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Technological disputation

Memo by Francisco De Abreu Duarte

Niall Cochláin (EUI - LAW) and Marco Almada (EUI - LAW) discuss the following statement:
“Before we repeat history and have mass adoption of [human] augmentation technology, we should stop and think about how we regulate this for the good of humanity.” (David Jacoby)

This event has been organised by the Technological Change and Society Interdisciplinary Research Cluster

Niall Cochláin opened the discussion by setting the terms of the debate. Human augmentation should be defined as *“a modification aimed at improving human performance and brought about by science-based and/or technology-based interventions in or on the human body.”* Throughout his opening statement, Niall provided several examples of forms of human augmentation, ranging from RFID chips implanted under the skin to open doors to surgeons using wearable headsets to perform better or soldiers wearing biological camouflage.

He stated his point clearly. He does not oppose human augmentation *per se*. There is already a dimension of dependency on technology that could be perceived as human augmentation (‘are we still fully ourselves, today, without our smartphones?’). The problem lies in establishing limits - where do we draw the red lines.

Niall proposed the ‘skin barrier as a pedagogic criterion, meaning the inviolability of the human body. The starting point should be that those augmentations which interfere with the right to bodily integrity – such as implanting chips, using drugs to enhance memory, cognition, or moral functioning, or replacing healthy limbs or body parts with superior prosthetics – are prohibited.

In order to develop such thinking, Niall divided its reasoning into two arguments:

1. There is a right to bodily integrity, connected to the idea of protecting people from themselves;
2. There are some types of human augmentation which clash with that right and should be hence prohibited.

Regarding the first point, Niall made clear he rejects an absolutist view of autonomy. This means he does not believe in a conception of individual autonomy by which everyone is simply

entitled to do whatever she/he wants with her/his body. A laissez-faire attitude such as that one, Niall argued, is not the European approach. Even when the law provides for exceptions to this general principle of the inviolability of the human body – such as tattoos or piercings – it is mindful of excesses. “You can donate an organ, but you cannot sell it. You can consent to your child’s male circumcision, but not their female circumcision. You can consent to certain piercings or cosmetic surgery, but not to ear removal or tongue-splitting.”. Ultimately, Niall’s point is about human dignity: we must protect people from choices that do not really reflect their autonomy.

Regarding his second point, Niall recalled the risks of exploitation if human augmentation is simply allowed without limits. The risk of workers being required to implant chips, consumer performance-enhancing drugs or modify their lungs or limbs to work in dangerous environments – is acute. The health and psychological effects are yet unknown. On a more profound level, this crossing of the skin barrier would shrink still further the sphere of our person that remains inviolable and protected from commerce and society.

Niall finished his presentation stating once again that human augmentation might one day be accepted, and social attitudes might change. This change, however, is one to be discussed by society as a whole, not just individuals or corporations.

Marco Almada presented his views on human augmentation and opened new pathways for discussion. He provided nuance by suggesting that human augmentation might not be such a radical departure from many other existing augmentations. Some forms of intervention, such as sports doping or robot limbs meant to give superhuman performance, already fundamentally change the way we interact.

Marco’s position was, however, tempered by the same concerns as Niall’s. There are risks with human augmentation, and some red lines must exist if we wish to protect fundamental rights. How can we then deal with these moving targets of regulation? What are those red lines?

First, Marco recalled the dangers of overriding autonomy and self-control – e.g., brain implants for dealing with trade secrets. In those cases, human augmentation should be forbidden as it is fundamentally destroying the free will.

Second, he pointed out that procedural laws are the best way to regulate these technologies. Given the vast diversity among these technologies, what is important is to ensure that procedural standards such as non- discrimination are protected.

He finished with a moderate position. Human augmentation might be dangerous, but there are several advantages. We should not stifle innovation with pre-conceived ideas about bodily autonomy.

Q&A

A PhD researcher raised three points for further discussion.

First, he wondered whether the societal impacts of human augmentation could serve as a potential objective way to establish a red line. Human augmentation can have pernicious effects on third parties and for the society at large (e.g., if a worker gets undue advantages due to robotic arms and imbalances in the job market).

Second, he asked whether equality, more than human dignity, could be the main value to be protected. Human augmentation could create categories of citizens. Those high-income citizens would be able to afford such augmentations and perpetrate continuous cycles of inequality.

Third, the researcher asked both speakers about what type of regulation they would envisage for these technologies. He suggested that risk-based approaches could be a pathway, the same way it is being tried with the AI regulation.

A participant continued questioning Niall's skin barrier criterion. He praised the clarity of the criterion but suggested that reversibility also played a very important role. The skin barrier could maybe be admissible if the procedure was not permanent (a finger that is attached and detached). It is (i)reversibility that ultimately might qualify a certain procedure as inadmissible, not just the skin barrier.

Another EUI Professor followed up with a decisive question: if human augmentation is not permanent, is it not simply new capital? What is so different about human augmentation that justifies the prohibition? Is it not just enhancing labor through capital (like machines)?