

Letter

The Need to Understand GMO Opposition: Reply to Couée

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Ivan Couée [1] suggests that our article 'Fatal attraction: the intuitive appeal of GMO opposition' [2] defines the societal debates about biotechnology as 'a battlefield between rationality and irrationality'. Instead, he proposes 'a framework of mutual respect and interest between citizens and scientists'. However, we believe that this is a false dilemma. While we endorse his plea for mutual understanding, we think that comprehending how concerns and beliefs about GMOs arise from untrustworthy sources facilitates, rather than impedes, the development of a conciliatory framework. In our experience, when scientists learn about the intuitive and emotive basis of public concerns, they do not put them aside as irrational. On the contrary, they tend to take a more lenient attitude towards GMO opposition, simply because they now better understand where it stems from and why it exists. Moreover, understanding GMO opposition induces scientists to consider the role and the impact of science on society at large, and to think about ways to improve the communication and relationship with the public. On the side of the public, the realization that some of their ideas are illusory prompts lay people to reconsider their stance towards GMOs.

Couée acknowledges the need to understand why people oppose GMOs. Indeed, he renders his own account, arguing that in the wake of earlier cases, people are understandably skeptical about the introduction of new biotechnologies. This rationale leads Couée to describe the opposition as a case of empirical rationality. We welcome his attempt to account for GMO opposition, which certainly has merit. We can indeed imagine that earlier cases have made citizens more cautious towards biotechnology. However, Couée's explanation for why people oppose GMOs does not make the opposition any more rational than our account in terms of human cognition. In the end, opposing GMOs in general remains unreasonable in light of the scientific evidence. This includes evidence pertaining complex societal issues, about which lay people err as much as about facts concerning the technology. Moreover, Couée's approach fails to account for the typical features of the GM opposition and why the focus lies on GMOs and not on other technologies. As such, an analysis in terms of intuitions and emotions makes an essential contribution to the understanding of GMO opposition.

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2. Blancke, S. et al. (2015) Fatal attraction: the intuitive appeal of GMO opposition. *Trends Plant Sci.* 20, 414–418

Forum

The Future of Field Trials in Europe: Establishing a Network Beyond Boundaries

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We propose the establishment of a European Consortium for Open Field Experimentation (ECOFE) that will allow easy access of European plant and soil scientists to experimental field stations that cover all major climatological regions. Coordination and quality control of data extraction and management systems will greatly impact on our ability to cope with grand challenges such as climate change and food security.

Technical and social infrastructures are the backbones of modern societies, enabling vital amenities such as supply and disposal of products, financial transactions, education, art, social security, and health services. Without such infrastructures, trade, travel, and technological and social progress would be almost impossible. Because they are so essential, it is commonly accepted that infrastructures are a public responsibility, in other words they are developed and maintained by the state.

Because infrastructures for scientific research are equally important for the advancement of science and