DiTech Topic 1

TQO THE ETHICS OF BIODIGITAL CONVERGENCE – BREIFING

Welcome to PHSMUN DiTech!

Resolutions for the topics (especially those that interest you!) are appreciated and should be submitted by any delegate hoping to be in the running for a prize - a digital and paper copy is preferable.
Position papers (max: 100 words) can be submitted if you like but aren't mandatory by any means.
Both resolutions and any position papers can be submitted to either cosmological.constant1052@gmail.com *or* gw13radkowskialex@glow.sch.uk .
Resolutions will be chosen on the day based on a combination of signatures gained after lobbying and which we feel will lead to the most engaging debate.

Notes for writing resolutions:

- *It doesn't need to be perfect/ as long as possible – the best resolutions offer a strong starting point with interesting things to build upon during the debate.*
- *Focus on writing strong operative clauses – preamble makes you sound good, but is mostly decorative at the end of the day.*
- *We can't stop you using AI, but we do discourage it – writing a resolution can be one of the most fun and creative parts of debating, as well as a good way to gain a thorough understanding of your topic even if your resolution isn't chosen. Also, when you don't know what your own resolution is talking about, it's very obvious.*
- *Look at the Rules and Info page on the website for more information and support on writing and reading resolutions, as well as other things.*
- *Don't be afraid to email us any time you have questions about the topics or process – it's what we're here for!*

We hope to see you here soon :)
- Chairs (Cara and Alex)

What is Biodigital Convergence?

Biodigital convergence refers to the merging of technical and digital systems with organic beings – this means integrating technology into living beings (such as inside people and animals) in order to improve performance, compensate for deficits or execute control.

The fields of technology and biology are surprisingly interconnected, with research and development in one field often driving innovation and progress in the other. Now, we are starting to see the first instances of the merging of organic systems with technical ones. This new age could bring major disruption both in these specialised areas and in daily life, but it also has the potential to lead to profound advancements and provide benefits to a wide range of sectors (e.g. healthcare, rescue, agriculture, research).

What Ethical Issues does This Create?

Digital modifications to organic beings blur the line between what we consider alive and what we consider technology. This raises moral questions around the nature of life, at what point a modified animal starts to be considered and used as a technology, and what qualifies something as a "living thing" which requires rights. It also raises issues around consent – can animals really consent to being integrated with technology? What about children? If someone is being influenced by a technology, how can we know if they really consent?

Biodigital convergence also poses a threat to the safety of not only the beings being modified but to everyone else too - to what extent should we be allowed to modify a life form's genetics and tissue and cells before it becomes not only ethically questionable but also hazardous? Especially when these innovations will inevitably become mainstream and thus could risk widespread weaponisation or unintentional harm.

The development and distribution of human augmentation may also lead to increased inequalities and discrimination between more and less economically developed countries, and between more wealthy and less wealthy people.

What is Happening Right Now?

Research into beneficial uses of biodigital technologies has begun, with scientists attaching sensors and microchips to various insects to control their movements. This was done in hopes of potentially finding ways to aid in rescue missions and gain easier access to dangerous or hard to reach locations.

On the human augmentation side, Johnny Matheny became the first person to have a fully controllable robot arm in 2018, after losing his arm to cancer in 2005. Now, companies like Neuralink and many others have started tampering with the psyche as well. Development is

currently underway for brain implants connecting to computer interfaces, raising many questions around ethics and safety.

Things to consider:

- What are the potential benefits and drawbacks to this phenomenon?
- What stake does your country have in the game? Are you using/producing biodigital technologies?
- If we accept that there are some cases where this convergence is beneficial to living beings, where do we draw the line? How do we safeguard against uses that are exploitative and dangerous?
- Should the public have access to such technologies? If yes to what extent, at what age, and for what reasons/uses?
- At what point does making modifications to other species become animal cruelty? Should humanity be able to digitally control an animal's movements under any circumstances?
- What regulations need to be put in place in order to ensure the safety of these technologies? At what point do too many regulations infringe on progress?
- How can we combat the potential increases in inequality which always inevitably arise with the creation of new technologies?

Useful links:

- https://www.southampton.ac.uk/news/2024/07/development-of-living-robots-needs-regulation-and-public-debate.page
- https://builtin.com/hardware/what-is-neuralink