

TRiSS Working Paper Series

TRiSS-WPS-04-2020

Can Economics Inform Literary Debate? The Case of American Authors

John O'Hagan¹

School of Social Sciences and Philosophy, johagan@tcd.ie, July 2020

Abstract. It has been argued that economic circumstances can partly shape and influence literature. This is so because creative writers must operate within, and are influenced by, the society to which they belong, and by the markets to which they sell their work. This paper examines the evolution of US literary output in terms of four factors that might impinge in this way on the work of creative writers, namely geography, migration, age and urban milieu. For this, we have constructed a novel and large data set on the geographic location, and number of major publications, for every year of the lives of 481 US writers listed in *Encyclopedia Britannica* born between 1800 to 1949.

Keywords: authors, literary output, location, migration, age **Primary Disciplines:** economic history, cultural economics

¹ I wish to acknowledge the generous funding from the Department of Economics at Trinity for the hiring of two Student Interns in the summers of 2017 and 2018 to compile the core data set on which this paper is based. Both, Maria Fleming and Seán McGuane, did sterling work with the data set. I also wish to thank Lukas Kuld, Technical University Dortmund, Germany, and Denis Murphy, Trinity College Dublin, for their very helpful work in compiling the charts based on these data sets, and Rory Luff for constructing the summary statistics table.



Can Economics Inform Literary Debate?

The Case of American Authors

Abstract. It has been argued that economic circumstances can partly shape and influence literature. This is so because creative writers must operate within, and are influenced by, the society to which they belong, and by the markets to which they sell their work. This paper examines the evolution of US literary output in terms of four factors that might impinge in this way on the work of creative writers, namely geography, migration, age and urban milieu. For this, we have constructed a novel and large data set on the geographic location, and number of major publications, for every year of the lives of 481 US writers listed in *Encyclopedia Britannica* born between 1800 to 1949. The main findings of interest are:

- Around 80 per cent of these prominent authors wrote novels, 40 per cent poetry and 40 per cent plays, implying that many wrote in two or more genres.
- A high degree of migration of the authors is evident in all subperiods, reaching a marked peak in the ages 18 to 30. After 1870 large numbers migrated abroad but over the whole period the main destination was New York City, making it the dominant location for authors, despite the spread of the US to the West coast in the 19th century.
- This was driven probably by income-earning possibilities, the social milieu and a concentration of theatres there. Throughout the whole period in fact economic factors partly explained migration and geographic location.
- A marked increase in creative output took place between the ages of 20 and 35, for all genres, with no significant fall-off for many decades, in the more recent periods.
- Migration and creative output were similarly related to age, to a remarkable extent, suggesting similar motivating factors. It is plausible to suggest a priori, and based on other studies, that some of the increase in creative output resulted from migration.

Keywords: authors, literary output, location, migration, age: JEL Codes: J4, N9, R1, Z1

Primary Disciplines: economic history, cultural economics



1 Introduction

It is noteworthy that the Winter 2019 issue of *American Literary History* was devoted to Economics and American Literary Studies. As long ago as 1910 the eminent Swedish economist Knut Wicksteed on a related topic, stated that:

The prophet and the poet may regenerate the world without the economist, but the economist cannot regenerate it without him.... The man who can make his fellows desire more worthily and wisely is doubtless performing a higher task than the one who enables them more amply to satisfy whatever desires they have. He [the economist] though may help guide if he cannot inspire. If he can give no strength, he may save strength from being wasted. (Wicksteed, 1910, pp. 23-24).

The role of economics was put perhaps a little more strongly in the following.

It has long been noted that although literature and drama, like language, function as institutions in some ways separate from economic forces and conditions, they do play an important role in shaping public opinion and standards on many economic issues. In turn, economic thought and circumstances shape and direct literature, drama and language. (Watts and Smith, 1989, p. 291))

The role of literature and drama in shaping economic opinion and standards is well documented (for example, see Watts, 1982, Watts and Smith, 1989 and Watts, 2002), either directly through literature or using quotes from literature to support the argument they are making (see Hirshliefer, 1977, and Watts, 2002). The article of most relevance for our purposes in the Winter issue of *American Literary History* is that by Sinykin et al (2019). They look at how the language of economics entered the US novel in the postwar period, asking have economists influenced novelists at the level of language and if so how. They empirically test the hypothesis that economic language became more prevalent around 1980.² To do so, the 'they apply the quantification techniques beloved of economists' they state. It could be argued though that rather than economics affecting literature, it might be the other way, namely that authors are entering and influencing the economic policy debate through the greater reference to economic issues (see examples in Watts 2002). And, hence if they are the ones who inspire, rather than guide, have the greater influence.

This paper though relates more to the issue outlined in the following.

If scholars or critics are fully to understand works of literary art, they must understand the commercial factors that influenced the composition and publication of these works... Critics have the luxury of interpreting the writings of earlier generations solely as aesthetic entities, but the authors who produced these writings had to do so with

² See Ginsburgh and Weber (2020) for an interesting albeit different contribution by economists in relation to language.



both artistic and practical motives in mind. They had to create within the limitations and strictures imposed on them by the markets to which they sold their work. (West, 1990, p 1, 4)

He argues that literary critics therefore to appreciate fully the creative merit of literary writing must understand the broad economic and political contest within which the writer operated. While some literary critics undoubtedly know this about some individual authors, it may be instructive to outline some developments which could have impacted on all, in some way. The purpose of this paper is to provide this general context, covering a long historic list of prominent authors. It may be that this will not inspire, but perhaps 'guide', the literary debate in some small way.³

This input to the wider context for literary debate is made possible by the data constructed for a larger project (see O'Hagan, 2019). For that study, we constructed a yearly data set on the 483 prominent US writers listed in *Encyclopedia Britannica* born between 1800 to 1949. The issue of who is/should be included in *Encyclopedia Britannica* is not of concern, as with such a large number we are likely to get a very clear picture regarding all prominent authors in the US in this time period, even if some prominent authors are omitted and others that should not have been included, in the view of some critics.

The US as a nation changed dramatically in the 19th and early 20th centuries, especially in terms of physical boundaries, means of transport and literacy. This impacted not only the nature of US literature over the period but also the three factors of interest here in relation to US authors. Section 2 briefly discusses the main historical material that might impact on the later empirical work. This is covered in Section 3, where three factors that the data allow us to examine are detailed; namely the changing geographic location of these prominent authors over time; the internal migration so involved and the age pattern of such migration; the tentative links between creative writing output and age. Section 4 concludes the paper.

2 Historical Context: Societal and Economic

A brief overview of the historical context is important for the later discussion (see O'Hagan 2019 for a longer discussion and references), if only to provide guidelines on the sub-periods used later in the paper.

Broad societal change

After the American Revolution and especially after the War of 1812, the emphasis in American writing was on native literature which for literary critics was the first major period of writing by US authors, covering from approximately 1820 (when those born from 1800 on could be first established as writers) to 1864. What is of interest is the economic circumstances which each of these writers experienced. During this period many of them came from wealthy backgrounds, were able to earn money through contributions to magazines and journals, could

³ For another, if very different, recent contribution to *Poetics* by economists relating to US literature, see Ceulemans et al (2020)



get employment in government agencies, lived in or near to New England and had close ties to Europe. This was in marked contrast to the situation in Germany at the time, where even the most famous writers there were utterly dependent on the ruling classes, secular and ecclesiastical, for employment and income, with writing for money viewed as immoral (Kuld and O'Hagan, 2019).

The post-Civil War period, 1865 to 1914, saw major changes in US society. Industry grew greatly in importance, cities expanded and dependence on agriculture for employment decreased rapidly. The frontiers of the US moved steadily Westward until by the end of the 19th century the US as it exists today was largely in place. These dramatic changes were bound to have effected US writers, the most striking example of this perhaps being Mark Twain who from his home in Missouri, well away from the East Coast, through his experiences there influenced the direction of the language and content of US writing. What is of interest also about Twain is that he was a sometime successful businessman. When he failed to strike it rich, he turned to journalism and it was during that time that he successfully launched his writing career. He later though relied on a benefactor to cover his debts after another failed business adventure. Further success from book sales and lectures restored his financial health and in the end all his creditors it seems were paid.⁴

Henry James was born in New York but spent most of his adult life in England, specifically London. Like many other writers of this period, he came from a wealthy family background. When in London he established relationships with Macmillan and other publishers, who paid for serial installments that they would later publish in book form. The audience for these serialized novels was largely made up of middle-class women, at the behest of the publishers, who played a key role in the development and financial success of authors, and, do, to this day. (see West 1990). He also spent time in Paris and both there and in London mixed with a wide array of artistically creative people. This was true of many US writers in this period as shall be seen later.

World War I, the Inter-War, and World War II years saw dramatic changes in the economic and political context in the US. This period was an exceptionally rich period for American literary output. Initially much of this writing took place in Paris and London, as well as in America, with Gertrude Stein, Ezra Pound, T.S. Eliot and Scott Fitzgerald following this route. They were influenced like most writers by their surroundings and people they met, John Steinbeck being a good example of this arising from his totally different experiences in California. The flourishing of US drama, and the rise of New York, especially for theatre, meant though that the centre of gravity slowly shifted there. This was helped by the fact that many writers could also earn a living from writing there for newspapers and magazines, thereby leaving them free from income constraints for their creative writing. Such income-earning possibilities were most likely to arise in a city like New York. The writing of this time was also heavily influenced by political and social events of the day: Harper Lee's *To Kill a Mocking Bird*, was shaped by endemic racist attitudes where she lived in the Deep South, whereas J.D. Salinger's *The Catcher in the Rye* was greatly influenced by his travel and experiences during

⁴ https://americanliterature.com/author/mark-twain



World War I. Thus, geographical location and its socioeconomic environment appears to have been an important influence on creative writing.

The aim of the later empirical section is to quantify the broad patterns of movement and location implied above. While knowledge of an individual's author's financial situation and movement are probably well-known to literary commentators, they might not be aware of the broader context that applied to all authors of the time and to what extent.

Changes in transport, publishing industries, literacy and population

Railroads played a large role in the development of the United States from the industrial revolution in the North-east (1810–1850) to the settlement of the West (1850–1890). Railroads soon replaced many canals and turnpikes and by the 1870s had significantly displaced steamboats as well. The railroads were faster and went to many places to which a canal would be impractical or too expensive to build or a natural river never went. Railroads also had better scheduling since they often could go year-round, more, or less, ignoring the weather. These developments clearly made it possible for authors, and the population in general, to travel further and taking less time, as the 19th century progressed. This we would expect to be reflected in the later quantitative sections.

There were also major changes in the publishing industry during the 19th century (see Lichtenstein, 1978, and West, 1990),⁵ with the demise of handmade paper in the late 1830s, replaced by machine-made writing paper, lowering dramatically the cost of production. This invention led to an increased demand for books, newspapers and magazines, as up to this, books had been a scarce resource, being largely the property of the privileged classes for centuries.⁶ Increased population, though, coupled with increased literacy rates were also very important factors behind the increased demand. For example, the US entered the 19th century with sixteen states and a population of 5.3 million: it is debatable whether half of the country's population then was literate. By 1900, the U.S. had 45 states and 76.3 million citizens, more than 50 million of whom were literate. Thus, potential readership increased more than twenty-fold and at a time when publishing costs were decreasing rapidly.⁷ Thus demand for books, and more importantly, for newspapers and magazines, grew greatly, increasing income-earning possibilities and options for writers.

Returning to the major demographic changes between 1800 and 1950. The population of New England in 1800 was just over one million, rising three-fold to the end of the Civil War. It doubled to over six million by the beginning of the 20th century, rising to nine million by 1950.⁸ The population of New York state was over half a million in 1800, rising to over

⁵ It was the job of the 19th century publisher, and still is, to contract with an author to write the book, to arrange for a printer and bindery and, finally to market and sell the book.

⁶ See, http://themagazinist.com/uploads/Part 1 Population and Literacy.pdf

⁷ 'The book publishing industry grew throughout the nineteenth century. The increase in literacy in America along with the growth in libraries and public schools provided a rapidly growing market for books. In addition, the introduction of technological advances allowed more volume at less cost. During the 19th century, big publishing firms emerged and some of these companies remain active in the industry today. http://www.eduscapes.com/bookhistory/commodity/5.htm

⁸ Namely the six states of the Northeastern United States: Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, and Connecticut.

four million by the end of the Civil War, to around eight million in the early 20th century to almost fifteen million by 1950. The total population of the United States, as it existed, around 1800 was just over five million, rising to around 35 million by the end of the Civil War, 92 million by the early 20th century, and over 150 million by 1950. Thus, six states, New England and New York, accounted for around 40 per cent of the population at the beginning of the period under review, still accounting for almost 30 per cent of the population by the end of the Civil War, falling to around 15 per cent by the start of the 20th century, and remaining stable then until 1950. This of course reflected the growing reach of the US, as it spread from thirteen states on the East coast, both south and east, to what it is today. As one might expect, this should impact on the geographical location and influences on writers as the US expanded to the West and population increased rapidly.

3 Relationships of Interest?

Age and creative writing

There is considerable evidence that creative output is related to age, despite the difficulties of defining and measuring such productivity (see Lehman, 1953, and Kanazawa, 2003). Several papers have been devoted specifically to age and literary creativity (see Simonton, 1975 and 2007, and Galenson, 2005 and 2006), again showing a marked connectivity between age and creative output. Galenson (2005), using though just a sample of eleven poets, highlighted that the peak age for creative output depends on the type of poetry being written. In a similar vein he examined the lives of twelve novelists and reached the same conclusion, namely that peak age varies by genre of novel writers. Earlier though, Simonton (1975) used a much larger sample of literary writers, namely 420 'literary creators' drawn from different times and countries. His findings suggested that poetry is produced at a younger age but found no difference between different forms of prose.

Some of the explanations for this are sociological or economic, whereas others are clearly psychological in nature. Simonton (2007) was robustly responding to Galenson (2005) who put forward an alternative theory of output trajectories in the arts and other creative disciplines. His argument was predicated on a distinction between two approaches to creativity, the *conceptual* and the *experimental*. In the former category are the young geniuses or *finders* who conceive their best work as sudden breakthroughs that appear very early in their careers. In the latter category are the old masters or *seekers* who work painstakingly via trial and error, and thus whose best work does not emerge until late in life when they can finally savour the fruits of their labours. As such, using this argument one should not detect necessarily any differences in age-creativity profile between poets and novelists.

Kanazawa (2003) provides evidence on the connection between age and creativity drawing on various sources and covering several creative activities, including authors. The evidence shows a markedly similar pattern in terms of the age-creativity curve. This though was primarily for males, with much less marked peaks for females (although sample sizes were very small in all cases for females). In the case of male jazz musicians for example there is a

⁹ Accominotti (2009) argues that peak age for creative output can be influenced by whether a creative worker is in a movement or not.



very marked peak for those aged 30 to 40, with a similar peak for females but much less pronounced. The same gender difference applied to painters, and authors. Kanazawa (2003) examined also the crime-genius connection by age and found remarkably similar results as for creative activities. He argues that the reason for this is that 'the same psychological mechanism that compels men to commit crimes also compels them to make great scientific contributions and express their genius in other forms' (p. 265). He also argues that the production of creative works is a cultural display designed to attract mates, just like by producing criminal products or making scientific discoveries, and hence the similar age-genius curves, and that over time once the genius is expressed it reduces, not because of lack of continuing genius but lack of effort (competitiveness).

Whatever the explanations, the empirical work later does plot creative output of US writers against age to ascertain whether similar patterns apply or not. Of more interest though is to plot migration against age for US writers and to check for possible common age patterns in terms of creative output and migration.

Age and geographic mobility and location

Is it the case that creative writers migrate most in the age spans when peak output might be expected? It could be argued that the fundamental sociopsychological processes which determine age of best creative output might also impact on willingness to migrate in search of greater opportunities in terms of creative stimulation and perhaps the financial means which would allow more time for creative writing.

Why should there be benefits from migration to large centres of activity, especially for creative output? Storper, and Venables (2004) argue that large cities facilitate learning and are particularly attractive for highly talented young people who have large potential returns from learning. Cities enjoy an advantage because of their economic and social diversity. This diversity, because it is highly packed into limited space, facilitates haphazard, serendipitous contact among people. And they argue that the diversity found in cosmopolitan cities facilitates 'creativity' because of the openness of their networks and the liberating force of resistance to hide-bound tradition.

The simple 'buzz' of such large centres then could lead to higher creative and other outputs. Individuals in a buzz environment interact and cooperate with other high ability people, are well placed to communicate complex ideas with them, and are highly motivated. In many buzz cities there is also cross-fertilization between sectoral specialized networks. For example, publishing, theatre and writing have close interactions, something of importance for this paper. In the case of creative people in the arts, many of them must rely on part-time work to finance their lives and creative endeavours. Such employment opportunities will be much more available in big cities. Highly dynamic and unplanned contact systems it could be argued then is why urban diversity is central to certain kinds of creativity because of the specific advantages of unplanned and haphazard, inter-network contact. As noted earlier, many of the greatest US writers of the early 20th century moved to London and Paris for such experiences.

All these interconnections would suggest that increased creative output could result from living in buzz cities, not hidebound by tradition or social mores but exposed to exciting new frontiers of knowledge and human experience. As Wojan et al (2007) argue, if 'a creative



milieu does confer competitive advantages, then artists would have a strong incentive to move to the most creative places' and that 'it is more likely that Bohemians are able to realize their locational preferences, as they tend to be more footloose than other workers.' (p. 712)

The buzz city of most interest for this study is of course New York, where, as shall be seen, there was and is a marked concentration of writers, particularly after the Civil War. In fact, Berlin rose to prominence as a major cultural city around the same time. As one observer on the Berlin scene then stated, the 'increasing tempo in both communication and travel left people feeling ever more hectic and nervous, but at the same time it made for an exciting time of unparalleled inventiveness' (Schnurr, 2011). In a similar way New York has long held a magnetic attraction for writers and the parallels between both cities in this regard are striking.

There could though be marked differences by genre in terms of the advantages of living in cities. As mentioned above, the work of playwrights must be performed and often close contact with the theatre world is essential to getting work accepted, rehearsed (often with the playwright present) and performed. The same may apply, but not to the same extent, to writers of prose fiction, in terms of needing to be in contact with agents and publishers. New York city was and is the main theatre centre in the US and hence one would have thought have special attractions for playwrights. Many of the main publishing houses in the past were also in New York. More important perhaps for writers of novels as discussed already were the opportunities to make a living from writing in periodicals and newspapers, many of which were based in New York for the period under consideration. This work not only provided an outlet for creative writing but also direct access to publishing houses. As seen earlier, many of the great authors realized the importance of publishers to their work, Mark Twain being a prime example.

It is difficult to see a priori why any specific location might matter for poets, unless they also had to make a living from writing for magazines and newspapers. On the other hand, many great poets seem to thrive on isolation, but of course many authors who wrote poetry also wrote in the other genres as will be seen later.¹⁰

4 Number of Writers and Geographic Location

Data and summary statistics

All authors included in *Encyclopaedia Britannica* made up those included in the data set. Authors included in *Encyclopaedia Britannica*, must have made at least one unique contribution to poetry or prose, which eliminated individuals whose contributions were strictly limited to translations, textbooks, song-writing, literary criticism, or other forms of publication (see Mitchell, 2019). In determining who is included as an author, the editors try to decide whether a person made contributions that were substantial enough and/or the person was recognised enough in their time for their work as an author. As such, there is an inevitable level of subjectivity in the choice of authors to include. Nonetheless, the list of authors includes most of the prominent names in US literature over the period in question. There is no such data

¹⁰ See Farrell (2001) for a discussion of collaborative circles in general, and particularly his chapter on the Fugitives, a group of young poets who first met in Nashville Tennesse around 1914 and formed a collaborative circle that lasted about fifteen years. This illustrates the desire of poets to work closely

with other poets.



available on the non-prominent US authors and as such our findings cannot infer anything about the 'population' of all US writers. However, great creative writers tend to be a magnet for many other writers and hence maybe follow similar mobility patterns.

Data on the location and mobility of the sample of authors was also collected from *Encyclopaedia Britannica*. This was as well the source for publications of each author. Key biographic data sought related to the geographical location of each author in each year of their lives. For these purposes we assume that if a writer who is for example listed as living in Boston and the next entry is not for ten years later, say in Chicago, resided in Boston for all the intervening period. Places of residence are only listed if in a different city/location, to the previous year. In this case we assume that long-term mobility (12+ months) has taken place.

Table I: Summary Statistics

Period	Number of authors	Average age of death	Average of moves aged 16+	Average age at first move
1800-1849	74	68	2.6	28
1850-1899	165	69	2.9	25
1900-1924	107	75	4.8	22
1925-1950	127	72	4.2	21

Table 1 contains some summary background statistics based on these data. As can be seen, the period is broken into four subperiods, with a minimum of 74 and a maximum of 165 authors in these. It can be seen also that the average age of death increased over the one hundred and fifty years, but not markedly so. The average number of long-term moves did increase over the period, but declined in the 1925-1950 subperiod, possibly because this covered WWII, in which many authors died. The final column shows that the average age of first long-term move declined steadily. This was not necessarily expected, as in the later periods with greatly improved transport facilities, short-term moves were much more possible

Number of writers by gender and genre

Figure 1 outlines the total number of writers, male and female, living in each year, 1800 to 1950. As can be seen, the number of prominent authors increased rapidly over time, up to 1950. Apart from the early part of the 19th century there was a sizeable number of prominent authors living in any one year, with well over 100 from 1840 on. Thus, the sample is large enough to make meaningful generalisations. One striking feature in Figure 1 is the number of females, below the numbers for males, but not nearly as markedly for say Germany (see Kuld

and O'Hagan, 2019). And remarkably perhaps, over the period 1800 to 1860, the number of female authors slightly exceeded that of males.

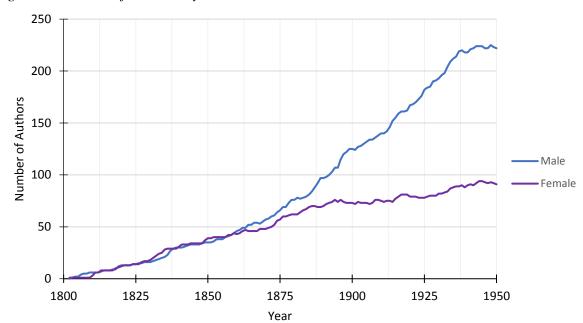


Figure 1: Number of Authors by Gender

Figure 2 shows the number of authors by genre (novel, poems, plays), bearing in mind that certain authors wrote in more than one.¹¹ Between 75 and 95 per cent of authors over the period wrote novels, with around 40 per cent also writing poetry for most of the period. The rise of writing drama noted earlier after 1900 is very evident also, with around 40 per cent of authors being playwrights also since 1925, a remarkably high figure in some ways. This was probably linked to the greater availability of theatres in which to perform drama and in this regard, as seen earlier, New York played a central role. It is perhaps striking also that since 1900 the number of writers involved in two or more genres was large, something that is difficult to explain.

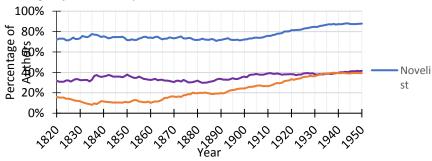


Figure 2: Percentage of Writers by Genre, 1820 to 1950

Note that the totals sum to well over 100%, especially after 1900, reflecting the fact that many were involved in writing in two or more genres.

¹¹ Some people use the term 'genre' to refer to different types of novel, for example romance, science fiction, crime stories, etc.



Geographic location

Turning now to the geographic location of authors over the period, Figure 3 gives a breakdown by three broad areas in the US, New England, New York, 'Rest of US', plus the category 'abroad'. As was evident in the earlier discussion, most authors were in New England up to 1860, hardly surprising perhaps given that the US during that time primarily just included the North-East coastal states. The meteoric rise of New York City from then to the end of the period looked at is remarkable though. Another feature to note is the large rise in authors living abroad from the 1920s and particularly in the WWII years (see later). The very large rise in the number in the category 'other US' is also not surprising, given the huge expansion West and South in the period under review. Even so, the number of authors in New York almost matched the total number in the 'other US' category from 1930 to 1950, even though it only accounted for less than four per cent of the total population then. The drops in the number of authors living in New York and Abroad is noteworthy, a reflection of the impact of WWII and its aftermath.

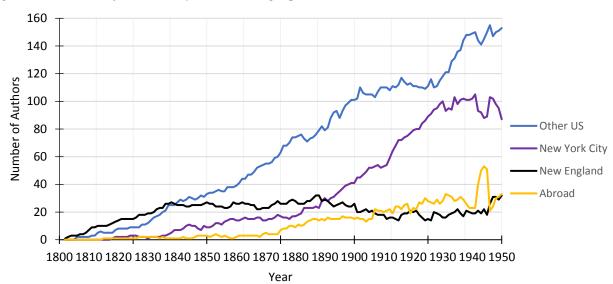
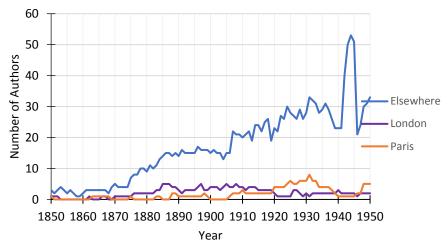


Figure 3: Number of Authors by Broad Geographic Location, 1800 to 1950

Given the earlier discussion, it might be of interest to look at the pattern of US authors living abroad. As can be seen in Figure 3, up to 1850 very small numbers of authors were living abroad and Figure 4 just covers this period for that reason., After 1850, and particularly after 1870, there was a steady increase, with a large jump in the 1930s and 1940s. As can be seen in Figure 4, London and Paris were the main cities in which authors lived, but the 'other abroad' category is where the largest numbers by far lived after 1870. Thus, it was not simply some of the best-known US authors as noted earlier who spent time abroad, but many others, with a total of around fifty in some of the year before 1950.

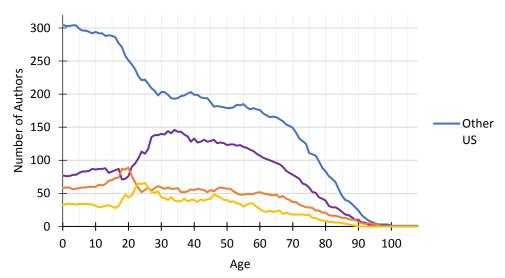
Figure 4: Number of Authors Living Abroad, 1850 to 1950



5 Migration, Age and Literary Output

Figure 5 shows that most authors were born in the 'other US' category, but that this dropped dramatically up to age 40, with a corresponding large increase in the number of authors in New York. There were increases in numbers in the other locations up to age 25 or so, but steady after this. This means that there was substantial migration of authors from 'other US' to other areas, the dominant destination being New York City. However, the migration to New York was not even over the whole period. The biggest in-migration was in the 1850 to 1890 period, with little net in-migration in the more recent period, with therefore those born there accounting for the bulk of those living there during the productive years (see O'Hagan, 2019).

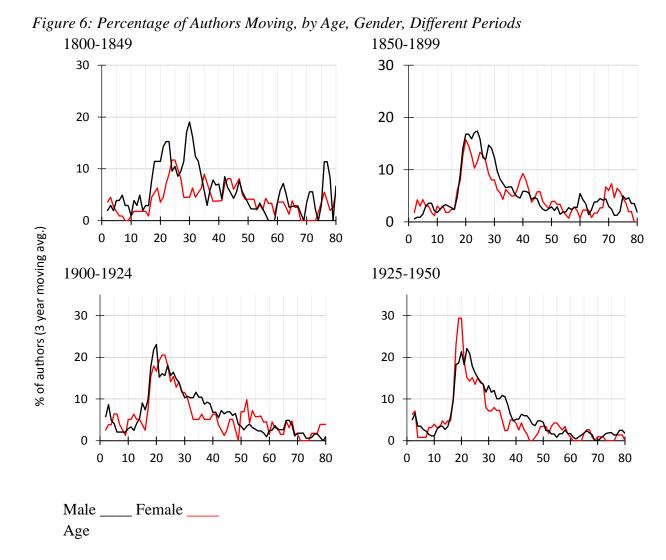
Figure 5: Number of Authors by Geographic Location by Age



To examine the migrations patters more fully, Figure 6 provides information on those who migrated over four subperiods, and by age and gender. ¹² The four subperiod chosen were

¹² In childhood movement reflected almost certainly moving with parents or family and as such would not have been work-related. As can be seen, there was considerable movement with family in childhood.

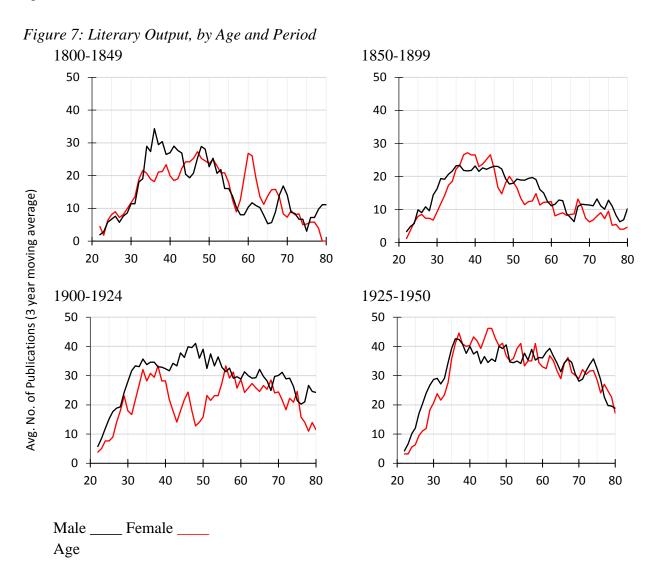
partly influenced by the earlier discussion and, also, to give similar numbers of authors for comparison purposes. The four period chosen cover, authors born before the Civil War, born between then and the end of the 19th century, and those born in the first and second quarters of the 20th century. There are similarities across periods and by gender, but the differences are even more marked. In the first period, 1800 to 1849, male authors moved much more frequently than females, with a marked peak in the ages 15 to 35. There was movement of females but at a much lower level and with no sustained peaks. For the period 1850 to 1899 the patterns for males and females were very similar, with peak movement for both again at ages 15 to 35. A similar pattern can be seen for the two remaining periods, 1900 to 1924 and 1925 to 1950. The level of movement is perhaps striking, showing for example for the period 1925 to 1950 that one-fifth of male authors moved around the age of 20-22 the comparable figure for females being almost thirty per cent. Movement continued then up to age 60, but at a declining rate.



¹³ These are also close to the four subperiods into which Encyclopaedia Britannica divided the development of US literature, see https://www.britannica.com/art/American-literature, which in turn was influenced by the broad political/economic developments over the 150-year period under review.



Figure 7 tracks literary output, measured by average number of publications by author, for the same four different periods. This is a rather crude measure of creativity, but as discussed earlier, the number of authors was 100+ for the three most recent subperiods, and thereby the three-year averages shown are for many authors, thereby avoiding the possible unusual age profile of a few authors impacting too greatly on the patterns. We are assuming that only publications listed were of some 'acceptable' minimum standard, as discussed earlier. It would be better to adjust for quality in some way, but there is not the data readily available to do this. While creativity as measured this way, does increase, in line with previous work as seen in Section 2, at around ages 20 to 40, there is after this no marked drop in creative output with age.



The only curves which follow the pattern suggested earlier are for males in the period 1800 to 1849, and females for the period 1850 to 1899. These differences may be due to the measure of literary output. As life expectancy increased dramatically from the mid-19th century (from around 40 years), which continued through most of the 20th century (around 75 years),



this coupled with better health, could explain the longevity of output for authors in the 20th century. It is noteworthy also that the increase in output occurs in the decade or so following the peak ages of movement. The drop in average output for females born in the period 1900 to 1924, aged 40 to 60, is also interesting. For many of them this would have corresponded with WWII years and its aftermath, but why should this apply to females and not males?

Given the earlier discussion, it may be that the age/creative output relationship differs by genre of writing. However, as so many authors write in one or more genre, it was not possible to check this using the aggregate data. The preliminary evidence, using the 'mixed' data however show no real differences. The only striking feature in the 20th century is that the creative output of writers of novels does not decline nearly as markedly with age as for those writing plays and poets, which might be expected perhaps.

6 Concluding Comments

This paper has explored to what extent the large data set collected on almost five hundred prominent US authors, tracking their geographic location over every year of their lives, can throw light on the broad age, spatial and migration features of historical American literary writers. While some literary critics may claim that they knew this broad story already, there has not been, as far as I know, any quantification of these features as discussed in this paper. Several main findings emerge from this data analysis, which it could be argued will better inform literary understanding and critique, by providing the broader context in which all writers of the time lived.

First was the prominence in the 19th century of New England and later New York, not only in terms of population but also in terms of wealth and the location of writers. Moreover, in the first seventy years or so, most of the top writers appear to have from wealthy backgrounds there and did not have to rely on an income from writing to survive. As West (1990) notes, in this period 'literary composition was considered by most Americans to be an idle pursuit, something undertaken to amuse oneself and one's friends. There was strong disapproval of commercial publication and of the notion of earning money for literary work', (p. 10). Most of them also travelled widely, especially in Europe. In the latter half of the 19th century, it was evident that the dominance of the N-E states of the US began to be broken but not markedly so.

Literature in general during this period reflected the times, particularly the changing circumstances that wars generated, including the Civil War and the two World Wars, and of course the Great Depression of the 1930s. These events also changed the location of economic activity and power. Of importance for writers were the changes in the means of travel, thereby allowing much more movement and mobility, and changes in literacy rates allied to those in the paper and publishing industries brought about mass circulation of, and demand for, newspapers, magazines and books, thereby making possible a lucrative living from writing in these various communication channels.¹⁴

_

¹⁴ Money from writing in magazines was extremely important. Indeed, authors often made a good deal more from serial rights than from book royalties. For example, Scott Fitzgerald earned some \$225,784 for his magazine fiction as opposed to only \$66,588 for his novels (West, 1990, p. 107)



. For playwrights, being close to producing theatres was clearly very important, with New York city emerging as the major centre for drama in the 20th century, both Broadway and Off-Broadway. In contrast, there was no pressing need for poets to locate in any special place, except perhaps close to other poets, although some of them were isolates. Many of them though in the later periods had to earn an income from sources other than creative writing, relying greatly on writing for magazines and newspaper which also had locational implications. They also needed to have regular contact with agents and publishers, ¹⁵ with again the likelihood that they had to be in certain centres.

The number of authors by gender over the period was outlined in Figure 1. This establishes some clear facts. First, that the sample is large enough, for every year, to be able to make generalisations from the data with some confidence and, second, it highlights the prominence, in comparison to the findings in other studies, of female writers throughout the period, especially in the earlier subperiod. Figure 2 shows that not unexpectedly most authors wrote novels but that also that many (over forty per cent in some years) wrote poetry or plays, some of course combining two or more literary genres.

Figure 3 confirms that most authors (and not just the better-known) lived in New England up to 1860. The meteoric rise of New York City from then to the end of the period is the most remarkable feature though perhaps. Another feature was the large rise in authors (again not just the best-known) living abroad from the 1920s and particularly in the WWII years. These writers were initially mainly located in England and France, but further afield in the later years (Figure 4). There was a huge rise in the prominence of New York, from over 15 per cent of total author years in the first period, rising to 31.0 per cent and then to 44.7 per cent of the total at one point. Its share dropped back in the final period, but still accounted for 27.4 per cent of total US author years (compared to just around three per cent of the US population, see O'Hagan, 2019).

Figures 5 and 6 showed two things. The large-scale movement and migration of US authors, over their whole lives but markedly so in the years 15 to 30. There were almost no gender differences in this regard, except in the first subperiod when females migrated at a much lower level than males.

Figures 7 explored the relationship between literary output and age. The picture here is not so clear-cut. Using the *Encyclopaedia Britannica* data, literary output rises dramatically between the ages of 20 and 35-40, for all subperiods. There are also no consistent gender differences. What is surprising is that there is not a marked drop in literary output after this, even up to aged 70, particularly for those born in the 20th century. This contrasts with the findings of other studies. It may be that it is easier to produce a higher level of literary output in literature, especially novels, up to old age, given that there are no infrastructural

¹⁵ Partly because of the imbalance of bargaining power, the literary agent emerged in the late 19th century in the US. Lichtenstein (1978) argues that 'the literary agent's primary function was not so much the protection of the author from the rapaciousness of his publisher, as the rationalization and centralization of the distribution of literary property to the several rather distinct markets that were emerging in the 1890s. In fulfilling this function as literary clearing house, the agent gave an added dimension of freedom to the professional writer, at the very time when editors and publishers were becoming more demanding in the requirements they imposed upon their contributors.' (p. 51).



requirements as for example for scientists, composers and, to a lesser extent, playwrights. Besides over the whole period, there were large improvements in health and life expectancy, something that might explain the markedly changing picture over the four subperiods examined, with the expected age-output pattern much more evident in the first two subperiods.

Whether the increases in creative output were linked to migration, especially to a large city, like New York, it suitable test can be found. However, as seen earlier, there is a strong a priori argument that living in a suitable urban milieu could inspire higher creative output. Besides, there is some evidence that this was the case for visual artists in the past in Paris (Hellmanzik, 2010), authors in London (Mitchell, 2019) and philosophers in several European cities (O'Hagan and Walsh, 2016). 16

This paper then has provided a quite detailed statistical outline of, and basis for, aspects of US literary authors that were perhaps only understood in an anecdotal sense up to now. As such it may shape in some small way the literary criticism debate, as the opening quotation by West suggested. Or should we heed, more the words of Hewitt (2009), who states that of 'all interdisciplinary couplings, perhaps the marriage between literary studies and economics has been the most tempestuous—the most likely to alternate between devotion and repudiation'. (p. 618). ¹⁷ Whither, for this paper, 'devotion' or 'repudiation'?

References

- Accominatti, F. (2009). 'Creativity from interaction: artistic movements and the creativity careers of modern painters', *Poetics*, 37 (3), 267-294.
- Andersson, Å. (2014). 'Creative people need creative cities', in Å. Andersson D. Andersson and C. Mellander, eds., *Handbook of Creative Cities*, Edward Elgar Cheltenham, 2011, pp. 14{55).
- Ceulemans. C, V. Ginsburgh, J. Prieto-Rodríguez and S. Weyers, (2020). 'One hundred years of solitude bestsellers in the United States, 1900-1999', *Poetics*, 79, 101422.
- Farrell, M. (2001). *Collaborative Circles: Friendship Dynamics & Creative Work*, Chicago; University of Chicago Press.
- Galenson, D (2005). 'Literary life cycles: measuring the careers of modern American poets', *Historical Methods*, 38 (2), pp. 45-60.
- Galenson, D. (2006). 'A portrait of the artist as a young or old innovator: measuring the careers of modern novelists', *Historical Methods*, 39 (2), pp. 51-72.
- Ginsburgh, V. and S. Weber (2020). 'The economics of language', *Journal of Economic Literature*, 58(2), pp. 348–404
- Hellmanzik, C. (2010). 'Location matters: estimating cluster premiums for prominent modern artists', *European Economic Review*, 54 (2): 199-222.
- Hewitt, I. (2009). 'The vexed story of economic criticism', *American Literary History*, 21 (3), pp. 618–632,

-

¹⁶ See also Andersson (2014).

¹⁷ See Ginsburg and Weber (2020) for another incursion by economists into similar interdisciplinary work.



- Kanazawa, S. (2003). 'Why productivity fades with age: the crime-genius connection', *Journal of Research in Personality*, 37, pp. 257-272.
- Kuld, L. and J. O'Hagan (2019). 'Location, migration and age: literary clusters in Germany from mid-18th to early-20th Century'. https://www.tcd.ie/triss/assets/PDFs/wps/TRiSS-WPS-03-2019.pdf
- Lehman, H. (1953). Age and Achievement, Princeton: Princeton University Press.
- Lichtenstein, N. (1978). 'Authorial professionalism and the literary marketplace 1885-1900', *American Studies*, 19 (1), pp. 35-53.
- Mitchell, S. (2019). 'London calling? Agglomeration economies in literature since 1700', *Journal of Urban Economics* 112, pp. 16-32.
- O'Hagan, J. and A. Walsh (2016). 'Historical migration and geographic clustering of prominent Western philosophers', *Homo Oeconomicus: Journal of Behavioral and Institutional Economics*, 34 (1), pp. 11-32.
- O'Hagan (2019). 'American Literary Output from early 19th to Late 20th Century: Age, Gender and Spatial Dimensions', Working Paper TRiSS, Trinity College Dublin https://www.tcd.ie/triss/assets/PDFs/wps/Triss-wps-04-2019.pdf
- Schnurr, E-M. (2012). 'Berlin's turn of the century growing pains' *Spiegel* Online, November 22.
- Simonton, D. (1975). 'Age and literary creativity: a cross-cultural and transhistorical survey,' *Journal of Cross-Cultural Psychology*, 6 (3), pp. 259-277.
- Simonton, D. (2007). 'Creative life cycles in literature: poets versus novelists or conceptualists versus experimentalists', *Psychology of Aesthetics Creativity and the Arts*, 1 (3), pp.133–139.
- Storper, M, and A. Venables (2004), 'Buzz; face-to-face contact and the urban economy', *Journal of Economic Geography*, 4 (1), pp. 351–370.
- Sinykin D., R. So, and J. Young (2019) 'Economics, race, and the postwar US novel: a quantitative literary history', *American Literary History*, 31 (4), pp. 775–804.
- Watts, E. (1982). *The Businessman in American Literature*, Chicago: University of Chicago Press.
- Watts, M. (2002). 'How economists use literature and drama', *Journal of Economic Education*, 32 (3), pp. 377-386.
- Watts, M. and R. Smith (1989), 'Economics in literature and drama', *Journal of Economic Education*, 20 (3), pp. 291-307.
- West, J. (1990) *American Authors and the Literary Marketplace since 1900*, Philadelphia: University of Pennsylvania Press
- Wicksteed, P. (1910). The Commonsense of Political Economy, London: Macmillan
- Wojan, T., D. Lambert and D. McGranahan, (2007) 'Emoting with their feet: Bohemian attraction to creative milieu', *Journal of Economic Geography*, 7, pp. 711–736.