

Paradigm shift anthropology



Marshall Sahlins' has a quote that we stand on the shoulders of giants to shit on their heads reflects the idea of paradigm shift. The shoulders personify the collective knowledge of those researchers before us, as students it is where we gain our information. It is not through our own work that we initially study our respective fields; we study the accumulation of work that those giants have codified. The shit represents new ideas, criticism, and reworking of the previously held beliefs. The constant questioning of beliefs, seeking new answers is an intrinsic feature of scientific inquiry.

This holds true not only in the hard sciences but in the social sciences as well, some may say to an even greater extent, due to the nature of the inquiry itself, it is highly subjective. It is much easier to leave your personal mark on a theory within the social sciences due to interpretation of data, which as stated can be highly subjective. Thomas Kuhn first classified the comprehensive worldview as a paradigm. This personal mark, this new interpretation that one struggles hard to have published is not necessarily, as Kuhn would see it, sufficient for classification of a shift in paradigm.

Paradigm, by its definition, is a consensual worldview on a particular subject. They exist within communities, thus for the shift to occur, the group must come to a new consensus; an individual outlier does not a new paradigm make. The scientific community can be seen to be defined by its allegiance to its paradigm. These outliers, those with ideas either opposing or falling outside the bounds of the paradigm are strongly resisted as Kuhn noted. Change does not come easily. Years of research and consensus are bound to the existing paradigm, changing this worldview that the community holds takes more than someone disagreeing.

Necessary requirements must be met. First and foremost is the necessity for data, new data. Data is the currency of science; buying yourself a new paradigm will require plenty of it. This data must represent an anomaly within the existing paradigm. If the anomaly is sufficient and backed by the data, new theories are developed. These theories can create a crisis within the paradigm, causing a blurring, uncertainty arises. Emerging from this blur is the new paradigm, putting the shattered world back together again, much like humpty dumpty. As a result the community changes its view of the field of inquiry and new methods and goals are created.

This overview of the course of a paradigm shift is naturally simplistic, and represents an ideal. Ideals as we know seldom happen. Anthropology as we know it did not exist before the 19th century. The age of exploration and discovery was marked by a belief that the peoples encountered were exotic, and needed to be Christianized. Alongside this idea was the view that European society was corrupt and should look to the primitive peoples of the new world as examples of a ideal state of nature. Neither ideal looks upon the study of the existing culture as we would today to understand it. Their paradigm rests on lack of evidence and conjecture.

With the rise of evolutionary biology through the likes of Lamarck and Darwin we begin to look for the underlying causes of differences between species. Following on the heels of this biological paradigm shift was the cultural evolutionary perspective. Tylor, Spencer and others attempted to view culture from an evolutionary stance. Societies were now seen to fit along a framework of advancement, the pinnacle of course being European-American society and thought. Within this framework I will examine Boas' view of

culture study as an example of paradigm shift. Certainly Boas' view was different than the preceding theorists.

Morgan, Tylor, and Spencer championed the culture history approach based upon cultural evolution to study the phenomena of culture. Boas rejected this philosophy, and sought to create a study based upon empirical data. Thus, we see the first hallmark of paradigm shift, rejection of the consensus. Boas' reliance on empirical data to formulate theories underscores Kuhn's central idea that paradigms are only changed through examination of new data. As data on cultures preceding Boas was slim at best, it is not hard to see how Boas could acquire data contrary to the existing viewpoint.

This data collection itself was a new theory, the new invention required. Kuhnian thought states that preparadigmatic schools emphasize the collection of the facts, as Boas was emphasizing. Crisis within the paradigm is witnessed by the competition between the schools of thought. Emerging from this crisis is Boasian anthropology, with its reliance on empirical data as the basis for study. This data collection is subdivided into the four subfields Boas saw as a requirement for this new field. The four-field approach emerges as the dominant force in anthropology.

With this approach the community changes its view of the field, and produces new methods and goals. These methods and goals have been used as a professional consensus in anthropology since the Boasian transformation. It may be argued that the Boasian example is not indicative of a paradigm shift, as anthropology itself was too new a field to have a consensus. Whether or not the data gathered resulted from anomalies in his

working paradigm is a consideration. Boas does appear to have stepped outside the bounds of the paradigm from the start, never attempting to fit his data into the existing evolutionary perspective.

Rejecting the paradigm then seeking the data to support the claim is not a strict Kuhnian criterion. Another problem encountered with classifying this as paradigm shift is whether or not the community was defined by its allegiance to the existing paradigm. Nonetheless, Boas' view emerged and seemed better than its competitors, giving rise to the modern field of anthropology. For the purpose of this paper I will classify this as paradigm shift. Kuhn may have had in mind more drastic and clear examples of shifts of scientific thought, when discussing his idea of paradigm shift.

A clear example of paradigm shift is the Copernican Revolution. So dramatic and drastic a shift resulted that it has attained the moniker of revolution. Consensus of course was that the earth was the center of the universe; this geocentric worldview was so deeply held that the predominant religion used it as dogmatic canon. New data however did not fit with this paradigm. Reaction against this data is well known; burning at the stake for those not supporting the consensus I would dare say is an extreme example of the existing community defending its worldview.

More data ensued and soon there was a competing school of thought. Emerging from this theoretical crisis was a paradigm drastically different from the previously held view. Technological as well as mathematical innovations were necessary components paving the way for the heliocentric paradigm. The extreme example of this revolution is again witnessed in its

precursory need for innovation to develop; telescope, new mathematical models for example. The end result of this shift was a transformation of the methods and goals within the community.

For this example the community was incredibly broad, some might say it is the entire European world. For me, this underscores what is perhaps the most serious problem facing emerging thought in anthropology and the sciences in general, wholesale rejection based upon the conventional view. Data can be entirely cast out because it does not fit, as we see today in regard to the question of when the Americas were populated. Data suggests a much earlier date, yet the paradigm exists which is contrary, so many discount the data prior to investigation.

In a field such as anthropology the data can be rather subjective, thus creating a danger when following strict paradigms. Resolution of these inherent dangers through standardized empirical data collection is a possible remedy, but due to the fact that anthropology leads itself away from standardization this seems unlikely. Another problem with the process of paradigm shift is the rejection of older views. Those views, as Kuhn notes, are read out of existence when they no longer accommodate a researcher's work. Previous work may be outright ignored and left to sit unused and rotting by the proponents of the new paradigm.

This poses a serious problem to anthropology. Much of the work can never be replicated, as it is time and case specific, thus the potential exists for material to be essentially lost forever. The large changes in thought from the Copernican revolution through the Enlightenment and into evolutionary

theory have given rise to the modern anthropological mind. The paradigm shifts have been dramatic at times. From traveler's accounts of exotic peoples, to placement along a continuum of cultural evolution, the anthropological ancestors are as foreign today as Columbus' Indians were in 1492.