STS Paper

In a world that is becoming more and more dependent on technology, we often wonder why certain technology becomes the next best thing while others never make it to the shelves. Technology’s success has been a considerable sociological topic since it is the human race that is the prime contributor to the success and failure of specific technologies. The idea that society shapes technology is explained by the concept referred to as “The Social Construction of Technology” (SCOT). Specifically, SCOT is a “developmental process of a technological artifact described as an alternation of variation and selection” (SCFA 28).

The definition of SCOT was coined by Trevor J. Pinch and Wiebe E. Bijker. First Pinch and Bijker recognized a relationship between sociology and science. They believed that explanations for the genesis, acceptance, and rejection of knowledge claims are sought in the domain of the social world rather than the natural world” (SCFA 18). So, it is society that decides what information will be researched and what finidings will become important to the public. Since science and technology have become so closely related, a sociological viewpoint has been taken to technology as well. Specifically “whatever resources are appropriate for the purposes at hand” are brought forward by society to be utilized in technological endeavours (SCFA 21). Specifically in SCOT, the forces that shape what technology is going to be developed and what technology will succeed are “human engineers, market forces, consumer needs and demands, organizations, government policies, and individuals/groups who are social processes” (1st citation).

According to Pinch and Bijker, the first step in SCOT is to name the relevant social groups that have members who have the same use and need for a specific technology. There will be multiple social groups relevant to each artifact with different interpretations of that artifact. This variation in interpretation is called interpretive flexibility, which explains that people with different values or cultures design and use specific technology in different ways (SCFA 40). Each group will have its own specific problems and solutions associated with the specific technology (Lamp 76). For every problem there are multiple solutions considered. Eventually, specific solutions for the problem stabilize (SCFA 44). After stabilization there are two possible ways of closing the issue (44). Rhetorical closure occurs when the relevant social groups believe the problems they were facing are solved by one of the technological solutions. Otherwise the problem is redefined by social groups (46).