



EurSafe News

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Dear EurSafe members,



I hope this newsletter finds you healthy and in good spirits, despite the trying times that we are facing. While a lot of media coverage and research efforts are understandably directed at fighting the Covid-19 pandemic, research into other areas, and reflection on it are also continuing. The focus of this newsletter is on one of those areas: genome editing.

Especially since the development of the CRISPR-Cas9 technique, new and easier ways of changing genomes have come into sight. The possibilities seem endless. I am very pleased that four of the most prominent philosophers who have been players in the debate on genome editing and CRISPR have agreed to share their thoughts with us.

In the first contribution, environmental philosopher **Christopher Preston** discusses the different promises of CRISPR and its reception and portrayal in different contexts. As gene editing does not necessarily involve the transfer of DNA between unrelated species, the question rises whether or not gene editing should be regarded as genetic engineering. The old 'process versus product' discussion that surrounded genetic modification from the start still seems relevant today, particularly in the regulatory domain. However, while the regulatory discussion focuses primarily on safety issues, Preston argues a lot more is at stake. We need to have an ethical discussion about 'whether a socio-cultural expectation or attitude is desirable'. In such a discussion it is crucial to reflect on how CRISPR is portrayed, but also on how we think about life itself: Life is not a machine, there is agency 'all the way from the level of genes to the environment'.

Next, **Marcus Schultz-Bergin** discusses how CRISPR changes moral reflection on the genetic engineering of animals. He distinguishes



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between extrinsic concerns – that focus on the results – and intrinsic concerns – that focus on the process – of genetic engineering. One intrinsic concern that is no longer relevant in the case of genome editing is with the crossing of species boundaries. Other intrinsic concerns, such as with the violation of animals’ integrity or dignity, should also be seen in a new light in the context of CRISPR. In Schultz-Bergin’s view, the debate should focus on extrinsic concerns, which should also be reconsidered in the face of CRISPR. For example, the risk of so-called ‘off target edits’ is reduced. In his view, CRISPR creates an opportunity to solve animal welfare problems that were created by a sole focus on productivity.

Illustrated by two cases – the creation of hornless cattle and disease resistance in pigs – **Donald and Ann Bruce** address the question of whether genome editing could be a responsible innovation. One of the main challenges is posed by the speed at which genome editing develops. RRI processes, on the other hand, take time if we want them to be more than just ‘a quick public engagement exercise’. The authors see a solution in the ‘I’ of RRI: the proof of principle stage is still sufficiently far removed from the introduction of a finished product onto the market to be able to include public views and concerns in the development of the product. This means that the public should get enough time to understand and reflect on the proposed development, but also that companies should be open to making changes on the basis of public feedback.

Next, I am happy to announce that we are introducing a new category to the newsletter, where young and promising scholars from within the EurSafe community briefly present their work. Typically, it will be PhD students in the last stage of the PhD projects reporting on their research, but we will also include the work of post-docs, for example. In this issue, one of the loyal attendants to EurSafe conferences, **Joachim Nieuwland**, presents recently defended PhD thesis on Interspecies Health Policy. In particular, Nieuwland has addressed the question of whether great apes have a

right to health and what such a right would entail. **Svenja Springer** reviews the recent book by Christian Dürnberger – another frequent visitor of our conferences – about agricultural ethics. Unfortunately the book is not available in English, but (lucky for me!) it has been translated into Dutch by our very own Stef Aerts.

Finally, our vice-president **Franck Meijboom** gives an update on the affairs of the EurSafe Board and we include an agenda of relevant conferences and symposia.

I hope you enjoy reading this newsletter. Please feel free to contact any of the editorial board members, listed at the end of the newsletter, if you would like to write an article or a book review or if you are a young scholar willing to present your work to the EurSafe community.

Bernice Bovenkerk (special issue editor)
Wageningen University and Research
bernice.bovenkerk@wur.nl

paper

CRISPR’s Ethical Infrastructure

Christopher J. Preston



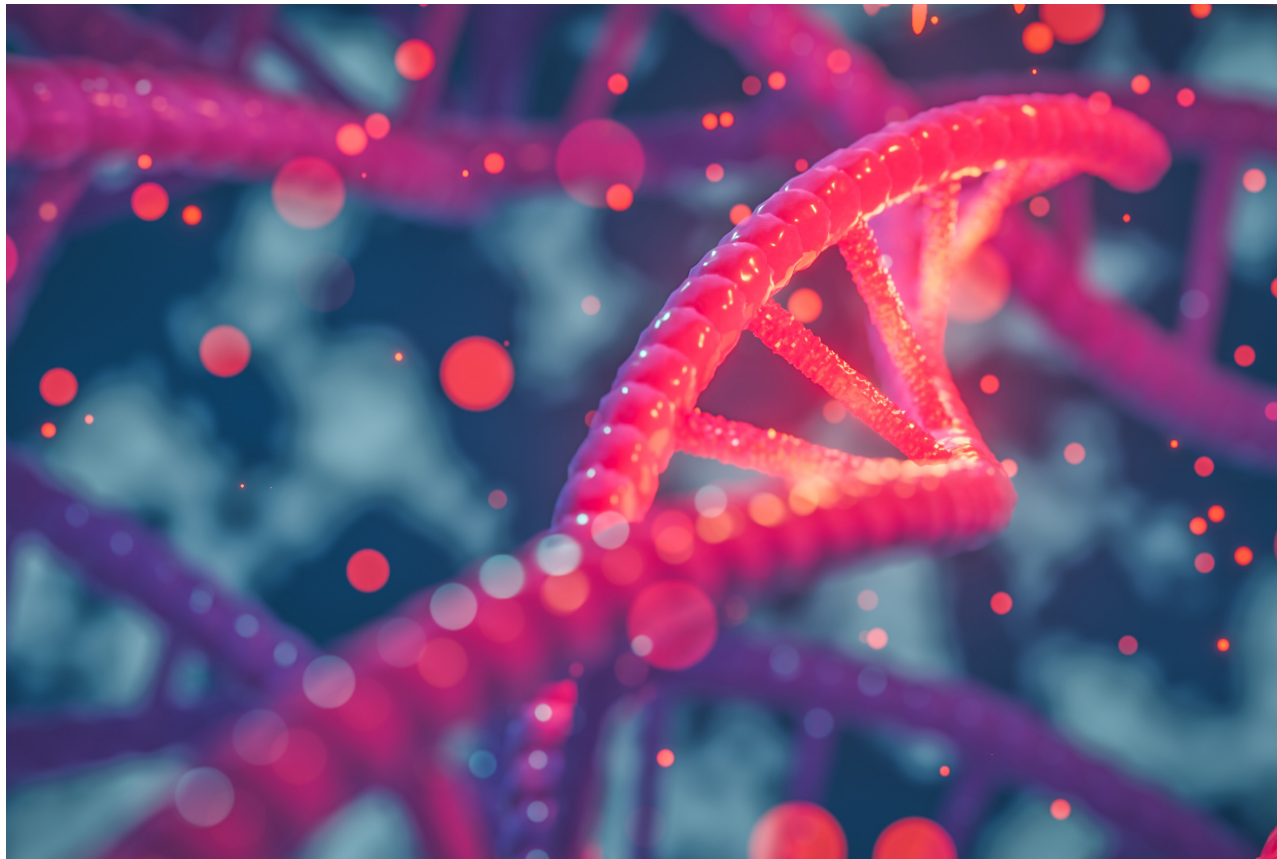
The CRISPR gene editing tool is scientifically inspired, biologically revolutionary, and ethically complex. In medicine, CRISPR provides hope for addressing genetic challenges such as cancers, blood disorders, liver disease, and muscular dystrophy.

In agriculture and conservation, CRISPR offers mouth-watering prospects like disease resistant plants, invasive pest eradication, and foods that come with distinct advantages in the marketplace. From potatoes that don’t suffer from blight and mushrooms that don’t go brown, to healthier canola oils and drought-resistant corn, CRISPR promises agriculture a priceless technical fix for a number of its thorniest challenges. Zacchary Lippman (2018), a professor of genetics at Cold Spring Harbor Laboratory, suggests CRISPR can turn science fiction into science fact. ‘*With gene editing,*’ he says, ‘*you are playing poker with aces up your sleeve*’.

The uncomfortable truth that ‘gene editing’ sounds an awful lot like ‘genetic modifying’ means that the pathway towards ethical acceptance of CRISPR has not been smooth. While advocates claim the ‘cisgenic’ potential of its products surrounds the technology with an ethical halo, detractors remain suspicious. An analyst at the Washington DC advocacy group, The Center for Food Safety points out CRISPR is still genetic engineering ‘whether you call it transgenic or not’ (Hanson 2018). Ricarda Steinbrecher (2015) at Eiconex agrees. ‘*Whether or not the DNA sequences come from closely related species is irrelevant, the process of genetic engineering is the same, involving the same risks and unpredictabilities, as with transgenesis*’. The fact that US and European regulatory regimes come to different conclusions about the level of scrutiny needed for

Christopher J. Preston
University of Montana in
Missoula, USA

christopher.preston@mso.umt.edu



gene edited products suggests the answers to the ethical questions are far from obvious.

Today's international regulatory differences boil down in large part to different approaches to safety, both for the humans who will eat gene edited crops and for the environments in which they will grow. But ethics is not limited to questions about safety. As revolutionary technologies like CRISPR permeate more and more aspects of our lives, this point about the breadth of ethics is crucial to remember.

In a discussion of the deextinction of lost species, a technological prospect which will rely heavily on CRISPR gene editing, Patrice Kohl (2017) suggests that the broader socio-cultural implications of new technologies 'deserve far more attention than they have so far received'. What I take Kohl to mean is that powerful technologies shape human expectations and relations with their environment in ways that deserve scrutiny. The ethics at issue here is not an ethics of whether or not a technology is safe. It is an ethics of whether a socio-cultural expectation or attitude is desirable.

The 'molecular scissors' utilized by CRISPR, for example, are widely portrayed as offering the ability to cut and paste genes in a genome like a word processor cuts and pastes text. This analogy imports assumptions into the wider society about what genomes are (.....assumptions that admittedly may or may not be held by CRISPR scientists themselves). One of these assumptions is that genomes can be treated reductively and mechanistically. This suggests genetic parts are interchangeable. It also suggests sections of the genome located far from the cut site should not be changed by editing taking place elsewhere, something the emerging scientific evidence reveals is wrong (Kosicki et al. 2018; Norris et al. 2020).

Bioethicists Joachim Boldt and Oliver Müller (2008) expressed concern about the growing tendency in molecular genetics to "conflate the concepts of 'life' and 'machine'". The conflation is risky because genomes remain complicated. When the Venter Institute synthesized from scratch a viable bacterial genome with only 473 genes, they conceded complete ignorance of

the function of one third of the genes they had assembled. They also expressed surprise by how context-specific the genome was. '*You can't just do things on the basis of the genes without then knowing the components in the environment as well*' (Smith 2006). Reductionism about genomes doesn't work. '*We have been lulled into the view that editing is small and local and controllable,*' says molecular biologist Allan Bradley, '*but the reality of DNA repair in a cell is much more complex*' (Rusk 2018).

Tinkering with biology at the genetic level brings you face to face with one of the deepest paradoxes in the life sciences. The building blocks of the living world are indeed physical and chemical. They obey fixed laws. But assembled into the complex form of a living organism, something else enters the story. Biology brings with it agency, and non-human agency all the way from the gene to the environment repeatedly confounds researcher's expectations.

This means an ethics adequate for CRISPR needs to be expansive and tentative. Daniel Sarewitz (2020), writing in a volume of *Issues in Science and Technology* dedicated to CRISPR, talks about an 'infrastructure of ideas and institutions' necessary for the ethical challenges presented by CRISPR. That infrastructure needs to be broad, it needs to be inclusive, and it needs to recognize that often life just isn't a machine.

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The CRISPR Revolution in Animal Agriculture

Marcus Schultz-Bergin



Attempts to genetically engineer agricultural animals is nothing new. In 1986, nineteen pigs were genetically engineered with human growth hormone in the hopes of creating a pig that fattened more efficiently. However, the plight of these ‘Beltsville hogs’

became a cautionary tale for genetic engineering as they suffered significant ailments including arthritis, ulcers, and a compromised immune system. In the end, the pigs were killed, and we still have yet to see any widescale attempt to raise genetically engineered pigs (or other animals) for food.

But that may all be changing with the rise of CRISPR, a recently discovered gene editing technique that promises to bring to fruition the genetic revolution so long promised. Cheaper, more powerful, and more versatile than past genetic engineering techniques, CRISPR has driven a massive increase in interest in gene editing since its early applications around 2012. It has driven a substantial increase in the variety of animals that are engineered, with the so-called ‘CRISPR zoo’ amounting to about 40 different species and one particularly controversial case of human gene-editing (Reardon 2016; Cohen 2019). By using a ‘seek and destroy’ system that leverages the natural DNA repair pathways of cells, CRISPR has diversified the types of edits scientists are exploring. Alongside the common projects aimed at increasing productivity, scientists have also produced hornless cattle and are aiming at instilling resistance to a variety of diseases common to the close confinement typical of modern animal agriculture.

Marcus Schultz-Bergin
Department of Philosophy &
Comparative Religion
Cleveland State University
m.schultzbergin@csuohio.edu

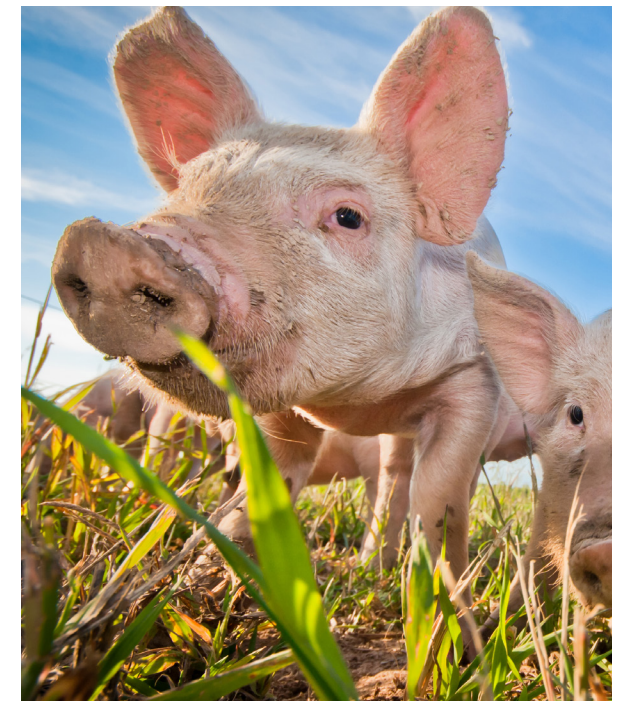
In this way, CRISPR holds some promise of being a tool for a more ethical form of animal agriculture, and not simply another means of increasing productivity at all cost. To see why, we can explore common ethical concerns with genetic engineering and how CRISPR changes the ethical landscape of animal genetic engineering.

Intrinsic Concerns

There are, broadly speaking, two types of ethical concerns commonly raised against animal genetic engineering. We may voice concern about the product of the genetic engineering – the poor health of the Beltsville hogs, for instance – or we may voice concern about the process of genetic engineering itself. The former sorts of concerns can be labeled extrinsic and the latter intrinsic. Intrinsic objections purport to show the necessary wrongness of an action like genetic engineering while extrinsic objections would not show that all instances of genetic engineering are wrong but only that some may be, depending on the results.

Perhaps the most widespread intrinsic concern voiced against genetic engineering is that it involves ‘playing God’ or is ‘unnatural’ or simply ‘something humans should not do’ (Rollin 1996; Streiffer 2003). Although the precise content of these objections is sometimes hard to place, one broad way of understanding them is that genetic engineering is wrong because it necessarily involves the ‘crossing of species boundaries’ (Robert and Baylis 2003). The Beltsville hogs neatly illustrate this idea as they are the product of integrating human growth hormone into a pig, thereby creating a transgenic organism – an organism containing the genetic material of two or more distinct species.

A lot of ink has been spilled over the validity of this ‘crossing species boundaries’ concern, but the rise of CRISPR provides genetic engineering proponents another response. Whereas past genetic engineering techniques required the insertion of ‘foreign’ DNA in order to induce the desired changes, CRISPR generally does not. Instead, by exploiting the natural DNA repair pathway found in cells, CRISPR-induced changes



result in a genome that is, in many cases, indistinguishable from a natural variety. For instance, some varieties of cattle are already born without horns. Animal breeders could, through selective breeding, create entire lines of hornless cattle, but in doing so they’d be giving up on other desired traits that the horned cattle have but the hornless ones do not. So, instead, scientists have used CRISPR (or similar gene-editing techniques like TALENs) to ensure they can produce cattle that have all the desired traits given the preferred usage (Reardon 2016). CRISPR edited animals, then, are not (typically) transgenic and so CRISPR does not, necessarily, involve the crossing of species boundaries. Thus, even if there is something morally problematic about crossing species boundaries, that can no longer be a sufficient objection to all forms of genetic engineering.

A related intrinsic concern suggests that genetic engineering necessarily involves a violation of an animal’s ‘integrity’ or ‘dignity’ (Rutgers and Heeger 1999; Bovenkerk, Brom, and Bergh 2002; Gavrell Ortiz 2004). Again, the precise content of these concerns is sometimes hard to determine, but it seems one common understanding is that the integrity or dignity of an animal is composed of it being a good of its kind. The idea captures the intuitive thought that things are going bet-

ter for a chicken if the chicken is doing chicken things and has all its chicken parts. Mutilation, for instance via debeaking of chickens or sterilization, is a violation of the animal's integrity. Similarly, some suggest, genetic engineering violates integrity because it robs of the animal of its 'wholeness', interfering with the 'uninhibited development of the functions that a member of its species can normally perform' (Gavrell Ortiz 2004, 112).

Once again, there is substantial debate over the validity of animal integrity or dignity as distinct moral concepts (e.g., Schultz-Bergin 2017). But whatever the merits of the concepts, it once again is not the sort of concern that necessarily gets a grip with CRISPR. If many cattle are 'naturally' hornless, and a hornless cow produced via CRISPR is genetically indistinguishable from one naturally born without horns, then there seems no avenue for suggesting that the CRISPR induced hornless cow's integrity has been violated. Perhaps similarly, the use of CRISPR to enhance immune systems in general or protect against viruses does not seem to prevent an animal from developing its typical functions, unless contracting and suffering from a particular virus is considered a species typical function. And so, all this suggests that concern for animal integrity may still be relevant in some instances but is not in others. As such, CRISPR transforms what many believed to be an intrinsic concern into an extrinsic one.

Extrinsic Concerns

Some instances of gene editing certainly could inhibit the development of species typical functions, just as some instances of gene editing could result in an animal that is much worse off in terms of bodily or psychological health. But not all instances will do this. A focus on extrinsic concerns can help us distinguish between those potentially acceptable uses of CRISPR and those which should be avoided.

Concern with 'unintended side effects' captures perhaps the most common set of extrinsic ob-

jections to genetic engineering. The Beltsville hogs, to return to our earlier example, were not engineered to have arthritis or ulcers but those came along as a side effect of the desired change. Unintended side effects have been a common part of the history of animal genetic engineering and are a major reason why production-level animal engineering never caught on.

CRISPR is unlikely to ever eliminate all unintended effects. However, the nature of the process does seem to allow for such effects to be substantially reduced both in absolute number and in terms of the magnitude of harm. One of the most common reasons for unintended side effects with past techniques was the prevalence of 'off-target edits', where the wrong gene sequence is modified. The 'seeking' element of CRISPR has shown great promise in reducing off-target edits. Indeed, the dehorned cattle seem to be in no worse health than their non-engineered counterparts and many other experiments have succeeded in inducing the desired change without any (or few) ill effects (Cohen 2019). Of course, it is not all good news, as some attempts at producing pigs that can carry human organs for xenotransplantation have resulted in unhealthy animals.

But unintended effects are just half of the equation. The other half are the intended effects. One of the most common uses of gene editing technology in general is the creation of disease models – such as animals that are intentionally designed to suffer from cancer or muscular dystrophy. In animal agriculture, the historic use of genetic engineering has been about increasing efficiency and productivity, with little regard for the welfare of the animal (Rollin 1996). Here CRISPR may make things worse, as it will more cheaply and effectively produce animals that grow faster but, as a result, may face issues with osteoporosis or broken bones. This is not an off-target edit issue so much as a priority issue. If the priority is productivity, then a powerful tool can help increase the productivity even at the expense of animal welfare.

But the low cost of CRISPR may allow for pri-

orities to shift, at least to some degree. In the dairy industry, cattle are currently dehorned with painful caustic paste; the use of CRISPR effectively improves the animal's welfare. Similarly, scientists in China have restored a gene long lost in pigs that helps them produce brown fat, a means of protecting newborn piglets against death from hypothermia (Cohen 2019). And elsewhere researchers are aiming to render chickens immune to influenza, a means of protecting both the birds and humans (Barber 2019). Of course, none of these projects are guaranteed to work without potentially worse side effects, but so far things look reasonably positive.

And there is a final way that CRISPR may substantially improve the welfare of agricultural animals. The egg industry has no use for male chicks and thus millions are killed upon hatching. Similarly, the dairy industry prefers female cows and the beef industry prefers male cows (but of different varieties). This has, to this point, often resulted in immediate death for many animals or their use in especially ethically suspect industries like veal. But projects aimed at rendering all beef cattle 'male-like' and inducing fluorescent glow to identify male chicks before they hatch have shown some potential for success (Reardon 2016; Cohen 2019). These sorts of projects take the animal agriculture industry as it is and seek to solve welfare problems created by our focus on productivity.

CRISPR & The Future of Animal Agriculture

CRISPR does hold promise to positively revolutionize both animal genetic engineering and animal agriculture. In largely bypassing the most common intrinsic concerns with genetic engineering, CRISPR encourages us to focus on the consequences of the process rather than the process itself. This certainly makes things more complex – it is always easier to just say 'never do it' – but it provides an avenue for more engagement between the ethics and the science. This, therefore, creates an opportunity to orient the work more towards projects that promote the welfare of the animal rather than merely its productivity.

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Can Genome Editing be a Responsible Innovation?

Donald and Ann Bruce



Donald and Ann Bruce

Genome editing is a revolution. Its apparently boundless prospects have activated scientists all over the world to apply the techniques to every conceivable field of genetics. From a scientific point of view, it is very exciting, but what of wider society outside the laboratory, particularly when it comes to food? One of the first areas of genome editing likely to impact on consumers is in novel applications to food animals, largely untouched by genetic modification in the 1990s, in applications like disease resistant pigs and hornless cattle.

Genome editing in livestock

Horns in cattle can cause harm to other cows or to their human handlers. Removing horns (polling) is done routinely in young calves in farms in the US and Europe. It is an unpleasant and painful process, which handlers often don't like doing, but it is considered justified on welfare grounds. Some beef cattle have a natural genetic trait they do not grow horns, it is much rarer in dairy cattle. Breeding this hornless variant into dairy cattle would take many years, and crossing beef cattle with dairy reduces their genetic merit as dairy

cows. Genome editing has been used to introduce a gene variant from beef cattle into a Holstein dairy cow, resulting in a hornless dairy cow which could be multiplied quickly to produce new herds. Beef and dairy cattle are the same species, so 'foreign' DNA is not involved. But is this ethically acceptable to make direct human intervention in the cattle genome? And should we be stopping a cow from naturally growing horns?

Disease resistant Pigs

Porcine reproductive and respiratory syndrome (PRRS) is a widespread infectious disease, leading to deaths of pig fetuses in pregnancy, and piglets born with severe respiratory symptoms and diarrhoea. If they survive, the affected pigs are more vulnerable to secondary bacterial infections. It affects both pigs kept indoors and those kept outdoors. In the UK, PRRS infection can be controlled to some extent by vaccination, but this requires more handling and can be costly. Researchers at the Roslin Institute have made pigs resistant to the disease, by using genome editing to disable part of a protein on which the PRRS virus relies to infect pig cells. The edit appears to confer resistance, but researchers are looking to see if there are any side effects from the partial deletion. Further testing for regulatory approval is underway. If successful, it is hoped soon to breed the resistant pigs into mainstream herds. Promoters suggest that to protect pigs from the harm of a serious virus-borne disease should be seen as a humane response, but would publics and retailers feel it had the 'taint' of genetic modification, even though again no 'foreign' genes are involved?

Responsible Research and Innovation

Responsible Research and Innovation (RRI) has been advocated by the European Commission for some years, as a way of ensuring that a wider-range of stakeholders and publics are able to engage with new and emerging technologies to inform decision making from their perspectives and values. At its heart is the idea that technological innovation should not just be the activity of the principal players of science, industry and

government, with the general public merely in the role of recipient consumers. Publics should be given the opportunity to engage and interact with the proposed innovations as citizens in a collaborative exercise, before being faced with an unfamiliar product on the supermarket shelf. This should involve anticipation and assessment of likely impacts (intended or otherwise), reflection about such factors as the aims and assumptions made, the uncertainties, and the social transformations entailed, and considering if the solution is fit for purpose. RRI embodies the assumption that there may be valid values, concerns and insights, when seen from other perspectives than just those of the promoters of a technology, and that these insights need to be given due consideration in policy making.

To innovate at a more reflective pace takes time, however. RRI is not just doing a quick public engagement exercise. A responsible scientist may have given much thought to the implications of his or her work. To the wider public, it may be a completely novel and surprising. They need to take time to assimilate, understand and evaluate. They will have an initial reaction to a news announcement of dehorning cattle by genome editing, for example, but this may change as they reflect on it, and especially if they can discuss it with the promoters and others.

With slowly emerging fields like nanotechnologies it was possible to involve citizens and stakeholders with developments. In contrast, genome editing research is proceeding so rapidly as to resemble an avalanche of potential applications, spreading rapidly and chaotically. This speed, breadth and disruptive potential of genome editing presents a serious challenge to the very concept of socially responsible research and innovation. If even specialists and policy makers struggle to keep pace with the pace of research, deliberative engagement with publics would be largely after the event.

Responsible Innovation

A more promising focus lies in the innovation process - the 'I' of RRI. There is normally a long time lag between the announcement of the promising research which has reached 'proof of principle' stage in an idealised research environment, and the appearance on the market of a developed and regulator-approved product. Here is a chance for the development scientists and companies, both established and start-ups, to engage with a wider range of stakeholders and publics, especially if there are concrete examples like the two above which people can 'get their heads round'.

Much depends on the attitude, ethos and management of the company. Some in the company may embrace the idea of foresighting the likely market success of the projected product, to circumvent the risk of an unprepared public environment. Others may fear to do so in case it 'opens up a can of worms' with the public, or it introduces delay into the trajectory of commercialisation. According to the principles of RRI, the time it takes to get society's blessing is an integral part of the process of translation. A key point is how far the organisation is prepared to change what it intended to do on the basis of feedback. To discover only late in that process that the public or retailers were hostile might be disastrous, when engagement might have built bridges and introduced adaptations that were welcomed in the market. An established plc (public limited company) with a portfolio of products might cope better than a venture capitalised start-up company with a single product.

Engagement can bridge vital gaps in understanding

Our two examples of animal genome editing are both motivated by welfare considerations, but there may be quite different views on their acceptability by citizens. It is important therefore to engage wider society, to bring out and discuss some of these issues. This might serve to bridge some of the gap between agricultural practice and the consumer, which might result in changes of both attitude and practice on either side.

To publics, the routine dehorning of dairy calves may come as a shock, because of the gulf between widespread practises accepted within the dairy industry and public awareness. Thus what was presented as a humane innovation, may rather provoke the question whether dehorning is wrong in the first place, and whether we should just reduce how densely cows are kept? On the other hand, understanding how a good dairy unit with careful handlers is managed may allay some public concerns. But cross-communication needs to happen.

Some might criticise the PRRS resistant pig as a technical fix for a problem blamed on large scale and intensive pig units. But discussion between industry and publics could reveal that the disease affects all types of pig unit, large and small, indoor and outdoors, and that even surviving pigs are then more susceptible to other diseases, such as pneumonia, that are then treated with antibiotics. In an era where bacterial resistance to antibiotics has become a major policy concern, and reducing the use of antibiotics in food production a priority, avoiding these secondary infections becomes important. Thus what started out perhaps as a single question may encourage a reflection on wider issues. This illustrates the importance of RRI with a technology of far-reaching implications.

In Europe, the ruling by the European Court of Justice to require genome editing to undergo the same testing as though it was the same as transgenesis effectively side-stepped any processes of wider societal engagement. Has this reduced RRI of genome editing in food into a matter of legal judgement, which is as far removed from the public as decisions over GM food were in the mid-1990s? Since there has been no discussion with the public, this could be argued to be a case where regulation has been socially premature, and not done on behalf of society.

phd thesis

Joachim Nieuwland

Utrecht University

Faculty of Veterinary Medicine

Wageningen University

Animal Science Group

j.nieuwland@uu.nl

Towards an Interspecies Health Policy: Great Apes and the Right to Health

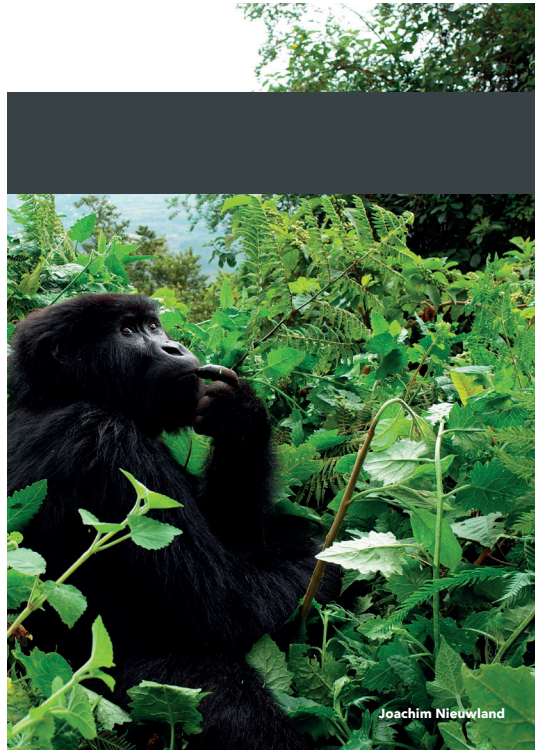
Joachim Nieuwland



On the 13th of May 2020, I defended my PhD thesis 'Towards an Interspecies Health Policy: Great Apes and the Right to Health'. I managed to do so successfully (even with the of course challenging questions posed by, among others, Bernice Bovenkerk). In this thesis, (with Franck Meijboom as one of my supervisors), I critically evaluated the idea of One Health and the way it includes non-human animals in health policy.

I have benefitted greatly from the many thoughtful discussions at EurSafe conferences (Cluj, Porto, Vienna and Tampere) in the process of writing my PhD thesis, especially when it comes to One Health. For those unfamiliar with the concept, One Health calls for cross-disciplinary collaboration in health policy out of a recognition of interdependency between human and non-human animal health against the backdrop of ecological processes. As a new perspective on health policy, I argued, it lacks sufficient engagement with justice. In reshuffling the way in which we look at our relations and interactions with non-human nature, One Health provides an opportunity, or even requires us, to reevaluate how we set up health policy. One Health sounds great but we have to ask: whose health matters?

To engage with that moral question, I looked at the potential of a moral right to health as a means to instill justice in One Health thought and practice. I was particularly struck by the way Jonathan Wolff develops the idea of a right to health as a protection to standard threats. I then went on to consider what



What happens when we acknowledge an animal right to health in health policy? I bring this question to bear specifically on the various interfaces between human and non-human great apes, using One Health as a framework for integrating apparently disconnected practices, so as to work towards an interspecies health policy.

it takes to protect individuals against standard threats against the backdrop of interdependency between humans, other animals and the natural world. When you bring the ideas of a right to health and One Health together, I discovered, they start to enrich each other. The right to health helps to attune One Health efforts towards the basic entitlements of individuals, while One Health in turn helps to develop a more ecological and interspecies understanding of the right to health. This culminated in the idea that individual human beings should have a right to ecological and interspecies relations that safeguard their health. I then took this further by exploring such protection of health interests for non-human animals. Here, I followed up on the Great Ape Project (GAP), initiated by Peter Singer and Paula Cavalieri, in extending human rights beyond the human. The right to health complements the set of basic negative rights defended by GAP. It does so by developing an interest-based theory of moral rights in line with the work of Alasdair Cochrane (key note speaker at Tampere 2019 EurSafe Congress), albeit (1) critical of his denial of animal freedom, and (2) more elaborate on the right to health.

book review

Svenja Springer

Messerli Research Institute
svenja.springer@vetmeduni.ac.at

**Ethik für die Landwirtschaft:
 Das philosophische Bauernjahr**

Christian Dürnberger

Paperback, 192 pages

ISBN: 979-8637671571, € 19,00

Translated edition:

Ethiek voor de landbouw:

Het filosofische boerenjaar

(Ned. bewerking door Stef Aerts)

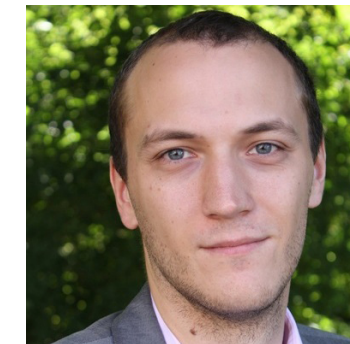
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Ethik für die Landwirtschaft: Das philosophische Bauernjahr

Christian Dürnberger

Book review by Svenja Springer



Christian Dürnberger studied philosophy and communication sciences at the University of Vienna. He graduated as doctor of philosophy from the Munich School of Philosophy and investigated concepts of the human-nature relationship in the

controversy on green genetics in his doctoral thesis. Currently, he is working as a philosopher at the Unit of Ethics and Human-Animal Studies (Messerli Research Institute, Vienna) and the Campus Franciso Josephinum Wieselburg.

Dürnberger's work over the last ten years includes different topics in the field of applied ethics. Subject areas range from genome editing to veterinary ethics (mainly for official veterinarians) and e-learning in the field of ethics and veterinary ethics. It becomes clear, however, that many of the questions he has worked on in these various spheres end up mainly in the field of agriculture and related subjects such as food, environment, climate, animals, landscape and energy.

Objective and results of the book

His many years of dealing with topics related to agriculture and the new challenges that farmers are currently facing constitute the starting point of Dürnberger's book, both in terms of content and structure. Accordingly, the ambitions of this book are twofold. On the one hand, the book intends to improve understanding of the agricultural profession as well as controversies associated with it, to clarify important key concepts and to promote indepen-



dent ethical judgement of involved professionals in agriculture. On the other hand, it can be understood as a reading for educational purposes for a wide range of students educated within the field of agriculture or wishing to deal with ethical questions related to this subject.

In the first chapter, Dürnberger presents relevant factors which – from his perspective – lead to a shift in the debate on agriculture and spark controversy. He points out that agriculture in our part of the world no longer only has to produce enough food for society, but that debates are increasingly concerned with new values such as animal welfare, and environmental and climate protection. Consequently, questions like ‘What is ethics?’, ‘How can the new social expectations of this agriculture be described?’, or ‘What does responsibility mean with regard to food, environment, climate and animals?’ build the basis for the twelve chapters. Here, the reading not only introduces the discipline of ethics in general (chapter 3) or animal ethics as a sub-discipline of ethics (chapter 5), but also sheds light on the topic from the perspective of communication sciences, in which questions such as ‘How to argue better’ (chapter 7) or ‘More communication about

agriculture – but how?’ (chapter 11) get to the bottom of the issue. In the final chapter ‘Outlook’ the author consciously refrains from a summary and/or important take-home messages. Rather, he presents theses that may be of importance for future agriculture. He proposes that the modern agricultural profession does not only require professional expertise, but also the ability to reflect on ethical issues in order to actively and self-confidently answer questions about values and responsibilities in the field of agriculture.

Most striking

The most striking aspects of the book are the variety of ethical issues related to agriculture as well as the provision of perspectives and disciplines dealing with and helping to overcome emerging problems. Furthermore, the book is intentionally restrained when it comes to judgements. This approach leads to a thought-provoking book that encourages its readership to critically develop their own (ethical) position. This is facilitated by means of well-considered and interesting reflection questions at the end of each chapter and self-tests at the end of the book.

Reasons (not) to read the book

If you are looking for a systematic argumentation from A to Z and an in-depth philosophical discussion of ethical aspects related to agriculture (including relevant ethical positions), this book might not be for you. As this book does not address academics but farmers and those interested in the topic, it rather offers a journey – a journey through twelve chapters, one year – that gives a good overview of the debates. In addition, the book does not need to be read chronologically. If you want to start with the chapters on the topic of communication, you can do so without lacking important knowledge from the previous chapters. Thus, each part of the journey is more of a teaser of different discussions than a profound and expansive examination of individual sub-themes. The book was translated into Dutch by Stef Aerts. Both the German and the Dutch version can currently be ordered via the ‘Book-on-demand’ service at Amazon.

updates

EurSafe Executive Committee

Update September 2020



I hope you have had a good and healthy summer in spite of this challenging period. On the one hand, many things seem to proceed as always: research applications are being prepared and submitted, teaching is starting again. On the other hand, it is clear that we are still in the middle of a special time, in which many of us mainly work from home, lecture online and many conferences are postponed or rescheduled in online meetings.

Under these special circumstances the EurSafe board had a regular EurSafe board meeting on 17 July that almost felt like normal, because most of the meetings have been telephone/ video calls for many years. On the agenda the main points were the preparation of the next two conferences. First steps are being made for the 2022 conference, while the team in Fribourg are in the middle of the organization of the 2021 conference. We are glad to tell you that many of you managed to submit an abstract for the 2021 meeting, which is an essential precondition for having an interesting conference. During the meeting we explored the possible impact of the Covid-19 outbreak. Although much is still uncertain and continuously changing Ivo Wallimann and his team are optimistic about holding the conference live. Nonetheless, preparations are being made to switch to alternative scenarios if necessary. In any way, the accepted abstracts will be published and discussed during the conference in June next year.

Last time – in June – I mentioned the activities to explore the possibilities to better use the EurSafe website as a platform to exchange news, job opportunities, new projects and encourage discussion. Due to the current situation this is somewhat delayed, but will be started up again in the autumn. If you have any ideas related to this initiative, please let me know. We would be happy to use your ideas and experience!

Best regards,

Franck Meijboom
On behalf of the Executive Board

Instrumentalisierung *Zu einer Grundkategorie der Ethik der Mensch-Tier-Beziehung*

Samuel Camenzind

This thesis in moral philosophy is concerned with the category of instrumentalisation in animal ethics. Besides a comparative analysis of the phenomena instrumentalisation, objectification, and exploitation of animals an assessment criterion is developed to distinguish between morally permitted and unpermitted modes of instrumentalization of sentient animals within a critical analysis of contemporary Kantian ethics.



More information
Publisher: Brill/Mentis
ISBN: 978-3-95743-745-7
Price: € 42,00

2020

OCTOBER, 7-8

Aquaculture and Fisheries

Vienna, Austria

[website](#)

OCTOBER, 15-18

International Society for Environmental Ethics 17th Annual Summer Meeting

Blue Rive, Oregon

[website](#)

DECEMBER, 6-9

4th International Conference on Global Food Security: Achieving local and global food security at what costs?

Le Corum, Montpellier, France

[website](#)

2021

JUNE, 23-25

Postponed, actually planned for summer 2020

7th International Conference – Corporate Social Responsibility (CSR), Sustainability, Ethics and Governance

Lisbon, Portugal

[website](#)

JUNE, 24-26

16th EurSafe Conference – Justice and Food Security

Fribourg, Switzerland

[website](#)

JULY 22-29

5th Minding Animals Conference, incorporating the 1st Compassionate Conservation Oceania Conference

Sydney, Australia

[website](#)

contact

President

Kate Millar

Centre for Applied Bioethics,
University of Nottingham, United
Kingdom
kate.millar@nottingham.ac.uk

Secretary

Bernice Bovenkerk

Philosophy Group, Wageningen
University, the Netherlands
bernice.bovenkerk@wur.nl

Treasurer

Dirk de Hen

the Netherlands
dgdehen@gmail.com

Vice-president

Franck L.B. Meijboom

Ethics Institute, Utrecht University, the
Netherlands
f.l.b.meijboom@uu.nl

Members

Stefan Aerts

Odisee University College / KU
Leuven,
stef.aerts@odisee.be

Diana Dumitras

University of Agricultural Science and
Veterinary Medicine
Cluj-Napoca
ddumitras@usamvcluj.ro

Leire Escajedo

University of the Basque Country,
Spain
leire.escajedo@ehu.es

Herwig Grimm

Messerli Research Institute
University of Veterinary Medicine
Vienna
herwig.grimm@vetmeduni.ac.at

Ariane Willemsen

Federal Ethics Committee on Non-Hu-
man Biotechnology,
Switzerland
ariane.willemsen@bafu.admin.ch

Simon Meisch

University of Tuebingen, Germany
simon.meisch@uni-tuebingen.de

Teea Kortetmäki

University of Jyväskylä, Finland
teea.kortetmaki@jyu.fi

Website

www.eursafe.org

EurSafe News

Chief-editor

Simon Meisch
University of Tuebingen
simon.meisch@uni-teubingen.de

Editorial Board

Raymond Anthony

University of Alaska Anchorage, US
ranthon1@uaa.alaska.edu

Mariska van Asselt

Aeres University of Applied Sciences
Dronten, the Netherlands
m.van.asselt@aeres.nl

Samuel Camenzind

Messerli Research Institute Vienna,
Austria
samuel.camenzind@vetmeduni.ac.at

Jes Harfeld

Aalborg University, Denmark
jlh@learning.aau.dk

Bernice Bovenkerk

Wageningen University
bernice.bovenkerk@wur.nl

Kate Millar

University of Nottingham, UK
kate.millar@nottingham.ac.uk

Svenja Springer

Messerli Research Institute, Vienna,
Austria
svenja.springer@vetmeduni.ac.at

Mark Stein

Salford University, Manchester, UK
markstein2010@live.co.uk

Layout

Luc Dinnissen

studio ds
Nijmegen, the Netherlands
www.studiods.nl

