

# Philosophy, Science, Education and Tolerance

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- In his proposal for the panel, Umpleby wrote that he is concerned about the “philosophical and social orientation of society”, and that this was a fourth level of cybernetic enquiry. It is irreducibly normative, culturally deeply ingrained and requires meta-level (fourth level?) analysis.
- How we think of other people, who are “outside” our own community, what we think are even solvable problems, over which we have some control, how we think of science, what our philosophical or religious roots are in our community are all intertwined. To notice the connections require this very high-up bird’s eye view.

- From high up, we cannot see everything; but we can see some things. What is important too, is to consider how to bring about changes in these deep-rooted, and difficult to question, beliefs or 'hinge principles'. It is not that we necessarily want to change them, but rather we want to understand that we have a choice in these matters, and that we can change the very hinges if they become problematic in some way.
- Asking about our choices in these matters is really a philosophical endeavour. But it is not, for all that, unscientific. We can be systematic, without being modular, first-order, computational and arithmetic. We can be rigorous – employing the very best statistics. We can also recognise when it is that normative and qualitative considerations become inseparable from our enquiry. So, we need both philosophy and science to make an analysis at these high levels.

- To make the sorts of changes that I think Umpleby is concerned about, we need education – education in, and of, science, *in* science because this gives us valuable information that we cannot always reliably intuit; education *of* science because we can then start to evaluate this information. We also need education in philosophy because this allows us to see from different perspectives, and jump up the levels of enquiry. In some cultures, and with the added pressure of overpopulation, global markets and competition for resources, it takes a lot of sophistication to overcome our blinkered alienation and regain our curiosity and tolerance towards others.
- Education is one way. There are others.