

8A: Links Between Heilbroner and Pinch and Bijker

Word Count: 487

1. Claim	claim is appropriate to the assignment, is clear and precise, and guides the entire text.
2. Analysis	details mentioned apply to the claim.
3. Information	information is correct and relevant; quotes advance argument and are "well framed."
4. Frames	first sentence(s) clearly and precisely summarize claim; final sentence reprises the claim.
5. Development	second paragraph uses information from the first paragraph; key terms are reused.
6. Signposts	use of explicit comparatives ("in contrast"; "similarly"; "however"; etc.); avoid "also."
7. Paragraphs	sentences flow logically; no digressions or repetitions; transitions link paragraphs clearly.
8. Sentences	meaning is clear and comprehensible; vocabulary is precise; sentences have varied structure.
9. Mechanics	document has been proofread for grammar, spelling, and reader's "pet peeves."
10. Format	document follows the required format (font, spacing, length, identifying information, etc.).
11. Extras	novel claim; unexpected evidence; surprising analysis; adept turn-of-phrase.

Heilbroner and the duo of Pinch and Bijker present differing views on the links between society and the path of technology. However, their ideas are not polar opposites, and the two essays do share some common ground. One of the most prominent points made in "Do Machines Make History?" was that technological developments can have a profound impact on human society. Heilbroner asserted that changes in the production methods of goods can change the workplace, and through that, influence culture and society. Pinch and Bijker would not disagree. In fact, much of their argument depends on the fact that society does react to new technology. The difference in the essays comes from the SCOT proponents' reminder that society's involvement with new innovations also allows people to influence the direction of future technological development. They explain that rival technologies go through a selection process based on problems and solutions, where "a problem is defined as such only when there is a social group for which it constitutes a 'problem.'" When a new innovation comes about, society will change in reaction to it, but social groups can influence the future development of the innovation through reactions to its faults. The social process that Pinch and Bijker describe would not work if society did not react to technological developments in the way Heilbroner described.

Heilbroner would have similarly agreed with the logic presented in "The Social Construction of Facts and Artifacts." He takes time to acknowledge the legitimacy of arguments like the ones presented in that essay, agreeing that "the direction of technological advance is partially the result of social policy." However, unlike Pinch and Bijker's forced agreement with his points to support their own argument, Heilbroner can agree with them because his essay works at a higher level of abstraction. In analysis of the bicycle's effect on society, Heilbroner would have observed that the technology was a method of one-man transportation that replaced horse-back riding and provided the poor worker with a cheaper form of travel. Between the first invention of the bicycle and its final stabilization into one design path, this fundamental impact did not change. Whether or not Pinch and Bijker are right matters little to Heilbroner's theory, because no matter what happens during the unstable early phase of a technology's life, it won't lose the purpose that brought it into being in the first place. Technology ends up having a rather set impact on society, and in turn, technologies are created predictably to solve new issues as they arise. Heilbroner qualified his ideas by stating "The general *level* of technology may follow an independently determined sequential path, but its areas of application certainly reflect social influences." With this revelation, we can see that Heilbroner and Pinch and Bijker aren't arguing opposite sides of an issue, but are actually proposing slightly dichotomous views that can be melded together to form a more comprehensive picture of the topic.