Altered Relationships with Autonomous Systems: somatic symbiosis, correspondence, alterity, or monster?

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Interaction design – changing

Challenged by novel *materials*
Importing/devising novel *theories*
Expressing novel *ideals*
Novel *relationships*
Novel *people (somas)*? New *society*?
Challenged by novel materials:
1. hybrid physical/digital materials
2. increasingly complex and fluid digital ecology
3. autonomous or partially autonomous systems changing their behaviour over time and with use

... and combinations thereof...
Correspondence relationships
Breathing Light
in collaboration with IKEA
Soma Mat
in collaboration with IKEA
Correspondence relationships

Intimate correspondence:
“For the feedback to make sense its expression must also somehow correspond with the experience of the bodily process addressed”
(Höök et al)

Correspondence:
“That is what it means to correspond, to join our lives with those of the beings, matters and elements with whom, and with which, we dwell upon the earth.”
(Ingolds)

Note: Not embodiment!
Soma
Soma as a living, purposive, sentient, perceptive body or bodily subjectivity

Aesthetics
an awakening from the mindless, joyless behaviours

Analytical & Practical
the highest art of all – that of living better lives

Soma Design (Höök building on Shusterman)
soma design—a process that allows designers to ‘examine’ and improve on connections between sensation, feeling, emotion, subjective understanding and values
Somatic symbiosis relationship
1. Walking
2. Standing still
3. How to move
Somatic symbiosis relationship

Post-phenomenology
Embodiment relations are characterized by a symbiosis of a person and a technology, such as eyeglasses (Ihde)

Somaesthetic symbiosis & appreciation
“One of the most interesting experiences for me was when I took off the tail after wearing it for an hour, and I had a surprising physical feeling of being tailless” (Svanaes)
Alterity relationship
Aerial Robotic Choir
by Åsa & Carl Unander-Scharin & KTH
Drone Chi
by Joseph La Delfa
Soft robotics material Omnifiber
by Özgun Kilic et al
Alterity relationship

Postphenomenology

Alterity relationships are those where the technology itself is in focus and the rest of the world is only a distant referent.

The technological artifact becomes the ‘other’, as, for example, when interacting with intelligent robots – drones or soft robotics (Ihde)
Monster relationships
Shape-changing corset
by Karpashevich et al

“Like some animal coming towards me from my legs, from the floor, from outside, pushing upwards. I was absolutely mesmerised by the experience”
Singing Corset by Cotton, Kilic, et al
“Literature, it is said, trains us how to read, and so I began to wonder, how might a novel like Frankenstein train me, as an HCI researcher moving into an AI translator role, to read about artificial intelligence? And the answer is not a cheap moral about a mad scientist—but rather about how humans use narratives as a technical methodology to work out what happens to ourselves when we experience transformation—which is timely, because those of us who are AI translators are also, inevitably, AI storytellers.”

(Bardzell talk at KTH: Chimeras of Boundless Glamour, Realities of Little Worth)
Background relationship
Always watching
Always listening
Going from background (implicit) to foreground (explicit)
Postphenomenology

Background relations reside in the periphery of human attention, such as the heating system of our home. (Ihde)
Relationships

Intimate correspondence
  Like dancing or horseback riding

Somatic symbiosis
  As one, unnoticed

Alterity
  Otherness

Monster
  Part human – part otherness

Background
  Implicit – explicit

…
Relationships = not bad/good

Intimate correspondence
  With ourselves, but also multispecies

Somatic symbiosis
  Whose body? Cyborgs, feminist

Alterity
  Shifting away from anthropomorphism?

Monster
  Taming the monster? Understanding the societal shift?

Background
  As crops to be harvested?

...
Somatic symbiosis, correspondence, alterity, monster AND background!

Post-phenomenology
  De-centring human in human-computer interaction
Not slotting designs into one of the relationships
  Phenomenology of multistability (Ihde)
Relationships can be interesting lenses for uncovering opportunities, risks, ethics and aesthetics
Interaction design – changing

Challenged by novel materials

1. hybrid physical/digital materials
2. increasingly complex and fluid digital ecology
3. autonomous or partially autonomous systems changing their behaviour over time and with use

... or combinations thereof... often data-driven, machine-learning-based
Interaction design – changing

New theories imported/created
1. Embodiment – movement turn
2. Somaesthetics
3. Pragmatist accounts
4. Post-phenomenology
5. Material turn
Novel ideals

1. Beyond the language-body divide
   somaesthetic appreciation, feminist ideals, …

2. From individual interfaces to the complex sociotechnical fabric of human and nonhuman actors warrants different design ideals
   infrastructuring, multispecies design, background, implicit interaction, …

3. Beyond predictability
   alterity, background, monsters & other narratives, …
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Jeffrey Bardzell, Chimeras of Boundless Glamour, Realities of Little Worth, talk at KTH