

### **Boundaries of Knowledge**

Over the course of this section's readings we have examined how the conditions of the surrounding environment affect the relationship between knowledge and social structure. We have already learnt how the two are interconnected, but something we have recently begun to explore is the parameters that social structure places around knowledge. As we have already said multiple times in class, "we don't know what we don't know because of what we know." From this phrase we could extrapolate that pre-existing knowledge sets up the boundaries to knowledge production. However, this is not a sufficient explanation. If knowledge production were simply bounded by what we already knew, then pre-existing knowledge would direct the areas of research that we explore, what is disseminated to the general public or our interpretations of said knowledge. In previous readings we have examined how social structure is a large part of how knowledge is transmitted from one generation to the other. In my last paper, I referenced Campbell<sup>1</sup> and Gwande<sup>2</sup> as they spoke about the social aspects of learning. Without enculturation into your respective social group, one's ability to assimilate new knowledge is hindered. The next analysis goes deeper in what this knowledge is and how is it produced within a social milieu.

This trend stands out strongest in Schiffrin's paper on "The Business of Books." In the very beginning of his paper, Schiffrin brings up "the relationship of high culture [knowledge] to mass audiences [social structure]"<sup>3</sup>; setting a tone for how the reader should interpret his writing.

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1 Robert A. Campbell, "Preparing the Next Generation of Scientists," *Social Studies of Science* 33 (2003): 897- 927.

2 Atul Gwande, "The Learning Curve," *The New Yorker*, January 28, 2002.

3 Andre Schiffrin, *The Business of Books* (London: Verso, 2000), 1- 14, 103- 128.

With a new age of industrialization coming, the publishing world underwent a number of substantial structural changes, and these changes were spearheaded by a new generation of editors. When these editors entered the publishing world, they brought with them a new definition of success. Previously the notion of success was to engage readers, to stimulate and provoke thought among their audience. Greater effort was put into searching for authors and writing that would have a significant impact upon the reader. All editors shared this lofty goal; however, each differed in what message they wanted pushed at the reader. This resulted in a host of smaller publishing houses, each with their own unique objective. The new generation of editors still shared a universal goal, that of financial success, however, all agreed that the method of attaining this goal was selling a greater numbers of books rather than provoking thought. With fewer unique methods of achieving this goal, there were fewer publishing house who could effectively compete. Editors had to reach down to what were common interests among all readers so as to have the largest potential consumer base. Schiffrin sums this up perfectly; “it is up to the public to choose what it wants – and if what it wants is increasingly downmarket and limited in scope, so be it.”<sup>4</sup> Due to these changes in publishing philosophy, the writings that got published, or produced, differed significantly from those before. If a book appealed to the general masses then it was thought that it would sell better than one with a unique message. In this reading, Schiffrin has identified two different social structures; a cohort of editors and the imagined community of readers; and both groups play a role in influencing what is knowledge is disseminated. If the objectives of the editors changed, or if the interests of the general public altered, then the type of books that would be published would shift to match the desires of these

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4 Andre Schiffrin, *The Business of Books* (London: Verso, 2000), 1- -14, 103- -128.

two groups. In this way we can see how social structures have decided what knowledge is produced and what knowledge the public is made aware of.

This also relates back to our infamous quote, ‘we don’t know what we don’t know because of what we know’. Only a certain number of books can be published at a time, and we can only *know* about those books that do get published. There are “hundreds, indeed thousands, of great books that have never made money”<sup>5</sup>; and since they never made money, the public is completely unaware of their existence. The public is even more blindsided by books that do turn a profit as these books gain a budget to be advertised with. It is a virtuous cycle in that the more money the book earns, the greater the budget it will have to continue advertising, the greater awareness of the book, and the more it is sold. Thus again, social structures, through their combined actions, define the parameters of what knowledge is produced and popularized.

Another interesting interaction with knowledge is that social structure can affect the interpretation of knowledge, or even change the knowledge itself. Vertesi’s paper demonstrates that the interactions users have with the London Underground Map transforms the knowledge it contains. It become more than a simple train map, growing into a representation of the city of London. As a native Londoner I can certainly attest to the power that the Tube map holds over me. It is by far the most convenient and frequently used mass transit system in London and thus is what the public is most familiar with. From a young age, I was transported about the city by the tube, even travelling unattended from the age of 11. My mental map of London is based on my interaction with the tube and so best visualized via the tube map. Vertesi says quite accurately “that topology and topography become intertwined, enmeshed and confused in everyday

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5 Andre Schiffrin, *The Business of Books* (London: Verso, 2000), 1- -14, 103- -128.

practices of interaction.”<sup>6</sup> When you ask a Londoner where they live, their residence is often described as in relation to the nearest tube stop. Through uses similar to this, the Underground Map has been transformed into a general diagram of London. We can see examples of this in that since 2008, when this paper was written, there have been the introduction and extension of tube lines, such as the London Overground and Docklands Light Railroad (DLR) in South-East London. With expansions of the network, parts of London have been ‘upgraded’ and are now accessible and more habitable, ending the “here be dragons”<sup>7</sup> aspect. People’s interactions with the city have grown in conjunction with the map. The tube map is designed from the perspective of its users and so its knowledge is formatted to be most accessible to that social structure. However, this knowledge has now changed and grown through its use by social structures.

There are plenty of other examples of how social structure influences knowledge; we can speak briefly about how society approves specific locations so that research conducted there becomes scientifically valid. This is illustrated in Shapin’s paper; certain places became sites of experimentation since society viewed them that way<sup>8</sup>. A more apt example of this is demonstrated by one of Milgram’s obedience experiments. He demonstrated in Experiment 10 that the ‘teachers’ were more likely to succumb to obedience when experiments took place in Yale’s laboratories, versus an off-site location in Bridgeport, CT. This new location eliminated the university's prestige as a possible factor in influencing the participants' behaviour; and under

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6 Janet Vertesi, “Mind the Gap: The London Underground Map and Users’ Representations of Urban Space,” *Social Studies of Science* 38 (2008): 9- -35.

7 Janet Vertesi, “Mind the Gap: The London Underground Map and Users’ Representations of Urban Space,” *Social Studies of Science* 38 (2008): 9- -35.

8 Steven Shapin, "The House of Experiment in Seventeenth- -Century England," *Isis* 79 (1988): 373- -404

this condition obedience dropped by 47.5%<sup>9</sup>. Society assigns locations, such as Yale, certain associations and thus can affect the knowledge produced there; whether it is validated, respected or even if it affects behaviour.

In the end we can see how knowledge is largely controlled by how social structures view and use it. At its most basic level, I could say that pigs fly, and if I have the backing of a validated scientific community that was approved by society, then I would probably be believed. It is the beliefs of others that moderate this world. Although the world is round, for a very long time it was agreed upon that it was flat. This belief was validated by others it was the truth, it was not until a significant minority started to believe otherwise that general knowledge was changed the world 'became' round. Our world is created by our interactions with others, and our beliefs have to be verified by others to ensure they are reliable and valid. The objectives of certain social groups have an impact on the knowledge that is produced and disseminated to the general public. Its users shape the application of knowledge and these structures can even change the interpretation of said knowledge. It is social structures that push the production of knowledge, and they affect its dissemination and mutation.

'Seeing [may be] believing', however, if someone else see it too, then it must be true.

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9 Milgram, S., "*Obedience to Authority: An Experimental View*", Harper Perennial Modern Classics; Reprint edition (June 30, 2009) Paperback