

## **Techno-moral imagination in relation to nanotechnology**

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It is necessary to explore ethical and social aspects of nanotechnology in advance, so as to enable 'responsible development and innovation'. But what typically hampers science-society dialogues is the focus on hard impacts rather than on soft impacts. Hard impacts can be defined as [a] dependent on non-controversial moral values like health, safety, sustainability and – to a lesser extent – privacy, [b] as quantifiable, and therefore compatible with the discourse of scientists and policy makers, and as [c] relatively independent from user-creativity. Soft impacts, then, [a] rest on more controversial values, are [b] often not quantifiable and [c] to a large degree depend on users for their occurrence. A particularly interesting type of soft impact is when established morals change due to the impact of the new technology, thus leading to techno-moral change. I'll argue that in liberal-pluralist societies concerns about soft impacts tend to be marginalized, with the result that those who have these concerns feel not represented. In order to redress this problem, I argue for providing a larger role for techno-moral imagination of nanotechnology's soft impacts. As an example, I'll present the set-up and outcomes of a vignette & scenario project, that was conducted as part of the National Nanodialogue in the Netherlands. I'll relate how we proceeded to develop these vignettes and scenarios; what are their main features; and how a 'method' for developing techno-moral vignettes and scenarios could look like. Finally, I'll describe some other, current, projects that build on our collection of vignettes and scenarios to engage the public in deliberating nanotechnology's soft impacts.