

Playing God?

The language behind genome editing

Uniform and eugenic dystopian society or the elimination of suffering and enhancement of human capabilities? 'Designer babies' or 'embryos' with manipulated traits? Using 'tools' or 'playing god'? In the last few years, these Aldous-Huxley-Brave-New-World questions have turned from science-fiction dystopian fantasies into notions vigorously discussed in various scientific conferences, Oxford union debates and across the media. Still perplexing and mysterious for most people, the ground-breaking discovery of genome editing has divided people into two camps: those praising gene-editing and those condemning it. Both sides have adopted a certain set of vocabulary, metaphors, euphemisms and dysphemisms to refer to this most complicated ethical dilemma: should we allow gene-editing?

The most widely used method is using language that would present genome editing as natural and beneficial. Take, for example, the *'growing of CRISPR-edited plants'*:

'growing' – most naturally occurring process, and plants – the nature itself.

In relation to humans, the supporters are talking about *'restoring the humanity'* – *'correcting'* the *'faulty'* version of sequences in *'afflicted'* patients and *'modifying'* genetic *'abnormalities'*. In short, this majestic tool can take errant human genes and bring them back to the natural way.

The pro-side of this notion also presents scientists administering gene-editing as *'doctors'* who cure, associating this tool with health and wellbeing. These healers can *'eliminate great suffering'*, *'maximise health'*, *'free people from disease'*, and *'correct devastating diseases in the womb'*. These procedures are referred to as *'gene therapy'* - one of the euphemisms for genome editing.

Furthermore, genome editing can *'maximise'* not only our health but also some of our abilities. How about *'augmenting'* our physical strength? Or *'empowering human beings to evolve and flourish beyond their current limitations'*? This great genetic tool is opening *'endless possibilities'* that can significantly improve human lives.

A lot of the vocabulary used tends to emphasize the importance of scientific progress, for it is *'ground-breaking'*, a *'breakthrough'* that can solve issues *'in a diverse range of fields... at a fraction of the cost'*.

However, scientific advancement is inseparable from scientific terminology – often confusing, perplexing and mysterious to the common person. To avoid distrust and suspicion of *'CRISPR'*, *'TALENS'* and *'zinc fingers'*, all these are christened as *'tools'* with which the scientists and doctors tirelessly perform delicate operations for the good of society. With *'precise and versatile... genetic scissors'* (this especially lucrative euphemism also presents the science as something more commonplace and familiar) they carry out *'simple acts'* of genetic engineering and make *'targeted changes'*, not any more unconventional than a surgeon using threads and a needle to suture wounds.

Lastly, a set of vocabulary is often used to avoid the controversy revolving around the problem of the ethical handling of life. All experiments seem to be conducted on '*objects of scientific study*' rather than animals. The end product – '*genetically modified livestock*' (itself actually a euphemism for animals). The words '*baby*' or '*human*' are hardly ever mentioned. Instead, a scientist deals with '*embryos*' and '*genetic material*' – something that is acceptable to work on and experiment with.

Much more fascinating still is the language employed by the condemners of genome editing. In fact, their arguments (although not deprived of scientific foundation) are much more often based on emotions, feelings, opinions and values, rather than on scientific data. Their choice of diction urges the reader to deeply consider the meaning and the value of humanity. Hence gene-editing can '*alter human lineage*', '*diminish human merit*', '*degrade our love*', '*sacrifice and undermine the human nature*', and even '*take away the soul*' - rather dysphemistic and emotive language.

Secondly, the opposers, via their words, tend to accentuate such exceedingly large power concentrated in the hands of the people in charge of gene-editing, who are '*toying with the secret to life*', '*tinkering with heredity*', '*playing the divine*'. All these dysphemisms connote carelessness and nonchalance, implying that scientists are messing around with DNA, with no concern about possible implications on society. Moreover, they are intervening with nature itself, meddling with the essence of life, taking on too much power with little responsibility: they '*remake life*' '*manipulate*', '*shape*', '*mould*', '*control*' and '*determine*'.

In fact, all the intriguing things happen in the scientific world when the opposers get to describe them. The previously mentioned '*genetic material*' turns into '*human embryos*', '*babies*' or even '*guinea pigs*'; people who gave no consent to be such. The versatile '*tools*' become obscure and untrustworthy '*chemicals*'.

One interesting and unique phenomenon of the language used in this debate – is the existence of some words that are used by both sides in their favour: '*enhancement*', '*flawless*' '*perfect*'. The pro-editing side uses it to picture the greatness of the gene-edited society. The contra-side, on the other hand, employs these words to paint a picture of a colourless dystopian world infiltrated with eugenics.

In conclusion, gene-editing – one of the biggest controversies of our time with a multitude of opposing opinions and arguments. But even more important than what the debaters say is how they say it, for the words they use – sometimes exaggerating, sometimes hiding the truth diminishing the importance of something – will influence the views of the audience, and hence shape the opinions of the public. And after all – it is the public that will decide: should we allow the gene-editing?