



myProsthetic



Prostheses

noun, plural pros·the·ses

- a device, either external or implanted, that substitutes for or supplements a missing or defective part of the body.
- an artificial device that replaces a missing body part, which may be lost through trauma, disease, or a condition present at birth
- What other definitions are there?

History & Important Advancements

- Egyptian Toe (950–710 B.C.E.) >>>>
- General Marcus Sergius (218-201 BC)
- Ambroise Paré (Early 16th Century)
- American Civil War (1861-1865)
- WWI (1914-1918)
- UC Berkeley (1946)
- Ysidro M. Martinez (1970s)
- Barlett Tendon Knee (2018)



Social Stigma & Acceptance

- Prosthetics are serious. They provide restorative or extended bodily function for a fair percentage of the global population. *An effective prosthesis delivers renewed functionality and is cosmetically pleasing, but it also serves to complete the wearer's sense of wholeness. A prosthesis then, is as much medical device as it is an emotional comfort.*
- *Prosthesis use plays a social role in the lives of persons with limb loss/absence. The ability to conceal such use enabled participants to ward off social stigmatisation that in turn enabled their social integration and the reduction of emotional problems surrounding such disability.* - Craig D. Murray
- *There was this feeling in the amputee community that the end-user could never talk to the people who were designing their limbs.* - Samantha Payne, Open Bionics co-founder and COO.





Bioethics & Critical Dialogue

- Ethical and Aesthetic Concerns (whose prosthetic?)
- Social Expectations & Technological Reach
- Trans-humanism & Tech/Mechanical Advantage
- Economic Divide

Open Source Projects

- [Hero Arm](#)
- [Open Hand Project](#)
- [e-NABLE](#)
- [Open Bionics](#)
- [Open Prosthetics](#)



Prosthetic Interventions

- Dani Clode - design dialogue
- StelArc - political prosthesis
- Aimee Mullins - disability design
- Marco Donnarumma - performing bodies
- Alberta Exoskeleton Project

Assignment

- Groups of 2
- It's OK to be vulnerable
- Physical Output / Physical Computing Required
- Displayed at EDP Expo
- Your projects have the potential to create a considerable impact in the expanding open source community of prosthetics. So please be serious. If you wish to make a parody, there must be considerable and serious critical dialogue associated.