7. "The vocabulary we have does more than communicate our knowledge; it shapes what we can know" - Evaluate this Claim with Reference to Different Areas of Knowledge

Word Count: 1599

"The members of the battalion, seeking revenge on their attackers, walked through the mountains searching for Indians."

"The members of the battalion, thirsting for revenge on their attackers, prowled through the mountains searching for Indians."

Earlier this year, my IB English teacher wrote these two sentences on the board at the beginning of class (Brazeau). The goal was to gain a greater understanding of how word choice affects our understanding of literature and its messages. Clearly, in the first sentence the word choice is blander and gives a less descriptive view of the soldiers and their actions. The second is a much more emotionally charged sentence which utilised animal imagery and thus gives us an understanding of the army as being savage and primal. This was clearly an effective example; however, while I cannot pretend to be a master of word choice, being a student of literature and history, this is a lesson I had learned many times before. Instead, I began to wonder whether the connotations that went along with these words and shaped our understanding could possibly incite the same understanding in each student. The meaning of the vocabulary used was perhaps ambiguous, not because it was imprecise, but perhaps because each word did not necessarily mean the same thing to all of the students. I thus had to question how well the author of such a statement could in fact shape our understanding in the way he or she meant to. It is true that vocabulary shaped our understanding, but exactly how it shaped this understanding and how effective and precise it can was in doing so is perhaps questionable and far more interesting. Through exploring history and mathematics, I will endeavour to ascertain how successful the purposeful choice of vocabulary can be in shaping our knowledge. History and mathematics have been chosen as they have varying purposes in their use of vocabulary and because, for comparative purposes, mathematics is useful as it uses a vocabulary of its own to reach conclusions of a kind different than those found in history.

As I will endeavour to answer how effective historians can be in purposefully choosing vocabulary to shape our knowledge, I must first ascertain what the purpose of the historian is. History seeks to explain and link past events, use historical facts in order to reach varying conclusions, and, perhaps most importantly, to use this understanding of past events to explain current events and societies. Historians utilize language to understand, and to allow us to understand, all of historical knowledge. As

such, this historical knowledge is always subject to vocabulary, and in many instances historians can use vocabulary to greatly and effectively shape our knowledge of past events in order to convince us of their own theses and conclusions. For example, Italian historians in the late nineteenth century sought to, through their histories of Italy, provide some sort of substantiation for the existence of a newly unified nation which in reality was still quite divided. As such, they portrayed the founders of Italy such as Garibaldi, Mazzini and Cavour as three idealistic men who worked together while in fact they were often at odds and it was mostly due to chance that they achieved the unification of Italy. In attempts to accomplish this, they named the three men the heart, the pen and the mind. By appropriating these three, very simple, very clear and symbolic vocabulary terms to the three men, historians were able to portray them as equally idealistic symbols, who were simple and pure in their goals. Furthermore, it allows people such as myself, the readers of history, to understand these three men not as the people they were but as the concepts and ideas that they represented. Thus, while the knowledge presented is accurate, in that Garibaldi was in fact a brave soldier, Mazzinni was a prolific writer and Cavour was a political genius, this knowledge was certainly shaped by the vocabulary that was used to understand it.

Despite this ability of vocabulary to greatly shape our understanding of history, there are at times complications with the use of vocabulary in understanding historical knowledge due to our oftentimes ambiguous understanding of its meaning. As an important part of history is understanding the causes of events and, ultimately, all of these events were caused by humans, any student of history must study humans in order to understand why they took certain actions whether a groups or as individuals. A constant driving force behind human decision making is emotion, and as such historians often have to consider emotions in explaining history. One such instance can be found in Isaac Deutscher's work, Stalin: A political Biography, when he describes how Stalin's regime maintained power. "... he gave the people healthy doses of fear and illusion. For those for whom the fantastical illusion of a utopian Bolshevik society was not enough, a good deal of fear would be used to keep them subservient" (Deutscher, 138). In this passage he describes how the emotions of fear and illusion kept Russian society in order. The writer cannot be sure that the reader will associate the same emotions with the words fear and illusion as he has, as there is a large amount of ambiguity in the meaning of emotional vocabulary. With words describing such physical, concrete things as a pine tree, there is little ambiguity as many people can all

observe a pine tree and agree upon the fact that this is what the word pine tree refers to. However, with emotion, there is no such definite external manifestation which can be agreed upon as the meaning of the word. We cannot be entirely sure that the feeling we associate with the word fear is the same as that which others associate with it. As such, the use of emotional vocabulary in history to understand such things as the state of society under Stalin is perhaps not very effective in purposefully shaping our understanding of it as its meaning is by no means uniform.

Mathematics, in its use of vocabulary, has a very different purpose from that of history. Through proving relationships using numerical methods, mathematics seeks both to model the real world and to understand the purely abstract relationship between numbers. Mathematics greatly differs from history in that in mathematics there is always a single, definite solution to be reached rather than a variety of supported views. As such, in Mathematics vocabulary cannot be used in order to further the aims of the mathematicians in convincing us of a certain conclusion. The role of vocabulary, which in the case of Mathematics is a set of symbols, is not to shape the actual knowledge gained or conclusion reached but rather to shape our understanding of the significance of the numerical conclusion which has been reached. This is significant in the realm of applied mathematics as numbers in this branch of mathematics are not merely abstract conceptions but rather symbolic representations of some physical situation. One instance in which the symbology used in mathematics shapes our understanding of it is with derivatives. The first derivative is an indicator of the rate of change of a function. There are two symbols which can be used to show the first derivative, these are $f^{1}(x)$ and $\frac{dy}{dx}$. Both symbols have the same meaning, however, the second gives us greater understanding of the value's significance. What is being calculated is a rate and thus a ratio of the change in one value to the change in another. While the first one is an arbitrary dash mark above the letter f, the second shows that one value is being divided by another and thus that a ratio is present, which is useful in allowing us to understand that this value models some sort of rate, whether it be a velocity or otherwise, in the real world.

I have now explored, to the extent possible in the context of this essay, how successful the purposeful selection of vocabulary can be in effectively shaping our knowledge. It would appear that while a greatly deal of ambiguity regarding emotional vocabulary and other types of vocabulary both shapes our understanding, and hinders us

the search for knowledge in history, it is perhaps less present in more precise and definite areas of knowledge, though even in these areas of knowledge the effect of vocabulary is not negligible. Before conducting this investigation, I understood that vocabulary could shape our knowledge, however, I have now become aware of a great deal of ambiguity involved in this process. As such, I must now ask myself what new understanding or approach this investigation has given me. One approach could be to disregard the use of vocabulary in understanding knowledge due to this ambiguity, however, this is clearly not at all pragmatic. Rather, as a student of history I will understand that when reading works of history, the understanding of the historian is at least somewhat removed from my own due to the ambiguity of vocabulary; and that, perhaps more importantly, when reading a historical source or extract, whether it be from Hitler's speeches at the Nuremberg rallies or Bismarck's treaties, that the context and connotation of vocabulary in these different time periods and societies must be understood. However, this recognition is common among students of history, and thus it is more significant that I am able to identify the significance that mathematical symbology places on numerical answers, as this is not an area of knowledge in which students are typically conscious of or prepared to analyze the role of vocabulary in shaping what we know.

Works Cited

Brazeau, Brian. Class Lecture. IB Standard Level English. American School of Paris, Paris, France. 2011.

Deutscher, Isaac. Stalin; a Political Biography. New York: Oxford UP, 1967. Print.