Birth Location, Migration and Clustering of Important Composers: Historical Patterns

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Abstract.

This paper examines the 522 most important composers in the last 800 years, as identified by Murray (2003), in terms of their birth location and migration. It also looks at detailed patterns of migration and tendencies to cluster in certain cities for those composers born from 1750 to 1899. This information is compiled from the large on-line *Grove* encyclopaedia of Music. There is also some discussion of the biases evident in choosing 'significant' composers. The data show a marked level of migration of important composers going back many centuries suggesting that phenomenon of globalisation had impacted on composers many centuries before its effects were more widespread. The data also show a marked level of clustering in certain cities.

Keywords: composers, geographic concentration, labour mobility, migration

1 Introduction

In order to conduct this study, the following interesting questions need to be addressed: how do we know who the prominent composers were; did they in fact tend to concentrate over the centuries in certain cities and/or countries, either in terms of birth and/or work location, and if so in which cities/countries; what source will provide sufficient data to answer these questions? Another question that arises if such clustering is evident what caused it? Kelly and O'Hagan (2007) reviewed the broad arguments in relation to this for visual artists, but providing substantial evidence to test the hypotheses and apportion different weights to the various possible causal factors is work for several future research projects. Nonetheless, the conclusion of this paper will address this issue and identify what the important next steps might be.

The paper builds on aspects of Scherer (2001 and 2004) but is much less broad in scope. Besides, this paper uses a different group of composers and has a much greater emphasis on documenting migration and clustering patterns.¹ The structure of the paper is as follows. In Section 2 some methodological issues are examined, such as the data set used for the paper, the definitions of long-term and short-term labour movement applied to artists and how some specific methodological issues were addressed. In Section 3 a summary of the key results in terms of birth location is provided, through the use of tables and charts, as well as the broad pattern with regard to migration of composers for the whole period under examination. Section 4 considers in some detail the pattern of migration, temporary and long term, and clustering by city resulting from such migration, for three fifty-year sub-periods from 1750 to 1899. Section 6 concludes the paper, with some speculate explanations, pending more detailed work, for the patterns observed.

2 Methodological Issues

Choice of Significant Composers

The first task is to choose the composers for investigation. The intention here is to pick a large number of 'prominent' composers, as it is much more likely that they will have migrated and clustered. After all, the distribution of economists is probably similar to the distribution of the general population in the Western world, but this would certainly not be

¹ The paper builds more therefore on earlier work in relation to visual artists (see Kelly and O'Hagan, 2005, O'Hagan and Kelly, 2007, O'Hagan and Hellmanzik, 2008, Hellmanzik, 2009a and 2009b), although it is as yet at the preliminary stage of gathering the essential information on patterns of migration and clustering of composers.

true for say the 1,000 most important economists. In an excellent chapter entitled Excellence and Its Identification', Murray (2003) outlines how he chose the most prominent people in various fields of endeavour, including classical music. His task was to rank the most significant composers (522 in all) whereas for our purposes we simply need the top 522, not necessarily ranked, a much less demanding task. He used seventeen different reference works and histories to calibrate eminence, and in at least one of these sources 2,508 composers were listed. He then reduced this to 1,571 composers who were mentioned in at least two sources, one of which was a non-encyclopaedic source. In examining these composers he used the thirteen most relevant sources, the latter being defined as one which contained 18 per cent of the 1,571 composers. He then reduced this to 522 'significant' composers, namely those mentioned in at least half of the thirteen sources used. After quite exhaustive tests of his methodology Murray then proceeded to use these 522 composers as his sample, with a Cronbach reliability index of 0.97, the highest index for any of his categories of human accomplishment. It is this group of 522 composers that is the subject of study in this paper.²

Core Data on Birth Location and Migration Patterns and Duration

The key data source on the birth location and migration patterns of the 522 composers is the on-line *New Grove Dictionary of Music*. This large multi-volume dictionary is detailed enough to track the movements of all 522 composers, especially work-related migration, and in fact covers more than 19,000 composers in all. It is 'a critically organized repository of historically significant information' (p. xii) and hence is an ideal source for our purposes, especially as it is also available on-line.

For contemporary composers, 1950 was the year adopted as the cut-off point by Murray, with no composers born after this year included: thus twentieth century from here on

² Scherer (2004) used the 742 composers listed in *Schwann Opus*. These are composers with extant recorded music during the time span 1650 to 1849. He then obtained biographical information from the *New Grove Dictionary of Music and Musicians* (1980). However, for 76 composers there was no entry in *Grove* and for another 20 the information in *Grove* was too sparse to track work locations, leaving 646 composers for study. He then chose a 'select' sample of 50 for in-depth analysis, using biographical references and other works. Simonton (1991) looked at a sample of 120 composers and chose them on the following basis: they needed to be listed in Gilder and Port (1978) and Barlow and Morgenstern (1948), they had to be deceased at the time the most current reference work was published, and a date could be reliably assigned to their most important works. His aim though was not to pick the most important composers but to examine the pattern of creativity over the life times of important composers. Vaubel (2005) had a much more specific objective, namely to show that the rise of Western music was linked to the mobility of composers and hence more demand possibilities arising from the geographically spread courts systems. He examined a relatively small number (25) of 'famous' composers in terms of their court employers and duration of employment and got this information from two German encyclopaedia of music.

refers to composers born in the first half of this century only. Important work of a composer occurred of course many decades after year of birth, with for example the main work of many composers born between 1850 and 1899 taking place in fact in the first half of the 20th century. Besides, the choice of periods is somewhat arbitrary, and this is why it is best to take into account the whole 1750-1899 period as well as the three 50-year sub-periods examined as this paper does.

The birth and migration locations of composers are categorised into eleven geographical categories, for different reasons. France, Italy, Russia, Spain and United States were left as stand-alone countries given the large number of important composers likely to have been located there, by birth and/or work location. The Germanic Countries relate to the three German-speaking countries of Germany, Austria and Switzerland, as the geographical boundaries in earlier centuries were not clear. The Low Countries relate to composers from Belgium and the Netherlands, again for the same reason. The British Isles includes artists from England, Scotland, Ireland and Wales. Eastern Europe relates to composers born in any of the Eastern European countries as classified by United Nations Statistical Division, with the exclusion of Russia. Rest of Europe covers composers from all other European countries. Rest of the World relates to composers that do not fit any of the other ten categories.

Definitions: Long-Term and Short-Term Labour Movement

Long-term movement captures those composers who migrated from their place of birth and moved to a different location, either within their country of origin (internal movement) or abroad (external movement), to live and work, for the longest period of their working lives. Some composers who undertook long-term movement returned to their place of birth, or to another location within their birth country for those who moved abroad, for short periods during or at the end of their working life (return migration), but the majority of their working life was spent in a different location to their birth and hence they are categorised as long-term migrants for work purposes.

Temporary mobility, on the other hand, relates to any short-term movement undertaken by a composer prior to and/or after he/she settled in the location that became their main place of work The period of time covered by *temporary* mobility varies from a few weeks to a few years, depending on the nature of the temporary mobility undertaken. Thus, temporary mobility differs from long-term movement because the artist returns to the location that was at the time he/she undertook such movement their main place of work, whereas he/she moves to a new location to live and work when they engage in long-term mobility. Composers who undertook both internal and external long-term movement (repeat migrants) are classified as one or the other according to where they spent the larger proportion of their working life.

3 Birth Location and Migration Findings

County/Region of Birth

As one might expect (see Table 1), the Germanic countries have had the largest number of significant composers; 138 out of the total of 522, followed by Italy (121) and France (94). Indeed, if one takes the twenty top composers according to Murray, then the dominance of the Germanic countries is even more marked, accounting for 12 of the total and for all of the five top spots. Looking at the different centuries, the Germanic countries produced the second highest number of significant composers in the 17th century (after Italy), the highest by far in the 18th century and the highest again in the 19th and 20th centuries. Italy was the biggest producer of composers in the 16th and 17th centuries, with the British Isles ranking second in the 16th century, its highest ranking by some way. Surprisingly, the US was not the dominant source of composers in the 20th century, as is commonly thought, as the Germanic countries had more; the US accounted for just 20 per cent of the total.³

While the variation in the number of composers over time is not the subject matter of this paper, it is interesting nonetheless to observe the trend (see Murray 2003 for discussion of this issue). As can be seen in Table 1, the largest number of significant composers were born in the 19th century. However, when population is adjusted for, a quite striking picture emerges. The number of composers per million of population was 0.84 in the 15th century, rising to 1.29 in the 16th century and dropping to 0.42 by the 19th century and to as little as 0.05 in the 20th century.⁴

Chart 1 highlights the bias that can emerge from using just one source, a bias that is inevitably towards the country of origin of the source. This was found to be the case by O'Hagan and Kelly (2005) for visual artists and markedly so for the 19th and 20th centuries. A similar story is emerging with regard to composers. The chart shows the distribution of the 250 composers chosen by Gilder and Port (1978) in their *The Dictionary of Composers* and that of the 522 composers chosen by Murray through exhaustive use of different and varied

³ The trend in the number of composers, both in absolute terms and per head of population, is of itself an interesting issue but is not the subject of this paper (see Murray, 2003, for further discussion).

⁴ Gilder and Port (1978) argue that 'not until the sixteenth century did composers emerge who began to develop music as a serious art form', yet according to Murray (2001) around 12 per cent of the 522 most important composers were born prior to the sixteenth century.

sources.⁵ The differences are marked and are almost all biased towards composers born in the British Isles (the country where the authors worked) and to a lesser extent the US. The share of British Isles' composers in Gilder and Port was 22 per cent but only 8 per cent in Murray: the corresponding shares for the US were 10 per cent and 3 per cent. The biggest change in the opposite direction was for Germany: up from 10 to 19 per cent.⁶

Migration: Internal and External

Table 2 outlines the broad pattern of migration of prominent composers over the centuries. As may be seen, 85 per cent of all prominent composers spent the longest period of their working lives away from their place of birth. Fifty-nine per cent migrated to another internal destination while the remaining 26 per cent migrated to work in another country/region. What is striking is that there is no trend over the centuries towards more migration, either internal or external, as the proportions did not change significantly over the centuries, which is perhaps surprising given increased ease of travel. This though could in fact have the opposite effect on work location as with easier travel, and in the 20th century much easier means of communication, a composer could keep in touch with developments elsewhere without ever moving on a permanent basis from his/her main work location.

We now turn to a more detailed examination of these migration trends, looking at three fifty-year periods, 1750-1799, 1800-1849 and 1850-1899. During this 150 year-period 191 of the 522 most important composers were born (see Table 2). The Germanic countries accounted for 47 of the 191 and France for 46, combined therefore accounting for around half of the total.

4 Migration and Clustering: 1750 to 1899

1750-1799: Birth Location and Migration

 $^{^{5}}$ Gilder and Port chose composers 'whose works may be heard in the concert hall, the opera or ballet house, and the church'. They list *Grove* first as one of their sources and a number of other English-language publications and then stated that 'for the rest, the reference books in French, German and Italian... have been too numerous for us to be able to remember them'.

⁶ Grove does address this issue somewhat. The first edition in 1879 states that in 'an English dictionary it has been thought right to treat English music and musicians with special care, and to give their biographies and achievements with some minuteness of detail' (reproduced in Grove 2000, p. Xxxvi). There were five editions of *Grove* with the first edition of *New Grove* appearing in 1980 and the most recent in 2000. The 1980 edition states that Grove, by long tradition, is the standard multi-volume musical reference work for the Englishspeaking world. It is a fully international dictionary. But it is proper if in some respects it reflects the tastes and preferences of the English-speaking countries.... The dictionary must serve the needs of the public by which it will be primarily used' (p. xiii). This is an acknowledgement therefore of the commercial reality of publishing any book.

There were 42 prominent composers born in this period: 17 of these were born in the Germanic countries, 11 in France and 8 in Italy, highlighting the dominance of these three countries/blocs in this period.

Looking now at migration patterns, the results for long-term movement indicate that a total of 16 prominent composers left their country of birth during this period and migrated to a new country to live and work. A further 20 artists moved internally within their country of birth. As a result a total of 36 composers (out of 42) moved permanently from their birthplace to live and work at a new location. Many artists also moved on a temporary basis - 28 of the 42 composers engaged in temporary migration, bearing in mind that *Grove* lists only temporary movements of significance, in a work sense. It is noteworthy that in the case of France there was no external long-term movement in this period and very limited temporary movement, with only 2 of the 11 French composers moving even on a temporary basis. In contrast, there was large-scale movement by Germanic and Italian composers.

1750-1799: Clustering in Paris and Vienna

Turning now to the destination for these movements, it is interesting to note that all French artists clustered in Paris, either because of birth location (3 composers) or due to internal migration (8 composers). This is a quite astonishing concentration of prominent composers in one city and could perhaps reflect the general prominence of Paris as a cultural city in this period. It may also reflect the centralised nature of France, with a huge concentration on Paris, in contrast to the spread of cultural and economic activity in Germany, a pattern that has lasted to this day.

Composers born in the Germanic countries almost entirely stayed in other Germanic locations, either because of internal or external migration. The spread was however very marked and, with the exception of Vienna and Berlin, no location was chosen by a second Germanic composer. Vienna was in fact the second (after Paris) most important work destination in this time period, where 6 out of 42 composers clustered. More interestingly, four of the Viennese composers are listed in Murray (2003) among the best 20 composers of all time: Beethoven, Mozart, Schubert, and Weber.

Italian composers either migrated internally or externally – mainly to Paris where 3 out of the 8 composers clustered. A further 5 non-French prominent composers migrated to Paris, bringing the total prominent composers with their main work location as Paris to 16 (out of a total of 42). This is a marked level of clustering of prominent composers in one location, with only Vienna coming close.

Turning now to temporary migration, the data confirm the immense importance of the Germanic countries and the dominance of Vienna. Twenty-two of the 28 composers who moved temporally did so to one of the Germanic locations and more than half of them visited Vienna for music-related reasons. The remaining composers spread among several other Germanic locations. The picture is less marked in relation to France or the British Isles, where respectively 7 and 9 composers moved on a temporary basis. All of the temporary migrants clustered in Paris or London.

1800-1849: Birth Location and Migration

There were 53 prominent composers born in this period, 16 of them in France and 14 in the Germanic counties. This period witnessed the emergence of Russia as the birth location for important composers, with 8 born there. This period also marked the decline of Italy (3 composers) and the rise of Eastern Europe (4 composers). It was also the first period when prominent composer were born in the US (2).

As with the previous half century, there was again marked long-term migration for work reasons. Around 75 per cent (40 out of 53) of all prominent composers moved on a permanent basis. Of the 40 who migrated on a permanent basis, 32 of these moved internally and 8 externally, with no marked change in this regard compared to the previous period. Again there was no external migration by any French composer, but 10 of the 16 moved internally on a permanent basis. Of the 14 Germanic composers, 8 migrated internally on a permanent basis and 4 did so externally. All 8 of the Russian composers moved internally.

Composers continued to move on temporary basis with a similar intensity as in the previous period. Approximately two thirds (35 out of 53 composers) moved on a temporary basis to other locations. In the case of French composers again only 6 of the 16 moved on a temporary basis.

1800-1949: Clustering in Paris, St Petersburg and Vienna

Paris remained the only cluster for French composers – all 16 prominent French composers spent the main part of their working lives in Paris, 6 of them born there and the other 10 migrating there. This again demonstrates an extraordinary concentration of activity within one country. The Paris cluster also remained important for composers born abroad – 3 composers (out of 8) chose Paris as their main work location. Thus 19 of the 53 composers born in this period had their work location in Paris, a less marked clustering of artistic activity than the previous 50-year period but nonetheless significant.

Composers born in the Germanic countries predominantly clustered in Vienna (5 out of 14), while the remaining artists mostly spread across locations in other Germanic countries, again a reflection of the origins of the German state and its federal nature to this day. Russian composers did not migrate abroad but clustered almost entirely in St. Petersburg, with 7 of the 8 based there on a long-term basis.

Consistent with previous observations Paris was in this period the single most visited city – 10 composers born outside France (out of 37 non-French composers) moved to Paris on a temporary basis. The Germanic locations were visited temporally by more composers (14 out of 53) but with a marked geographic spread. The dominance of Vienna seems to have diminished while Berlin was on the rise – both locations were visited by 5 composers, with no other city listed as visited by more than one composer for work reasons.

In the case of London, 8 composer-visits were recorded, reflecting perhaps the relative wealth of London in this period. Of more significance, 6 non-American composers moved on a temporary basis to the United States, predominantly to New York (5 composers), again perhaps a reflection of the rising relative wealth of New York.

1850-1899: Birth Location and Migration

A total of 96 prominent composers were born during this period (the highest number among the three 50-year periods. The spread by birthplace was less concentrated than in any previous period. France (19) and the Germanic countries (16) remained the birthplace for the largest number of composers, followed by Russia and the US (with 12 each) and Italy and the east European countries (each with 10 composers).

Seventy-five of the 96 composers moved for work reasons on a long-term basis. Of the composers who migrated, 56 moved internally and 19 migrated long-term to another country. Thus the long-term movement was predominantly internal. Once again, not a single French composer moved externally on a long-term basis, but 10 of the 19 moved internally on a long-term basis. Of the 16 German composers, 11 moved on a long-term basis, 5 of them externally. All of the Eastern European composers moved on a long-term basis, 5 internally and 5 externally. All 12 of the American composers also moved on a long-term basis, all within the US. Of the 12 Russian composers, 10 moved on a long-term basis, 4 externally.

The vast majority of prominent composers migrated on a temporary basis to other locations - 79 out of 96 prominent composers, higher than any previous 50-year period. There was considerable variation by country group but the sample is probably too small to reach any firm conclusions in this regard.

1850-1899: Clustering in Paris, but also in Many Other Cities

Remarkably again, 18 of the 19 French composers worked in Paris on a long-term basis; 9 of them were born and the other 9 moved there. Of the 18 composers who moved externally, 3 were based on a long-term basis in Paris, 2 from Eastern Europe and the other from the British Isles (bringing the total to 22 clustering in Paris). Yet the dominant trend is the emergence of many cities as clusters, including Vienna (9 composers), New York (7), London (6 composers), Moscow (5), Rome (4), and Budapest, Prague and St Petersburg (3 each). It is also noteworthy that 38 of the 96 composers did not cluster in any of these cities but were spread throughout at least another 20 cities.

In relation to temporary movement, though, there was much more clustering evident. 22 of the 74 non-French composers moved to Paris on a temporary basis. Even more composers visited the Germanic countries, 39 of the 80 non-Germanic composers. 21 of these visited Berlin and 12 visited Vienna, the next most visited city being Cologne (3). 19 of the 89 non-British composers visited the British Isles, 17 of these visiting London on a temporary basis. Thus in terms of temporary movement, Paris, Berlin, London and Vienna stand out.

The most notable development perhaps relates to the US. 35 of the 84 non-American composers visited the US on a temporary basis, 20 of them staying in New York. This was indeed a new development with also significant visits to Boston and Los Angeles. The contrast between the location destination for temporary and long-term movement then is quite striking.

6 Concluding Comments

The overall picture is one of a significant clustering of composers but not as marked as in the case of visual artists, especially in the first half of the 20th century. The other major difference is in relation to the cities in which the clustering occurred. Paris was a major centre for both visual artists and composers. London in contrast was a major centre only for visual artists.

Why do visual artists, composers and other creative people tend to cluster? A related but different issue, why in particular cities. It would be extremely difficult to demonstrate 'scientifically' why say Paris, among all of the major cities in Europe, became the main centre for clustering of visual artists and composers but a general and convincing argument can be posited (see Cowen, 2000, and Kelly and O'Hagan, 2007, for example). One of the key reasons not discussed above is the simple issue of adjusting for the population of the cities in question.⁷ For example, in 1850 London had a population of 2.23m and Paris a population of 1.31m (see Scherer 2004). Vienna had a population of only 0.45m in contrast, Naples 0.42m, Moscow, 0.37m, and Madrid, 0.26m. In terms of composers per head of city population Vienna would emerge as the most important city by far, more so than Paris or Moscow. But why was this the case and why did other similar-sized cities have almost no prominent composers working there? Why did London have so few given that it was the largest and wealthiest city in Europe by far at the time?⁸

In some ways the more interesting question from an innovation perspective is why artists and composers, and indeed so many other prominent innovative workers such as the designers of computer soft-ware or academic historians and economists, tend to cluster so much at all and this was covered in Kelly and O'Hagan (2007) and also very well in Andersson and Andersson (2006) and can easily be applied to composers.⁹

An interesting question related to the above is why much more clustering was observed in relation to prominent visual artists than composers. A factor that makes composers different to visual artists is that many of them need either a symphony orchestra or opera company to perform and test their work, but not necessarily the best company, which are usually located in the large cities. Thus having the dedicated facility of a resident orchestra in their home location could be a huge factor deterring movement, especially if the home orchestra was prepared to perform unknown works without over-concern for the commercial consequences. On the other hand, given the huge expense of having an orchestra or opera company (and the required infrastructure, such as concert hall or opera house), it might be argued that composers would need to cluster even more to exploit economies of scale in relation to the use of an orchestra by a number of composers. This assumes though

⁷ Not adjusting for the size of cities is a common error in some papers on urban economics, where often it is simply stated that large cities attract much more economic and artistic activity and then attempt to explain this. In fact, to establish that say a large city of 10m people leads to a higher density of activity than say a city of 1m then the absolute level of activity would have to be more than ten times greater in the larger city. This is something that is almost never established. See for example Andersson and Andersson (2006) who despite an excellent discussion of why clustering in cities might occur provide no evidence as to why they specify some cities as examples of centres of clustering. There may be more theatres say in London, but proportionality is it more than say Leeds or Munich; probably not.

⁸ Scherer (2004, p. 128) claims that 'London and Paris are universally acknowledged as the most important magnets to composers during the eighteenth and early nineteenth centuries' but this as the evidence above clearly demonstrates applied only to Paris and not London. Thus his 'magnet city' empirical analysis as a result is suspect.

⁹ Recent work though has not added much perhaps to what Marshall (1890) had to say (see Quigley, 1998), in which work Marshall refers to a paper about clustering in industrial districts going back to the 13th century (Desrochers and Sautet, 2004). Indeed, geographers and regional scientists seem very 'frustrated' with recent work by mainstream economists such as Krugman (see Derochers, 1998). The main addition in the literature to Marshall appears to relate to the importance of tacit knowledge (for good discussions see Andersson and Andersson, 2006, Ikeda, 2004, and Rallet and Torre (1998).

that the main function of orchestras is to test experimental work and not 'entertainment' per to the larger and more successful orchestras, but which are the very orchestras which may have least time or inclination to try out new works.

A further argument relates to increasing globalisation and the greatly reduced cost (in terms of time and price) of travel and hence opportunities for long-term and short-term movement. However, the evidence in this paper would not bear this out. As Scherer (2004) states, 'the geographic mobility of composers in the eighteenth and nineteenth centuries... would astonish modern-day Europeans'(p. 124).¹⁰ This is seen clearly in Table 2. In the 15th century all 51 prominent composers moved on a long-term basis, 39 per cent of them to another country. The corresponding figure for the 16th century was 23 per cent, the 19th century 23 per cent and the 20th century 18 per cent. Thus the evidence would suggest that with increasing ease of travel there was in fact less long-term movement outside ones country, with no clear pattern in relation to internal movement over the centuries.

It does appear though that there was increasing short-term, work-related movement over time. This is as one might expect. Movement in the past was so difficult and costly that it was in many cases long term. However, with reduced cost and time requirements it became possible to have work-related mobility for shorter periods, while maintaining a home base.

The main contribution of this paper though is to outline, in a systematic way, the birth locations and migration patterns of the 522 most prominent composers identified by Murray (2003).¹¹ While it could be argued that much of the evidence in this paper might seem to be well established already, at least in a general sense, we would argue that this is not the case in a number of respects. First, the accepted wisdom that most of the prominent composers were concentrated in the various locations identified here was not up to now based on hard evidence, either in terms of making explicit how 'prominent' is defined and then by an actual 'count' of the birth/work locations of the artists so defined.¹² Second, there does not appear to have been any previous systematic documentation of the labour migration patterns, both short

 $^{^{10}}$ Even within large cities Scherer (2004) argues travel was time-consuming and unpleasant, as Mozart found when visiting Paris. When travelling to the homes of potential students or composition patrons Mozart wrote that 'by foot t is generally to far – or too littered with excrement. Travelling by coach within Paris is unbelievably dirty' (p. 144) and expensive.

¹¹ Much interesting work can now be developed using this data set (see for example, Borowiecki, 2009)..

¹² This for example explains the erroneous general claim regarding London as a magnet city for composers made by Scherer (2004) (see fn. 6). Scherer's work though is a rich contribution in two respects. First, the breadth of coverage is immense and second a sample of 50 composers was selected. For each of the 50 composers at least one book-length biography was read and annotated, and for the more important composers, several biographies and correspondence collections were scrutinised. The book as such is dotted with pearls in interesting information. Andersson and Andersson (2006) also 'assume' that certain cities are important centres without providing any evidence for these assumptions, although the main thrust of their work was providing explanations rather than evidence.

term and long term, of prominent composers and the extent and nature of the geographic clustering so resulting.

References

- Andersson, A. And D. Andersson (2006). *The Economics of Experiences, the Arts and Entertainment*, Cheltenham: Edward Elgar.
- Barlow, H. And S. Morgenstern (1948). A Dictionary of Musical Themes, New York: Cronin.
- Borowiecki, K. (2009). 'Are Composers Different?; An Individual-Level Study of Conflict-Induced Migration' (Working Paper, Department of Economics, Trinity College Dublin).
- Cowen, T. (2000). In Praise of Commercial Culture. Cambridge: Harvard University Press.
- Desrochers, P. (1998). 'A Geographical Perspective on Austrian Economics', *Quarterly Journal of Austrian Economics*, 1(2), 63-83.
- Desrochers, P. and F. Sauter (2004). 'Cluster-Based Economic Strategy, Facilitation Policy and the Market Process', *Review* of Austrian Economics, 17 (2/3), 233-245.
- Grove Music Online. Oxford Music Online, http://www.oxfordmusiconline.com (accessed March-November 2009).
- Gilder, E. And J. Port. (1978). The Dictionary of Composers and Their Music. New York and London: Paddington Press.
- Hall, P. (1998). Cities in Civilization: Culture, Innovation and Urban Order.
- Hellmanzik (2009). 'Location Matters; Estimating Cluster Premiums for Prominent Modern Artists', *European Economic Review* (forthcoming).
- Ikeda, S. (2004). Urban Interventionism and Local Knowledge', Review of Austrian Economics, 17, 2/3, 247-264.
- Kelly, E. and J. O'Hagan (2007). 'Geographic Clustering of Economic Activity: The Case of Prominent Western Visual Artists', *Journal of Cultural Economics*, 31, 109-128.
- Marshall, A. (1890). Principles of Economics: An Introductory Volume (Eight Edition). London: Macmillan.
- Murray, C. (2003). Human Accomplishment: The Pursuit of Excellence in the Arts and Sciences, 800 B.C. to 1950. New York: Harper Collins.
- O'Hagan J. And C. Hellmanzik, (2008). 'Clustering and Migration of Important Visual Artist: Broad Historical Evidence'. *Historical Methods*.
- O'Hagan, J. and Kelly, E. (2005). 'Identifying the Most Important Artists in a Historical Context: Methods used and Initial Results.' *Historical Methods* 38 (3), 118-125.
- Quigley, J. (1998). ' Urban Diversity and Economic Growth', Journal of Economic Perspectives, 12, 2, 127-138.
- Rallet, A. and Torre, A. (1998) 'On Geography & Technology: Proximity relations in Localised Innovation Networks', in Steiner, Michael (ed.) Clusters and Regional Specialisation: On Geography, Technology and Networks. London: Pion.
- Scherer, F. (2001). 'Servility, Freedom, and magnet cities in classical music composers' occupation and locational choices'. *Musical Quarterly* 85(4): 718-34
- Scherer, F. (2004). *Quarter Notes and Bank Notes: The Economics of Music Composition in the Eighteenth and Nineteenth Centuries*. Princeton: Princeton University Press.
- Simonton, D. (1991). 'Emergence and Realization of Genius: The Lives and Works of 120 Classical Composers, *Journal of Personality and Social Psychology*, Vol 61, No. 5, 829-840.
- Vaubel, R. (2005). 'The Role of Competition in the Rise of Baroque and Renaissance Music.' Journal of Cultural Economics 29, 277-297.

Century of	τ.		F	G	D 1	P	G	FF	D E	110.4	D W	T 1
Birth	It	Low	Fr	Ger	Brit	Ru	Sp	EE	RoE	USA	RoW	Total
12th	0	0	2	2	0	0	0	0	0	0	0	4
13th	1	0	2	0	0	0	1	0	0	0	0	4
14th	4	1	4	0	2	0	0	0	0	0	0	11
15th	7	15	10	7	3	0	0	0	0	0	0	42
16th	35	12	10	18	20	0	8	1	0	0	0	104
17th	39	1	14	29	4	0	0	2	1	0	0	90
18th	21	1	14	44	4	0	1	10	1	0	0	96
19th	13	2	34	30	9	20	3	14	6	13	2	146
20th	1	1	4	8	2	2	1	0	1	5	0	25
Total	121	33	94	138	44	22	14	27	9	18	2	522

Table 1. Number of Prominent Composers' Births (12th - 20th century).

Source: http://www.oxfordmusiconline.com/subscriber/article_citations/grove/music/40258pg3 Note: It = Italy, Low = Low Countries, Fr = France, Ger = Germanic Countries, Brit = British Isles, Ru = Russia, Sp = Spain, EE = Eeastern Europe, RoE = Rest of Europe, USA = United States of America, RoW = Rest of World.

Table 2. Type of Movement by Century.

			Mo	vement			
	ľ	None		Internal		External	
Century of Birth	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: See Table 1.

Table 3. Extent of Mobility for Prominent Composers (b. 1750-1799).

		Lo	ng-term mov	Tempora	ry mobility	
	All	None	Internal	External	No	Yes
Brit	1			1		1
EE	4			4	1	3
RoE	1	1				1
Fr	11	3	8		9	2
Ger	17	2	9	6	4	13
It	8		3	5		8
Total	42	6	20	16	14	28

Source: See Table 1.

Note: We report movements only for countries with positive composer births.

			Nonmovement		Internal Movement		External Movement
	Al 1		Work location		Work location		Work location
Brit	1					1	Moscow (1)
EE	4					4	London (1), Paris (1), St. Petersburg (1), Vienna (1)
RoE	1	1	Stockholm (1)				
Fr	11	3	Paris (3)	8	Paris (8)		
Ger	17	2	Berlin (1), Vienna (1)	9	Berlin (1), Dresden (1), Hannover (1), Kassel (1), Leipzig (1), Stuttgart (1), Szczecin (1), Vienna (2)	6	Copenhagen (1), Milar (1), Paris (2), Vienna (1), Weimar (1)
It	8			3	Naples (2), Venice (1)	5	London (1), Paris (3) Vienna (1)
Total	42	6		20		16	

Table 4. Long-Term Movement Destinations for Prominent Composers (b. 1750-1799).

Source: See Table 1. Note: We report movements only for countries with positive composer births.

Table J. Extent of Mobility for Fromment Composers (0. 10	able 5. Extent of Mobility for Prominent Composers (b. 1800-1	849).
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		Lo	ng-term mov	rement	Tempora	ry mobility
	All	None	Internal	External	No	Yes
Brit	2	1		1		2
EE	4		2	2	2	2
RoE	3	3			1	2
Fr	16	6	10		10	6
Ger	14	2	8	4	1	13
It	3		3		1	2
Low	1		1			1
Ru	8		8		3	5
USA	2	1		1		2
Total	53	13	32	8	18	35

Source: See Table 1.

Note: We report movements only for countries with positive composer births.

			Nonmovement		Internal Movement		External Movement	
	All		Work location		Work location	Work location		
Brit	2	1	London (1)			1	London (1)	
EE	4			2	Prague (2)	2	Paris (1), Weimar (1)	
RoE	3	3	Bergen (1), Copenhagen (1), Oslo (1)					
Fr	16	6	Paris (6)	10	Paris (10)			
Ger	14	2	Vienna (2)	8	Berlin (2), Leipzig (3), Munich (1), Schwerin (1), Vienna (1)	4	Paris (1), Vienna (2), Zurich (1)	
It	3			3	Milan (3)			
Low	1			1	Antwerp (1)			
Ru	8			8	Moscow (1), St. Petersburg (7)			
USA	2	1	Pittsburgh (1)			1	Paris (1)	
Total	53	13		32		8		

Table 6. Long-Term Movement Destinations for Prominent Composers (b. 1800-1849).

Source: See Table 1. Note: We report movements only for countries with positive composer births.

Table 7. Extent of Mobility for Prominent Composers (b. 1850-1899).

		Lo	ng-term mov	vement	Tempora	ary mobility
	All	None	Internal	External	No	Yes
Brit	7	1	4	2		7
EE	10		5	5	1	9
RoE	3		3			3
Fr	19	9	10		7	12
Ger	16	5	6	5	2	14
It	10	2	6	1	1	9
Low	1		2			1
Ru	12	2	6	4	4	8
Sp	4		2	2		4
USA	12		12		2	10
RoW	2	2				2
Total	96	21	56	19	17	79

Source: See Table 1.

			Nonmovement		Internal Movement		External Movement
	All		Work location		Work location		Work location
Brit	7	1	London (1)	4	London (4)	2	London (1), Paris (1)
EE	10			5	Brno (1), Budapest (3), Warsaw (1)	5	Paris (2), Prague (3)
RoE	3			3	Copenhagen (1), Helsinki (1), Oslo (1)		
Fr	19	9	Paris (9)	10	Paris (9), St. Tropez (1)		
Ger	16	5	Munich (1), Vienna (4)	6	Berlin (1), Leipzig (1), Vienna (4)	5	Amsterdam (1), Blonay (1), Oxford (1), Sau Francisco (1), Vienna (1)
It	10	2	Venice (2)	6	Milan (1), Rome (4), Torre de Lago (1)	1	Berlin (1)
Low	1			2	Rotterdam (1), Antwerp (1)		
Ru	12	2	Moscow (1), St. Petersburg (1)	6	Moscow (4), St. Petersburg (2)	4	Los Angeles (1), Municl (1), New York (1), Zuricl (1)
Sp	4			3	Barcelona (2), Granada (1)	1	Cambridge (1)
USA	12			12	Arlington, VT (1), Berkeley, CA (1), Boston (1), New Haven, CT (1), New York (6), Princeton (1), Stockton (1)		
RoW	2	2	Rio de Janeiro (1), Mexico City (1)				
Total	96	21		57		18	

	Table 8. Long-Term Movement	Destinations	for Prominent	Composers ((b.	1849-1	1899).
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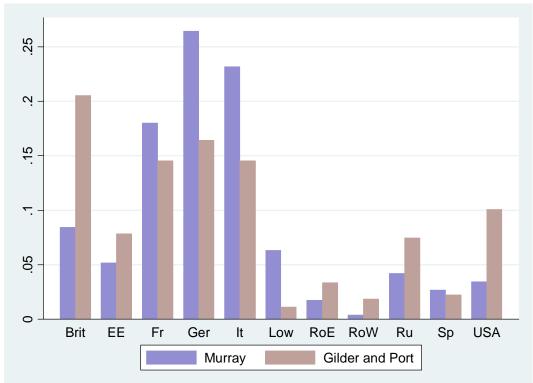


Figure 1. Birth Country for Prominent Composers by Source.

Source: Murray (2003), Gilder and Port (1978).

Note: Murray's sample covers 522 composers born between 1110 and 1911. Gilder and Port's sample covers 268 composers born between 1505 and 1949. The results do not differ for the intersection and can be viewed upon request.