

Carleton University

From Migrations to Migration: Birth of a Phenomenon

A thesis submitted to  
The Faculty of Graduate Studies and Research  
in partial fulfillment of  
the requirement for the degree of  
Master of Arts

Institute of Political Economy

by

Christopher Alderson, B.A. (Hons.)

Ottawa, Ontario

September 2009  
©2009, Christopher Alderson



Library and Archives  
Canada

Published Heritage  
Branch

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque et  
Archives Canada

Direction du  
Patrimoine de l'édition

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*  
ISBN: 978-0-494-60291-1  
*Our file Notre référence*  
ISBN: 978-0-494-60291-1

#### NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

---

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

#### AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

---

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

■\*■  
Canada

## **Abstract**

This thesis describes the emergence of migration studies in the 19<sup>th</sup> and 20<sup>th</sup> centuries, for both birds and humans. I outline their parallel trajectory as sciences and their common epistemological roots; all in order to demonstrate that understandings of migration are made, not given. Working from my empirical research into practices of observation and recording, I demonstrate how migration first appeared as a phenomenon with an internal coherence, or, alternatively, as a reality to be studied and acted upon. It does not focus on asking whether migration is “natural,” but rather when and how did we begin to perceive and understand migration as such? I therefore focus on the questions knowledge, visualization and inscription. This will be contrasted with counter-histories of “migration” in which I share once-cherished accounts of bird hibernation, transmutation, and of human colonization and regional pauperism.

## **Acknowledgements**

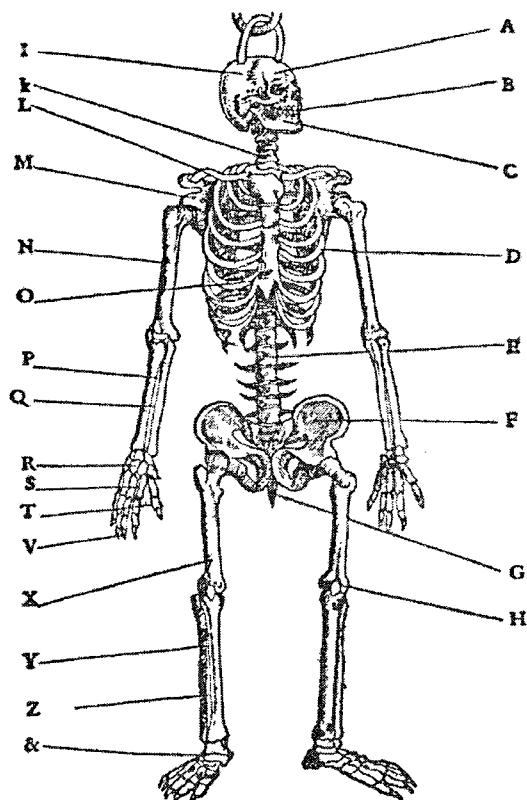
I want to thank Donna Coghill, Rianne Mahon, Alan Hunt, and Bruce Curtis. Thanks also to William Walters, who supervised this project without hesitation and provided encouragement. Thank you Elizabeth Record for fun with animals and robots, Atticus for long walks in the park, and Thomas Abrams for no fun at all. Patricia Alderson did her MA first, making mine seem like a good idea. And most of all, thanks is due to Rebecca Sandiford for her encouragement, patience, and support.

## Table of Contents

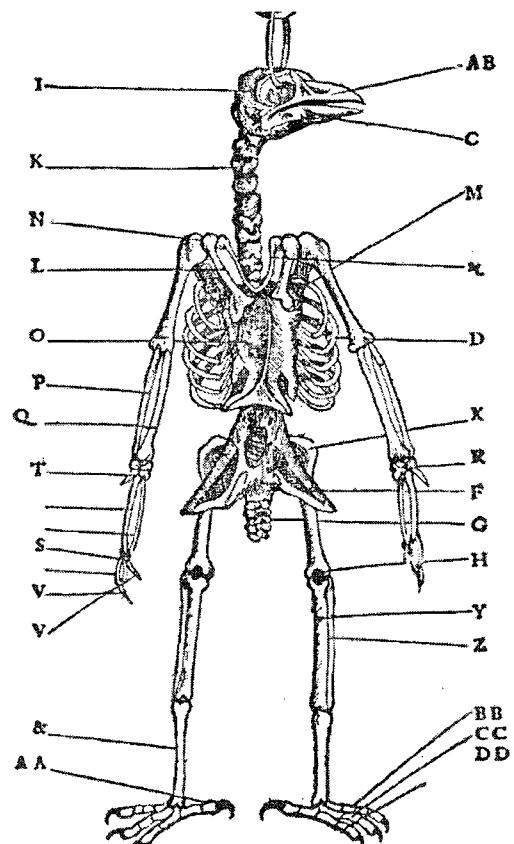
Chapter 1: The Problem of “Migration” .....	1
<i>Between Etymology and Genealogy: Methodological Considerations</i> .....	2
Conditions of Visibility .....	7
Practices of Inscription.....	12
<i>Outline of Chapters</i> .....	17
Chapter 2: For the Birds! Or, Life and Labour into the Modern Period .....	18
<i>How to Learn from Bird Migration</i> .....	18
<i>Mobility without Migration 1: Paupers, Parishes, and the Poor</i> .....	27
<i>Mobility without Migration 2: Mercantilism and Population</i> .....	33
“Migration” into “The Economy” .....	41
Chapter 3: Practices of Inscription: British and International Efforts at Marking Movement .....	47
<i>From Bird Descriptions to Migration Inscriptions</i> .....	47
<i>Tracking Human Movement</i> .....	49
<i>Early Statistical Interrogation of Movement: The British Census</i> .....	54
<i>Towards International Migration</i> .....	67
Conclusion .....	76
Bibliography .....	79

## **Figures**

Figure 1: Pierre Belon, Comparative Study of Human and Bird Skeletons (1555)	vi
Figure 2: Hibernating Swallows Caught by Fishermen, from Olaus Magnus' "History of the Northern People" (1555)	18
Figure 3: A Technological Innovation: Visualizing Currents and Density of Migration, from Ravenstein's "Laws of Migration" (1885)	53
Figure 4: "Indexing Department (Gallery) of The Census Office," Illustrated Times (1861)	58
Figure 5: Sample Tabulating Card from 1911 Census	66



HUMAN SKELETON.



BIRD'S SKELETON.

**Figure 1: Pierre Belon, Comparative Study of Human and Bird Skeletons (1555).**

## Chapter 1: The Problem of “Migration”

---

I begin and end this thesis with a discussion about two specific productions of text: both published in 1931, both atlases of sorts, both “firsts” in their field, and both taking up the subject of migration. Following decades of empirical investigation, organization, codification and representing hundreds of thousands of labour hours, it could be well argued that the study of migration hit its stride with these books, and that both are the result of a swelling interest in movement during the 19<sup>th</sup> century. The difference between them, however, is that one deals with human migration, and the other with that of birds.

*International Migrations*, published in *Volume One* (1929) and *Volume Two* (1931) by the International Labour Organization (ILO), numerically described the flows of labouring bodies around the globe, and marked the first time international statistics on human movement had been collated and put forth so comprehensively. These hefty volumes of charts and tables quickly became a standard reference document in migration literature. They followed a massive international project of collecting, aggregating, and distributing information on the process of migration accounting; it was a great gathering of “local” statistics with the purpose of producing a “global” picture.

The second text, *Atlas des Vogelzuges (Atlas of Bird Migration)*, was the first atlas that described the annual migration of birds. Its authors, Schüz and Weigold, relied on the results of extensive specimen-tagging operations off the Prussian Coast at Rossitten, but this activity was preceded by about sixty years of European interest in empirically discovering migration. It was an achievement followed and funded by many ornithological organizations.

In this thesis I demonstrate what connects these texts besides their immediate subject matter.<sup>1</sup> I make the argument that their relationship (although subtle) is a profound one, a relationship generated from specific conditions of knowledge production that emerged in the 19<sup>th</sup> century. I use this peculiar human-avian parallel to demonstrate some of these conditions and how they made the perception of migration possible, a kind of counter-balance to the well-worn thesis that specific conditions have *made* migration. This thesis is simultaneously a study of migration’s emergence as a documented, analyzed phenomenon, as a matter of modern concern. In all, I work to demonstrate that “migration” is far less than an *obvious* occurrence. It is something made obvious.

This thesis looks at “migration” in this very abstracted sense, as *perceptible* phenomenon. It seeks out the how and when of migration’s entry into the modern consciousness, its emergence as something worthy of study and documentation. This thesis, then—as it ends with these two texts—is a prehistory of migration studies, the work coming before, which made possible what was to come afterwards.<sup>2</sup>

---

### Between Etymology and Genealogy: Methodological Considerations

---

When we talk of “brain drain”, refugees, temporary workers, naturalization, illegal immigrants, landed aliens—just a few of the contemporary representations of human “migration”—the terms tumble out self-contained and meaningful. Each takes up a portion of the problem of migration in specific and focused ways—the problem being

---

<sup>1</sup> I have been unable to discover any cross-references between the two, and they were certainly not funded by the same organizations.

<sup>2</sup> I seek here to understand the conditions that made it possible to publish these texts, which are not quite foundational (as I argue they were a result, rather than catalyst) and certainly not conclusions (as the migration studies has done nothing but ballooned, bibliographically that is).

that human movement happens. Some are clearly implicated in attempts at control, others in projects of welcoming and incorporating. All these words, however, imply that we *know* human movement is happening all around us. Migration is something that is occurring in reality.

Gilles Deleuze once cautioned against trying to solve a problem of knowledge through the invocation of a simple correspondence of terms.<sup>3</sup> In other words, and elaborated upon: epistemology is not limited by words but rather constitutes the principles of their use. “We have to break open words or sentences...and find what’s uttered in them.”<sup>4</sup> Bruce Curtis articulates a similar point in a note about historical epistemology when he writes, “one distinguishes words from concepts in that the latter ‘make a difference’ in theoretical discourse.”<sup>5</sup> In short, concepts matter, while words come and go in their articulation.

But this presents a new problem: what, then, is the relationship between words and concepts if they are not identical, if we should be wary of conformity of terms without conformity of concept? At this—a problem of words and concepts (or words and knowledges)—a parallel place of “between etymology and genealogy” arises.<sup>6</sup> While it is possible to convincingly deal with this problem through making the straightforward distinctions that an etymology is what corresponds to words, while a genealogy deals with the business of concepts, it seems that there is a tighter relationship than this: a

---

<sup>3</sup> Gilles Deleuze, *Negotiations, 1972-1990*, vol. European perspectives (New York: Columbia University Press, 1995), 96.

<sup>4</sup> Ibid.

<sup>5</sup> Bruce Curtis, “Foucault on Governmentality and Population: The Impossible Discovery,” *Canadian Journal of Sociology* 27, no. 4 (2002), 507.

<sup>6</sup> We could also very well be taking about a “between etymology and archeology”

relationship between etymology and genealogy that accounts for how words correspond to changing intellectual conditions, changing conditions of possibility.

This thesis is unabashedly concerned with a genealogy of the concept of migration, yet a workup of an etymology of this word is likewise a useful exercise. For one, it complicates the division we may hold between human and animal sciences. For instance, “flock”—a word borrowed from the animal sciences, used to describe a multitude of humans, perhaps immigrating to the New World—is, in fact, a reintroduction of the obsolete Middle English origin specific to humans. It was forgotten, reintroduced, and is now metaphorical reading of human movement: in short, an anthropomorphic zoomorphism! “Migration” itself has complicated roots. The Latin *migrāre* most likely formed from the base *meiere* (to urinate), *mūtāre* (to change or to transform), and *mūnis* (to be bound or under obligation). But most interesting, it has strong and reoccurring denotations to death and dying, passing onto another place, and even passing into a new condition: changing state of being. The word has since become increasingly topographical in its meaning. Further, it has become increasingly confined to what we may properly call “international migration.” 17<sup>th</sup> and 18<sup>th</sup> century definitions specify a move, removal or flitting from one place to another: the generalized act of changing place. It was Noah Webster’s 1828 definition that first added the specification of “country” or “state” to the definition. He also added the specification now dominant “with a view to permanent residence or residence of some continuance.”<sup>7</sup> For the 17<sup>th</sup> and 18<sup>th</sup> century, one migrated with great frequency and in a multitude of ways; from the 19<sup>th</sup> century onward, it became possible to migrate only in much more restricted sense.

---

<sup>7</sup> N.L. Shumsky, “Noah Webster and the Invention of Immigration,” *The New England Quarterly* LXXXI, no. 1 (2008).

Etymologically, then, it is increasingly difficult to suggest that migration is something that humans have always done, and will always do; of course it depends on what we mean by migration. A century's worth of anthropological studies on migration fill the shelves of most university libraries, many containing hundreds of pages of descriptive and theoretical justifications for why migration is “natural and universal.” One can also find about a hundred years’ worth of economic histories that thoroughly document the impact of migration on the development of the *homo economicus* in North America and other colonies, which so tightly bind migration and economic development that it is difficult to think of the relationship in any other terms. The problem faced here, however, is that migrations have been theorized differently throughout that time.

Migration has not always been posited as a natural attribute of populations, something a given number of people in any group will “just do.” While international migrations (plural) have long been a historical reality, this reality was not, until the 19<sup>th</sup> century, discovered as generalizable—that is to say, recognized and identified as a global phenomenon. Human movements, from at least for the 16<sup>th</sup> century, were seen as isolated and extrinsic events, affecting population size, density, social and economic condition—as a loss to a sovereign’s holdings and a reduction in populousness, for example. Only relatively recently has migration (in the singular) been positioned as an intrinsic and inherent characteristic of populations, in this case affected by size, density, social and economic conditions. Only recently has migration become “the very base of the development of the human race and of human culture,” as so much of the mid-20<sup>th</sup> century research on the subject declares.<sup>8</sup> And only recently has it become a defining aspect of what it is to be human and to interact economically.

---

<sup>8</sup> Maurice Davie, *World Immigration: With Special Reference to the United States* (New York: The

My thesis is not, therefore, focused on asking whether migration is natural, generalizable or given to the human condition, but rather on asking when and how did we first perceive and understand migration as such? The former question is one of Being; the latter question is one of history and knowledge, knowledge and visualization, visualization and inscription. My question, in comparison to the first, is tough to answer today. Try to find a reflexive history of migration studies—rather than a study of migration history—and you will be hard-pressed to come up with much. And beyond this lack of published accounts of migration studies, there are no quasi-transcendental categories to fall back on: Nature, Life, Society, Essence, all fail to illuminate questions of knowledge production and knowing. In short, what follows is a partial history of the way and means that we see migration, and see it everywhere. My purpose is to draw attention to these practices of visualization and inscription that render migration perceptible and a thing to be acted upon. It does not accept migration as a pre-existing concept in thought and an object of control; the chapters that follow make efforts to undo precisely this assumption. I address the history of migration as something thinkable, observable and of vital interest, irrespective of whether it has “always been a thing humans do.”

Drawing heavily from Social Studies of Science literature and a Foucauldian analytic, this inquiry is undertaken with a conscientious sidestepping of the realist-constructivist debate. I do not attempt to reduce migration to a simple social construction; nor do I treat it as a simple matter of fact, pushing itself up and into view (the realist program). Ask a border agent if migrants exist, you will be pointed to queues of people,

field manuals, border stations, or holding-cells, the apparatuses of the everyday reality of migration. Counter to relativist claims of discourse equivalences—where new utterances somehow materially compete with existing discourse—a thing such as migration “holds” because of its density in thought, practice, standards, and convention (what Latour would call “strong associations.”) Likewise, however, my position is that “migration” is deeply implicated with human cognition—if for no other reason than that its reality depends on ideas of citizenship, territoriality and particular notions of time—and that it presents as a strong reality only through mediation with live practices of observation and recording.

Migration is simultaneously real and constructed.<sup>9</sup>

Below I describe the methodological considerations observed throughout this study. To inject a sense of order, the two chapters following this introduction and the method section immediately below are broken down into questions of “Conditions of Visibility” and “Practices of Inscription.”<sup>10</sup> This division provides not only some methodological guide rails, but also a way to pin down authors who tend to elude easy categorization.

### Conditions of Visibility

That I spend time considering the conditions of visibility of migration studies implies two things: first, migration has not always been observable; and second, observation is dependent upon circumstances extrinsic to human movement. Once again, migration did not press itself into view—particular epistemological, intellectual, and

---

<sup>9</sup> I draw this statement about the simultaneously reality *and* construction things directly from literature of the social studies of science, especially Latour and Desrosières.

<sup>10</sup> I take these terms from Bruno Latour but expand on epistemological considerations that tend to be under-emphasized in his work.

social landscapes gave rise to the possibility of migration study. This section describes the approach I observed which helps to illuminate these conditions; it is also a brief elucidation of my particular epistemological and ontological position. I do this through a brief exegesis of the meaning of an “Archive,” a description of what texts represent for an archeology of knowledge. My aim is to expose the mentality underlying my reading historical material.

The analytic I pursue denies archives and databases as simply holders of self-contained speech (or text) acts. To do research in this way would be to assume, problematically, that what one is viewing is a transcript representative only of a particular subject; it would be to understand what one is reading as a free standing entity, with self-contained meaning and as a thing in-and-of itself. The danger here is that the text itself becomes radiant, where the author is taken out of broader context<sup>11</sup> and given a primacy over their conditions. In contrast, the perspective I adopt treats the archive and database as locations of “monuments” rather than “documents.”<sup>12</sup> The importance and connotation of the monument lies at the heart of the precaution I observe. Documents, on the one hand, are perceived to be the pure communication of sovereign and individual subject, an “indelible trace of its freedom” as Foucault would argue.<sup>13</sup> To read for monuments, on the other hand, is an explicit effort to look for conditions of existence that each record, transcript, or image is, for lack of a better word, commemorating.

---

<sup>11</sup> The word “context” is only used here to introduce the reader to this milieu. The problem of “context” is better understood as the problem of familial relations between statements taken up by an author or authors. In other words, proximity is not determined by time or physical location (i.e. hundreds of years could separate statements part of the same formation of thought). See Gilles Deleuze, *Foucault*, trans. Sean. Hand (Minneapolis: University of Minnesota Press, 1988), 11.

<sup>12</sup> Michel Foucault, “Politics and the Study of Discourse,” in *The Foucault Effect: Studies in Governmentality: With Two Lectures and an Interview With Michel Foucault* (Chicago: University of Chicago Press, 1991), 60; Gilles Deleuze, *Foucault*, 54.

<sup>13</sup> Michel Foucault, “Politics and the Study of Discourse,” 60.

The particular advantage of this kind of archeological investigation is the provision of the situated set of epistemological limits, problems, and problematizations present over a given period. This distinction is subtle, to be sure, but it is nonetheless important: it allows a presentation of what made a particular statement possible. A monument represents the “sayable” and the “doable” given to a particular period.<sup>14</sup> It is to read for what Deleuze and Guattari would call “strata”—the ground upon which every statement and practice stands.<sup>15</sup> Deleuze prefers the language of strata to archeological formations—perhaps because an archeology implies a building up, rather than a possibility of circling back or shifting densities of thought—both are applicable here. Both the analysis of the archeology of knowledge and the analysis of strata look for the regularity of statements and the internal consistencies, which may or may not be bounded by disciplines, time, texts, or author.

If we consider the archive to be merely housing for documents, we run two risks. First, as suggested above, we learn very little about formations of thought and practice by assigning too much (or all) meaning to an individual subject from the past. For example, the few histories of migration studies that do exist have tended to identify the first substantive article on the “Laws of Migrations,” published in 1885 by George Ravenstein, as the birth of migration studies. They assign Ravenstein the status of methodological genius for his inductive method applied to population studies.<sup>16</sup> To

---

<sup>14</sup> Ibid., 59.

<sup>15</sup> Gilles Deleuze, and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (University of Minnesota Press, 1987).

<sup>16</sup> D. Grigg, “E. G. Ravenstein and the Laws of Migration,” *Journal of Historical Geography* 3 (1977): 41-54; D. Grigg, “Ernst Georg Ravenstein, 1834-1913,” *Geographers Biobibliographical Studies* (1977); MJ Greenwood, and GL Hunt, “The Early History of Migration Research,” *International Regional Science Review* 26, no. 1 (2003): 3; John Corbett, “Ernest George Ravenstein: The Laws of Migration, 1885,” *Center for Spatially Integrated Social Science*, <http://www.csiss.org/classics/content/90> (accessed October 15, 2008).

counter this tendency, my approach privileges the examination of the interplay between discourses and practices rather than, for example, the particular speech act of a subject. In the case of Ravenstein, I see his importance not as the origin but as representing a culmination of changing conditions taking place in the decades prior to his published work. I investigate his work with an eye to the roles played by the economic and statistical sciences in forming the possibility for Ravenstein to make sense of migration—indeed, for him to see migration as something worth studying in the first place.

The second problem with reading archives and databases as holding places for documents is the vulnerability opened to allowing contemporary meaning to overrun our investigation of the past. For example, those writing histories of migration have gleaned information from any and every available record that documents the movement of people to gain a picture of past mobilities. Medical records, ship manifests, colonial permits, passport applications and records of deportations have all been called into service as evidence of migration. However, in giving an accurate account of the dates and volumes of movement, these accounts simultaneously blur perception of how migration *became* a field of study. The act of issuing of a passport or documenting the number of subjects sent to colonize a foreign land does not necessarily presuppose a belief in the naturalness or inevitability of these movements. In a very real way, our contemporary understanding of human movement migrates back into past. By attempting to think outside our current connotations and problematizations, we are better able to learn about the shifts and passages of different systems of thought. Likewise, we can avoid reducing statements to the representation of some deeper, structural meaning or determinant foundation. As Foucault argues, “the historical base of discourse is not some other, more profound

discourse, at once identical and different.”<sup>17</sup> With this in mind, this thesis attempts to trace the past into the present, rather than searching for the present in the past.<sup>18</sup> To read *documents* is to assume that we stand on the same ground; to read *monuments* is to recognize that the ground we stand on shifts.

Simply put, an archive is a place where these record-monuments pay a kind of homage to past formations of knowledge and discourse. The archive contains records of the historically situated problems and rules of the games, ultimately connecting discourse to practice. For this thesis, I look for the emergence of migration as a topic of investigation and field of interest in the 19<sup>th</sup> century. But to corroborate my findings, I also look for how movement has been problematized differently over various periods. I hope to avoid ripping documents from their situatedness, and asking them to speak in this way or that. Treating primary sources as monuments demands an active, contemplative consideration of the conditions making their production logical (or even possible). I try to take up this active stance in establishing what procedures of truth have shaped ways of thinking and solving problems.<sup>19</sup> Doing this helps to illuminate how a particular utterance or image appears as self-evident or logical. It is to describe what made a particular stance obvious, natural and even necessary, making objects that normally appear self-contained appear within practices that objectivize them. Paul Veyne might call my thesis an attempt at the “rarefaction” of migration.<sup>20</sup>

---

<sup>17</sup> Michel Foucault, "Politics and the Study of Discourse," 61.

<sup>18</sup> Wendy Brown, *Politics Out of History* (Princeton: Princeton University Press, 2001), 102.

<sup>19</sup> Gilles Deleuze, *Foucault*, 63.

<sup>20</sup> P Veyne, “Foucault Revolutionizes History,” in *Foucault and His Interlocutors*, ed. A Davidson (Chicago: University of Chicago Press, 1997).

## Practices of Inscription

---

Conditions of visibility pertain, however, to only half of the strong claim I make regarding the simultaneous reality and construction of migration. As stated above, analysis of the epistemological, intellectual, and social landscapes that provide the conditions of “migration” is a vital first step. This empirical effort provides the material by which an investigation can proceed. After doing this work, however, it is important not to fall back into latent realism—conditions of *invisibility* are not overcome in the process of seeking the truth; they are precisely the means by which what counts as truth is determined. What is still needed is an account of the practices that actually give migration its status as a reality; an account of how individual migrations (plural) were firmed up and solidified as part of the phenomenon of migration (in the singular). So, in taking for granted that we truly live in an “Age of Migration”,<sup>21</sup> I draw from researchers such as Bruno Latour, Mary Poovey, Ian Hacking, and Alain Desrosières, to look at the construction of the “facts” helping to make migration an obvious occurrence.<sup>22</sup>

My engagement with this literature helps account for the very *facts* of migration: the tables, indexes, statistics, trends, reports that flatten confusing three-dimensional human movements into less confusing two-dimensional representations.<sup>23</sup> If people are embedded within complex circumstances and histories, and are subjects of often confused and conflicting objectives, the categories of migration can represent a much clearer

---

<sup>21</sup> Stephen Castles, and Mark J Miller, *The Age of Migration: International Population Movements in the Modern World*, 4th ed ed. (New York: Guilford Press, 2009).

<sup>22</sup> Thomas Osborn and Nickolas Rose advise adopting “only a weak form of what one might term *inscriptophilia*,” lest we forget to observe the “array of relations...required before one can render something into vision and represent it in a stabilized form.” My strategy for dealing with this problem is to first address broader conditions of visibility before describing relevant practices of inscription. See T Osborne, and N Rose, “Populating Sociology: Carr-Saunders and the Problem of Population,” *Sociological Review* 56, no. 4 (2008), 552-54.

<sup>23</sup> Bruno Latour, “Visualization and Cognition: Drawing Things Together,” [www.bruno-latour.fr](http://www.bruno-latour.fr) Paper N°21 (1986), 15.

picture, on paper nonetheless! They present a picture of the naturalness of movement. However, these “facts” do not walk off boats and airplanes with their migrant referent; painstaking efforts have gone into representing, documenting, and textualizing the reality of movement. From textbooks describing the history of migration, to academic works that cite these volumes, to newspapers that try to put a “human face” back on the numbers, we are surrounded by the results of this kind of work. A history of these practices, the acts of inscription, provides one component in the account of the construction of migration as generalizable, a phenomenon in its own right.

The immediate objection to be countered is the position that inscriptions are simply reflections of occurrences happening “out there”; that the numbers on international migration are simply recordings of the goings on in the world; that there is nothing abstract about knowing how many people migrated from one place to another over a given period. The problem with this perspective is that it picks up the story part way through; it suggests that work has not already gone into defining what we consider migration, that we already know who qualifies as a migrant, and that we are not changing movement and its conditions by measuring and recording it. For example, my position holds that it would be preposterous to argue that reports on “illegal migration” are nothing more than a reflection of what is happening in the “real world.” An argument such as this would neglect to consider that international travel regimes have deep roots in international law, convention and practicality; it would be forgetting that the division between legitimate and illegitimate movement has fluid boundaries, changing over time and according to circumstances. As Mea Nagi puts it: “illegal alienage is not a natural or fixed condition but the product of positive law; it is contingent and at times it is

unstable.”<sup>24</sup> It would be—stated again—picking up the story part way through. For this and other reasons, I take seriously the approach outlined by Bruno Latour, that both “abstraction” and “reality” are relative positions, more tools for research and investigation than having to do with ontology.<sup>25</sup>

For Latour, the productivity found in the division between abstraction/reality is the allowance made for bracketing what is needed, quite simply, to get things done. The play between transcendence (discovering) and immanence (constructing) has the tremendous productive capacity of allowing us to manufacture proofs, purify them, and attribute them to “Nature” or “Society.” These twin poles, both part of the real, are none other than a methodological precaution.<sup>26</sup> The trick for Latour, however, is that the human role in manufacturing reality can be marked out by attribution to something called Nature—a phenomenon was “discovered” rather than “constructed.” Foucault also articulates a point that is useful here. In his account of what constitutes modern knowledge, he writes of the verticality implicit in the notion of life. Much like Nature, Life is positioned as having dimensions that always and already elude perception, going deeper and deeper into hidden unity below the surface.<sup>27</sup> Foucault also argues against the misguided perception that Life somehow has pressed itself upon us, gradually building up “owing to new methods, [and] through the progress of science advancing

---

<sup>24</sup> Mae M. Ngai, *Impossible Subjects: Illegal Aliens and the Making of Modern America* (Princeton: Princeton University Press, 2004), 6.

<sup>25</sup> Bruno Latour, “Visualization and Cognition: Drawing Things Together.”; Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, Mass: Harvard University Press, 1987); Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, Mass: Harvard University Press, 1993).

<sup>26</sup> *Ibid.*, 39-43.

<sup>27</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1970), 267-68.

towards...rationality.”<sup>28</sup> Latour and Foucault both—despite their temporal disjuncture regarding the “when” of Modernity—agree on the epistemological positioning of a Nature existing outside us, a Nature with the potential to be known absolutely, but in practice known only piece by piece.

From this diagnosis of modern knowledge production, we can take up a counter methodological precaution, one where *a priori* notions of Nature “out there” and Nature “down there” are rejected yet still explained; that is, where we treat the assumptions about nature and reality as things in themselves to be explained. As Latour and Woolgar write, “‘reality’ cannot be used to explain why a statement becomes a fact, since it is only after it has become a fact that the effect of reality is obtained.”<sup>29</sup> Alternatively, “out-there-ness” is only a “consequence of scientific work rather than its cause.”<sup>30</sup> I take this seriously in illuminating the presentation of migration’s status as a force, and, as such, I look at how facts telling us migration is real are generated. These facts are my object of inquiry, rather than migration as such.

Migration’s inscriptions are products of censuses, photographs, official recording of exits and entries, and paper trails of government travel documents. These are some of the “socially available procedures for constructing an ordered account out of the apparent chaos of available perceptions.”<sup>31</sup> All of these techniques, through further refinement into statistical form, upgrade idiosyncratic movements from the status of anomaly to that of “the real,” given as characteristics of the multitude, and stable enough to withstand or

---

<sup>28</sup> Ibid., 253.

<sup>29</sup> Bruno Latour, and Steve Woolgar, *Laboratory Life : The Construction of Scientific Facts* (Princeton, N.J.: Princeton University Press, 1986), 180.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid., 33.

support the “on-the-ground” viewpoint. The significance of this upgraded status is that inscriptions allow a newly composed thing to be acted upon. For Latour, “paper-work” provides mobility, immutability, and portability to a particular reality, allowing its unadulterated distribution to all those who want to know. For example, the number of “new Canadians” this year can be found within rolls of data at Statistics Canada. Schoolteachers, researchers, and politicians can all act upon this information, in any given location in Canada. Inscriptions (and “data”), for Latour, are also important because they can be scaled. Unlike personal observation, new numbers can be added to old while still retaining optical consistency. Those reports on “new Canadians” can be updated if a particular department fails to provide correct information the first time. But perhaps most importantly, at least for the purposes of this thesis, inscriptions that are combined with written texts can merge with corresponding happenings “out there.”<sup>32</sup> For example, Canada’s first *Immigration Act* of 1906 provided the first legal mechanisms allowing the *Department of the Interior* to exclude and deport anyone deemed to be “undesirable” according to a detailed definition that included the “feeble-minded,” “idiots,” and those who had experienced an attack of insanity within the last five years, or been infected with a “loathsome disease” (syphilis) or a contagious disease, “paupers,” “professional beggars,” “vagrants” and those convicted of a crime of “moral turpitude.” It was a melding of the paper world and the port-of-call world. An “undesirable” (on paper) underpinned efforts to stop them at the crossing point (out there).<sup>33</sup> These kinds of

---

<sup>32</sup> Bruno Latour, “Visualization and Cognition: Drawing Things Together,” 18-20.

<sup>33</sup> Another example would be the U.S. Johnson Quota Act of 1921. Limiting the annual number immigrants admitted to 3% of the 1910 census, too many immigrants (numerically) combine with efforts to stop them at the crossing point. Nagi provides an extended account the Johnson-Reed Act of 1924 in Part One, “The Regime of Quotas and Papers,” of Mae M. Ngai, *Impossible Subjects: Illegal Aliens and the Making of Modern America*.

inscriptions exemplify how a hard distinction between “reality” and “representation” falls apart—paper and port work together to produce “the real.”

### Outline of Chapters

The chapters that follow provide a partial outline of how the reality of migration has become matter of fact—a fact that might more usefully be labeled a matter of concern.<sup>34</sup> I claim only to provide a partial account, like so many genealogies, but nonetheless an empirical one. In the chapter “Conditions of Visibility” I describe how both Classical political economy and Ecology provided the context for intensified studies in movement. I begin with the curious history of studies of bird migration. Following this introduction, this chapter provides two counter-histories of migration, what I am calling “mobility without migration.” I first describe the role of the parish and the management of the indigent, then work to outline the theorization of population (or populousness) given to political oeconomy. Following these two examples, I recount Foucault’s description of the “Modern Episteme,” a useful starting point as it describes Life and Labour as guiding categories in the modern era.<sup>35</sup> With Ecology, the proliferation of work on animal and bird migration during the mid-to-late 19<sup>th</sup> century served as a precursor to studies into human movement, coming decades later. The epistemological preoccupation with the category of Life, unrealized until then in Natural History, focused attention toward how movement (of all kinds) served deeper functions that could be discovered

<sup>34</sup> Bruno Latour, “Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern,” *Critical Inquiry* 30 (2004): 225–48; Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory*, vol. Clarendon lectures in management studies (New York: Oxford University Press, 2007).

<sup>35</sup> See Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*.

through careful observation. I also argue that as Labour became the guiding object of analysis in classical political economy, human movement was re-theorized away from an abnormal activity, draining resources from a state, towards an activity undertaken by self-maximizing and productive agents.

My chapter “Practices of Inscription” describes how an investment in living systems (outlined just above) was mirrored through practices of analysis and recording of movements. Again, through a brief account of studies into bird migration, I outline how inscriptive practices helped bird movements appear as a definite reality. I then describe Ravenstein’s “Laws of Migration” and its place in history as representative of an emerging field of inquiry. I work to unwind his representation as strands of a larger statistical movement under way to record movement and understand migration. As stated above, Ravenstein depended heavily upon the work of the Register General’s Office and the Census Reports. I also tie his work to the shift occurring mid-century towards inductive reasoning: laws of migration were determined within an epistemological grounding in life and truth within it. Following this work, I describe the “internationalization” of statistical practice through the work of the International Statistical Congress and Institute, as well and the work of the International Labour Organization. I outline here the first “international” work on migration and provide a brief account of the evolution of statistical accounts of human movements, ending with the work of the International Labour Office in the 1920s and the first aggregation of global statistics on movement. The chapter ends by outlining the particular abstractions implicated in migration statistics.

## Chapter 2: For the Birds! Or, Life and Labour into the Modern Period

---

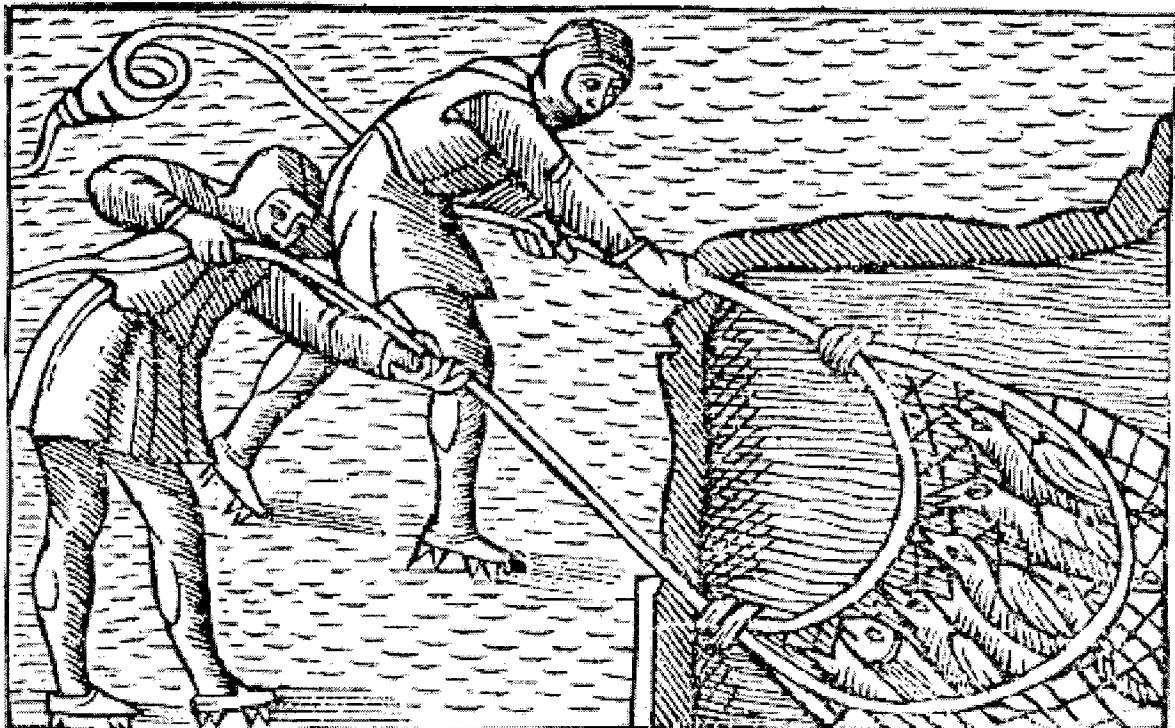
They try their fluttering wings, and thrust themselves in air,  
But whether upward to the moon they go,  
Or dream the winter out in caves below,  
Or hawk for flies elsewhere, concerns not us to know.

—John Dryden (1631-1700)

---

### How to Learn from Bird Migration

---



**Figure 2: Hibernating Swallows Caught by Fishermen, from Olaus Magnus' "History of the Northern People" (1555).**<sup>36</sup>

---

<sup>36</sup> Magnus writes: “Although memorable writers on many subjects of natural history have related that Swallows change their abode, that is, seek warmer countries on being greatly pressed by winter, yet in Northern waters, by the chance of a fisherman, Swallows are often drawn out in a kind of rolled-up lump, which, when about to descend into the reeds after the beginning of autumn, have bound themselves together—mouth to mouth, wing to wing, foot to foot. Moreover, it has been remarked that they at that season, their very sweet song being finished, descend, and peacefully, after the beginning of spring, fly out thence and reseek their old nests or make new ones with their natural diligence. But if that lump be drawn out by ignorant young men (for old and expert fishermen put it back) and carried to a warm place, the Swallows, loosened by the access of heat, begin to fly about, but live only a short time, giving proof that

After hundreds years of being dissected, typologized, illustrated and placed (living and stuffed) into private collections, a peculiar thing happened to birds during the 19<sup>th</sup> century—through the eyes of ornithology at least. All at once, the weight of the encyclopedists' wisdom lifted, and the anatomist's plodding search for structure gave way. Direct observation of individual birds and their habits took off. Ornithologists were suddenly writing about birds' "wanderlust," examining their innate knowledges of "highways of the air,"<sup>37</sup> and investigating the nature and extent of their sophisticated meteorological awareness. A new kind of interest descended on birds during the 19<sup>th</sup> century, and they were—for the first time—investigated as migratory creatures.

For modern readers in biology, the concept of migration is so central that *not* to possess knowledge about it seems ridiculous, almost impossible. Yet, as it turns out, for most of its history, ornithology provided no sustained analysis of migration. As late as 1802, for instance, George Montagu's text, *The Ornithological Dictionary; or, Alphabetical Synopsis of British Birds*, did not even contain an entry for "migration," although the word does appear in passing reference to a few specific birds. By the time the second edition was published in 1831, Montagu had written an entry on Migration, stating that the "migration of birds is a curious fact which no one denies, though we have not wanted for incredulous persons who believe the nightingale was found in every hedge during the winter."<sup>38</sup> Naturalist and historian Ernest Ingersoll noted in 1923: "It is hardly more than a century ago that intelligent men abandoned the belief that certain birds

premature birth is to be guarded against." As quoted in William Eagle Clarke, *Studies in Bird Migration*, vol. 1 (London: Gurney and Jackson, 1912), 7.

<sup>37</sup> J.F. Naumann's 1846 phrase, as quoted in *Ibid.*, 20.

<sup>38</sup> George Montagu, *The Ornithological Dictionary; Or, Alphabetical Synopsis of British Birds*, vol. 1 (London: Bensley, 1802); George Montagu, *Ornithological Dictionary of British Birds*, 2nd ed. (London: Hurst, Chance, and Co., 1831).

hibernated in hollow trees, caverns, or even buried themselves every autumn in the mud at the bottom of ponds...recovering [themselves] in the spring.”<sup>39</sup> In fact, what has been called Immersion Theory was so prominent for so long that scientific giants Carl Linnaeus (1707–1778)—the “father” of modern taxonomy—and Georges Cuvier (1769–1832)—French Naturalist and major contributor to comparative anatomy—both attributed the disappearance of birds at certain times of year to hibernation in swamps and lakes.<sup>40</sup> Accounts of immersion, like those transmit by Olaus Magnus (see *Image 2*), percolated down through the ages, unsubstantiated and largely unchallenged; they even graced the pages of the *Philosophical Transactions of the Royal Society*.<sup>41</sup> Equally puzzling for modern readers is the theory of transmutation, popularly attributed, for example, to the barnacle goose. It was widely held that the barnacle goose began as a cluster of freshwater barnacles on driftwood, but mutated into goose form given sufficient time, and would mutate back into barnacles as required. (Other accounts have them growing from fruit trees or flowers).<sup>42</sup> The transmutation of the barnacle goose was taken so seriously that it was the subject one of the first papers presented to the Royal Society of London in the mid 17<sup>th</sup> century, (only to be discredited a little while later by Leonhard Baldner who dined on two such geese one evening after they failed to mutate following almost a year in his captivity).<sup>43</sup>

While amusing to us today, what is telling about these and other accounts is not so much the *lack* of knowledge as the *type* of knowledge that they highlight. When

---

<sup>39</sup> Ernest Ingersoll, *Birds in Legend, Fable and Folklore* (New York: Longmans, Green and Co, 1923).

<sup>40</sup> See William Eagle Clarke, *Studies in Bird Migration*, 8-9.

<sup>41</sup> See Robin Baker, *The Mystery of Migration* (London: Macdonald, 1980), 8-9.

<sup>42</sup> *Ibid.*, 10-12.

<sup>43</sup> E.G. Allen, “The History of American Ornithology Before Audubon,” *Transactions of the American Philosophical Society* 41, no. 3 (1951), 418-20.

migration did enter the vocabulary of Natural Historians, it exited on the same plane as other competing accounts of bird life and natural structures, all flowing from the great collection of the encyclopedists' work of the 16<sup>th</sup> century. In this period, compendia of knowledge freely mixed fanciful myths with accounts of structure and use. The natural historian, as Foucault articulates it, was "to establish the great compilation of documents and signs—of everything, throughout the world, that might form a mark, as it were."<sup>44</sup> We see this perspective at work in the ornithological work of Swiss Conrad Gesner (1516-1565). His *Historia Animalium*—published in five parts, the third devoted to describing 217 birds—covered anatomical descriptions, distribution, habits and the information about each bird's place in literature and mythology.<sup>45</sup> Similarly, the Italian Ulysses Aldrovandus (1522-1605) described his own ornithological work as follows:

I have supplied the names of the birds not only in Greek and Latin but also in Hebrew, Arabic and Italian, and in short all the known languages. I have described the birds and figured those I have had an opportunity of drawing. I have illustrated their nature and habits, have dwelt upon their food, the manner in which they are captured, and how they may be best preserved; likewise the nourishment they afford, their use as medicine, their employment on emblems, symbols, and images and in sacred and profane mythologies, and on coins, in proverbs and hieroglyphics.

Indeed, "whatever can be usefully said upon birds may be found here"<sup>46</sup>—except anything comprehensive about migration. If the question of why birds disappeared arose in these texts at all, accounts of transmutation, hibernation and migration all existed together: no rigid distinction appears between types of information; descriptive accounts mixed freely as representatives of the hidden truth within, demonstrated in myth and folklore. In some cases, as for Aristotle (likely the originator of both hibernation and

---

<sup>44</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, 130.

<sup>45</sup> E.G. Allen, "The History of American Ornithology Before Audubon," 403.

<sup>46</sup> As quotes in Ibid., 404.

transmutation theories), exactly what they did to disappear was a matter of choice for many birds.<sup>47</sup>

For Classical writers—a periodization I draw from Foucault’s *Order of Things*—structure and comparisons became the objective of Natural History, producing a different kind of knowledge from the way the modern study of biology is approached and understood. Pierre Belon (from whom *Image 1* of this thesis was taken) made breakthroughs in comparative physiology, describing the common structures of both birds and humans. His great work the *Histoire de la Nature des Oyseaux* was divided as follows: *De la Nature des Oyseaus; Vivant de Rapine; Qui ont le pied plat et nagent sur les eaux; Qui n’ont le pied plat; De Campagne, qui font leurs nids sur terre; Qui Habitent Indifferent en tous lieux, et paissent de toutes sortes de viands; Des Oysillons que Hantent Les Hayes buschettes, et buissons*.<sup>48</sup> But again, if he had any awareness about migration or even V-shaped mass movements of birds, or why his objects of research disappeared seasonally, it is either not apparent or permanently obscured in his production of tables and lists of the visible and nameable. The ornithologists of this period were unconcerned with developing accounts of why and how certain behaviors existed. The ornithological dream team of John Ray and Francis Willoughby collected a huge number of drawings—selected for their true likeness to living samples—as they did not plan to amass a collection of specimens.<sup>49</sup> But their achievement and legacy persists because of their rigorous classification techniques and their detailed accounts of the structure and anatomy of the birds they studied. In his history of ornithological studies, J.

---

<sup>47</sup> Aristotle *Historia animalium* was translated in to Latin by the Scotsman Michel Scot during the 13 century. Aristotle persisted well through the 16<sup>th</sup> century as a relevant authority in Natural History.

<sup>48</sup> As quoted in Ibid., 411.

<sup>49</sup> Ibid., 419.

Haffer notes that Willoughby and Ray “based their classification of birds almost exclusively on form (structure) rather than function, mainly on the shape of the beak, the structure of the foot and body size.”<sup>50</sup> As such, Willoughby reported on the disappearance of birds with seeming *indifference* to it as a scientific problem:

What becomes of the Swallows in winter time, whether they fly into other countries, or lie torpid in hollow trees and the like places, neither are natural historians agreed, *nor indeed can we certainly determine*. To us it seems more probable that they fly away into hot countries, viz., Egypt, Ethiopia, etc., than that they lurk in hollow trees, or holes in rocks and ancient buildings, or lie in water under ice in northern countries.<sup>51</sup>

Ray epitomizes Foucault’s articulation of fixism in the Classical Period, in evidence when he concludes, “The number of true species in nature is fixed and limited and, as we may reasonably believe, constant and unchanging from the first creation to the present.”<sup>52</sup> His work is yet another example that exposes how Natural History was consumed with the identity and difference of and between beings, not their relation to the environment, and certainly not the inner mechanisms that made up function and living systems the way that the study of biology is today.<sup>53</sup>

Why was there such an absence of discussion about migration, and why did ornithologists pay so little attention to exploring the functions, drives, or inner structures of birds? In short, the type of knowledge being produced and the epistemological barriers that it created did not permit sustained analysis of the movement of birds. As Foucault has demonstrated, and what has been illustrated above through various

---

<sup>50</sup> J Haffer, “The Development of Ornithology in Central Europe,” *Journal of Ornithology* 148 (2007), 131.. Note that the articulation of structure is visible in almost any Natural History print from the 17<sup>th</sup> and 18<sup>th</sup> century: their subject matter is depicted with great attention to the details of structure, giving equal priority to all parts.

<sup>51</sup> As quoted in William Eagle Clarke, *Studies in Bird Migration*, 11. Emphasis is mine.

<sup>52</sup> J Haffer, "The Development of Ornithology in Central Europe," 131.

<sup>53</sup> See Chapter 5 Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*.

examples, behaviour was secondary to bird identification (if not entirely incidental, or even irrelevant); the preoccupation with classification meant that questions about migration stood tangentially to taxonomy. This is evident even in the occasional text that mentions migration. In the physio-theological studies of Johann von Pernau, for instance, he distinguished between migratory, non-migratory, and partially migratory birds, but went no further than suggesting "some secret impulse" as the cause.<sup>54</sup> His classification using "migration" was just that, a taxonomy that distinguished birds that traveled from those who did not. This, quite naturally, had practical and "real" consequences.

Curiously, and as a result, migration only emerged as a research object in what were considered "unscientific" works, the writings of amateur field naturalists of the early 19th century,<sup>55</sup> who studied birds in their natural environment, observing and recording their actions and tendencies. It was teachers, clergy, and lay enthusiasts who made the first important "discoveries" related to migration.<sup>56</sup> It was at J.A. Naumann's aviary in 1795, for example, that revealed seasonal "restlessness" in the species he kept; painter Heinrich Gätke who studied migration on the island of Heligoland from 1837 onward, becoming known by both English and German ornithologists as one of the foremost authorities on the subject;<sup>57</sup> Danish school teacher Hans Mortensen, who is credited in the 1890s with the first major breakthrough in tagging (or "ringing") birds to observe migration over long distances—hunters faithfully returned his rings, noting the

---

<sup>54</sup> J Haffer, "The Development of Ornithology in Central Europe," 135.

<sup>55</sup> For an extended discussion and history of the role of amateurs in ornithology, see JJD Greenwood, "Citizens, Science and Bird Conservation," *Journal of Ornithology* 148 (2007): 77-124.

<sup>56</sup> J Haffer, "The Development of Ornithology in Central Europe," 138.

<sup>57</sup> Erwin Stresemann, *Ornithology From Aristotle to the Present* (Cambridge, Mass: Harvard University Press, 1975), 333; Heinrich Gätke, and Rudolph Rosenstock, *Heligoland as an Ornithological Observatory: The Result of Fifty Years' Experience* (Edinburgh: D. Douglas, 1895).

location where his birds were killed;<sup>58</sup> and it was painter and poet Heinrich Krueger who helped locate the famed bird observation point at Rossitten in Prussia.<sup>59</sup> These and others are now written in as part of the background of modern scientific understandings of migration, but their “discoveries” were a production from outside.

The point here, then, is that bird “migration” both has and has not always existed. Its conceptual realization was just as bound to the epistemological landscape as the birding one. This is therefore *not* the story of gradual transformations in the scientific process, the story of silly taxonomists who thought birds might as well bury themselves in muddy lake-bottoms for all they cared, and the brilliant, underappreciated amateurs working in the “field.”<sup>60</sup> Rather, this is the story of knowledge and non-knowledge. It took a break in how knowledge was constructed, a new way of looking at structures and functions, for migration to appear as part of something relevant to more than a specific bird, to be seen as part of a larger, general phenomenon. This is more than saying “we have moved past” Natural History; it is recognizing that classical Natural History, for a long time, was about other things altogether. This is where there is something to learn from bird migration—in looking at both its absence and its presence as a concept and object of inquiry. If the presence of bird migration, surely a “natural” kind of movement, can fail to appear to those studying birds in great detail, so then it becomes possible that human migration might too fail to appear as fact, phenomenon, and force.

---

<sup>58</sup> P Berthold et al., *Bird Migration: A General Survey* (Oxford University Press, USA, 2001), 12.

<sup>59</sup> W Fiedler, “Vogelwarte Rossitten: Ornithology on the Courish Spit Between 1901 and 1944,” *Avian Ecol Behav* 7 (2001), 4.

<sup>60</sup> This is the distinction drawn by in the history of ornithology provided in J Haffer, “The Development of Ornithology in Central Europe.”

This chapter describes the conditions of visibility present at the emergence of migration as an object of inquiry. I will begin by examining two examples of mobility without migration: “Paupers, Parishes and the Poor”—a look at how the non-circulation of the poor proved expedient within an alternative theorization of economy—and “Mercantilism and the Population”—a brief exposition of classical notions on populousness and colonization. As with the ways in which hibernation and transmutation were perpetuated as legitimate theories to explain the seasonal absence of birds, alternative theories of human movement were possible and indeed persisted. I provide these two examples of mobility without migration as juxtaposition to more modern intellectual traditions, that we may otherwise fail to recognize; namely, the way that today migration or freedom of movement is considered to be inextricably bound to economic and social health. This notion is so strong that the European Union describes it as one of its Four Freedoms, dozens of international agreements have been formed to protect and regulate it, (such as those policies and accords which seek to provide safe transit and treatment for labour migrants), and research centers spend millions trying to decipher its economic and social impacts. Following these two counter examples, I describe how 19<sup>th</sup> century classical political economy contextualized the intensified study of mobility, and how, following Foucault, modern categories of Life and Labour proved useful guides for theorizing human movement away from a consideration of it as an abnormal activity that drained resources from a state, and spread indigence and idleness, towards an activity undertaken by self-maximizing and productive agents. I then spend the last section of this chapter describing the interface between what would become “migration” and the emergence a notion of “the economy.”

---

### Mobility without Migration 1: Paupers, Parishes, and the Poor

---

The treatment of vagrancy within Europe generally, and the proliferation of parish workhouses and poorhouses in Great Britain under the 1662 *Act of Settlement* specifically, clearly illustrate how free mobility and economic health have not always been deeply associated with each other. The idea that migration is endogenic to the economy is absent, and movement was not theorized as a right, a necessity, or as possible method of ameliorating quality of life or economic power. I demonstrate how poverty was not understood as something that might be overcome by mobility, and how the poor were in fact subject to demobilizing controls under the belief that such restrictions would prevent or reduce further social decay. The poor, their movement, and the health of local economy were separate, and individual mobility, especially of those in need of work, was contrary to healthy social and economic relations. This formulation represents more than a simple freedom withheld; it is an ulterior problematization of what movement means; it is an absence of theorizing migration.

Following the English Restoration (1660), the treatment of the poor once again became a local affair, wrested away from the Crown and its direct administration and interferences through Justices of the Peace.<sup>61</sup> The 1662 *Act of Settlement* gave local parishes the power to manage the movements of those who would potentially fall in need, both local residents and those coming from other locations. With this, “the whole of the

---

<sup>61</sup> Polanyi outlines this transition in more detail than is necessary here, see Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, 2nd Beacon Paperback ed ed. (Boston, MA: Beacon Press, 2001).

laboring classes throughout the country were thus subjected to a restriction, which has previously had been applied only to the idle and the important—the vagrant, whose vicious habits it was necessary for the well-being of the community to punish and restrain.”<sup>62</sup> The law empowered the local parish to eject foreign paupers (i.e. those whose “settlement” was not that of the local parish) to prevent further influxes, while requiring locals to demonstrate both that they were settled there, and that they were legitimately in need if they were requesting any relief. This move greatly expanded the purview of the Poor Laws: no longer limited to dealing only with “idle vagrants,” the *Act of Settlement* expanded the purchase of the law to all those renting property worth less than £10 a year, the majority of British subjects at the time.<sup>63</sup> While convicted vagrants were once simply marked with a V (branded in their flesh), the laws of settlement hugely increased control over movement for the majority of the population, through possible denial of assistance and forcible removal of those who strayed from their home parish of settlement. The “1662 act allowed parish officers to prevent inter-parochial migration by most Englishmen.”<sup>64</sup>

It was not until 1795 that removal from a parish first required an individual actually to become a public charge.<sup>65</sup> (Two years previous to this, the law became such that membership in a Friendly Society—a version of a private social insurance scheme—afforded the same protection from summary removal). But from 1662 until 1795, an

<sup>62</sup> George Nicholls, *A History of the English Poor Law, in Connection With the State of the Country and the Condition of the People.*, vol. 1 (London: King & Son, 1904), 285.

<sup>63</sup> N Landau, “The Regulation of Immigration, Economic Structures and Definitions of the Poor in Eighteenth-Century England,” *The Historical Journal* 33, no. 3 (1990): 541-72; N Landau, “Who Was Subjected to the Laws of Settlement? Procedure Under the Settlement Laws in Eighteenth-Century England,” *Agricultural History Review* 43, no. 2 (1995): 139-59.

<sup>64</sup> Ibid., 140.

<sup>65</sup> George Nicholls, *A History of the English Poor Law, in Connection With the State of the Country and the Condition of the People*, vol. 2 (London: King & Son, 1904), 112.

individual without a demonstrable settlement could be removed from the parish based on the mere *suspicion* that they would one day become a charge. Until then, the law remained consistent in curtailing movement. For example, from 1697 onward, individuals could only move from parish to parish provided their settled parish issued a certificate guaranteeing that it would provide relief if the settler were ever to become a public charge. Certificates were difficult to obtain, as home parishes would effectively lose a community member while retaining the burden of their welfare. Following a 1698 parliamentary decision, even certified immigrants paying rates and taxes at a new parish could be continually denied settlement by that parish,<sup>66</sup> thus further reducing the ability to relocate legally.

For those who found themselves in need within their settled parish—and could prove settlement—the workhouse was often their only option for receiving relief. As Dorothy Marshall has argued:

By 1722 [the year which allowed multiple parishes to combine workhouses]...a general belief in the efficacy of workhouses to deal with poverty [presided]. It was chiefly interesting as marking a transition between the solicitude which required that work should be found for the Poor, and the harsh determination of the eighteenth century to compel the Poor to work. The workhouse was a favourite panacea for all the social ills of the eighteenth century... It was also hoped that the establishment of workhouses would do something to deal with the question of vagrancy by way of both prevention and of cure.<sup>67</sup>

While in the 19<sup>th</sup> century work was the objective in dealing with the poor, for the duration of the 18<sup>th</sup>, work was merely the best method for curing the social ills associated with vagrancy. Foucault has made this point in his history of madness and confinement: "In

---

<sup>66</sup> N Landau, "Who Was Subjected to the Laws of Settlement? Procedure Under the Settlement Laws in Eighteenth-Century England," 141.

<sup>67</sup> Dorothy Marshall, *The English Poor in the Eighteenth Century: A Study in Social and Administrative History*. (London: Routledge & K. Paul, 1969), 47-48.

classical thought, the power that labour was believed to possess to make poverty disappear came not from its productive capacity but from a sort of moral enchantment. The effectiveness of laws perceived as deriving from its ethical transcendence.”<sup>68</sup> Work was less something that produced and more something that restrained and ordered.

George Nicholls has argued that “settlement” was the key category for determining the right to relief,<sup>69</sup> but we should extend this to include settlement as a key category that determined the possibility of “mobility” and “migration.” While not restricting movement entirely, (as people did still move), “settlement” and its significant purchase over movement help demonstrate the absence of a more abstract notion of people’s right to mobility and the concept of “migration.” This is evident in several ways. For one, the movement of individuals was not theorized on a generalized or abstract plane. This is precisely the argument made by Vincent Denis in his work on “The Invention of Mobility and the History of the [French] State.”<sup>70</sup> While not taking up “migration” as such or dealing with the English case, his demonstration of “how the abstract notion of mobility was born in the context of a concert of administrative and police practices”<sup>71</sup> serves as a useful and parallel comparison. Denis does this through examining the practices of local collection and aggregation of information on *specific* mobile subjects—in France, the poor, soldiers, and workers—rather than the existence of a generalized and singular category of “the mobile.” Denis argues that the administration of specific movements “remained faithful to the mercantilist imperative that viewed the

---

<sup>68</sup> Michel Foucault, *History of Madness*, trans. Jean Khalfa (New York: Routledge, 2006), 69.

<sup>69</sup> George Nicholls, *A History of the English Poor Law, in Connection With the State of the Country and the Condition of the People*.

<sup>70</sup> Vincent Denis, “The Invention of Mobility and the History of the State,” *French Historical Studies* 29, no. 3 (2006): 359-77.

<sup>71</sup> Ibid., 360.

population as a resource to be mobilized... [while not creating a] single category of mobile population." That is, not until a territorial rather than jurisdictional conception of sovereignty emerged in the late 18<sup>th</sup> century following the French Revolution. For a generalized and abstract category of "mobility" to emerge—and likewise for "migration"—a centralization of information on movement had to occur, along with the partial erasure of parochial identities and the nationalization of the French people. In other words, for Denis, "the invention of the concept of mobility in France is...inseparable from the history of the French state and its administration."<sup>72</sup>

While putting specific social groups into their *proper place* is perhaps endemic to government of all sorts, with respect to the poor during the 18<sup>th</sup> century this is especially true. In one of many examples, legislation was passed in 1713 "For reducing the laws relating to Rogues, Vagabonds, Sturdy Beggars, and Vagrants, into one Act, and for the more effectual punishing such [group] and sending them whither they was born." This is in stark contrast to modern theories that claim benefits lie in relocating the poor to where they are needed. As William Walters has demonstrated, it was not until the later 18<sup>th</sup> century that the unemployed were discursively separated from the condition of unemployment. Lack of work would be only be transformed from a problem of the individual to that of industry and surplus labour late in the century.<sup>73</sup> Until this time, however, what stands in the place of a notion of a "national economy" is more a parochial moral economy, where local space is equated with moral (and healthy) space, rather than the more contemporary figuration where national health is found through the individual's ability to adapt to changing situations (and locations).

---

<sup>72</sup> Ibid., 376.

<sup>73</sup> William Walters, "The Discovery of 'Unemployment,'" *Economy & Society* 23, no. 3 (1994), 273-74.

What is important here is the problematization of mobility, rather than the actual restrictions that were placed upon it.<sup>74</sup> Mobility was not theorized as a normal or healthy activity. It was understood as something done under special circumstances. The movement of vagrants during the 18th century was thus theorized on the scale of the individual pauper as it related to the social body, as a contaminant, as one who would perpetuate idleness and other social ills; it was not theorized at the scale of generalized employment as it related to “the economy” in terms of the effects of unemployment, the production of capital, and the like. As Polanyi argued, it was not until the end of the 18th century that labour and land became themselves objects of commerce.<sup>75</sup> With respect to labour, it took the advent of the Speenhamland Law—1795-1834—for a national labour market to be created, facilitating the circulation of labour and significantly eroding the parish system of poor relief. The Speenhamland Law opened a labour market on the national scale. And late in the 19<sup>th</sup> century, the labour exchange and national unemployment insurance would act as key technologies: insurance would manage the necessary down turns given to industrial organization and labour exchanges would ensure an appropriate matching of the supplies of labour to the demands of industry.<sup>76</sup> With these and others re-conceptualizations, movement and something called *the economy* began to consort with each other in positive territory. But not before the 19<sup>th</sup> century.

---

<sup>74</sup> Landau, among others, notes the effectiveness of the various restrictions on movement has been long debated in historical studies.

<sup>75</sup> Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, 73.

<sup>76</sup> William Walters, "The Discovery of 'Unemployment,'" 278.

---

## Mobility without Migration 2: Mercantilism and Population

---

In his satirical 1729 essay “A Modest Proposal,” Jonathan Swift takes aim at what he earlier identified as the “undisputed maximum in government, ‘That people are the riches of a nation.’”<sup>77</sup> Making a forceful argument that the sale and consumption of soon-to-be beggar children at the age of 12 months would not only reduce the general burden of poverty, but also provide a tidy profit of eight shillings to the mothers (“rags included” in the calculation of net earnings), Swift underscores how Great Britain’s efforts under mercantile maxims had led Ireland to a state of misery and poverty. That is, uncontrolled population *had* become a loss, not only of wealth but also through its production of misery.<sup>78</sup> This desire for a high density of population—in order to keep wages low and manufacturing cheap—had, for Swift, led many directly into the dismal conditions of pauperism and theft.<sup>79</sup> The rationalization of production that held a dense population (or the state of “populousness”) most dear inspired, by the early 18<sup>th</sup> century, a number of critiques on sovereign knowledge of economic processes. These critiques, and the emergence of Classical political economy, led to the introduction of what Foucault and others argued to be the internal limits of government<sup>80</sup> and new concepts about naturalness in economic processes, all of which contradicted what would be rethought as the artificiality total sovereign knowledge expressed.<sup>81</sup> The type of thought Swift was satirizing (grouped under the term “mercantilist”) represents a theorization antithetical to

---

<sup>77</sup> Louis Landa, “"A Modest Proposal" and Populousness,” *Modern Philology* 40, no. 2 (1942), 161.

<sup>78</sup> Jonathan Swift, *A Modest Proposal and Other Satires*, Great Minds Series (Amherst, N.Y: Prometheus Books, 1995).

<sup>79</sup> Louis Landa, “"A Modest Proposal" and Populousness,” 161-63.

<sup>80</sup> Michel Foucault, *The Birth of Biopolitics: Lectures At the Collège De France, 1978-79* (London: Pelgrave Macmillan, 2008), 10-16.

<sup>81</sup> Michel Foucault, *Security, Territory, Population: Lectures At the Collège De France 1977-1978* (New York: Palgrave Macmillan, 2007), 349.

more modern notions of population fluidity and intermingling as they relate to economic health. It is a second example of mobility without migration.

Far from the modern concerns about the *production* of wealth, or Ricardian ideas of humans as the *origin* of wealth and the possibility of their limitless production of it, the classical period rendered wealth as a share of a global fixed limit,<sup>82</sup> providing the conditions for political oeconomy and its particular rationalizations over production. For Keith Tribe, this body of knowledge concerned itself chiefly with proper circulation within the state; that is, the “maintenance of all objects of administration in their proper place,” quite different from the “modern economic sense of the term which concerns the allocation of the product to economic agency who are placed not by some prior social order but by their contribution to the process of production.”<sup>83</sup> Denis Meuret, using the language of an “economics of absolutism” rather than political oeconomy, describes this period as one in which the state was responsible for making commerce contribute to the people’s happiness and the nation’s strength,” rather than the modern Smith-derived conceptualization where the public determines the nature of economic interaction, the ones who determine the nature of the rules of the economy.<sup>84</sup>

The chief object of a properly ordered state was the outcome of low-priced goods—widely understood to be a “national advantage.” Such an order was of the utmost importance for producing favorable flows of trade, which in turn produced inflows of real wealth in the form of precious metals. The direct ordering of production (which included population) towards this national advantage was vital for further exchanges and thus for

---

<sup>82</sup> M. Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Routledge, 2001), 189-191 & 275-278.

<sup>83</sup> Keith Tribe, *Land, Labour, and Economic Discourse* (London: Routledge, 1978), 81-82.

<sup>84</sup> D Meuret, “A Political Genealogy of Political Economy,” *Economy and Society* 17, no. 2 (1988), 231.

increasing a share in the world's supply of real wealth, thereby strengthening the holdings of the sovereign and state;<sup>85</sup> to "doe yearly export the overplus to forraign Countries...to encrease our wealth and treasure is by Forraign Trade..." argued Thomas Mun in 1664.<sup>86</sup> By this logic, population was a direct means of production that should be ordered towards a national end; a series of hierarchical orders and classes, not a set of equivalent units; and which needed to be managed in such a way that would ensure the survival of the whole.<sup>87</sup>

A key idea here is that, like other resources, subjects were, en masse, an entity that could be ordered and composed by the state for a specific purpose. There was no concept of wealth (or value) being located *within* human production; wealth was acquired, not produced. The problem of mobility was, then, a problem to be theorized on the level of *specific* migrations *as they related to a generalized ordering of the state.* Would this, or that, or any specific movement of people help produce a national advantage? As the merchant and "mercantilist" Josiah Child argued in this matter:

Plantations [and colonies] being at first furnished, and afterwards successively supplied with People from their Mother-Country, and People being Riches, that loss of People to the Mother-Country...*is certainly a damage, except the employment of those People abroad...do cause the employment of so many more at home in their Mother-Kingdoms.*<sup>88</sup>

---

<sup>85</sup> Joseph Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1961), 359.

<sup>86</sup> Thomas. Mun, "England's Treasure By Forraign Trade," in *Teachings From the Worldly Philosophy*, ed. Robert Heilbroner (New York: Norton, 1997), 25.

<sup>87</sup> Bruce Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875* (Toronto: University of Toronto Press, 2001), 508; Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: University of Chicago Press, 1998), 287.

<sup>88</sup> As quoted in Louis Landa, ""A Modest Proposal" and Populousness.". Emphasis is mine.

For Child and his contemporaries, migrations were acceptable or permissible on the condition that subjects leaving (or arriving) were ultimately contributing to the general wellbeing of the state through providing fully productive and cheap labour.

No logic of migration appeared to have been present other than how isolated and specific movements of people might be pictured in the overriding project of accumulating national wealth; how movements added and subtracted to the strength of the state and affected the degree of national populousness. Put another way, and to again draw upon Denis's work, the state's imperative was to understand, monitor, and account for the movements of *specific categories of people* (soldiers, workers, seafarers, the poor, etc.) as they specifically related to state administration; the movements of particular kinds of people were judged and observed only as they related to the strength of the state.<sup>89</sup>

Foucault also identifies and notes that the idea relating the number of inhabitants to the strength of state flourished during the 17<sup>th</sup> century. In his account of police and *raison d'État*, he summarizes how the problematization of the day circulated around how the relations between men, territory, resources and wealth could be organized for sovereign benefit; how best to distribute subjects for the maximization of sovereign economy.<sup>90</sup> No logic internal to the population was supposed to exist and therefore did not demand attention; as such, migrations were framed only as a possible threat to the control and stability of the state or sovereign, not as a phenomenon that naturally occurred, and even less often as something that might organically benefit a nation's economy.

---

<sup>89</sup> Vincent Denis, "The Invention of Mobility and the History of the State."

<sup>90</sup> Michel Foucault, *Security, Territory, Population: Lectures At the Collège De France 1977-1978*, 70-72 & 323.

Three quarters of a century after Swift's proposal, and in what reads almost as a direct response to the conditions Swift describes, Thomas Robert Malthus attacked the objective of populousness. Beyond his well-known warnings about overpopulation, Malthus' discourse helped fracture the theoretical equation of population to national wealth, national wealth with exchange for share of global wealth, and global wealth with wellbeing. While political oeconomy equated population with the riches of the nation, classical political economy re-posed population as a problem to be managed alongside, and given to, the fixity of economic production. Taking a cue from the Physiocrats, Malthus underscored the given *reality* of production and its unconditional dictates upon the population. Not only would the increase in population threaten the community with poverty, but its density would also no longer be something which government could ultimately control. Population had forever been tugged away and forced into conceptual reconciliation with the phenomena of the economy and market conditions. Even for the anti-Malthusians who attributed poverty to non-demographic factors or who claimed fertility to be independent of the factors governing economic production,<sup>91</sup> population remained a distinct force from that of the economy.

Even with this fracture, however, Malthus still did not theorize the problem of overpopulation with respect to emigration or mobility; overpopulation neither necessitated nor was it solved through a force of migration. The question of emigration for Malthus and his contemporaries like Jean-Baptiste Say, could not be anything more than an ephemeral solution to a problem which was rooted in the means of substance and moral development. Indeed, Malthus contended that it would be "but a slight

---

<sup>91</sup> Joseph Spengler, "French Population Theory Since 1800: I," *The Journal of Political Economy* 44, no. 5 (1936), 600.

palliative.”<sup>92</sup> Populations would continue to increase in density so long as people procreated freely and the means of subsistence allowed further density. Only education and moral restraint (sexual abstinence) could solve the problem of overpopulation—not direct attempts to de-populate—because fertility would always increase to the very limit of the means of subsistence.<sup>93</sup> Malthus goes on to argue:

There are no fears so totally ill-grounded as the fears of depopulation from emigration. The *vis inertiae* [force of resistance] of the great body of the people, and their attachment to their homes, are qualities so strong and general, that we may rest assured they will not emigrate unless, from political discontents or extreme poverty, they are in such a state as will make it as much for the advantage of their country as of themselves that they should go out of it.<sup>94</sup>

For Malthus, population is naturally resistant to movement and colonial efforts. For “a natural unwillingness of people to leave their native country, and a difficulty of clearing and cultivating fresh soil” leaves emigration as thoroughly inadequate remedy to overpopulation.<sup>95</sup> The ideal for which Malthus would have striven, if it were in fact possible, would be the successful de-population of the nation through colonization. Even this theorization, however, places migration as an activity *external* to the national population. It is, with much in common with mercantilist thought, a transfer affecting the social and economic conditions of a population from the outside. Movement, in the best-case scenario, would be a successful reduction in population density; it would not be movement *caused* by overpopulation, or by a natural impulse or desire present within that population.

---

<sup>92</sup> Thomas Robert Malthus, “An Essay on the Principle of Population,” <<http://www.econlib.org/library/Malthus/malPlong15.html>> (accessed Augest 15, 2008), Bk.III,Ch.IV, par III.IV.1.

<sup>93</sup> Joseph Spengler, "French Population Theory Since 1800: I."

<sup>94</sup> Thomas Robert Malthus, "An Essay on the Principle of Population," Bk.III,Ch.IV.

<sup>95</sup> Ibid., Bk.III,Ch.IV, par III.IV.19.

What, then, of the successful colonial projects and population transfers that occurred during the last two centuries, despite Malthus' pessimism about the efficacy of such activities? How, during the 19<sup>th</sup> century, did classical political economy theorize these population movements? The distinction held between "colonization" and "migration" is useful for these purposes; a distinction that primarily lies in the degree of internal force afforded to each kind of movement, and the role prescribed to government; both of which make migration the later invention. For classical political economy, colonization was still an activity to be undertaken by national governments. Migration, in contrast, was beginning to be assigned as a self-generating and internally contained force, similar to Smith's articulation of the "invisible hand" of the market at the end of the 18<sup>th</sup> century. Classical political economy, however, remained clear on the distinction between *laissez-faire* policies and colonization; for classical political economy of the early-to-mid 19<sup>th</sup> century, the efforts to expand national holdings and population distribution through colonies were activities that demanded government intervention. Migration, in contrast, was a force to be reckoned with, which again confirms that it was a later invention of that period.

The absence of a theorization of mobility is evident in what Brinley Thomas has identified as a persistent dualism in classical political economy which exists between a *static* theory of international trade and a *dynamic* theory of colonization, where consistent government intervention was thought necessary to circumvent the losses resulting from a natural tendency for levels of production to diminish over time.<sup>96</sup> While a comparative national advantage was used to justify free trade and a policy of *laissez-faire*, the theory

---

<sup>96</sup> Brinley Thomas, *Migration and Economic Growth: A Study of Great Britain and the Atlantic Economy*, 2 ed. (Cambridge: University Press, 1973), 3.

of diminishing returns and declining profits demanded a continued policy of colonization to circumvent losses. (Even for Adam Smith: “man is of all sorts of luggage the most difficult to be transported.”<sup>97</sup>) So while colonization was held to be an important factor in expanding markets and the gathering of resources—even essential for national economic health—it was also understood as an expensive endeavor that was not self-generating. Migration, in contrast, was to become itself a component of the national economy, late in that same century. The British government even went so far as to describe certain regions of the country as benefiting from a comparative advantage in the production of surplus population.<sup>98</sup>

Even for John Stuart Mill, colonization was an activity in which government intervention and assistance was imperative.<sup>99</sup> Mill publicly endorsed campaigns for “systemic colonization” as a founding member of the *Emigration Society* and regular attendee of *National Colonization Society* meetings.<sup>100</sup> Migrations (in the form of colonization) were seen as movements creating additional markets and access to additional resources for the improvement of the home country’s trade position; these non-competing groups would simply enlarge the field of the national economy. Population transfers in the context of colonization were therefore a kind *internal* transfer, since colonies were viewed as annexes of the colonizer’s national economic space—and therefore essentially the same place, not an “other” or “international” place. (This would radically change by the end of the 19<sup>th</sup> century, with the force of internal migration

<sup>97</sup> M.J. Greenwood, and GL Hunt, “The Early History of Migration Research,” 5.

<sup>98</sup> Cf. United Kingdom, *General Report, Census of England and Wales*, vol. IV, [C.3797] (London: Eyre and Spottiswoode, 1883), 50-51.

<sup>99</sup> Brinley Thomas, *Migration and Economic Growth: A Study of Great Britain and the Atlantic Economy*, 10-14.

<sup>100</sup> Donald Winch, *Classical Political Economy and Colonies* (Cambridge: Harvard University Press, 1965), 135-43.

starting to pre-occupy government and social scientific minds). While we now conceptualize colonization as a process of international movements, at the time these movements were conceptualized as movements within Britain's economic empire, not between "old" countries in Europe or elsewhere.<sup>101</sup> Colonization had not yet been reconciled with developing notions about migration.

---

### "Migration" into "The Economy"

---

What remains to be demonstrated is migration's conditions of visibility. To begin, and to recap the conclusions of "mobility without migration," the gulf between migration and political oeconomy—or between the realization of migration and the classical period—can be summarized in a few points. As the first example above demonstrates, the theorization of individual mobility domestically had yet to be nationalized; that is, to work at a national scale rather than a parochial one. The problem of *individual* and *domestic* movement was suspended within a parochial moral economy; movement was curbed at the crossing of every parish line. As the second example demonstrates, mobility understood in the form of colonization—what is broadly referred to as "international migration" today—was figured through a political arithmetic considering subjects, their place within the social order of things, and its affects on the strength of the nation as a whole. In short, political oeconomy set out to order international movement with the expectation of thorough knowledge and careful planning, such as it was considered an active policy for the enhancement of the state. It would have been an arithmetic of social

---

<sup>101</sup> Brinley Thomas, *Migration and Economic Growth: A Study of Great Britain and the Atlantic Economy*, 11.

ordering based on a vision for the future grounded in state ambitions, rather than an abstract calculation of equivalence between subjects, where each specific migration becomes tabulated as part of a larger phenomenon already and naturally taking place.<sup>102</sup> This is—as the next chapter will demonstrate—quite distinct from the numerical calculations of movement of the 19<sup>th</sup> century, where government reacted to, and attempted to modify these “natural” movements; migration would develop into part of the economic processes situated outside the possibility of total knowledge and planning.<sup>103</sup>

What, then, lay between realizing an economy of equivalents (modern economic subjects) based on a conception of economic processes understood to occur outside those directed by the state (in other words, a reality outside sovereign knowledge), and the movement of people as understood through the 18<sup>th</sup> century? What impediment prevented the observation of migration? Following Foucault, I argue that key to preparing migration’s maturity as a phenomenon outside government direction or parochial purview was the arrival of a unique epistemological terrain that allowed a depth of life and labour to be expressed and observed through social and scientific processes. In short, moving away from the classical period and its knowledge production that was based on the possibility of complete record and the generation of texts in which total representation of the observed was considered possible, and towards the expansive yet fragmented

---

<sup>102</sup> Bruce Curtis, "Foucault on Governmentality and Population: The Impossible Discovery," 508.; Also see Foucault on *Raison d'État*, police, the concern with circulation of goods and men's activities {Foucault, Michel Foucault, *Security, Territory, Population: Lectures At the Collège De France 1977-1978*, 325-26.

<sup>103</sup> This definition is an adaptation from that presented in the governmentality literature; I draw from it not so much for its actual articulation of the formation of “the economy” (something Ryan Walter and Ute Tellman rightly point out as wanting), but for what it adds to the question about epistemology, for which I hold it still quite strong. See Ibid.; Colin Gordon, “Governmental Rationality: An Introduction,” in *The Foucault Effect: Studies in Governmentality: With Two Lectures and an Interview With Michel Foucault*, ed. Graham Burchell et al. (Chicago: University of Chicago Press, 1991); R Walter, “Governmentality Accounts of the Economy: A Liberal Bias?,” *Economy and Society* 37, no. 1 (2008): lxv, 395; U Tellmann, “Foucault and the Invisible Economy,” *Foucault Studies* (2009).

knowledge production of the modern period.<sup>104</sup> The possibility of complete knowledge was less because of overweening self-confidence on the part of the government; and more a result of the given conditions of knowing in that era.

To recall, the appearance of migration in the ornithological world came as result of transformation in scientific activities as the focus on taxonomy lessened and attention focused on the search for function and purpose. Similarly, for human movement to take on its own meaning, function and purpose, the analysis of wealth in Western political economy had to be replaced with an inquiry into production by classical political economy. What is common between the Natural Sciences and the Analysis of Wealth is the arrangement of knowledge on a horizontal plane. Knowledge of birds could be labored over until almost complete taxonomic and bibliographic description were found; the possibility of acquiring state supremacy and a supply of real wealth was a matter of arranging clearly identifiable and amenable components of one's nation. All could be laid out in a perfectly clear order...until the shift in knowledge construction that occurs through the turn of the 19<sup>th</sup> century. Suddenly, "the visible order, with its permanent grid of distinctions, is now only a superficial glitter about an abyss."<sup>105</sup> Accounts of life rather than of specific living beings take precedence.<sup>106</sup> Accounts of production, rather than accumulation are prioritized.<sup>107</sup> Foucault writes: "European Culture is inventing for itself a depth in which what matters is no longer identities, distinctive characters, permanent tables with all their possible paths and routes, but great hidden forces developed on the

---

<sup>104</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, Ch. 7- 8.

<sup>105</sup> Ibid., 251.

<sup>106</sup> Ibid., Ch. 8.

<sup>107</sup> Ibid.

basis of their primitive and inaccessible nucleus, origin, causality, and history.”<sup>108</sup> Life and Labour enter the intellectual landscape as guiding categories.

The difference between life—a generalizable category, and living beings—specific and non-generalizable entities, is found in the ability to further abstract from a localized finding.<sup>109</sup> Life is revealed within the “specific processes” of an organism, but, at the same time, is no larger than those processes. In Foucault’s words, life hovers as a “quasi-transcendental category,”<sup>110</sup> guiding a search for knowledges located both inside and governing living beings. “Life” provides the possibility of a singular migration coming to represent migration in general. It urges on a search for principles underlying the phenomenal, rather than an inventory account of species traits. Waning were the production of lists naming all the birds that migrate, and waxing were the activities aimed at understanding the principles behind the existence of migration as a phenomenon. And as in ornithology, the science of population was soon able to see something larger going on within an individual movement. The modern era allows the specific to demonstrate the nature of the multitude.

The differences between labour—the source of value—and wealth—the already existing and finite objective—is found in the investment in human forms and the analysis of the process of production. Economic reasoning begins to follow production as it exists,

---

<sup>108</sup> Ibid., 251.

<sup>109</sup> Georg Simmel provides a useful summary of what would become one of Foucault’s theses in *The Order of Things*: “We are...reminded of the fact that not much headway was made in formulating a concept of ‘life’ as long as it was conceived of as an immediately real and homogeneous phenomenon [*this taxonomic and readily observable universe of the classical age*]. The science of life did not establish itself on a firm basis until it investigated specific processes within organisms—processes whose sum or web life is; not until, in other words, it recognized that life consists of these particular processes” From the essay “The Problem of Sociology” Georg Simmel, *On Individuality and Social Forms; Selected Writings* (Chicago: University of Chicago Press, 1971), 27.

<sup>110</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, 250.

gives credence to economic actors, and gives up the pursuit of economic sovereignty.

Denis Meuret articulates this in his “Political Genealogy of Political Economy.” He writes how “the principle of state legitimacy will be revised [from that of the classical or absolutist model]. It won’t be a question of bringing to the public an order shown by knowledge *to be possible*, but of allowing the completion of a movement shown by knowledge *to be real*.<sup>111</sup> Political oeconomy becomes the body of knowledge predating modern governmentality, a form of knowledge aligned and parallel with *raison d’état*. What supplants this form of knowledge is classical political economy and forms of liberal government checked through economic forces. Put simply: in the modern era, government is subjected to the constants of what already exists, whereas during the 17<sup>th</sup> and 18<sup>th</sup> century, economy was the activity of the state. As Tribe puts it (albeit in reverse), classical political economy “does not depend on the prior existence of a political for it to identify an arena of investigation—this arena is constituted discursively by its theories of production and distribution.”<sup>112</sup>

In the modern era, theorization of movement becomes possible on the scale of the individual as representative of a larger happening. Individuals are made both sovereign and suspended within larger economic interactions—part of which forms the newly observable “economy.” With even a cursory view of the first articles of the London Statistical Society and other social scientific investigations during the mid-19<sup>th</sup> century, we see that the concept of migration becomes consonant with the logic given to modern economic actors and economy, a formulation of thought that was impossible even one hundred years earlier. It becomes increasingly the case that “migration” is taken on as a

---

<sup>111</sup> D Meuret, "A Political Genealogy of Political Economy," 239. Emphasis is mine.

<sup>112</sup> Keith Tribe, *Land, Labour, and Economic Discourse*, 145.

subject in its own right, from the British census boasting how certain regions are supplying a surplus population and contributing to their comparative advantage on the national stage to the articles published in the Royal Statistical Society of London which state that the prime factor in movement is a desire to better one's condition—the act of an individual, generalized. Migration becomes an example of how, as Tribe might say, modern theories of production and distribution help constitute a field of analysis of classical political economy. The key analytic lens for the birth of migration is the role individual movers play as both economic actors and as entities affecting economic processes. Tribe writes:

Classical Political Economy constructs distribution as occurring between theoretically defined agents. For the first time it is possible to construct economic, rather than political, legal or even human agencies which are derivative of a systematic analysis of production and distribution. The constitution of such specifically economic agencies, occupying the terrain of an economy, and not, as in the case with Political Oeconomy, as polity, is related to the possibility of constructing particular conceptions of profit, capital, labour, value, and so on.<sup>113</sup>

What classical political economy brings is the formulation of economic subjects necessary for migration to be studied in its own right. It becomes possible to use “migration” as way to better understand traction such sovereign economic subjects.

However, we should be wary of allowing a latent realism to leak through here. We should not allow sovereign economic subjects to exist prior to their articulation in thought, and imagine them pushing themselves up. In other words, “the economy” does not somehow preexist its own epistemological conditions. Ute Tellmann, who has been critical of Foucault’s reading of “the economy,” makes the important point that “too quickly, the invisibility of the economy is taken as a ‘tool for the criticism of reality’

---

<sup>113</sup> Ibid., 127.

[Foucault's reading of the role played by 'the economy' in liberal governmentality], rather than as a machine for seeing, whose epistemological privileges, lines of exclusion and technologies of knowledge need to be dissected."<sup>114</sup> The economy's already existence (or persistence), in other words, is privileged rather than the account of the work this very status accomplishes. She argues

Foucault's reading fails to account fully for the *political problématique* of visibility and invisibility in the social body; hence only a partial and one-sided genealogy of the invisible hand emerges, one which privileges the critical function of the invisible hand while underestimating the limitations imposed by this trope<sup>115</sup>

Taking from this, we might alternatively consider "the economy" as a machine necessary for seeing movement on its own terms, as something internal to population.<sup>116</sup> What is left, then, is an articulation where "the economy" is much more complex than simply something existing "out there": the economy is both that which makes and is made by a cohort of other activities and realities, done through local practices such as statistical observation, recording, and reckoning.

Through this particular theorization, it becomes fruitful to think through how the birth of "migration" might run parallel to the introduction of the field of "the economy." William Walters makes the argument "it is possible to speak of 'the economy' as something which is 'territorialized' in terms of a whole host of technical and political interventions, each possessing their own history and material density.... [and all of which] make 'the economy' a knowable and manipulable entity."<sup>117</sup> It is the articulations

---

<sup>114</sup> U Tellmann, "Foucault and the Invisible Economy," 8.

<sup>115</sup> Ibid., 14.

<sup>116</sup> The component of such a machine will be discussed in the following chapter—along with how such eyes were actually formed—but for now, it is sufficient to say that the emergence of statistical reasoning, a view of population (rather than populousness), and the epistemological conditions of the 19<sup>th</sup> century.

<sup>117</sup> William Walters, "Decentring the Economy," *Economy and society* 28, no. 2 (1999), 314.

of economic space, along with concepts like ‘unemployment,’ ‘balance of payments,’ and statistical measures that combine to make something called “the economy” a thing. The empiricization of movement provides a technique for seeing otherwise abstract economic subjects. The abstraction of migration allows the bringing together of the otherwise distinct fields of economy and commerce.<sup>118</sup> Migration becomes a manifestation of an invisible hand, just one of the ways in which it makes itself present. And, finally, it allows the actions of the few or even the singular to be representative of a larger condition of an economic region. With respect to our topic, we may choose to think how the metrics of the economy allow migration its vital location in the modern imaginary. In other words, “migration” and “the economic” might relate necessarily.

This chapter has begun to demonstrate, in various ways, that “the economy” and “migration” grew up together, so to speak. The creation of this economic space, a space of depth (as opposed to that of complete sovereign knowledge) is what facilitates movement’s elevation to a parallel epistemological and ontological status. (People have always moved, yes, but have not, in their movement, always been part of an underlying phenomenon). These concepts work together, both in their formation and in their execution, but in the end it is important to keep the invisibility of the economy from running roughshod over actual practices that allow it to be conceptualized. As Latour writes:

It is of course impossible to talk about the economy of a nation by looking at ‘it’. The ‘it’ is plainly invisible, as long as cohorts of enquirers and inspections have not filled in long questionnaires, as long as the answers have not been punched onto cards, treated by computers, analyzed in this gigantic laboratory. Only at the end can the economy be made visible inside piles of charts and lists. Even this is still too confusing, so that redrawing and extracting is necessary to provide a few

---

<sup>118</sup> D Meuret, "A Political Genealogy of Political Economy."

neat diagrams that show the Gross National Product or the Balance of Payments....The visual construction of something like a "market" or an "economy" is what begs explanation, and this end-product cannot be used to account for science.<sup>119</sup>

---

<sup>119</sup> Bruno Latour, "Visualization and Cognition: Drawing Things Together," 14.

## Chapter 3: Practices of Inscription: British and International Efforts at Marking Movement

---

---

### From Bird Descriptions to Migration Inscriptions

---

At the beginning of the previous chapter, I outlined the “conditions of visibility” for bird migration and described a periodization, following Foucault, in which the modern period allowed for Life to become an object of knowledge and investigation. The function of movement and its mechanisms all became vital in the production of a generalized account of the phenomenon of migration. However, as alluded to above, it took more than an interest and ability to think through migration for ornithology to produce a complete account. The production of knowledge was deeply dependent upon the careful collection of movement data. It took widely coordinated efforts for bird migration to appear as solid fact, a fact that could be textualized, mapped and shared between interested parties.

It was only from the late 1870s and onward that ornithological associations in both continental Europe and North America had sections devoted to migration. In the U.K., the first report of the “Committee for the Migration of Birds” was published in 1879. The formation of the “Committee for Ornithological Observation Stations in Austria-Hungary” happened in 1882, and a year later, the American Ornithologists’ Union formed a “Special Committee for the Migration of Birds.” By 1901, the first dedicated bird migration observatory had been established in the small fishing village of Rossitten (East Prussia). Headed and run by Johannes Thienemann, and supported by the

German Ornithological Society and the Prussian State, it carried out the first broad-range bird-tagging operation in 1903. Stressmann provides the most useful account: “after the failure of the cooperative endeavors, hope was now placed on a single permanent station in a favorable location. Two years after Rossitten was founded, Thienemann [its head] began to use Mortensen’s method. In October 1903 he banded with aluminum 151 hooded crows caught on their migratory flight. Only a serial number and the year were stamped on the rings.” However, he notes, “No sooner has the daily press spread the news than the animal protectionists raised a storm of protest against the ‘den of murder’ at Rossitten. They demanded that the government forbid banding, because it encouraged the people living inland to catch and kill large numbers of birds in order to find one from Rossitten among the hundreds of others.”<sup>120</sup> The method, however, proved highly successful as it substantially raised the possibility of retrieving information on the path of birds through Europe. Information was collected on:

- a) the periods of the year and times of day that individual species migrated;
- b) the direction taken;
- c) the number of birds in the different groups and their general composition;
- d) the subdivision of the species in the migrating groups, according to age and sex;
- e) weather and wind conditions during the migration;
- f) the height above the ground taken by the birds;
- g) their speed during migration and experiments of birds in general;
- h) the rest stations of the migratory birds and the birds return; and
- i) the place of origin of the migratory birds.

Such was information previously unrecorded during what we might call the parochial period of ornithology, where bird observation was limited to the accounting of individual species and not to overarching functions and tendencies. Through practices like those at Rossitten, other bird-banding centers were founded soon after: Hungary 1903, Great

---

<sup>120</sup> Erwin Stresemann, *Ornithology From Aristotle to the Present*, 337.

Britan 1909, a second Prussian center at Helgoland 1910, Switzerland 1911, and Sweden 1912. The Prussians also funded the expansion of Rossitten in 1907 with the construction of a fuller laboratory and a museum for birds collected; Thienemann also began running courses directed at the general public shortly thereafter.<sup>121</sup> This was matched additionally by the more extensive observations organized by the American Ornithological Association, where a sophisticated network of local enthusiasts reported migration information along with meteorological information back to the association.<sup>122</sup>

What is useful about describing ornithology's practices of inscription during the late 19<sup>th</sup> century and into the 20<sup>th</sup> is it's unambiguous status as a technical and coordinated innovation. Whereas the analysis of human migration often mixes with questions of place, nationality, race and economics, studies in bird migration, while political in their own way, demonstrate the importance of focusing on matters of recording and documenting. We don't need to deal with so-called "political" influences to lay out these activities.

---

#### Tracking Human Movement

---

Like birds, there have not always been data on the movement of people. Researchers, politicians and the public have not always been able to consult reference texts to get the numbers on migration. In 1800, would have been very difficult to find the number of British emigrants to North America. Nor would it have been possible to ascertain information on domestic mobility in the U.K., the U.S., or Canada during the

---

<sup>121</sup> W Fiedler, "Vogelwarte Rossitten: Ornithology on the Courish Spit Between 1901 and 1944," 6.

<sup>122</sup> Erwin Stresemann, *Ornithology From Aristotle to the Present*.

same period. Human movement was simply not thought of, recorded, or analyzed in such ways. While various aspects of movement have been documented in one way or another for hundreds of years—passenger lists were collected as early as 1635 from London ports, for instance<sup>123</sup>—the constructing of meaning in the form of statistics, striving for a kind of empirical accuracy, is a much more recent pursuit,<sup>124</sup> which was only beginning to flourish in the last half of the 19<sup>th</sup> century and epitomized by Ernest George Ravenstein's articles on the “Laws of Migration” (1885, 1889).

Ravenstein published what would be the first treatment of migration as a topic unto itself, in this case as a response to Dr. William Farr's argument against the possibility of definite laws on the subject. (Farr at that time was the head of the British Register General's Office). Ravenstein went beyond reporting the number of individuals moving—a topic frequently addressed by the Statistical Society of London from the 1840s onwards<sup>125</sup>—and used the census data published by the British Register General's Office to make statistical inferences towards understanding the then abstract phenomenon of migration. Among other things, he observed that: surplus population drifts to parts with labour needs; want for labour is supplied by neighboring provinces; the currents of migration's loss in strength is proportional to the distance from the source; the main currents of migration produce countercurrents; and that females are more migratory than males, but tend to travel shorter distances. Ravenstein also identified the root cause of migration to flow from the basic “desire inherent in most men to ‘better’ themselves in

---

<sup>123</sup> I Ferenczi, “Introduction,” in *International Migrations, Volume I: Statistics, National Bureau of Economic Research*, ed. Walter Wilcox (1929), 61-62.

<sup>124</sup> MJ Greenwood, and GL Hunt, "The Early History of Migration Research," 3.

<sup>125</sup> The works published by the Statistical Society of London and the Royal Statistical Society generally moved away from deductive reasoning and towards inductive accounts. For a full account, see Poovey, Mary. *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: University of Chicago Press, 1998.

material respect”<sup>126</sup> and does so by couching it in the language of biological necessity. Subsequent to describing these “laws” of migration, Ravenstein was forced to defend himself, for at the meeting of the Statistical Society of London that followed his presentation, a Mr. S. Bourne argued that:

It did not appear to him from the results of the investigation that there was anything, strictly speaking, in the way of law to be discovered which regulated the migration of population from one part of the country to another, unless it was the simple law of supply and demand.<sup>127</sup>

Mr. Roland Hamilton at the same meeting responded that “A natural ‘law’ worthy of the name could not admit any exception [and yet the] conditions laid before them were but a portion of a very large and intricate question, and would constantly be modified by other facts.”<sup>128</sup> In retort, Ravenstein pointed out that the “laws of population, and economic laws more generally, have not the rigidity of physical laws” and that they “are continually being interfered with by human agency.”<sup>129</sup> His was a proposal aligned to that period’s “social physics” of statistical analysis.

Ravenstein made such an impact on the social sciences that most introductory texts on migration studies cite him as the founder of the field, and note that he developed the first “push-pull” models of migration. However, what is revealing here for the purposes of this thesis is less Ravenstein’s methodological genius or status as first statistician to provide explanatory principles of migration,<sup>130</sup> but more that he was willing

---

<sup>126</sup> E.G. Ravenstein, “The Laws of Migration,” *Journal of the Royal Statistical Society* 52, no. 2 (1889), 241, 286.

<sup>127</sup> E.G. Ravenstein, “The Laws of Migration,” *Journal of the Statistical Society of London* 48, no. 2 (1885), 233.

<sup>128</sup> *Ibid.*

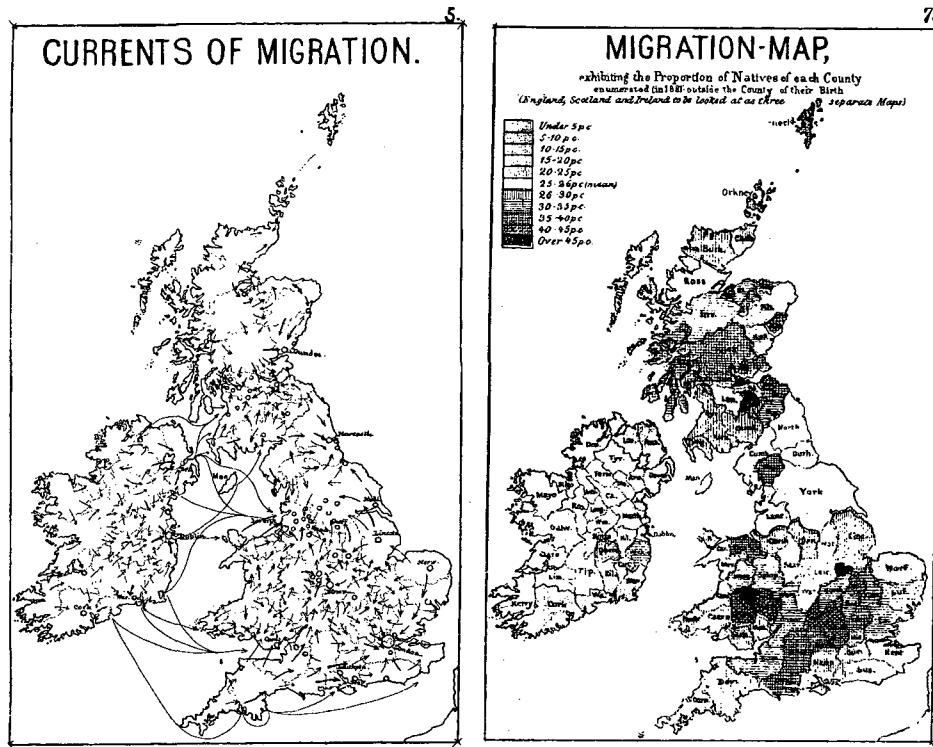
<sup>129</sup> E.G. Ravenstein, “The Laws of Migration,” 241.

<sup>130</sup> D. Grigg, “E. G. Ravenstein and the Laws of Migration.”; D. Grigg, “Ernst Georg Ravenstein, 1834-1913.”; MJ Greenwood, and GL Hunt, “The Early History of Migration Research.”; John Corbett, “Ernest George Ravenstein: The Laws of Migration, 1885.”

to treat migration as a topic unto itself, as well as his ability to extrapolate such laws from an analysis of the statistical productions of the English state. Ravenstein represents the burgeoning interest in migration as an endogenic phenomenon, which could be treated through the language and epistemological space opened up by classical political economy, the biological and human sciences. Most pertinent for this chapter is his use of British censuses, which represent the inscriptive practice most significant for the theorization of migration. By the time his first article was published by the Statistical Society of London, Ravenstein could depend on nearly a century of census development; he could crib directly from the tables of numbers collected for 1881. (In some places he simply reproduced the findings of the census general report.) With the publication of his second article, under the same title, he could make further advances through the incorporation of census data from the U.S. and other European nations, shared in a way that would have been impossible just one hundred years earlier, which thereby increased his sample population to include many nations.<sup>131</sup> Ravenstein could only present his articles on the “laws of migration” after individual movement had been inscribed in the census reports that were published after enumeration. Special to Ravenstein’s work—as representative of his time period—is his ability to theorize at the scale of the individual migrant (as opposed to that of the nation). The census data allowed him to produce maps (see *Figure 3*) and describe trends in aggregate movement.

---

<sup>131</sup> E.G. Ravenstein, "The Laws of Migration."



**Figure 3: A Technological Innovation: Visualizing Currents and Density of Migration, from Ravenstein's "Laws of Migration" (1885).**<sup>132</sup>

This chapter focuses on the material Ravenstein and others used to construct such an investigation into migration. I follow Bruno Latour here in seeking out some of the mechanisms of inscription that allowed this “thing” of migration to appear in a sustained fashion, to “hold together” as a problem to be addressed. For example, the maps produced by Ravenstein were created from a nation-wide census, correlated through the question of “where born” and location of enumeration, demarcated by parish or enumeration districts, and then represented topographically. These maps testify to the technological and inscriptive efforts of a generation of public officials. What I outline below are the basic methods that allowed migration to become presentable, readable, and

<sup>132</sup> Ibid.

perhaps most importantly, combinable.<sup>133</sup> I do this to demonstrate that “migration” has its own history embedded within technologies of enumeration.

In the first section, I examine early efforts in the U.K. that brought domestic, and eventually international, movement into focus, and I describe the development of fact-gathering in British censuses and the British Passenger Act. In the second section, I focus on the efforts of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries to aggregate, standardize and share data on an international scale, with a special look at the International Labour Office (ILO), and its work from 1920-1931 toward assembling these statistics. The ILO produced a compilation that for decades after its publication served as *the* source when writing about matters of movement.

---

#### Early Statistical Interrogation of Movement: The British Census

---

My assertion that migration is a recent invention hinges on two claims. The first, outlined in chapter two of this thesis, is that movements have not always appeared as an elemental component of health or economic life. The second, that an epistemology and governmental arrangement appeared which began to find new meanings within populations and their activities. That is, where previous mentalities of government sought to govern *over* population, modern mentalities have sought to govern *through* populations.<sup>134</sup> The distinction of this transition is demonstrated through an analysis of

---

<sup>133</sup> Bruno Latour, “Drawing Things Together,” in *Representation in Scientific Practice*, ed. Michael Lynch, and Steve Woolgar (Cambridge, Massachusetts: MIT Press, 1990), 26.

<sup>134</sup> Further investigation into the emergence of governmentality can be found in {Rose, Michel Foucault, *Security, Territory, Population: Lectures At the Collège De France 1977-1978*; Nikolas Rose, *Powers of Freedom: Reframing Political Thought* (Cambridge: Cambridge University Press, 1999); Mitchell Dean, *Governmentality: Power and Rule in Modern Society* (London ; Thousand Oaks, Calif: Sage Publications, 1999).

the emergence of classical political economy. Here, in this account of the history of migration visibility, the specific significance comes with the growth, in the last 200-odd years, of information-gathering about populations. As Ian Hacking puts it so eloquently, the story of biopolitics can be told in the counting of bodies over hearths and windows.<sup>135</sup> As they provided a way to visualize and count matters related to human movement, studies into migration are linked to the census and other forms of enumeration. The census in the British context has worked since the mid-19<sup>th</sup> century to illuminate movement in such a way as to help construct theory and cognition of aggregated mobility. Census returns have helped migration to appear as a phenomenon.

Before outlining the role of the census in migration, it is worth noting the explosion in statistics-making and enumeration during the early 19<sup>th</sup> century, within the U.K. but also more generally in Europe and North America. Although the use and importance of statistics and numerical representation in modern social sciences seems given, as though it has always existed, important work under the heading of “historical epistemology” has demonstrated otherwise. For example, Mary Poovey’s account of the emergence of the “modern fact” has put the early 19<sup>th</sup> century as a formative period in the emergence of numerical representation around social questions. For her, the epistemological status given to numbers during this period has been formative to the modern notion of truth and knowledge. She writes: “numbers as opposed to rhetoric have come to epitomize the modern fact, because they have come to seem preinterpretive or even somehow noninterpretive at the same time that they have become the bedrock of

---

<sup>135</sup> Ian Hacking, “Biopower and the Avalanche of Printed Numbers,” *Humanities in Society* 5, no. 3-4 (1982), 280.

systemic knowledge.”<sup>136</sup> She argues that the early 19<sup>th</sup> century was a time of great threshing out of the status of statistics as they related to social authority.<sup>137</sup> Ian Hacking has also observed this period to be one of an “avalanche of statistics” and a huge increase in printed numbers more generally.<sup>138</sup> Most importantly, this was a period in which numbers started to imbue an otherwise irregular world of social events with a sense of regularity into, at the same time that philosophical and moral determinism (or providentialism) eroded.<sup>139</sup> Put simply: statistics applied to the social world demonstrated a consistency which could be acted upon and influenced by prudent government. With the growing sense that numbers were capable of representing reality (or a truth), and a newfound importance in illustrating the conditions (and alternative governmental possibilities) of population, a vigorous proliferation in number-making, including the census, occurred. In Victorian England, questions of “progress” and “change” were wrapped in the production of numerical measures of the quality of life.<sup>140</sup> (Poverty, for example, stands as the classical example of the relationship between enumeration and social control).

I take up my analysis of the representation of migration here, with the proliferation of printed numbers, as its mechanisms and procedures are indistinct from the mechanisms and procedures representing illness, deviancy, population and the like. However, in providing a history of the “appearance” of migration, some conceptual

---

<sup>136</sup> Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*, xii.

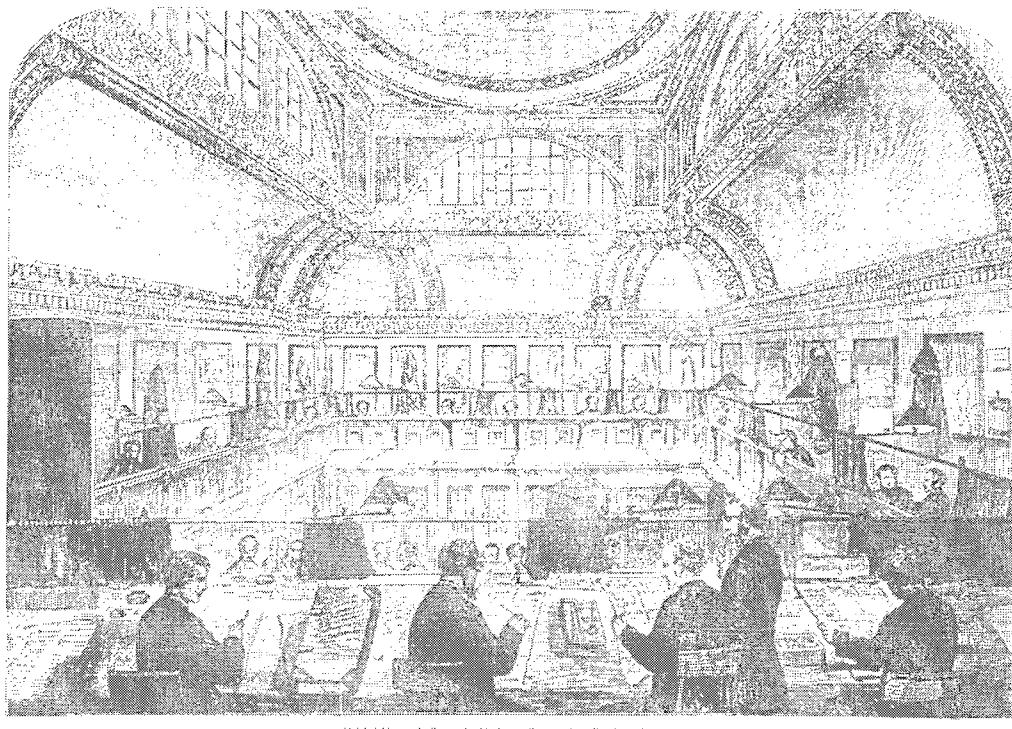
<sup>137</sup> Mary Poovey, “Figures of Arithmetic, Figures of Speech: The Discourse of Statistics in the 1830s,” *Critical Inquiry* 19, no. 2 (1993), 258.

<sup>138</sup> Ian Hacking, “Biopower and the Avalanche of Printed Numbers.”

<sup>139</sup> Ibid.; Ian Hacking, *The Taming of Chance* (New York: Cambridge University Press, 1990); Ian Hacking, “How Should We Do the History of Statistics?,” in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell et al. (Chicago: University of Chicago Press, 1991).

<sup>140</sup> Asa Briggs, “The Human Aggregate,” in *The Victorian City: Images and Realities* (London: Routledge & Kegan Paul, 1973).

problems present themselves. First, like the accounts of the “avalanche of statistics,” there is the need to show what was not present before. My account below demonstrates the emergence of records and record-making practices throughout this period, and, in this same way, stands in as a method to demonstrate the absence of like data before this time. The second problem has been that these systems of recording have themselves undergone many changes. For example, the British Census only *became* an authoritative source for recording movement—it was not its original intent. And likewise, the legislated requirement of passenger lists only *became* useful for representing movement when it was found these lists could be compared to the “natural increase” (Birth Registrations/Deaths) to determine the effects of these movements. And likewise, these lists only *became* authoritative sources when the Board of Trade and its more extensive data processing machinery took hold of how this information was handled. What has been an obstacle to overcome in this research is that studying “migration” typically appears to be of secondary or even tertiary importance, not as the original objective of those designing information collection systems. Migration is but something that has imposed itself in some ways upon inscribed data that were collected on movement. It has only been through retrospective investigation, a kind of binding together, that historians have been able to produce accounts of migration for the 19<sup>th</sup> century.



**Figure 4: “Indexing Department (Gallery) of the Census Office,” Illustrated Times (1861).<sup>141</sup>**

The British Census and Passenger Acts have been of primary importance for the collection of information on mobility. From the census in 1841 onwards, the question of “Where Born” was asked of all those enumerated. The 1841 possibilities were limited to: whether born in the county where enumerated, and if not, a choice of England, Wales Scotland, Ireland, British Colonies or Foreign Parts. Later years provided the opportunity for individuals to fill in by hand their place of birth. Combined with the information of the Enumeration District in which the information was gathered, these simple questions provided a powerful data set for the General Register Office (GRO), a data set only

---

<sup>141</sup> This reproduction was taken from Martin Campbell-Kelly’s “Information Technologies and Organizational Change in the British Census, 1801-1911.” *Information Systems Research* 7, no. 1 (1996), 28

limited by the ability to process such information. This simple line of questioning remained until the 1911 and 1921 census, where explicit instructions sought to reduce ambiguity, dividing categories into “If born in the United Kingdom, the county and town or parish of birth,” “If born outside the United Kingdom, the country and the state/province or district of birth” and “Whether born at sea.” In 1911, the question of Nationality was asked in the positive: the enumerated were to indicate their nationality. From 1931 onwards, the above questions were asked in addition to whether the place of enumeration was the usual residence. Enumerators in the 1960s and after asked specifically where the individual lived one-year and five-years prior to that census. These latter changes reflect a consensus reached by international enumerating bodies on the need to distinguish between visitors and permanent residents.

Again, the story here is not the line of questioning itself—there is little change in it for the better part of 80 years—but the processing of the census schedules. As noted above, the information derived from these returns, whether taken up or not, was dependent on state machinery and the choice of whether to process it. These data also lay dormant until it was perceived to be necessary to interpret them further. How the information was dealt with is key: it took a century for the U.K. census to be transformed from a decentralized and unsophisticated counting of the people to a centralized and specialized information processing operation, employing a staff of hundreds and publishing ever larger and more detailed reports.<sup>142</sup> Even before these institutional changes, information gathering through a census process required other kinds of

---

<sup>142</sup> Comparing each decade’s Census Reports, it becomes clear with the length and detail how the census machinery became increasingly sophisticated. For an account of these changing practices from a Information Sciences perspective, see Martin Campbell-Kelly, “Information Technologies and Organizational Change in the British Census, 1801-1911,” *Information Systems Research* 7, no. 1 (1996): 22-36.

legitimation. After a rejection in 1753 of a census as “totally subversive to the last remains of English liberty”—given that it would “acquaint our enemies abroad with our weakness...and enemies at home with our wealth”<sup>143</sup>—it is significant in itself that the census came to be accepted and even associated with the administration of “free England.” The acceptance of census making less than fifty years later partially reflects the shift in mentality, between the 18<sup>th</sup> and 19<sup>th</sup> century, away from the notion of “populousness” to that of “population.”<sup>144</sup> The census’ legitimacy as a source of truth is a history unto itself. But for my purposes here, it is more important to outline the gradual yet significant shift in the processing of the census returns toward extracting information on mobility.

The aggregation and processing pictured in *Figure 4*, above, is precisely what this chapter aims to describe. While the original caption from the *Illustrated Times* reads “Indexing Department (Gallery) of The Census Office,” it might well have read, “Imaging Department.” This is not to imply the Census Office or the GRO was presenting a false picture of England or somehow dreaming up the numbers, but rather to imply that the Office was charged with the task of forming new concepts and ways of presenting otherwise unknowable details of the British people. As Curtis has argued, the census is made, not taken.<sup>145</sup> *Figure 4* is depicting a group seeing migration in an abstracted sense,<sup>146</sup> along with many other objects such as the distribution of various occupations, and birth and death rates.

---

<sup>143</sup> A. J. Taylor, “The Taking of the Census, 1801-1951,” *British Medical Journal* (1951), 715.

<sup>144</sup> Michel Foucault, *Society Must be Defended* (Palgrave Macmillan, 2003); Bruce Curtis, “Foucault on Governmentality and Population: The Impossible Discovery.”

<sup>145</sup> *Ibid.*

<sup>146</sup> Considering Bruno Latour’s suggestion that abstraction is a privileging of inscription over experience—that is, a property of reference rather than mind—it is of interest to note that William Farr, charged with

From 1841 until the census in 1891, the scope of the census, with respect to migration, grew gradually. With each census, more and more pages were devoted to illuminating and representing the question of birthplace and what was significant about it for understanding movement. The general objective from these years, however, can be safely asserted to be a desire to document the “free circulation of the people...now necessary in Great Britain...to meet the varying requirements of the Public Industry.”<sup>147</sup> The overriding theme of the century had to do with revealing the “emigration” and “immigration” occurring *within* Great Britain. Unlike the 20<sup>th</sup> century, interest lay mainly in revealing the high levels of *domestic mobility*. The numbers printed accounted for, with increasing attention and precision, the movement of populations within the empire, with little heed, at first, to the movement of “Foreigners” into British cities. The returns revealed that many counties, “if we may borrow a phrase from Natural History, send out swarms of their population every year.”<sup>148</sup> Ricardian accounts of the “emigrant counties” noted that they “produced more men and women than they were able to retain, and had given off their surplus to other parts,” going on to assert labour “to be one of their stable commodities...which they export.”<sup>149</sup>

There was also a general revelry in the idea of Britain as a nation sending its population out to the far reaches of the globe. In 1871, an empire-wide census recorded some 234,762,593 subjects, living within 7,769,449 miles of territory and 44,142,651 homes, living under British rule across the globe. It is hard to disagree with the return’s

---

organizing the Register General’s Office from 1839-1880, was appointed “Abstractor of Statistics.” Bruno Latour, and Steve Woolgar, *Laboratory Life : The Construction of Scientific Facts*, 23; Bruno Latour, *The Pasteurization of France* (Cambridge, Mass: Harvard University Press, 1988), 35.

<sup>147</sup> United Kingdom, *Population Tables, Census of Great Britain, 1851*, vol. I, [1691-I] (London: George Edward Eyre and William Spottiswoode, 1854), cvii-cviii.

<sup>148</sup> Ibid.

<sup>149</sup> United Kingdom, *General Report, Census of England and Wales*, 51.

statement that “the success of the census may be accepted as evidence...of the general efficiency of English administrative machinery.”<sup>150</sup> The power of the census, however, was not its enumerative outcome: knowing the number of British Subjects and the number of homes was hardly a useful achievement (at least within this period of governmentality, as opposed to *raison d'état*). The achievement was that the empire-wide census was accomplished at all: the levels of communication, coordination, and transportation attest to London’s ability to coordinate simultaneous, complicated actions across the globe. Truly, this was “action at a distance.”<sup>151</sup> But what is perhaps most interesting is the ways in which Britons living in both British and non-British colonies were included in the general accounts. Foreign consulates and the American Census Bureau forwarded their own returns to London so that British-born individuals could be included in the census. Far from concern of overpopulation, the censuses of the 19<sup>th</sup> century proclaim the valor, virtue, and industry of Britain, and its seemingly never-ending ability to produce far more than necessary to sustain its growing population. With glee, a number of the census returns appeared to refute Thomas Malthus; some crowing about capital accumulation which demonstrated almost exponential growth of the means of subsistence; others proudly describing how production within the colonies had actually increased *faster* than the population.<sup>152</sup>

---

<sup>150</sup> United Kingdom, *General Report, Census of England and Wales for the Year 1871*, vol. IV, [C.872-1] (London: George Edward Eyre and William Spottiswoode, 1973), vii-ix.

<sup>151</sup> Nikolas Rose, *Powers of Freedom: Reframing Political Thought*; Peter Miller, and Nikolas Rose, “Political Power Beyond the State: Problematics of Government,” *British Journal of Sociology* 43, no. 2 (1992): 172-205; Bruno Latour, “The Powers of Association,” in *Power, Action and Belief: A New Sociology of Knowledge?*, ed. John Law, Sociological Review Monograph 32 (London: Routledge, 1986).

<sup>152</sup> United Kingdom, *General Report, Census of England and Wales for the Year 1861*, [3221] (London: George Edward Eyre and William Spottiswoode, 1863), 24-27; United Kingdom, *General Report, Census of England and Wales for the Year 1871*.

What the Census Office was also able to imagine, and what its focus was for the 19<sup>th</sup> century, was how the movement of both British and non-British subjects bore directly on the material conditions of the United Kingdom. And while I noted that the greatest interest was on what we would term “internal migration,” this was not to say that foreigners were left unaccounted for. From 1861 onward, census tables were present within the returns that noted countries of origin, and occupation broken down by country of birth. However, to deal with the influx of immigrants to Britain, the government turned towards the Passenger Act and the Board of Trade. Originally designed to protect outgoing emigrant passengers from the terrible conditions aboard ships, the Passenger Acts of 1855 and 1863 required captains to furnish lists of steerage passengers. Like the census, these lists were collected—at first—with no intentions related to or inspired by an understanding of movement in an abstract sense. When it was later “discovered” that passenger lists could be used to calculate the total movement into and out of Great Britain, the administration of the Passengers Act was transferred from the Emigration Commissioners to the Board of Trade in 1873. From that year onward, the more powerful processing capabilities needed to deal with the Passenger Act (and its lists) were supplied. In its first report on immigration, published in 1876, the board observed that the record of immigration to Britain was “most imperfect before 1870, and hardly existed before 1860.”<sup>153</sup> It went on to argue that, in fact:

It was only possible a year ago [1875] either to give the balance of the total emigration and immigration, or to deduct the total immigration from the

---

<sup>153</sup> United Kingdom, *Emigration and Immigration: Statistical Tables Relating to Emigration and Immigration From and Into the United Kingdom in the Year 1876, With Report to the Board of Trade*, [5] (London: Unknown, 1877), 3.

emigration of persons of British origin only, the probability being that the true balance would lie between the figures thus obtained.<sup>154</sup>

By 1887, the Board began noting how the number of aliens within Britain was increasing rapidly (although the total between 1871 and 1881 had been quite low). It observed that “a good deal of pressure is felt in particular trades, a good deal of inconvenience is felt in certain districts at the East End” due to increased foreign elements;<sup>155</sup> and similarly lamented that at that time there was “no machinery at the command of the Board of Trade for extending the annual information as to the emigrants and immigrants beyond the present limits.”<sup>156</sup> Given the legislative limitation of Passenger Lists, the Board could only furnish information on non-continental travel; a problem they felt could be remedied provided more fund were made available. The Board clearly sought to use the then unenforced Alien List Act (6 Will 4. C. 11) or to put in place some other mechanism like it.

Less than a decade later, the Board would begin reporting more expanded information on migration, including movement between Britain and continental Europe. Relying on information sources that ranged from the Jewish Board of Guardians, and the Societies for the Relief of Deserving Foreigners and Destitute Aliens, to the actual *Aliens List*, the Board was able to provide “Volume and Effects of Recent Immigration from Eastern Europe into the United Kingdom,” which was part of the information being

---

<sup>154</sup> Ibid., 4.

<sup>155</sup> United Kingdom, *Emigration and Immigration. Copy of Memorandum on the Immigration of Foreigners Into the United Kingdom, With Appendix Containing Statistical Tables and Other Information*, [112] (London: Henry Hansard and Son, 1887), 4.

<sup>156</sup> Ibid., 5.

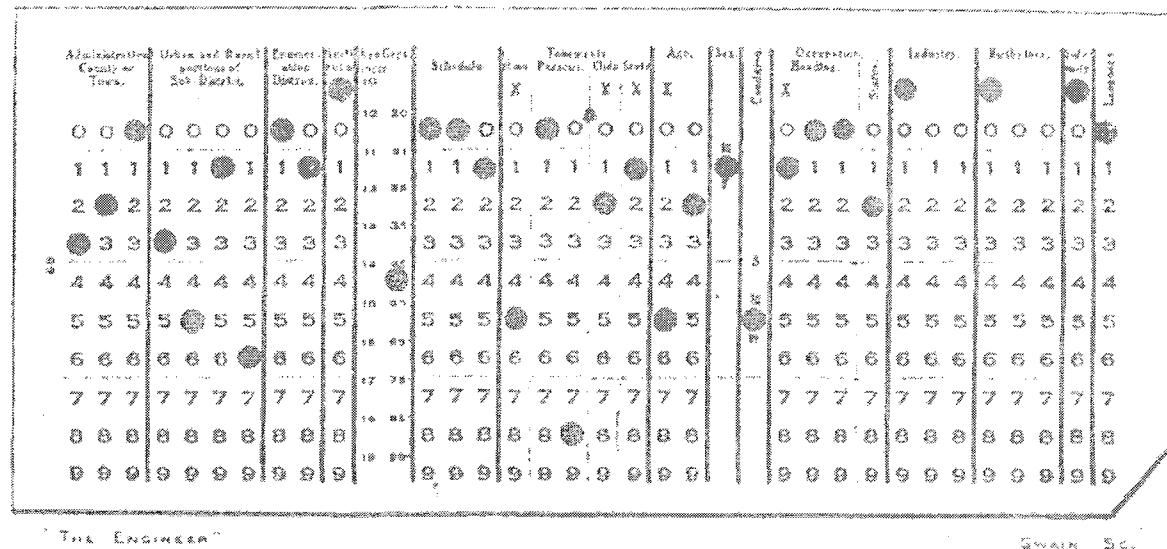
demanded by Parliament.<sup>157</sup> However, there was no clear single source for migration data. Parliament took action by passing the *Aliens Act* of 1905, which was administered by the Home Office and required that the nationality of those coming into Great Britain be recorded. The House also passed a *Merchant Shipping Act* in 1906 that, starting from January 1<sup>st</sup> 1908, required all ships to furnish lists of all passengers, including name, sex and nationality. By the turn of the century, the movement of foreigners was being treated more and more as a serious concern, understood as an extension of the domestic migration problem affecting urban centers.

Reflecting related interests, the British census was by 1911 concerned with comparing differences in population trends within foreign states. There were, during this particular census, many significant technological advances in information processing techniques as well. Great Britain adopted the use of the British Tabulating Machine—an English version of the more famous Hollerith machine that was used in the United States for more than two decades. The machine vastly increased data computing power as compared to any previous census. Once the information written into household return had been transferred onto tabulating cards—a job completed by 170 skilled and unskilled machine workers, mostly women—the cards were sent through the Tabulating Machine several times to obtain different calculations.<sup>158</sup> *Figure 5* depicts a sample tabulation card—note field thirteen where place of birth was translated into numerical four-digit numerical code for processing.

---

<sup>157</sup> United Kingdom, *Emigration and Immigration. Statistical Tables Relating to Emigration and Immigration From and Into the United Kingdom in the Year 1895, and Report to the Board of Trade*, [130] (London: Eyre and Spottiswoode, 1896).

<sup>158</sup> As Campbell-Kelly notes, each card was passed through the machines an average of 13.6 times. For an excellent account of the transformations in information processing in the census, see Martin Campbell-Kelly, "Information Technologies and Organizational Change in the British Census, 1801-1911."



**Figure 5: Sample Tabulating Card from 1911 Census.**<sup>159</sup>

The distinction noted above regarding domestic vs. international movement is interesting in the case of Great Britain. Reading the actual census return coming to Parliament two years after enumeration—after the numbers were “crunched” and laid out in easy-to-read tables and summaries—the interest expressed was clearly focused on domestic movement, rather than the international. Reading from Raphael Samuel’s classic essay “Comers and Goers,”<sup>160</sup> a description of the whirlpool of movement into and out of Victorian London, there is no question why this was case. Urban centers such as East London were experiencing great demographic shifts. However, I disagree with Samuel’s first assertion that: “The ‘migrating classes’...have left remarkably few traces

<sup>159</sup> This reproduction was taken from Martin Campbell-Kelly’s “Information Technologies and Organizational Change in the British Census, 1801-1911.” *Information Systems Research* 7, no. 1 (1996), 33.

<sup>160</sup> See Raphael Samuel, “Comers and Goers,” in *The Victorian City: Images and Realities* (London: Routledge & Kegan Paul, 1973).

of their existence.”<sup>161</sup> In fact, the presence of the “migrating classes” has been greatly marked through practices of enumeration, especially towards the end of the 19<sup>th</sup> century. The national movement Samuel discusses left many traces in the Victorian city, albeit not at the train platforms and lodging houses that he would have expected, but within the census returns on the shelves of the General Register Office. The British census, return after return, contained larger and more detailed sections on “Place of Birth,” documenting rural to urban movements and transitions in the demographic nature of counties and parish districts.

---

### Towards International Migration

---

Although calls to collect information cooperatively on the movement of birds had been made early in the 19<sup>th</sup> century (in 1834 British naturalist J.D. Salmon asked for the “cooperative agency of naturalists residing near headlands on the coasts” to study migrant birds off the coast<sup>162</sup>), it took until the last quarter of the century for sustained efforts to occur. In 1884, the first International Ornithological Congress was established. Held in Vienna, its two organizers, Rudolf Blasius and Dr Gustav von Hayak, sought to “extract the full value from this development [an interest in migration], which spread almost at the same time to still other countries” by working “out a fantastic plan for international cooperation.” In his history “Ornithology from Aristotle to the Present,” Erwin Stressmann writes that the two men “attempted nothing less than a network of ornithological observation stations around the whole habitable globe.”<sup>163</sup> Following the

---

<sup>161</sup> Ibid., 123.

<sup>162</sup> JJD Greenwood, “Citizens, Science and Bird Conservation,” S79.

<sup>163</sup> Erwin Stresemann, *Ornithology From Aristotle to the Present*, 334.

first congress, the Ornithology Journal *Ornis* was founded. The journal printed “innumerable data sets” and registered hundreds of observation “stations.” However, it was undone by the relative success of the many observations, the nature of which were general and not of individual birds. The European system yielded too much data, leaving the “the dreary mass of material” unutilized and abandoned.<sup>164</sup> In contrast, the Americans during this same time had great success in organizing mass field observations. Biologist W.W. Cooke asked volunteers to observe and report on quite specific data points. “It was an extensive collection of notes on observations combined with meteorological data, whose theoretical results were summarized...in the [Journal] Auk.”<sup>165</sup> Cooke then produced reports plotting “isochronal lines” (lines of migration flight) from the mid-1880s onward using the data. He transferred his collected information to index cards, totaling more than 600,000 by 1910.<sup>166</sup> By the second International Ornithology Congress in 1891, it was decided that the European failure of the migration observations was due to the failure individually to identify birds migrating, a necessity that Danish school teacher Mortensen had already started to address independently with his local tagging of starlings. What was established, as noted in the previous chapter, was a global network of local observation stations, all relaying information on their findings through the congress and publication in journals.

By 1931, what resulted from many bird-banding experiments was the possibility of publishing the first atlas of bird migration (noted in the introduction to this thesis). Ernst Schüz and Hugo Weigold would have relied on many sources of bird-banding

---

<sup>164</sup> JJD Greenwood, "Citizens, Science and Bird Conservation," S79; Erwin Stresemann, *Ornithology From Aristotle to the Present*, 334-35.

<sup>165</sup> Ibid., 335.

<sup>166</sup> Ibid.; JJD Greenwood, "Citizens, Science and Bird Conservation."

information to publish their text. When coordinated, this information provided a picture of the phenomenon of bird migration, which is much more than simple knowledge of its existence. “Scientists start seeing something once they stop looking at nature and look exclusively and obsessively at prints and flat inscriptions,” as Bruno Latour would say.<sup>167</sup> The atlas by Schüz and Weigold represents the culmination of some hundred years of sustained interest in bird movement, the result of various “local” efforts, coordinated and made “international” through the passage of information between parties—the very same process by which human migration was mapped into the international.

Like the jump between an individual observer of birds and the establishment of an observation station and networked community, the jump between enumerating places of birth to collecting the number of migrants globally is a difficult one. “Birthplace” is a considerably less complex concept to negotiate in comparison to that of “resident,” “immigrant,” “emigrant,” or “migrant.” These latter categories involve considerable questions of temporality, identity, citizenship and race. (Enumerating those “born at sea” seems the biggest problem of “birthplace,” and even this is overcome by the British who simply add this location of birth as its own possibility in the 1921 census—previous to this it was incumbent upon individuals to describe themselves as such.) With enumeration of “residents,” “immigrants,” “emigrants,” or “migrants,” the question becomes much more difficult, more subjective, and entirely open to the ambiguities of abstract terms. For instance: does the person enumerated *believe* they are coming/going temporarily or permanently? What amount of time constitutes *permanent* residency? When and how is citizenship obtained? Does a person cease to be an immigrant after

---

<sup>167</sup> Bruno Latour, "Visualization and Cognition: Drawing Things Together," 15.

obtaining legal status as a citizen? After what period does one become a national?

*Representing international migration is not a self-evident activity.*

Translating domestic measurement (haphazard and set to the specification of individual governments) into useful international measurements (comparable and congruent) was something that was somebody's job—it did not happen on its own. How to see migration—a technical (and necessarily moral) problem—was an activity unto itself. As Bruce Curtis identifies, “the establishment of relations of equivalence among categories of objects and...the routine execution of social observations” is necessary for the emergence of statistical knowledge.<sup>168</sup> The international comparison of migrations requires a uniform set of definitions and exchange of information; and these uniform definitions and exchange practices have a history that can be told. So while individual countries (like Britain) may have for their own purposes solved parts of these problems, it became increasingly clear to statistical branches that multiple sets of local statistics, produced by different states, were not comparable through a simple matter of addition.

The task of dealing with these problems began during late in the 19<sup>th</sup> century.

Beginning with the first International Statistical Congress (ISC) in 1854, and meetings of the International Statistical Institute (ISI) into the 20<sup>th</sup> century, efforts were made at “introducing unity in the Statistical Documents of all Countries.”<sup>169</sup> Not only did this information-sharing represent a break from the notion that census-like material was akin to a state secret, it also represents growing recognition of problems associated with a new

---

<sup>168</sup> Bruce Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875*, 31; Alain Desrosières, “How to Make Things Which Hold Together: Social Sciences, Statistics and the State,” in *Discourses on Society: The Shaping of the Social Science Disciplines*, ed. Peter Wagner et al., Sociology of the Sciences Yearbook 1991 (Norwell: Kluwer Academic Publishers, 1991).

<sup>169</sup> As quoted by Leone Levi, “Resume of the Statistical Congress, Held At Brussels, September 11th, 1853, for the Purpose of Introducing Unity in the Statistical Documents of All Countries,” *Journal of the Statistical Society of London* 17-1 (1854): 1-14.

global scale of population. The relationship between the domestic population and the international population was an expanding point of intersection. Participant representatives of the ISC agreed on the need for statistical comparison, exchange of publications, regular censuses (including the actual number of people residing and people who have legal domicile but are absent), and surveys of national territory. Attention was devoted to migration in its various forms for the simple reason that movement between counties obviously affected the collection of information on local populations (“population” here being both those living in a particular place and the objects of statistical analysis). Reporting to the Statistical Society of London following the first congress, participant L. Levi described the consensus that “Emigration of late has frustrated the natural course of the law of population.”<sup>170</sup> Migration, in other words, affected state measures of population growth; it introduced the need for a state metric distinguishing *actual* from *natural* increases in population. By 1891 the International Statistical Congress had discussed and drafted a uniform definition of the international migrant, but made little progress beyond indicating the need for it. Again in 1901 and 1903 the topic was broached but discussion went no further than suggesting that attention be paid to distinguishing permanent and temporary emigration.<sup>171</sup> However, by the time the ISI would meet in Rome (1926), Warsaw (1929), and Madrid (1931), began passing more meaningful resolutions towards clarifying of the problem<sup>172</sup> At Rome the body decided:

---

<sup>170</sup> Ibid., 6.

<sup>171</sup> International Labour Office, *Statistics of Migration: Definitions - Methods - Classification*, Studies and Reports: Series N (Statistics) No. 18 (London: P.S. King & Son, Ltd, 1932), 19.

<sup>172</sup> Ellen Percy Kraly, and K. S. Gnanasekaran, “Efforts to Improve International Migration Statistics: A Historical Perspective,” *International Migration Review* 21, no. 4 (1987), 969.

- (1) the various categories of emigrants should be distinguished on a uniform system...[And] it would be wise to consider only permanent immigration or emigration when dealing with migration statistics;
- (2) it would be very desirable that provisions relating to the registration of persons departing or arriving should, in principle, be uniform;
- (3) for the compilation of statistics of migration movements, it is desirable to introduce uniform identity cards with a fixed questionnaire;
- (4) ...[and] to send copies of them [the questionnaires] to the head of the central statistical office of their country;
- (5) ...[and] national statistical offices should make their compilations in accordance with a uniform programme...

Following this, the ISI at Madrid would begin to defer the important question of migration statistics to the newly formed International Labour Organization. Headed by Albert Thomas, an administrator who was endeavoring to develop “intensive collaboration between scientists and political and administrative personnel,” the ILO would strive to draw together statistical sciences and policymaking.<sup>173</sup> For their part, the ILO worked to develop legislation that would protect the rights of economic migrants—including equal treatment of foreign and national workers, supervision over emigration agencies, and the traffic in women and children<sup>174</sup>—but they also worked towards the publication of statistics on global migration. In fact, while the work of the late 19<sup>th</sup> century by Ravenstein was certainly groundbreaking in its own way, it was the work of the ILO led by Thomas that solidified the global space of migration statistics that continues today. The ILO not only published what would be the most complete text describing the international flows of people, but they also worked to develop improved reporting and collection devices. In effect, the ILO solidified the groundwork for a

---

<sup>173</sup> Alain Desrosières, "How to Make Things Which Hold Together: Social Sciences, Statistics and the State," 205.

<sup>174</sup> See Albert Thomas, *The International Labour Organization: The First Decade* (London: George Allen & Unwin Ltd, 1931), 187.

sustainable global *dispositif* that helped make migration “hold together” as an internationally observable object.

Beginning in 1920, the ILO initiated an extensive project to understand current practices of migration data collection. Following the first meeting of the International Emigration Commission, formed as result of the first session of the International Labor Conference, the ILO sent questionnaires to participating national governments at the end of 1920. The organization requested that national governments supply both their data on various components of migrations and a description of the methods used to collect this information. By 1922 the International Labour Congress would instruct the ILO to “make every effort to facilitate the international cooperation of migrant statistics.”<sup>175</sup> And that same year, with 39 responses from major states to their questionnaire, the ILO published a manual entitled *Methods of Compiling Emigration and Immigration Statistics*, likely the first of its kind to be disseminated. The document first demonstrates the considerable variation in data collection methods among states, concluding “that the best of these efforts will be condemned...by the narrow limits within which they are confined, never to give completely satisfactory results until there is reasonable international co-operation.”<sup>176</sup> Among their general findings, researchers for the organization concluded that: census results alone are generally insufficient for the study of the emigration problem; using estimates to number migrants is a completely unsatisfactory practice; many immigrants failed to be accounted for due to national processes of naturalization; and, in general, directed methods of enumeration via individual returns were largely

---

<sup>175</sup> Walter Wilcox, ed. *International Migrations*, vol. 2 Interpretations (New York: National Bureau of Economic Research, 1931), 2.

<sup>176</sup> International Labour Office, *Methods of Compiling Emigration and Immigration Statistics* (Geneva: International Labour Office, 1922), 6.

incomplete “because they depend on the goodwill of the emigrant and on the declaration which he [sic] makes.”<sup>177</sup> In short, states had yet to develop centralized, individualized, and standardized methods of enumerating those who moved across state boundaries. The report did find, however:

That the great majority of countries have long recognized that migration statistics must be of an individual and continuous character, that is to say, they should not merely deal with emigration as a whole and at long intervals only, but they should analyse it into individual cases and follow each case in order to ensure registration at the decisive moment.”<sup>178</sup>

In other words, to obtain a more complete picture of the migration of humans—like birds—individual tracking would be necessary. By 1924, the ILO, as well as the International Statistical Congress would, at the International Conference on Emigration and Immigration convened at Rome, endorse a method of statistics-gathering where national identity documents with detachable sheets would be used by all travelers. The document would be detached piece-by-piece along the route of travel, thereby providing unambiguous statistics as to whether the traveler was just passing through or was to find their permanent home at that location.<sup>179</sup> The idea was that parties interacting with migrants would both collect their own data and return slips to respective government departments. The Conference that year suggested, “whereas for the study and solution of the international problems arising out of migration, it is necessary to have statistical data on its various aspects which should be as complete and comparable as possible.”<sup>180</sup>

A problem remained, however. While the standardization of statistical collection had long been a goal among nations, the publication of international migration statistics

---

<sup>177</sup> Ibid., 41-49.

<sup>178</sup> Ibid., 43.

<sup>179</sup> Ibid., 55-57. Ellen Percy Kraly, and K. S. Gnanasekaran, "Efforts to Improve International Migration Statistics: A Historical Perspective," 969.

<sup>180</sup> Walter Wilcox, *International Migrations*, 3.

had been almost non-existent. It was a pressing problem taken up by the ILO. Beginning with the International Emigration Commission of 1921, it was resolved that: “Each Member [State] shall communicate to the International Labour Offices at intervals as short as possible and not exceeding three months: all available information, legislation, statistical or otherwise concerning emigration, the repatriation and transit of emigrants.”<sup>181</sup> From here, it became clear that the organization would be taking the lead in publishing such information. And such is the common relationship between almost *any* English language texts on migration from the 20<sup>th</sup> century: all have relied to some degree on the publications of the ILO. Naturally, authors have made use of additional works to support their specific argument and inquiry (be it questions of sociology, psychology, political science or economics), but their empirical components as well as their knowledge of international changes in law and government practice came from the publications of the ILO. The ILO’s “Migration Movements” (a monthly update of international migration statistics), the “Monthly Record of Migration” (a compilation of international agreements, official state actions, and an account of non-official organizations affecting migration)—and the 1929 and 1931 volumes entitled *International Migration Statistics* (in coordination with the U.S. National Bureau of Economic Research) all had widespread uptake in the secondary literature on migration and immigration. And in the case of the *International Migration Statistics*, the impact went far beyond researchers, affecting how local statisticians did their work.

The official proposal adopted by the ILO for was to “assemble and publish with the economic assistance of the NBER in one volume the international statistics of human

---

<sup>181</sup> Ibid., 1.

migration from the *beginning of the record in each country to the present time.*<sup>182</sup> This massive undertaking took the team four years to complete—in addition to the several years spent on the preceding reports noted above—and included not only official correspondence and visits with national statisticians around the globe, but also substantial archival research that was used to create the statistics needed to put together a comprehensive history of migration. The archival research was necessary because “Statistical departments, having to do only with the statistical period, could hardly be expected to know what records about migration were in the archives or the older literature.”<sup>183</sup> Beyond producing a massive volume on these statistics (with tables for 116 countries), the ILO’s work also presumably solidified the techniques of information gathering in the member states. The principle investigator observed:

The legislation and the administrative practices of a country were examined in order to ascertain the basic for the statistics. These researches revealed data previously unsuspected by archival authorities who were unaware that seaport passenger lists could be utilized for statistical purpose. This statistical method, which to-day is most reliable, appears to have been applied for centuries.<sup>184</sup>

What is most interesting about the research completed by the ILO was not simply its collection of previously discrete pieces of information, but how it developed methods and educated local statisticians about how to discover demographic histories of movement, a field that has subsequently expanded and continued to provide empirical data on human movements. In effect, the ILO’s study achieved the construction of a methodology as well as a massive data set on historical migration, and converted localized information into centralized statistical data. The ILO helped bridge less systematic methods and research on movement (like those mentioned in the previous chapter) with common

---

<sup>182</sup> I Ferenczi, "Introduction," 54.

<sup>183</sup> Ibid., 57.

<sup>184</sup> Ibid., 61.

standards, pulling disparate pieces of data together into a form comprehensible to the “modern” researcher.

What is most notable about the work of the ILO and the ISC is how it helps to exhibit some of the ways in which “international migration” was not always a given object of inquiry. There is a history to be told about a new field of observation that simply *did not exist before*. While early information gathering in the U.K. was focused on understanding the balance of inward and outward movement, it and the efforts of other countries were limited in that they were not abstractly concerned with *human migration*. By effectively showing what would be a part of the picture of migration, the power of the census and other documentary technologies assisted in creating a global space of human movement and global governance thereof. The reason this is useful is that it illustrates how modern histories and statistics of migrations are actually based on a broad range of sources, including census returns, passenger lists, passport and visa applications, port of call and medical inspection records, and a whole host of other sets of discrete data, many of which were gathered for an entirely different purpose. Migration statistics are actively constructed. I have outlined both the emergence of primary accounting of movement and some of the retrospective statistical analysis of this information.

## Conclusion

---

My Introduction described how *International Migrations* and the *Atlas des Vogelzuges (Atlas of Bird Migration)* can act as both the beginning and end of my specific investigation. I chose these two tomes because of their otherwise quite ordinary existence as reference texts: they are uncontroversial representations that the phenomenon of migration “exists”, at least insofar as it can be “seen” and comprehensively studied as such. At the beginning of my research, the fact that these two books shared the same year of publication seemed a happy and humorous coincidence. How novel would it have been to discover social scientists being zoomorphic for once, and with such an important topic as migration!

But I return to these books for my conclusion because of the *impossibility* of their publication just a hundred or so years before: they became possible only through the culmination of radical shifts in knowledge production and theories of life and labour. Beyond anthropomorphism or zoomorphism, migration studies for both birds and humans share common epistemological roots and methods of investigation, requiring the compilation of multiple observations of discrete movers, which are in turn understood to represent deeper and more profound principles and currents. No longer is migration simply “to flit here and there” as Henry Cockeram defined it in 1623.<sup>185</sup> This thesis has looked at “migration” in its now very abstracted sense, as a perceptible *phenomenon*. It has sought out part of the how and when of migration’s entry into the modern consciousness, its emergence as something worthy of study and documentation. And as

---

<sup>185</sup> Oxford English Dictionary, 2008 Online Version., v. “Migrate.” Quote from Cockeram, H. 1623. *The English dictionarie, or an interpreter of hard English words.*

such, it only makes sense that humans and birds would be accounted for together, as in this thesis, if my claims *emergence* of the concept of migration were to be taken seriously.

I think it is important to also look at what work the concept of migration may perform. It is more than a useful common noun. Migration—in its contemporary, rather than its classical meaning—assists in thinking of a global population, rather than a parochial or national one. Both ornithology and its human equivalent have carved out new intellectual spaces and forms of knowledge production in thinking through the problem of movement, achieved partly through an unprecedented kind of widespread, coordinated collaboration, and partly through the gradual establishment of common methods and standards. As Paul Edwards has argued regarding the establishment of international meteorological standards and reporting, the specification of “uniform standards for globalist information *actively produces a shared understanding of the world as a whole.*”<sup>186</sup> In a practical way, imagining (or imaging) the international movement of people has produced a shared understanding of a global population—in both the biopolitical and statistical meanings. And seeing the seasonal migration of birds continually helps make it possible to think through ecological systems beyond ones’ town, county, or country.

Furthermore, the internationalization of knowledge production in migration studies represents here the product of both temporal suturing (historical research) and geographical information sharing. Numbers, charts, and graphs mobilize movements into the presentable and representative objects of migration that we know today. They also, as

---

<sup>186</sup> PN Edwards, “Meteorology as Infrastructural Globalism,” *Osiris* 21, no. 1 (2006), 239.

Latour might argue, demonstrate the impossibility of truly “international” statistics. The production of a global picture of movement is really and always the collaboration of what can be metaphorically thought of as local pixels, standardized and coordinated in order to “see” something larger and more profound.

Ending this thesis by referencing the books cited above is not intended to suggest that migration reached full-force as a concept 1931, but to emphasize how they stand as important milestones in its formation as a concept—reminders that before migration was “everywhere”, an “obvious” subject of necessary consideration, it was particular, parochial, and even non-existent.

## Bibliography

---

- Allen, EG. "The History of American Ornithology Before Audubon." *Transactions of the American Philosophical Society* 41, no. 3 (1951): 387-591.
- Baker, Robin. *The Mystery of Migration*. London: Macdonald, 1980.
- Berthold, P, HG Bauer, and V Westhead. *Bird Migration: A General Survey*. Oxford University Press, USA, 2001.
- Briggs, Asa. "The Human Aggregate." In *The Victorian City: Images and Realities*, 83-104. London: Routledge & Kegan Paul, 1973.
- Brown, Wendy. *Politics Out of History*. Princeton: Princeton University Press, 2001.
- Campbell-Kelly, Martin. "Information Technologies and Organizational Change in the British Census, 1801-1911." *Information Systems Research* 7, no. 1 (1996): 22-36.
- Castles, Stephen, and Mark J Miller. *The Age of Migration: International Population Movements in the Modern World*. 4th ed ed. New York: Guilford Press, 2009.
- Clarke, William Eagle. *Studies in Bird Migration*. Vol. 1, London: Gurney and Jackson, 1912.
- Corbett, John. Ernest George Ravenstein: The Laws of Migration, 1885.  
<http://www.csiss.org/classics/content/90> (accessed October 15, 2008).
- Curtis, Bruce. *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875*. Toronto: University of Toronto Press, 2001.
- Curtis, Bruce. "Foucault on Governmentality and Population: The Impossible Discovery." *Canadian Journal of Sociology* 27, no. 4 (2002): 505-33.
- Davie, Maurice. *World Immigration: With Special Reference to the United States*. New York: The Macmillan Company, 1936.
- Dean, Mitchell. *Governmentality: Power and Rule in Modern Society*. London ; Thousand Oaks, Calif: Sage Publications, 1999.
- Deleuze, Gilles. *Foucault*. Translated by Sean. Hand. Minneapolis: University of Minnesota Press, 1988.
- Deleuze, Gilles. *Negotiations, 1972-1990*. Vol. European perspectives, New York: Columbia University Press, 1995.
- Deleuze, Gilles, and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press, 1987.
- Denis, Vincent. "The Invention of Mobility and the History of the State." *French Historical Studies* 29, no. 3 (2006): 359-77.

- Desrosières, Alain. "How to Make Things Which Hold Together: Social Sciences, Statistics and the State." In *Discourses on Society: The Shaping of the Social Science Disciplines*, edited by Peter Wagner, Björn Wittrock, and Richard Whitley, 195-218. Norwell: Kluwer Academic Publishers, 1991.
- Edwards, PN. "Meteorology as Infrastructural Globalism." *Osiris* 21, no. 1 (2006): 229-50.
- Ferenczi, I. "Introduction." In *International Migrations, Volume I: Statistics, National Bureau of Economic Research*, edited by Walter Wilcox, 1929.
- Fiedler, W. "Vogelwarte Rossitten: Ornithology on the Courish Spit Between 1901 and 1944." *Avian Ecol Behav* 7 (2001): 3-9.
- Foucault, M. *The Order of Things: An Archaeology of the Human Sciences*. New York: Routledge, 2001.
- Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage Books, 1970.
- Foucault, Michel. "Politics and the Study of Discourse." In *The Foucault Effect: Studies in Governmentality: With Two Lectures and an Interview With Michel Foucault*, 53-72. Chicago: University of Chicago Press, 1991.
- Foucault, Michel. *Society Must be Defended*. Pelgrave Macmillan, 2003.
- Foucault, Michel. *Security, Territory, Population: Lectures At the Collège De France 1977-1978*. New York: Palgrave Macmillan, 2007.
- Foucault, Michel. *The Birth of Biopolitics: Lectures At the Collège De France, 1978-79*. London: Palgrave Macmillan, 2008.
- Foucault, Michel. *History of Madness*. Translated by Jean Khalfa. New York: Routledge, 2006.
- Gätke, Heinrich, and Rudolph Rosenstock. *Heligoland as an Ornithological Observatory: The Result of Fifty Years' Experience*. Edinburgh: D. Douglas, 1895.
- Gordon, Colin. "Governmental Rationality: An Introduction." In *The Foucault Effect: Studies in Governmentality: With Two Lectures and an Interview With Michel Foucault*, edited by Graham Burchell, Colin Gordon, and Peter Miler, Chicago: University of Chicago Press, 1991.
- Greenwood, JJD. "Citizens, Science and Bird Conservation." *Journal of Ornithology* 148 (2007): 77-124.
- Greenwood, MJ, and Hunt, GL. "The Early History of Migration Research." *International Regional Science Review* 26, no. 1 (2003): 3.
- Grigg, D. "E. G. Ravenstein and the Laws of Migration." *Journal of Historical Geography* 3 (1977): 41-54.

- Grigg, D. "Ernst Georg Ravenstein, 1834-1913." *Geographers Biobibliographical Studies* (1977):
- Hacking, Ian. "Biopower and the Avalanche of Printed Numbers." *Humanities in Society* 5, no. 3-4 (1982): 279-95.
- Hacking, Ian. *The Taming of Chance*. New York: Cambridge University Press, 1990.
- Hacking, Ian. "How Should We Do the History of Statistics?" In *The Foucault Effect: Studies in Governmentality*, edited by Graham Burchell, Colin Gordon, and Peter Miler, 181-96. Chicago: University of Chicago Press, 1991.
- Haffer, J. "The Development of Ornithology in Central Europe." *Journal of Ornithology* 148 (2007): 125-53.
- Ingersoll, Ernest. *Birds in Legend, Fable and Folklore*. New York: Longmans, Green and Co, 1923.
- International Labour Office. *Methods of Compiling Emigration and Immigration Statistics*. Geneva: International Labour Office, 1922.
- International Labour Office. *Statistics of Migration: Definitions - Methods - Classification. Studies and Reports: Series N (Statistics) No. 18*. London: P.S. King & Son, Ltd, 1932.
- Wilcox, Walter, (ed.) *International Migrations*. Vol. 2 Interpretations, New York: National Bureau of Economic Research, 1931.
- Kraly, Ellen Percy, and Gnanasekaran, K. S. "Efforts to Improve International Migration Statistics: A Historical Perspective." *International Migration Review* 21, no. 4 (1987): 967-95.
- Landa, Louis. "'A Modest Proposal' and Populousness." *Modern Philology* 40, no. 2 (1942): 161-70.
- Landau, N. "The Regulation of Immigration, Economic Structures and Definitions of the Poor in Eighteenth-Century England." *The Historical Journal* 33, no. 3 (1990): 541-72.
- Landau, N. "Who Was Subjected to the Laws of Settlement? Procedure Under the Settlement Laws in Eighteenth-Century England." *Agricultural History Review* 43, no. 2 (1995): 139-59.
- Latour, Bruno. "The Powers of Association." In *Power, Action and Belief: A New Sociology of Knowledge?*, edited by John Law, 264-80. London: Routledge, 1986.
- Latour, Bruno. "Visualization and Cognition: Drawing Things Together." [www.bruno-latour.fr](http://www.bruno-latour.fr) Paper N°21 (1986): 1-26.
- Latour, Bruno. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, Mass: Harvard University Press, 1987.

- Latour, Bruno. *The Pasteurization of France*. Cambridge, Mass: Harvard University Press, 1988.
- Latour, Bruno. "Drawing Things Together." In *Representation in Scientific Practice*, edited by Michael Lynch, and Steve Woolgar, 19-68. Cambridge, Massachusetts: MIT Press, 1990.
- Latour, Bruno. *We Have Never Been Modern*. Translated by Catherine Porter. Cambridge, Mass: Harvard University Press, 1993.
- Latour, Bruno. "Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30 (2004): 225-48.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Vol. Clarendon lectures in management studies, New York: Oxford University Press, 2007.
- Latour, Bruno, and Steve Woolgar. *Laboratory Life : The Construction of Scientific Facts*. Princeton, N.J: Princeton University Press, 1986.
- Levi, Leone. "Resume of the Statistical Congress, Held At Brussels, September 11th, 1853, for the Purpose of Introducing Unity in the Statistical Documents of All Countries." *Journal of the Statistical Society of London* 17-1 (1854): 1-14.
- Malthus, Thomas Robert. 2008. An Essay on the Principle of Population. <<http://www.econlib.org/library/Malthus/malPlong15.html>> (accessed Augest 15, 2008).
- Marshall, Dorothy. *The English Poor in the Eighteenth Century: A Study in Social and Administrative History*. London: Routledge & K. Paul, 1969.
- Meuret, D. "A Political Genealogy of Political Economy." *Economy and Society* 17, no. 2 (1988): 225-50.
- Miller, Peter, and Rose, Nikolas. "Political Power Beyond the State: Problematics of Government." *British Journal of Sociology* 43, no. 2 (1992): 172-205.
- Montagu, George. *The Ornithological Dictionary; Or, Alphabetical Synopsis of British Birds*. Vol. 1, London: Bensley, 1802.
- Montagu, George. *Ornithological Dictionary of British Birds*. 2nd ed. London: Hurst, Chance, and Co, 1831.
- Mun, Thomas. "England's Treasure By Forraign Trade." In *Teachings From the Worldly Philosophy*, edited by Robert Heilbroner, 25-28. New York: Norton, 1997.
- Ngai, Mae M. *Impossible Subjects: Illegal Aliens and the Making of Modern America*. Princeton: Princeton University Press, 2004.
- Nicholls, George. *A History of the English Poor Law, in Connection With the State of the Country and the Condition of the People*. Vol. 2, London: King & Son, 1904.

- Nicholls, George. *A History of the English Poor Law, in Connection With the State of the Country and the Condition of the People*. Vol. 1, London: King & Son, 1904.
- Osborne, T, and Rose, N. "Populating Sociology: Carr-Saunders and the Problem of Population." *Sociological Review* 56, no. 4 (2008): 552-78.
- Polanyi, Karl. *The Great Transformation: The Political and Economic Origins of Our Time*. 2nd Beacon Paperback ed ed. Boston, MA: Beacon Press, 2001.
- Poovey, Mary. "Figures of Arithmetic, Figures of Speech: The Discourse of Statistics in the 1830s." *Critical Inquiry* 19, no. 2 (1993): 256-76.
- Poovey, Mary. *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: University of Chicago Press, 1998.
- Ravenstein, E.G. "The Laws of Migration." *Journal of the Royal Statistical Society* 52, no. 2 (1889): 241-305.
- Ravenstein, E.G. "The Laws of Migration." *Journal of the Statistical Society of London* 48, no. 2 (1885): 167-235.
- Rose, Nikolas. *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press, 1999.
- Samuel, Raphael. "Comers and Goers." In *The Victorian City: Images and Realities*, 123-60. London: Routledge & Kegan Paul, 1973.
- Schumpeter, Joseph. *History of Economic Analysis*. New York: Oxford University Press, 1961.
- Shumsky, NL. "Noah Webster and the Invention of Immigration." *The New England Quarterly* LXXXI, no. 1 (2008):
- Simmel, Georg. *On Individuality and Social Forms; Selected Writings*. Chicago: University of Chicago Press, 1971.
- Spengler, Joseph. "French Population Theory Since 1800: I." *The Journal of Political Economy* 44, no. 5 (1936): 577-611.
- Stresemann, Erwin. *Ornithology From Aristotle to the Present*. Cambridge, Mass: Harvard University Press, 1975.
- Swift, Jonathan. *A Modest Proposal and Other Satires. Great Minds Series*. Amherst, N.Y: Prometheus Books, 1995.
- Taylor, A. J. "The Taking of the Census, 1801-1951." *British Medical Journal* (1951): 715-20.
- Tellmann, U. "Foucault and the Invisible Economy." *Foucault Studies* (2009):

- Thomas, Albert. *The International Labour Organization: The First Decade*. London: George Allen & Unwin Ltd, 1931.
- Thomas, Brinley. *Migration and Economic Growth: A Study of Great Britain and the Atlantic Economy*. 2 ed. Cambridge: University Press, 1973.
- Tribe, Keith. *Land, Labour, and Economic Discourse*. London: Routledge, 1978.
- United Kingdom. *Population Tables, Census of Great Britain, 1851*. Vol. I, [1691-I]. London: George Edward Eyre and William Spottiswoode, 1854.
- United Kingdom. *General Report, Census of England and Wales for the Year 1861*. [3221]. London: George Edward Eyre and William Spottiswoode, 1863.
- United Kingdom. *Emigration and Immigration: Statistical Tables Relating to Emigration and Immigration From and Into the United Kingdom in the Year 1876, With Report to the Board of Trade*. [5]. London: Unknown, 1877.
- United Kingdom. *General Report, Census of England and Wales*. Vol. IV, [C.3797]. London: Eyre and Spottiswoode, 1883.
- United Kingdom. *Emigration and Immigration. Copy of Memorandum on the Immigration of Foreigners Into the United Kingdom, With Appendix Containing Statistical Tables and Other Information*. [112]. London: Henry Hansard and Son, 1887.
- United Kingdom. *Emigration and Immigration. Statistical Tables Relating to Emigration and Immigration From and Into the United Kingdom in the Year 1895, and Report to the Board of Trade*. [130]. London: Eyre and Spottiswoode, 1896.
- United Kingdom. *General Report, Census of England and Wales for the Year 1871*. Vol. IV, [C.872-1]. London: George Edward Eyre and William Spottiswoode, 1973.
- Veyne, P. "Foucault Revolutionizes History." In *Foucault and His Interlocutors*, edited by A Davidson, Chicago: University of Chicago Press, 1997.
- Walter, R. "Governmentality Accounts of the Economy: A Liberal Bias?" *Economy and Society* 37, no. 1 (2008): lxv, 395.
- Walters, William. "The Discovery of 'Unemployment'." *Economy & Society* 23, no. 3 (1994): 265-90.
- Walters, William. "Decentring the Economy." *Economy and society* 28, no. 2 (1999): 312-23.
- Winch, Donald. *Classical Political Economy and Colonies*. Cambridge: Harvard University Press, 1965.