Reacquainting Two Cultures

to prevent a silent de-elsification of nutrigenomics?

I. Two Cultures

Sir Charles Snow, being a writer and a scientist, felt that he “was moving among two groups – comparable in intelligence, identical in race, not grossly different in social origin, earning about the same incomes, who had almost ceased to communicate at all” (Snow, 1993 [1959], p. 2). He called these two groups *the two cultures*. These two cultures referred to those involved in the natural sciences and those in the humanities. In his days, it was not customary to distinguish between the humanities and the social sciences. In nutrigenomics, for instance, one can distinguish between ELSA on the one hand, and science on the other, making it a two-cultured endeavour.

Many argue that this division is an awful thing. Snow did so, and presently, it is also said that natural science, the humanities and social sciences should no longer solely exist as disconnected from one another.

IV. Sensitisation

Drawn from biology, a possible definition would be ‘to render an organism sensitive to a serum via a series of exposures’. Exposures are a prerequisite to interaction: one has to pursue a certain proximity in order to interact. Researchers continuously expose themselves to the field they study, enabling them to see deeper and more clearly into its heart. Since, in ELSA, the ‘object of study’ are scientists, the actors from the field of study are exposed to the researchers as well.

Methodological terms, such as participation, interaction, expertise, saturation and sensitisation all describe aspects of cognitive and normative exchange and are thus all connected. To this particular type of study, participation is very important, since it provides the opportunity to interact on a large scale. Interaction is something that happens between practices, between science and ELSA and between the scientist and the ELSA researcher, across the boundary between the two. Sensitisation makes this boundary easier to cross, in both directions. Finally, sensitisation may even lead to interactional expertise. Interactional expertise enables an individual to meaningfully comprehend and engage in debate and discussions in a practice that is not native to him or her, as if it were so, whereas contributory expertise enables someone to contribute insight and actually participate to a practice, fully mastering its language, normativity and materiality (Collins and Evans, 2003, 2004; Collins et al., 2006).

Expertise cannot be acquired by reading papers or books; but it can by participation, interaction and sensitisation. Sensitisation contains elements of a cognitive, as well as a normative recognition and outreach over the boundaries between science and ELSA. It requires a lot of work and failure is a real and imminent danger. Accordingly, the relation between researcher and object of study is in constant peril. If ELSA researchers were to constantly try to sensitise scientists – here, ‘indoctrinate’ perhaps would be a better word – that may lead to overkill, an imbalance – irritation – and perhaps even expulsion.

Both science and ELSA may benefit from an active attempt to make the boundary between them more permeable. Although it takes a lot of hard work, it may make them more sensitive and more relevant to one another.

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II. ELSA

Over the last couple of decades, generally a more pro-active approach has been taken to understanding the relationship between science and technology on the one hand, and society on the other. For instance, a relatively new tradition in science policy states that large-scale technological research programs should be accompanied by studies of the social, political and legal issues which surround the theme of such programs. One can argue that this started with the study of the so-called ethical, legal and social issues (ELSI) that surround the Human Genome Project. Following the example of the HGP, most of the international large-scale research initiatives have set up similar initiatives. Genomics, nutrigenomics and nutrition science are no exceptions to this trend.

III. From academic ELSI to pragmatic ELSA

One of the rather blunt critiques of the academic ELSI programme states that “ELSI has failed” (Kitcher, 2001, p. 189). While an enormous amount of papers were written in the ELSI programme, “virtually nothing has been accomplished” (p. 188). Kitcher argues that science in general, but genomics in particular, is part of our world. It does not raise clearly demarcated ‘issues’, which can be analysed, discussed and “solved in a politically neutral way” (p. 189). Instead, the changes (one may call them problems) invoked by the new genetics are part of much broader social and political questions and dealing with them would require much more than a discussion of issues. This discussion of issues can be identified as the ‘pragmatic turn’ and when looking at how ELSA is performed, it can be said to dominate the ELSA landscape.

How does a pragmatic ELSA look like? Well, the development of nutrigenomics is to proceed and in its slipstream social, ethical and political issues can be discussed. This particular approach results in a facilitating position for social science, unable to adopt a very critical stance towards nutrigenomics’ objectives, agenda and products. The power to set the research agenda for both natural and social science, lies mostly with the natural scientists. This does not exclude social science from nutrigenomics, but it prefers a specific subset of ‘issues’ alongside a specific subset of social science: communication research and ethics (guidelines and tools).

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