

PATIENT CENTERED PROSTHETIC DESIGN

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WHY CAN'T WE JUST DESIGN FEET THAT ARE BETTER THAN THE REAL THING?



Why can't we just design feet that are better than the real thing?







“MOMENTS OF TRUTH” IN HUMAN DESIGN

- ✻ What is a “Moment of Truth”?
- ✻ Independent but significant and often overlapping considerations for any device that will interface with a person. Failure at any one could destroy the outcome.

FIVE C'S

☀ Comfort

☀ Cosmesis

☀ funCtion

☀ Cost

☀ Cool

COMFORT

☀ What makes something comfortable?

COMFORT

- ☼ Transference of pressure
- ☼ No “noxious” stimuli (noise, vibration etc)
- ☼ Heat
- ☼ Nuisance factor
- ☼ Weight



COSMESIS

☼ What is cosmetic?



COSMESIS

- ✻ How do we perceive ourselves?
- ✻ How do changes to our body affect our perception of cosmesis?





FUNCTION

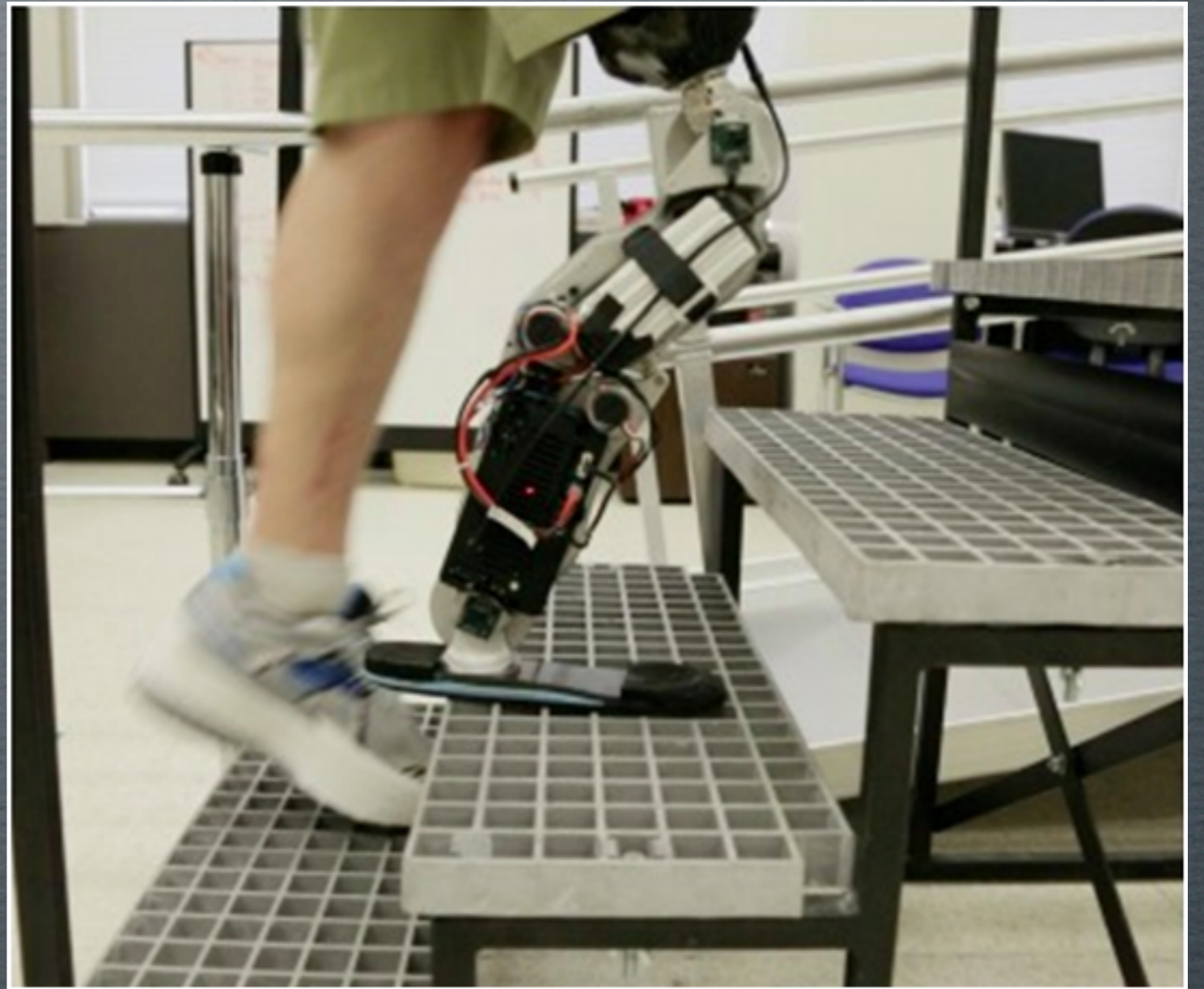
- ✻ Is it a device that reliably does what it is intended to do?







COOL

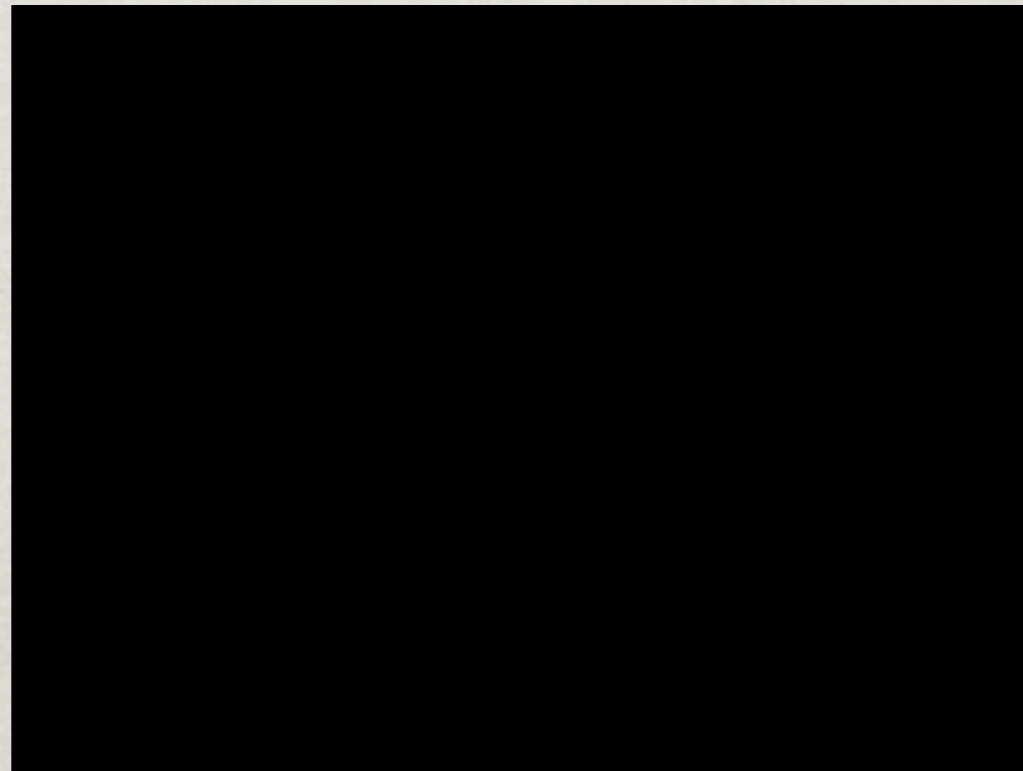




COST

Jesse Video

27 degrees of
freedom arm
controlled by re-
innervated muscle
groups



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THE PERFECT
DEVICE IS ONE
THAT
BALANCES ALL
OF THE ABOVE
FOR THAT
INDIVIDUAL



