

國立陽明交通大學科技與社會研究所
110 學年度碩士班暨碩士在職專班考試入學複試筆試試題

科目：英文閱讀與理解

★說明：以下兩題為翻譯題（英翻中）。若時間不足，請就各題內容儘量說明與解釋。

1. “Data” comes from the Latin for “givens,” but much work has to be done to create typical data. While data are givens within science, the creation of data is a topic for investigation in STS. In a neurobiology laboratory, for example, photographs of sections are carefully marked to highlight the features that the researchers want to take as data (Lynch 1985). These features are not merely ones that would be invisible, indistinct, or unremarkable to an untrained eye, but only make sense in particular experimental and observational contexts. That is, the markings and enhancements of the slides bring to the fore features that the researchers, working in local research contexts, were looking for. So not only does it take expertise to read such slides – there are no mechanical rules for reading – but the expertise needs to be attuned to local circumstances. The careful highlighting and labeling of features on the photographs in some sense takes them out of their most local contexts and makes them available for inspection by the relevant expert community more generally.

Sismondo, Sergio (2006) ‘Studying Laboratories’, p. 112 in *An Introduction to Science and Technology Studies*. Malden, MA: Blackwell.

2. Perhaps the most significant contribution of research in engineering studies is that it provides case studies of life on the constructed social boundaries between science and society and between labor and capital. Engineering knowledge, for example, appears to be neither purely scientific nor only social but somehow a combination of the two. As the term applied science has long suggested, albeit misleadingly, knowledge-producing activities in engineering appear to occupy a double location both inside and outside of science. At the same time, engineering work appears somehow to be a combination of the activities of labor and the activities of capital. In positions that vary from country to country, engineers regularly find themselves grappling with ambiguities engendered by their double location as both objects and representatives of corporate power. The ambiguities in engineering knowledge and engineering work thus not only raise interesting conceptual problems about boundaries but also generate difficult power issues for engineers as persons.

Downey, Gary Lee, and Juan C. Lucena. (1995), ‘Engineering Studies’, p. 167 in Jasanoff, Sheila, Gerald E. Markle, James C. Petersen, and Trevor Pinch (eds.) *Handbook of Science and Technology Studies* (Revised Edition). Thousand Oaks, CA: Sage.