NUFFIELD COUNCIL ON BIOETHICS

Expert roundtable meeting

Ideas about naturalness in bioethics debates

Wednesday 30 September 2015
28 Bedford Square, London WC1B

Note of meeting

A list of the meeting participants is provided at Annex A.

1 Following a presentation of the Council's research on naturalness so far, the participants were asked to provide feedback on the findings and their significance for those professionally engaged in debates about bioethics issues. The key points raised are summarised below.

General points

2 The fact that the Nuffield Council is conducting a project on this topic represents a shift in thinking. It has moved to the idea that we should engage in what people mean when they use the terms *natural, unnatural* and *nature*, rather than dismissing them as a trap or non-entity.

3 Concerns about naturalness could be better understood and addressed head-on to improve public debate about advances in science, technology and medicine.

4 Naturalness has become a nemesis for science, underpinned by public questions about trust in authorities and scientists, their oversight, and the extent to which the public feel involved in the process. There is often wisdom in people's views, even if not expressed in language that scientists readily adhere to.

5 We need to equip policy audiences with the tools to communicate with public concerns about naturalness. Engaging with this vocabulary can help us move forward. Public engagement exercises should be responsive to these dynamics.

6 Expressing relief about not using these terms in a value-laden way is itself value-laden.

Definitions and different viewpoints

7 We all often use the words *natural* or *unnatural* without really ever defining them. The words are used impulsively and have no agreed or fixed meaning. They are

often used to lend weight to a predetermined argument rather than to advance a discussion.

8   Naturalness seems to be a concept we grasp for when we can't really put our finger on what we don't like; it's used as a placeholder or proxy for something else. However, it's not always clear that these terms are a placeholder for talking about concerns about e.g. safety – talking about safety could also be a way of expressing moral concerns.

9   It is difficult to draw ethical distinctions based on distinguishing between the natural and unnatural.

10 Some participants thought the whole concept of naturalness was a trap; a deficient word. Even the most ardent proponents of a 'natural' world would be, it was suggested, reluctant to give up technologies which are far from natural. Just because a new procedure 'mimics nature' or an inserted gene is already 'naturally occurring' doesn't automatically make it good, safe or desirable. Sometimes scientists fall into the trap of aligning their own advances with the natural world to gain acceptance. Both approaches are equally unreliable and potentially misleading to the public.

11 Everyone has a worldview, a set of beliefs about 'life, the universe and everything' that determines the way they think and act in the world.

12 Christians believe there is such as thing as human nature. The Bible teaches that every human life is precious and unique. Human value, dignity, worth and human nature are all grounded in the view that humans bear the Image of God.

13 The key here is what is our intention. The goals of relieving suffering and exercising autonomy (within limits) are good. Jesus healed but he did not enhance. Ethical art intervention, as an analogy, seeks to protect, maintain and restore the masterpiece to the original, whereas unethical intervention seeks to enhance, alter or improve the original design at a fundamental level.

14 Humans are exhorted by God to: 'Be fruitful and increase in number; fill the earth and subdue it'. So the wise use of technology is supported and encouraged by Christians. In fact, Christians believe that we have an ethical obligation to reach out and heal the sick and to embrace technology as aids to prevent or correct illness and restore health and fitness.

15 We need to pay attention both to the ends (ie goals) being pursued (for individuals and for society) and also the means of obtaining those ends.

16 The question we constantly ask is not so much whether it is 'natural' or not but: 'what might the impact of each particular technological development have on the inherent nature, value and equality of all human life?'

Public perspectives

17 One participant suggested that the public are generally not concerned with naturalness. Early media reporting will often seize on the most extreme

viewpoints as they make for colourful articles, but it's not long before the questions most people ask are 'can feed it to my kids?' and 'is it safe?' When meddling with nature could save someone's sight, initial fear and disgust seem to evaporate. The public are, by and large, pragmatic.

18 Scientists are part of the public too and many see nature as a good thing, but also that where we are as a society is 'unnatural', i.e. after years of farming.

19 The timing and location of debates makes a difference to people's views. You get very different responses if the discussion starts very early in scientific developments, and if people and their homes are personally affected.

20 Once policy makers become aware of a debate about science and technology, (non evidence based) public opinion often is already formed and starting to lever politicians. More precise language could help Parliament take a more rational view.

21 When public debate plays out, scientific developments mustn't be allowed to become casualties of lazy or deceptive appeals to the natural order of things.

22 If you probe people's misgivings, an appropriate public policy response can be introduced, with safeguards and limits.

Bioethics topics

23 Naturalness doesn't come up that much in discussions about GM or fertility, but it does come up often when people talk about food. One of the reasons GM crops is still meet with opposition in Europe is not because they are seen as unnatural or weird, but simply because we don't personally experience enough of the problems they are designed to solve.

24 We are sold 'natural' products but it doesn't have a legal meaning. We may be being ripped off and led into dangerous dietary regimes.

25 A bigger issue might be chemicals, additives and processes being labelled as unnatural and blamed for things they are not necessarily responsible for, such as allergies. A market has grown up for tests for 'man made' products, which are meaningless and expensive.

26 An interesting example is 'natural IVF', which uses no or fewer drugs to collect few or one egg. Many couples find this appealing because they are attached emotionally to the ideal of 'natural reproduction'.

27 It is surprising that the concept of naturalness didn't come up that much in the public dialogue activities on mitochondrial DNA therapies; not as often as it did during discussions about hybrid embryos in the past.

Comments on the draft paper

28 A short summary of the findings could help science organisations tackle the 'unnatural issue' head on, rather than avoiding or dismissing it.

29 The finding that there was a difference in the use of the terms *natural* and *unnatural* by scientific organisations and by media, Parliamentary and civil society sources was interesting.

30 When talking about media coverage we must be careful not to confuse news and comment pieces. It was heartening to see that value-laden uses of natural/unnatural were quite rare in news articles, which is encouraging for those who want science reporting to be objective and fair. Commentators exist to take strong (and often extreme) positions, where phrases like 'playing god' and 'the natural order of things' trip easily off the page.

31 The political significance of the terms is underplayed in the current draft. For example, in discussions about synthetic biology the public are concerned about control of authorities and overstepping the mark.

32 Other areas participants suggested might be explored include: the aesthetic appeal of nature, non-Christian and cultural perspectives, the relational meaning of naturalness, differences between the use of the terms in different scientific disciplines, non-human ethics, and the relationship between personal benefit and concerns about new technologies.

Comments about conclusions and recommendations

33 Professionals engaged in these debates should first accept that everyone has very different starting points when it comes to naturalness, which can be shaped by ideology, religion, culture or just squeamishness.

34 When we have these debates about scientific developments we shouldn't be going out to change people's minds – it should be about putting everything on the table and shining a light on it. Policy makers must delve deeper through public engagement.

35 The report might help scientists and scientific bodies have clarity about what they mean when using the terms themselves, understand how other people use the terms and use this broader understanding to reflect on their own work and explore deeper issues.

36 It may be OK to use the terms in media articles if the context is explained in the rest of the piece. However, journalists, particularly news journalists, should push below the surface and be more specific.

37 Recommendations could include to communicate science plainly and in the context of similar technologies. The public engagement with science community would be interested in these findings and could be a target audience for recommendations.

Annex A   List of participants

Participants

Roland Jackson, Chair of the Nuffield Council on Bioethics Steering Group on naturalness and Executive Chair of Sciencewise (CHAIR)

Diane Beddoes, Chief Executive, Dialogue by Design

Kayo Chingonyi, poet

Jeanette Edwards, Professor of Social Anthropology, University of Manchester and Chair of the Nuffield Council on Bioethics Working Party on cosmetic procedures

Adrian Evans, Senior Research Fellow in Food and Community Resilience, Coventry University

James Gallagher, Health Editor, BBC News Online

Andy Greenfield, Programme Leader in Developmental Genetics, MRC Harwell, and Chair of the Nuffield Council on Bioethics Working Party on genome editing

John Holmes, Deputy Head of Science and Society, Department of Business, Innovation and Skills

Sile Lane, Director of Campaigns, Sense About Science

Catherine Joynson, Programme Manager, Nuffield Council on Bioethics

Phil Macnaghten, Knowledge, Technology and Innovation Group, Centre for Integrative Development, Wageningen University, The Netherlands

Katherine Mathieson, Director of Programmes, British Science Association

Darian Meacham, Senior Lecturer in Philosophy, University of the West of England, Bristol, and a member of the Bristol Synthetic Biology Centre

Patrick Middleton, Head of Public Engagement, Biotechnology and Biological Sciences Research Council

Andrew Miller, ex-labour MP and previous Chair of the House of Commons Science and Technology Select Committee

Sarah Norcross, Director, Progress Educational Trust

Nicola Perrin, Head of Policy, Wellcome Trust

Emma Rose, Campaigns, Lobbying and Communications Specialist, Alliance to Save our Antibiotics

Tom Shakespeare, Senior Lecturer in Medical Sociology, Norwich Medical School, University of East Anglia, and a member of the Nuffield Council on Bioethics Steering Group on naturalness

Tom Sheldon, Senior Press Manager, Science Media Centre

Mona Siddiqui, Chair in Islamic and Interreligious Studies, University of Edinburgh, and a member of the Nuffield Council on Bioethics Steering Group on naturalness

Philippa Taylor, Head of Public Policy, Christian Medical Fellowship

Juliet Tizzard, Director of Strategy and Corporate Affairs, Human Fertilisation and Embryology Authority

Chris Tyler, Director, Parliamentary Office of Science and Technology

Anna Wilkinson, Programme Officer, Nuffield Council on Bioethics

Adam Wishart, writer and documentary maker, and a member of the Nuffield Council on Bioethics Steering Group on naturalness