks, approximated with auction price data, changed over his or her lifetime and show that the peak age occurred much earlier for later cohorts, who were exposed to increased demand for innovation. It was therefore not by chance that Paul Cézanne and Pablo Picasso created their most significant works within 1 year of each other, although they were born more than 40 years apart.

Apart from market conditions in a given time and place, many scholars have discovered that copyright protection over time and across countries and regions has created different creative environments. Ruth Towse has contributed extensively to this literature and has examined the effects of copyright protection on a variety of creative industries and conflicts between artists and intermediaries over ownership of intellectual property (Towse 2001). Her work deals primarily with contemporary policy and economic conditions. More historical in her focus, Petra Moser has researched the effects of copyright and patent protection across a variety of industries, geographies, and eras (e.g., Moser 2011, 2013). Recently, she has worked with artistic data – specifically book publishing in nineteenth-century Britain (Li et al. 2017) and the effect of Napoleonic rule on Italian operas (Giorcelli and Moser 2020) – to examine the effects of copyright on innovation. Giorcelli and Moser exploit variation in the adoption of copyrights due to the timing of Napoleon's military victories in Italy. The authors are therefore able to estimate the causal effects of copyrights on creativity and find that basic levels of copyright protection increased not only the quantity of creative output but also its quality. These creativity gains are explained by the fact that copyrights reward the greater composing effort necessary to produce high-quality work.

Beyond intellectual property rules, other political and policy factors can have an important effect on artistic output. Vaubel (2005) develops the hypothesis that competition among neighboring states may favor cultural innovation. This hypothesis is then backed up with the empirical observations that European instrumental music had its breakthrough during the Baroque era and that the most famous composers came from the two countries characterized by the highest degree of political fragmentation: Italy and Germany. Vaubel then measures the average duration of employment as a proxy for competition on the demand side and shows that famous Italian and German composers of the Baroque period changed their employers significantly more often than their French and British counterparts did. These insights suggest not only that political fragmentation has promoted musical composition and encouraged quality but also stimulated the mobility of composers.

While much of the research about creativity has focused on the effects of clustering and specific policies, there is a growing economic history literature that explores how biological factors drive artistic creativity. Thinkers since Aristotle have theorized that creativity and emotional state are linked. Other disciplines – notably applied psychology literature – have probed this link, along with the apparent correlation between famous creative people and psychiatric disorders like depression

and bipolar disorder. Economic historians of the arts have recently engaged with this literature by looking at the letters of famous artists and seeing how their emotional state correlates with their creative output. Borowiecki (2017), for example, uses textual analysis to calculate the extent of positive and negative emotions expressed in a large number of letters written by Wolfgang Amadeus Mozart, Ludwig van Beethoven, and Franz Liszt. This allows him to create well-being indices capturing emotional states throughout each man's lifetime. He then shows that negative emotions have a causal impact that leads to increased creativity, as measured by the number of high-quality compositions written.

While it is clear that clustering drives increased creative output, this greater output may have come at a cost for artists' physical and emotional well-being. Fierce competition between peers anecdotally led to depression and nervous breakdowns, as was the case for Maurice Ravel, who was diagnosed with neurasthenia in 1912 immediately after the failure of his ballet "Daphnis et Chloé." His condition was presumably aggravated by an exceptional performance of his fellow Frenchman and competitor Claude Debussy's "Prelude to the Afternoon of a Faun," also performed in Paris just 10 days earlier. With anecdotes like this one in mind, Borowiecki and Kavetsos (2015) argue that the concentration of talent is likely to have adverse effects in terms of health and well-being. They attribute these outcomes to the continuous mental strain individuals go through in order to achieve their aspirations, which become more intensified in settings where one's peers thrive. Borowiecki and Kavetsos approximate for peer competition in various ways and suggest that it reduces composers' longevity. For example, all else equal, a 1% increase in the number of composers located in the same area and time reduces composer longevity by about 7.2 weeks. Essentially, clustering leads to greater quantity and quality of creative output, but this can come at a cost for one's well-being. These findings are thought-provoking, especially if one considers that the first fundamental theorem of welfare economics also argues that competition is indispensable in producing Pareto-optimal outcomes.

Conclusion

Economic historians have rarely turned their attention to the arts. Often, when they did decide to study the arts, it was a mid-career decision driven not primarily by a belief in the centrality of arts and culture as topic in economic history but because they had a personal love for art, music, or another cultural good. These later career engagements created *excellent* scholarship – and there are exceptions to the characterization of scholars in this subfield starting midcareer. (In fact, the co-authors of the underlying chapter are just such an exception.) However, the fact remains that studying the economic history of the arts has long been a secondary topic in our field.

Happily, this is now changing and there are many indicators for the change, including two forthcoming special issues on the economic history of the arts – at the *European Review of Economic History* and the *Journal of Cultural Economics* – a growing number of contributors and increasingly many publications in top field as

well as in top five economics journals. This change has been partly driven by the shifting composition of developed economies. Developed economies are now dominated by services – including the ever-growing category of “arts, entertainment and recreation.”⁶ The continued growth of the arts sector and other service industries demands creativity and innovation; this innovation often emerges from clusters of creative people, whether it is in Silicon Valley, a major metropolis like Paris, or in smaller clusters around universities and other cultural institutions. Today’s economic dynamism therefore shares many common features with artistic output over the course of history. Understanding what fosters and drives creative achievement means understanding what fosters and drives economic success today. For this reason, the economic history of the arts has become more important in the broader field and is poised to become increasingly important. The improving availability of good data, whether obtained from original sources or from other disciplines, is conducive to these developments.

Beyond applications to contemporary economics and policy questions, cliometric approaches to the study of the arts are having a growing impact on other humanities fields that have typically resisted quantitative research. The rise of the digital humanities – first in the study of literature and now in art history, musicology, and other fields – has made humanities scholars more receptive to the use of quantitative methods (Jockers 2013; Moretti 2005; Fletcher and Helmreich 2012; Jaskot 2020; Brey 2021). However, literary scholars, art historians, and other humanities researchers often do not have the prerequisite statistical and computational training to compile and analyze quantitative evidence. This creates a golden opportunity for cliometricians to contribute to these other fields and use quantitative methods to address long-standing research questions in these areas. Consider the following example: cliometricians have documented the geography of creative clusters and explained how these have evolved over time and across various regions of the world. It could certainly be argued that art and music historians have been aware that Paris was an important center for the arts. However, there would quite likely be less agreement on how important it has been, the timing of its prime, and how it compared with other major cities. In other words, the extent of the dominance of Paris has not yet been quantified, nor has it been compared across creative domains. In this way, cliometrics provides a representative, objective, and robust measurement of the importance of cities, which can later be used within the humanities in various contexts.

Unfortunately, cliometricians have not yet seized this opportunity for collaboration. Practitioners in the digital humanities have engaged mostly with computer scientists and statisticians to implement tools such as 3-D mapping, algorithmic literary analysis, and linguistic patterns in textual corpora. Economists and economic historians should take this opportunity to have an impact on another field. Early efforts include the “Genius for Sale!” conferences, organized in 2014 at the

⁶These numbers for the United States are available from Federal Reserve Economics Data (FRED) (n.d.). URL: <https://fred.stlouisfed.org/series/CES7071000001>

University of Oxford and 2016 at Brandeis University.⁷ These conferences invited scholars working both in the humanities and social sciences to present on topics related to the arts in their broader economic contexts. We need to create more collaborations like these that may, in turn, result in important interdisciplinary publications. Notably, special series in humanities journals that are dedicated to digital approaches—such as the online art history publications *Nineteenth-Century Art Worldwide* and *Panorama*—are a venue that is currently underexploited by cliometricians. With humanities scholars as co-authors and guides to these publication outlets, more work in this interdisciplinary area can be completed and shared.

Cross-References

- ▶ [History of Cliometrics](#)
- ▶ [Innovation in Historical Perspective](#)
- ▶ [Institutions](#)
- ▶ [The Cliometric Study of Innovations](#)

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