

國立陽明大學 101 學年度碩士班暨碩士在職專班

招生考試筆試試題

所組別： 科技與社會研究所

科目： 英文閱讀與理解

請勾選： 碩士班 碩士在職專班

★請注意：共四題英文閱讀題。請對每題英文加以翻譯，若時間不足，則起碼對每題的英文儘量作說明與解釋。

1. For most of the twentieth century sociology took a rather simple-minded view of science and its social role. It was assumed that science operated according to its own independent logic and that scientific thought was essentially beneficial or – at least – that it was a simple matter of weighing benefits and costs since, whatever its drawbacks, science did offer an accurate depiction of how the world was. This was also mirrored in some ways in the broader culture where science typically enjoyed high prestige and was commonly invoked in advertising campaigns and publicity slogans. Science was assumed to give rise to a greater understanding of the surrounding world, an ability to predict events and to control and manipulate parts of that nature. Despite wide, everyday acknowledgement of the importance of science to social change, science was comparatively neglected by many sociologists, perhaps because they lacked scientific training and felt overawed by the demands of science. Scientific institutions had tended to be neglected by the founders of the discipline also... (30%)

Steven Yearley, *Making Sense of Science*, p.x

2. The debate about the public understanding of science is... confounded by confusion over method and content. What should be explained is methods of science, but what most people concerned with the issues want the public to know is the truth about the natural world—that is, what the powerful believe to be the truth about the natural world. The laudable reason for concern with public understanding is that scientific and technological issues figure more and more in the political process. Citizens, when they vote, need to know enough to come to some decision about whether they prefer more coal mines or more nuclear power stations, more corn or clearer rivers, more tortured animals or more healthy children, or whether these really are the choices.... The ‘public understanders,’ as we might call them, seem to think that if the person in the street knows more science—as opposed to more *about* science—they will be able to make more sensible decisions about these things. (20%)

Harry Collins and Trevor Pinch, *The Golem*, p.144.

3. The crucial move in the new sociology of technology is the attempt to uncover and analyze the choices embedded within technologies and technological regimes and show how these choices are tied to wider societal concerns. One obvious means of doing this and “opening the black box of technology” is through the use of history. Historical analysis shows that things have not always been as they are today and thus exposes the potential for showing how things could be and were different. In terms of the analysis of institutions, Foucault's work (*Discipline and Punish*) is particularly instructive. His focus was mainly on what he called “technologies of the self,” but his examination of specific disciplining institutions such as prisons drew attention to their material dimensions. The panopticon is well-known, but the separate system of prison care initiated by reformers such as Jeremy Bentham included many new technical devices such as the architecture of rooms to avoid prisoners seeing each other... Foucault’s broad-brush technique did not examine these technical artifacts in detail, but such “total institutions” clearly depend on material arrangements and technical devices. (30%)

Trevor Pinch, ‘The Sociology of Science and Technology,’
in *21st Century Sociology*

4. What I want to argue here is that activist movements...can in certain circumstances bring about changes in the epistemological practices of science—our ways of knowing the natural world. Nothing guarantees that such changes will be useful in advancing knowledge or in curing disease, but in this case, I want to suggest, lay participation in science had some tangible benefits, though not without risks. This is a surprising finding, and one that is...at variance with popular notions of science as a relatively autonomous arena with high barriers to entry. And it runs counter to the view that many might normally voice—that science must be safeguarded from external pressures in order to prevent the deformation of knowledge. (20%)

Steven Epstein, ‘Democracy, Expertise, and AIDS Treatment
Activism,’ in *Science, Technology, and Democracy*, p.16



