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Мы никогда не были бововременными

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В мире, где настройка тела больше не ограничивается видеоиграми вроде *Cyberpunk 2077*, я исследую слияние плоти и технологии. Ограничены ли мы своей физической формой или есть пространство для развития, для модернизации? Эта статья затрагивает переплетение человеческой природы и кибернетики, поднимая вопросы о нашем существовании в технологически опосредованном мире. Где заканчивается человек и начинается машина?

OUR UTOPIAN imagination is constrained by our bodies. From the ability to customize our genitals in *Cyberpunk 2077* to the practice of injecting tiny NFC chips into our hands, the cybernetic is oftentimes thought as embodied, even subcutaneous. Doing an image search of "cyborg," we see illustrations of entities who have parts of their skulls replaced with metal, glowing lights in their eyes, wires bursting from the skin. It seems like we are equating "becoming more than human" with "reaching beyond the current limitations of the flesh." We move from hardware to wetware and write stories about the commodification of our bodies, the folly of our ambition, and what it means to be human.

However, there is another way of seeing the extension of human capabilities, and the social changes that flow from that. The current landscape of numerous academic disciplines is undergoing a profound shift, referred to as the "ecological turn:" we are more cognizant that our actions occur in, and through, a world, a local ecology.

This re-evaluation of the relationship between the agent and their environment is driven by a multitude of factors, one of which is the influence of the "extended mind thesis." This theory postulates that our minds are not confined to our physical bodies but are extended into the environment through various tools and technologies we use. For instance, our ability to write down thoughts in a notebook expands our memory capacity, at least insofar as we become habitually reliant on this notebook in our everyday activities. With smartphones being ubiquitous in many people's lives, are we even the same people without them? What about cab drivers who can only do their job when they have access to Google Maps?

> Where does the mind stop, and the rest of the world begin? The question invites two standard replies. Some accept the boundaries of skin and skull and say that what is outside the body is outside the mind. Others are impressed by arguments suggesting that the meaning of our words "just ain't in the head," and hold that this externalism about meaning carries over into an externalism about mind. We propose to pursue a third position. We advocate a very different sort of externalism: an active externalism, based on the active role of the environment in driving cognitive processes[1].

1. *Clark A., Chalmers D.* The Extended Mind // Analysis. 1998. Vol. 58. № 1. P. 7.

Psychologists have embraced this idea to examine how the environment can enhance our thinking, while sociologists have gone a step further to acknowledge that the built environment is a political arena, where some groups (such as those who can read) have greater opportunities than others. A recent example of this concept is the artificial intelligence ChatGPT, which can perform a wide range of creative tasks, including writing some parts of this text. The ability to extend our minds into the capability-space of something like ChatGPT gives us a significant competitive advantage, as it allows us to save time and increase efficiency in completing tasks. The loss of access to such systems can result in a decrease in our perceived intelligence.

Multimodal ethnomethodologists also acknowledge that the environment is not solely composed of objects that expand our minds, such as smartphones and notepads. They posit that human action itself is a feature of the environment and can be leveraged to achieve more complex outcomes. Essentially, the actions of others are becoming seen as cybernetic implants that facilitate new actions.

One particularly relevant fictionalized take on this matter was provided in Hannu Rajaniemi's posthuman cyberpunk sci-fi novel, *The Quantum Thief*, which envisions a future where the relationship between the agent and their environment has undergone a significant transformation. The story takes place in the far future, where humanity has colonized the solar system and advanced technology has transformed society. The protagonist, Jean le Flambeur, is a notorious thief who is broken out of prison by a mysterious woman named Mieli. Together, they embark on a quest to steal a priceless artifact, but their plans are complicated by the machinations of rival criminal organizations and the intervention of powerful beings known as the Sobornost. The novel explores themes of identity, memory, and the nature of consciousness, and is known for its complex world-building and use of advanced scientific concepts.

The subplot that plays out in the city named Oubliette, explores the idea of *exomemory*. Much like an exoskeleton may provide us with a mechanical advantage when lifting heavy objects, the concept of an exomemory explores the idea of a body-external infrastructure for cognition: imagine being immortal whilst constantly generating new memories. It stands to reason that you would at some point run out of local (wetware) memory. What if, instead, we could store our memories, encrypted, in some kind of hyper-advanced cloud infrastructure? What if all worldly events, conversations, and emotions were accurately recorded by sensors, and could be played back upon request?

> This is how it works. The exomemory stores data — all data — that the Oubliette gathers, the environment, senses, thoughts, everything. The gevulot keeps track of who can access what, in real time. It's not just one public/private key pair, it's a crazy nested hierarchy, a tree of nodes where each branch can only be unlocked by the root node. You meet someone and agree what you can share, what they can know about you, what you can remember afterwards.
>
> Sounds complicated.
>
> It is. The Martians have a dedicated organ for it. I tap my head. A privacy sense. They feel what they are sharing, what is private and what isn't. They also do something called co-remembering, sharing memories with others just by sharing the appropriate key with them. We just have the baby version. They give the visitors a bit of exomemory and an interface to it, reasonably well-defined. But there is no way we can appreciate the subtleties[2].

Rajaniemi imagines a society where total privacy is possible: since all events are recorded externally, people may choose to walk through the world without being seen or remembered, both sensory data and memory are a matter of malleable public record. Given enough trust in the cryptographic backend of the system (the novel deals with this in detail), this system would afford curious interactions. One could meet somebody for a one-night stand, but specifically agree that only the sensations will be remembered, but not the identity of the participants. One could meet up with a friend and share all secrets with them, then agree that only the fact of this sharing will be remembered, not the conversation itself.

Indeed, this disentanglement of a phenomenal totality brings up otherwise unthinkable possibilities. For instance, we may set up our exomemory recall in such a way as to remember the face, but not remember the identity of an interlocutor. This technomediated face-blindness illustrates how the connections between certain body parts and their use in social interaction are a result of the build-up of a sociotechnical infrastructure. Ethnomethodology is quite insistent on its description of a focus on at-hand resources, and multimodal studies have always been keen on moving away from seeing a "whole normal body" as some kind of interactional default. Instead, humans use what's available to them, and encode micro/macrosocial meanings in various elements of the environment, which are subsequently used to accomplish quite pragmatic action.

2. *Rajaniemi H.* The Quantum Thief. N.Y.: Tor Book, 2011. P. 108–109.

If, for instance, we happen to pilot a human body, then we may deduce the attentiveness of our interlocutors through the pivoting of our heads in the general direction of social activity. If we don't have a fleshy-bony multi-eyed ball at our disposal, we use other resources to track markers of co-orientation. For instance, we may start attending to the "typing…" messages in text chats and treat them as signs of presence. We may combine them with "message seen" conventions to rebuild some kind of equivalent framework for attention management in disembodied social environments.

In our everyday interactions, we tend to collapse the pragmatic nature of our interactional resources into the structures that are habitually at our disposal. This is typically our body, but may be other stuff in the future, too. Indeed, one colleague of mine recently started a research project on how we position our smartphones in interactions with others, and how we might use interactional moves like "taking the phone into both hands" as a way to transition from focused face-to-face interaction into various parallel engagements. Our language betrays us here a little: at-hand, facing each other, even orientation itself are just incidental tools for accomplishing particular kinds of actions. Speculative fiction destroys this regression to the mean by reconfiguring familiar items of our lived experience (a conversation, a body, a mind, identity).

More fundamentally, they demonstrate that we are not transitioning from default embodiment to some kind of novel cybernetic intersplicing of hard- and wetware. Instead, we have always interacted inside a contextual configuration of particular resources, and have built semi-permanent, post-hoc obvious, structures around them.

Our familiar faces don't travel far on their own. We might use facial recognition to distinguish close friends from strangers, but we need a whole socio-technical infrastructure to allow faces to become synonymous with identity. Imagine robbing a bank in the beginning of the age of photography. If some rich hipster happened to snap an old-timey daguerreotype of you, what then? We'd need a system for cataloging photos of known perpetrators, we'd need mass media infrastructure to distribute the photos across a town (or towns?!), we'd need some kind of technology to record faces habitually. So, while our passports have photos in them, they do so because we configured our bodies in socio-technical space in such a way as to make these photos circulate through relevant bureaucracies across recognizable social situations.

In sum, this tiny essay wanted to reflect about our body-centricity, and how we project it forward through time, by seeing technological

change as involving body-modifications. We treat our body as though it was some kind of primordial toolset of interaction, which we are slowly beginning to mediate. By attending to the way familiar embodied elements (faces, memories, gazes, thoughts) can become disembodied, and reconfigured, we may also realize that we have never been non-cyborgs. While there may be some cool neural tech in the future, we are already cyborgs. Always have been.

WE HAVE NEVER BEEN BODERN

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In a world where body customization is no longer limited to video games like *Cyberpunk 2077*, I explore the convergence of flesh and technology. Are we confined by our physical form, or is there room to evolve, to upgrade? This article navigates the intersection of human nature and cybernetics, sparking questions about our technologically mediated existence. Where does the human end, and the machine begin?

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