# Computer science and technology : historiography IV (9 - part six)

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Benefit of cyber-modifications, enhancements, implants are clear : abilities gained that go beyond the human standard. In the Cyberpunk universe these can go up to even invisibility (e.g. camouflage skin) and slowing of time (e.g. technology by Dynalar being well-known)... One of the downsides is that all of these parts or close, now, become suceptible to hacking.

An analogy are computers and a connection to the Internet : simultaneously, very useful, and exposing to all sorts of dangers. It is that kind of dichotomy, but extended to the ultra-computerized, -connected society, culture imagined in *Cyberpunk*'s world.

*Cyberpunk 2077*'s "Cyberware" display or menu includes categories of "Operating system", "Frontal Cortex", "Ocular system", "Nervous System", "Hands", "Arms" etc.
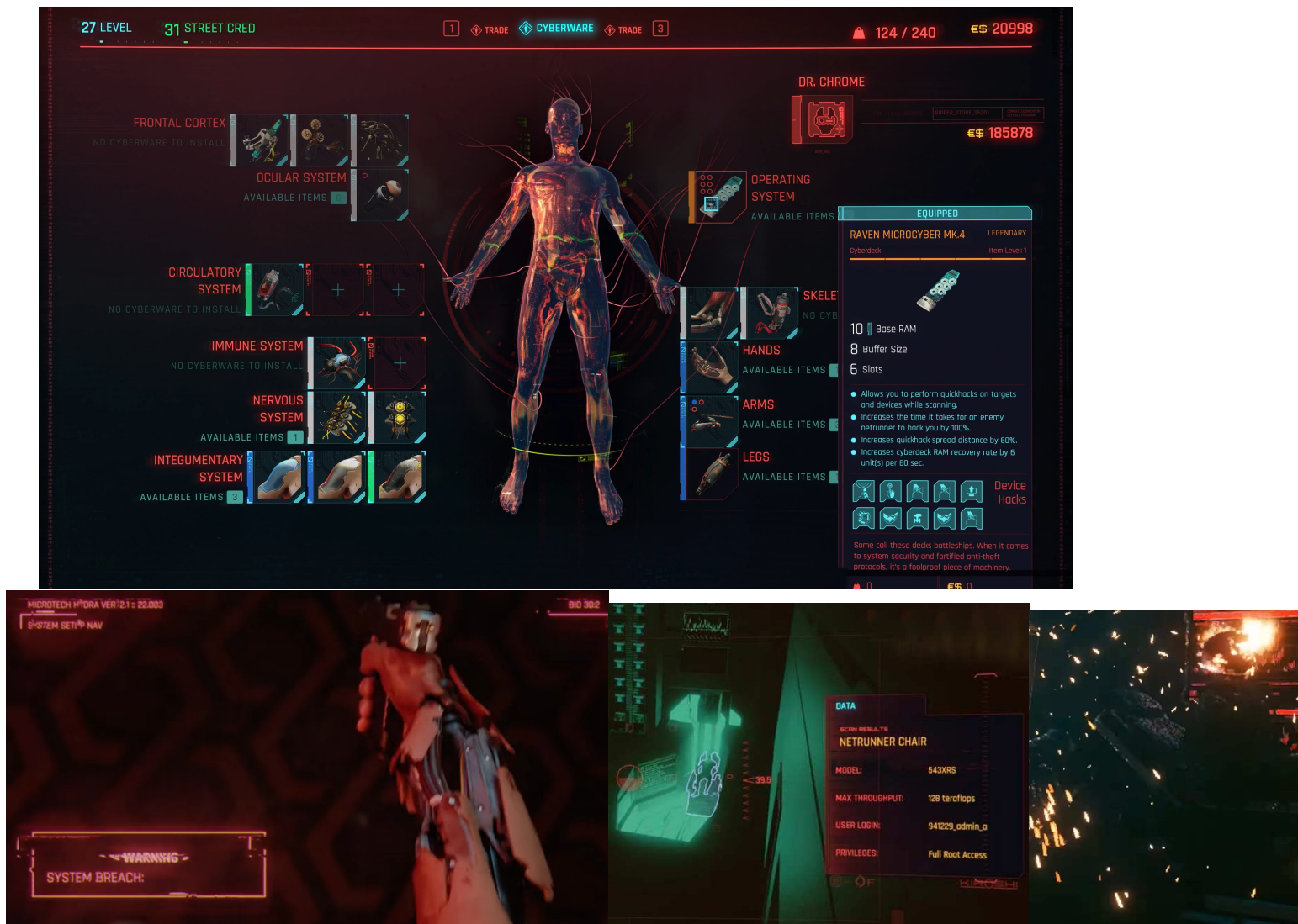




Il. *Cyberpunk 2077* [1] Official gameplay trailer (Nov. 2020) [2] T-Bug hacking V's Microtech Hydra (2019 E3 trailer) [3] detail "user login", "full root access" [4] imagery of head-on-fire type (associated with neturrning, hacking victims)

Based on T-Bug's fate in the Arasaka Heist (of the 2070s...), the effects on those who are killed through, and during, netrunning/hacking is described :

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"She got burned like anyone who tries to hit Arasaka.
They found the body in her pad, nervous system fried. You know what that feels like?
They say it's like a thousand knives stabbing you at once."
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[NB T-Bug is the one doing the hack in the 2018 E3 trailer. And, now the same happened to her, attacker and victim reversed.]

A highlight is reached as part of arguments to determine the distinctive human trait, in a side story involving Buddhist monks : 2 brothers, who identify with a wandering (mendicant) lifestyle associated with early teachings, came to Night City not knowing of dangers.

In the Northside, (home of Maelstrom gang), one of them is encountered in great pain. He explains they "were out begging for alms" when a group approached them - Maelstrom members - resulting in a cruel joke, kidnapped, his "body [defiled] through cybermodification", his brother remaining a prisoner awaiting the same ...

Once rescued, the protagonist enters a discussion with them around the topic of engrams[1]

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V.   Let's say the engram was just a copy. What then? Could you say that person was real?
Monk.   If they are truly self-ware, a buddhist will recognize them as a human being.
(...)
Monk.   Suffering is key. It has been there since the dawn of human existence.
        If a construct can suffer, it is a person.
(...)
Monk.   One must still remember that they will still be imprisoned in their body...
        even if their body is not flesh.
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And also, connected to the issue of immortality presumably, sought by corporations or their owners, executives,

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Monk.   He who cannot die cannot be born into a better life (...)
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[1]A simple, working definition of engram is given elsewhere in the discussion like so : "*Let's say an engram's just a person that's been digitized.*"

As we had already previously proposed, the Maelstrom are among least likable gangs of Cyberpunk. The protagonist of 2077 comments : "Cyberpsychos, the lof of them".

Discussions around the -biological, mortal- body, and immortality are echoed by Garry, who asks publicly : "But how could mere mortals become these death-defying abominations".

A note : Garry appears to have in common with the monks to be a beggar and to not have any or, many cyber modifications. Are these the signs by which truth-tellers are recognized in a cyberpunk world?

## GENERAL SOCIAL SCIENCE, PHILOSOPHY

It might seem odd to have cyberpunk discussions be succeeded by references to Early Christian philosophers, but the connection is the question of the body that is so central, here and there - Christianity, and life-and-death issues in a technologically advanced society (in which we already live, or towards which we are headed, depending on perspective)

### — *Augustine*. A very short introduction. Oxford Press.

Although this book is ostensibly about Augustine, it has a wealth of information on Early Christian thinkers in general, and their influences...

> "*the occult theosophy taught more than a century earlier by Mani (ad 216–77) … expressed in poetic form a revulsion from the material world and became the rationale for an ultra-ascetic morality. The Manichees regarded 'the lower half of the body' as the disgusting work of the devil*" (p. 12)

> "*Like his elder Christian contemporary Origen, Plotinus lived an ascetic life of minimal food and sleep, given to vegetarianism and no baths. 'He always seemed ashamed of being in the body'*" (p. 18)

> "*Porphyry urged that the soul's purging could be achieved only by 'flight from the body'*" (p. 20)

etc.

In a perhaps naive interpretation at first sight replacement of the human body (at least some of it, especially the lower elements) with "metal", and possibly cybernetics does not directly stand in contradiction to these Christian views or interpretations, or many religions for that matter : in their own ways, they tend to view the human body with suspicion due to association with lower urges;

God created humans imperfect, but the greater issue, (not discussed by Augustine to our knowledge, we are not aware of Augustinian toughts about cyberpunk...), being likely whether doing that could be a desecration, destruction of the original design.

### — Meeks. *The first Urban Christians. The social world of St. Paul.* Yale Press.

> "*A second way of dramatizing the break with the past and integration into the new community is found also in the language of the baptismal ritual, to which allusions are made in Galatians 3:28, 1 Corinthians 12:13, and Colossians 3:11. Here we learn that those who have been "baptized into Christ" or "into one body" have "put on Christ" or the "new human,"*
>
> (...)
>
> *This baptismal reunification formula, which is almost certainly pre-Pauline, has its roots in certain aspects of the Adam legends. These legends spoke of the image of God (Gen. 1:26) as a "garment of light" with which the first human was clothed, lost when he sinned, and replaced by the "garments of skin" (Gen. 3:21), or the physical body.*

"

(2nd ed., p. 88)

Among religious, prophetic or philosophical figures of Cyberpunk are Voodoo Boyz, the Buddhist monk brothers, Garry. In addition, less obvious, Brendan and Angel - a vending machine and a prostitute... serving as 22nd century-almost Biblical characters representing the forgotten and the downtrodden. Both, like some of the others, can tell the protagonist's fate ("But, we'll get to know each other well in no time, honey. (...) I know you're dying", says Angel). Cunningham as AI also fits in this category, -dead yet alive [echoing Christ's resurrection... she adopts poses that mimic the cross. palms outward].

There is at least another one in the form of the, mysterious and nebulous, "Zen Master" (also itinerant, also no easily determinable major modifications...). Encountered in one of the city's few central public green areas, hidden, overshadowed by the corporate buildings, and again by the large (energy, solar panel) installations of the desert.

As other prophetic figures before the stranger can tell the protagonist is dying. The Zen Master remarks that the protagonist has "no strong roots in this world".

V's duality is a constant theme : in an exchange with Johnny, (with whom they are linked due to the chip they have received), they express their frustration : "Pisses me off that our memories blend, don't have my own anymore." In yet another conversation, though we cannot remember with whom anymore, the interlocutor reckons "a part of you wants to fight, another [wants to hide, give up?]" [Cunningham or Brigitte, maybe].

Connected to engram, are (either synonymous or extensions) chip, biochip and relic.



Il. religious figures, prophets, philosophers of *Cyberpunk 2077* : Garry and the Zen master.



Il. *Cyberpunk 2077* 'The Heist' scenes.

**People, places, stories... *Cyberpunk***

| T-Bug | Netrunner |
|---|---|
| The Heist (cont.) | Chip, Konpeki Plaza, T-Bug |
| Worldly possessions | Mr. Griffin |
| Losing My Religion | 2 monks lost in Night City |

[r.] Yoko (a friend of T-Bug, vendor in Kabuki)

(games so far)

| Detroit: Become Human | another stand-out cyberpunk game |
|---|---|
| Haunting Ground | (a lot of focus has been on Fiona so far, but the pet companion as concept and gameplay element should be further explored e.g. see also Rule of Rose, prev. listed) |

*Detroit: Become Human*

Fascinating game on many levels which breaks with several big conventions of the genre as it is established :

- Android perspective (hence its title i.e. become or appear human, by which is learned what it is to be human...)
- Instead of a protagonist, the player explores the world through multiple characters, or groups of characters.
- Contrary to, now, dominant open world games, the story unfolds over several days in episodic manner.
- Choices made appear to have a non-negligible effect (both on individual episodes/stories, and the end).

As for the latter: a recurrent criticism addressed to Cyberpunk 2077 was that choices seemed to not have the kind of impact expected or promised. The same cannot be said of *Detroit..*, which has a complex tree of decisions (incl. visualisation feature?).
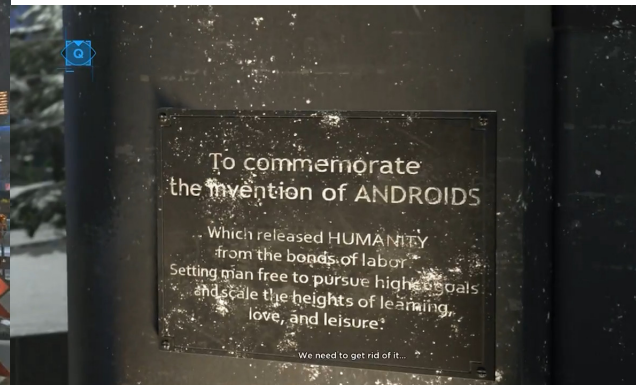




Il. detail "Android work ahead"; "the invention of Androids. Which released humanity ... from labor."

## COMPUTER GRAPHICS PAPER

&mdash; Mitchell, McTaggart, Green. "Shading in Valve's Source engine". SIGGRAPH 2006.

"*At the time that Half-Life 2 shipped, the key innovation of Source engine's rendering system was a novel world lightning system...*"