Abstract

From 2006-2011, together with Gaymon Bennett and Paul Rabinow, I explored the ethics and ontology of ongoing efforts to make biology easier to engineer: the stated task and aim for a cadre of bioengineers who call themselves synthetic biologists.

Early in our work, a core problem became visible, whose indeterminations were as significant for us as for the bioengineers with whom we were engaged. The problem is this: the challenge of making biology easier to engineer cannot be reduced to the techniques and technical milieu for engineering biology—however crucial these may be for determining a certain range of biological possibility. The reason, to put it bluntly, is that the living organism pushes back on experimental ambition.

Much has been made of molecular biology having entered an 'age of fabrication'. The increased ability to forward-engineer biological systems is striking, to be sure, and fabrication is very much on the agenda, as evidenced by the recent creation of venues dedicated to becoming 'foundries' for biotechnology. The purported shift away from older problems in molecular biology, however, is easily overstated: this brief paper takes up such overstatement, its indeterminations and discordances within the field of synthetic biology.