

## Multi-scalar Spatial Analysis and Humanities Data

A Case Study from the Grand Tour Travelers Project

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In this paper, I present a case study from the Grand Tour project (part of Mapping the Republic of Letters) that illustrates the way in which robust computer driven data analysis and more traditional humanistic inquiry can operate together in a fruitfully reinforcing dialectic. While traditional scholarship has often noted that travel to Sicily by British dilettantes increased during the late 18th century, our project adds nuance and analytical rigor to the discussion by both comparing general scholarly impressions with the evidence of a large dataset and by plotting detailed individual Sicilian tours in space and time in a way that demonstrates the intimate relationship between logistical realities, knowledge networks, and big trends in Grand Tour travel.

The purpose of the Grand Tour project is to enlighten the nature of 18th century travel in Italy in new ways by looking at overarching patterns found within the largest existing compendium of relevant data, John Ingamells' Dictionary of British and Irish Travellers to Italy, 1700-1800. This volume comprises over 6,000 entries, each representing a British or Irish individual who traveled in Italy at some point between 1700 and 1800. The entries are organized alphabetically. Each entry includes the name of the traveler, their gender, their social status (including any titles they may have had), their expertise, and a variety of other relevant information, depending on how much we know about them. After giving this basic biographical information, the entry provides information about the geographical and chronological scope of the tour taken by the individual (cities visited and dates of stay).

The aim of our project was to take the rich geospatial information collected in the Ingamells dictionary and plot this information

in space in a way that illuminated the literal "shape" of the Grand Tour—where did people go most frequently, was there a more or less orthodox itinerary, did things change over time, etc. However, while we remain committed to sorting through the "big" questions about the Grand Tour with which we began, we found during our research (2008-present) that our most interesting results often came when we paired our analyses of the "shape" of the Grand Tour data with in depth research into the articulation of the big questions with the stories of individual travelers.

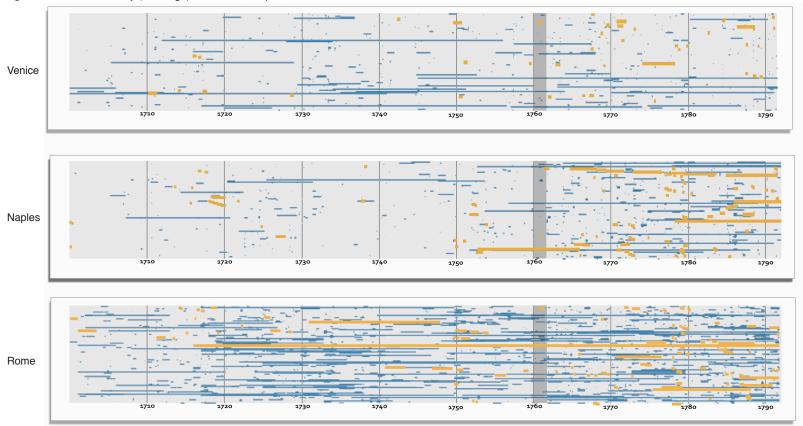
In what follows, I present a case study on travel to Sicily that demonstrates the value of pairing macro scale analysis of data with micro scale close reading and visualization of primary source material in digital humanities projects. While looking at the "big" data allows us to confirm the established scholarly impression that travel to Sicily became more popular over time, visualization of a few detailed journals from different points in the 18th century shows the probable day-to-day forces that drove the big diachronic trend. The macro and the micro approaches inform one another, and join together in filling out an unprecedentedly rigorous and multivalent description of 18th century travel trends.

One of the topics that drew us to a quantitative study of the Ingamells data was change in Italian itineraries over time. Traditional scholarship on the Grand Tour had generated truisms about the routes and routines that characterized dilettantish travel abroad. These were largely based on anecdotal evidence. For example, while Sicily seemed to be omitted from most travelers' itineraries early in the 18th century, its prominence increased after 1760.2 However, in the absence of a data-centric approach to the Grand Tour, we had no way of knowing whether this was an impression that held true in general, or whether it was only true of the celebrated intellectuals and adventurers about whom the most studied accounts had been preserved. Naturally, these accounts represent only the "tip of the iceberg" of evidence for 18th century travel. In our project, we aimed to compare established truisms about the Grand Tour (e.g. travel to Sicily became more popular over time) with the evidence contained in a more comprehensive dataset that incorporated not only the rich and famous, but also the many "less visible" travelers documented in Ingamells.

In order to "test" the hypothesis that travel to Sicily became more popular late in the 18th century not only among famous travelers, but

## The CESTA Anthology 2013

Figure 1. Travelers to Sicily (in orange) and Venice, Naples, or Rome.



also in the aggregate, we constructed a digital timeline of all of the trips recorded in the Dictionary. This timeline effectively represents a frequency map of documented travel to major Italian cities during the 18th century. The timeline displays each trip taken by Grand Tourists in our dataset as a blue line. The length of the line represents the length of stay of the individual traveler, and its position indicates at which point in the 18th century the traveler went to the city. The original dictionary entry for each traveler represented in the timeline is linked to the timeline, and can be searched through the interface. Searching for "Sicily" in the timeline highlights all of the lines representing travelers that went to Sicily (Figure 1). After 1760, the density of highlighted orange lines in the datasets for Rome, Naples, and Venice all becomes palpably greater. According to our data, then, it appears that travel to

Sicily did increase over the course of the 18th century, as scholars had long suspected.

However, looking at the data in the timeline raises more questions than it answers. We can see that the density of trips in general as well as trips to Sicily in particular increases in the second half of the 18th century. At the resolution of the entire dataset, we are unable to distinguish the cause of this phenomenon (increased popularity of travel to Sicily) with much certainty. Did more travelers go to Sicily in the 1780s because more travelers went to Italy in the 1780s or because Sicily became a more popular destination for reasons actually pertaining to travel in Sicily (i.e. can we distinguish per capita/intensive change from aggregate change)? If there was intensive change in travel to Sicily, how do we account for this? Questions such as these can only

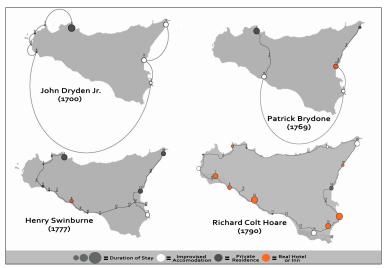


Figure 2.

be answered by digging into data on a deeper level than that apparent in the undulating surface of Grand Tour topography we generated in our timeline.

In order to attempt to understand the Sicily travel phenomenon in finer grain, I conducted a detailed study of the personal journals left behind by four early Sicilian tourists. John Dryden Jr. (1667-1703), Partick Brydone (1736-1818), Henry Swinburne (1743-1803), and Richard Colt Hoare (1758-1838) all traveled to Sicily at different points between 1700 and 1800 and left extensive written records of their journeys.<sup>3</sup> While all of these travelers had distinct motivations and interests for visiting the island (Brydone was an enthusiastic amateur vulcanologist, Colt Hoare an archaeologist, etc.) each one of their accounts is given over in large part to descriptions of the daily logistics of travel. The quality of the roads (or lack thereof), the prominence of banditti, and the nature of available accommodations are recorded faithfully in each of the four travelers' journals. Since the relative insuperability of logistical obstacles to comfortable navigation in a given destination might reasonably be expected to impact the popularity of that destination among banditti-averse travelers, and since "logistics" was clearly a category of data that all of the journals I sampled provided in comparable resolution, I determined to visualize changes in the day-to-day reality of travel in Sicily over time.

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Figure 2 is my attempt to visualize the way in which the logistics of travel in Sicily did indeed change over the course of the 18th century. At the beginning of the century, Dryden was compelled to sail from city to city due to the absence of reasonable roads and, perhaps more crucially, the intransigence of the island's socio-political instability. His company found no inns during their travels, and most often slept on their ship. By the time Brydone ventured to explore Sicily in 1769, some overland travel was possible, but still dangerous. According to Brydone, in the 1760s even "the Italians represent [travel in Sicily] as impossible, as there are no inns in the island, and many of the roads are over dangerous precipices, or through bogs and forests, infested with the most resolute and daring banditti in Europe."4 Conditions look to have improved considerably by the date of Swinburne's travels in the late 1770s. His trip and descriptions of the many wonders of Sicily are thought to have generated greater interest in southern Italy,5 and we can certainly see that local travel was much more manageable by the time Richard Colt Hoare toured the island in 1790. Colt Hoare found many passable and/or pleasant inns in the major towns, and while he occasionally complains about the quality of especially out-of-the-way roads,6 his trip is generally unobstructed by poor travel conditions.

Figure 3 shows another way that one could view variation in travel to Sicily among the four travelers, arrayed along a timeline. While Dryden did not linger in Sicily for very long and visited only a few cities, his successors gradually lengthened their stays overall and expanded their itineraries to include a variety of towns and cities, probably partly as a result of the switch from maritime to terrestrial means of conveyance. This timeline view also makes quite apparent the explosion of inn availability near the end of the century.

In general, then, it seems likely that there was real, intensive growth in travel to Sicily in the last part of the 18th century. Not only do we know, from our macro analysis of data in the Ingamells dictionary, that a larger number of British tourists visited the south after 1760, but detailed investigation of smaller datasets (i.e. individual journals) reveals compelling evidence, in the form of major strides in infrastructure and availability of lodging, that Sicilian travel was growing in both scale and maturity. This growth was probably both driven by and a driver of the dissemination of knowledge about the island's merits as a destination. As accounts like Swinburne's became known

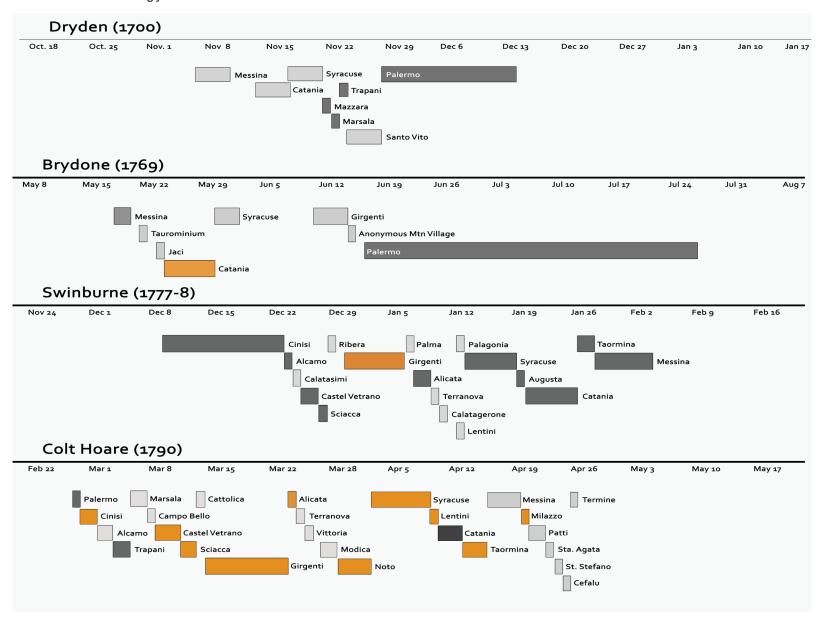


Figure 3.

among the general public, more of those travelers who came to Italy ventured to Sicily, and this generated demand for and allowed travelers to find lodging and roads of an acceptable quality, which further encouraged more visitors to come to the island. This phenomenon is a good example of the complex ways in which knowledge networks and real conditions of travel were locked together in a synergistic feedback loop in 18th century Italy. In the Grand Tour project, we believe that these kinds of relationships, between knowledge, space, and time, are best revealed with the kinds of multi-scalar, data-driven methods that we used in this case study of early travel to Sicily, and throughout our Mapping the Republic of Letters research.

## **Endnotes**

- 1. Ingamells, J. Dictionary of British and Irish Travellers in Italy, 1700-1800.
- 2. Black, J. 1985. The British and the Grand Tour. Kent: 30-31.
- Dryden, J. Jr. A Voyage to Sicily and Malta. (Published 1777); Brydone, P. A Tour through Sicily and Malta. (Published 1848); Swinburne, H. Travels in the Two Sicilies 1777-80. (Published 1790); Colt Hoare, R. Travels through Italy and Sicily tending to illustrate some districts which have not been described by Mr. Eustace, in his Classical Tour. (Published 1819).
- 4. Brydone, Letter to W. Beckford dated May 14, 1770.
- 5. Black 1985, 42, n. 45.
- e.g. Wed. March 3, to Alcamo: "After awhile I quitted [the beach road], and ascended to Alcamo, by a miserable track..."; March 29, to Modica: "...owing to the length of the journey and the badness of the roads, I did not reach Modica until dark."