ENABLING NEW FORMS of AGENCY using AGENCY SENSITIVE DESIGN and WEARABLE ENVIRONMENTS

AGENCY
transformative capacity or capacity for action

AGENCY IS AN ATTRIBUTE OF

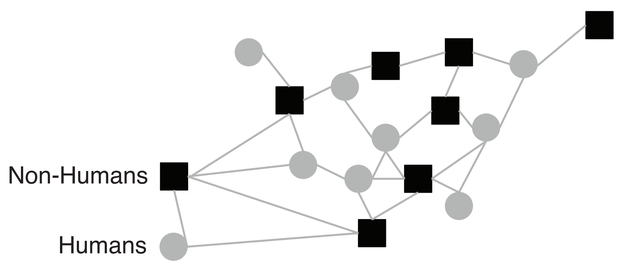
- Humans and Social Structures
- The relation between Humans and Technology
- Technology

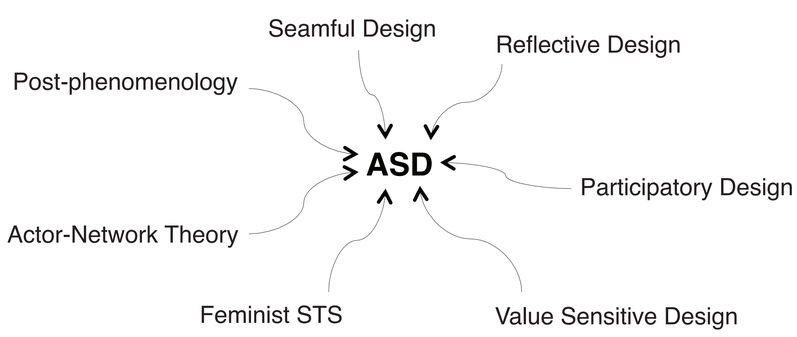
RESEARCH QUESTIONS

HOW CAN WE DESIGN FOR (RELATIONAL) AGENCY?

HOW CAN WE ENABLE NEW FORMS OF AGENCY?

AGENCY SENSITIVE DESIGN (ASD)





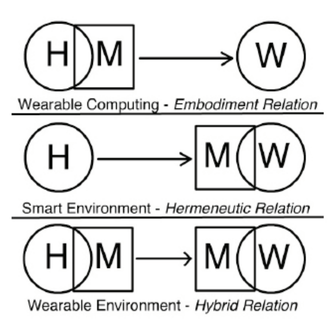
WEARABLE ENVIRONMENTS

Human, Machine and World Relations

Embodiment relation	(human – technology) → world
Hermeneutic relation	human → (technology – world)
Alterity relation	human → technology (– world)

Ihde, D. *Technology and the Lifeworld.* Bloomington,Minneapolis: Indiana University Press, 1990.

Ubiquitous Computing and Human, Machine and World Relations



AIM

TO DEVELOP
A FRAMEWORK FOR DESIGNING FOR AGENCY

> Embracing variety in the formation of agency

> Facilitating the fair treatment of human and non-human actants

> Supporting the emergence and evolution of new forms of agency in production and use of technologies

STRATEGIES

Transparency:
. making visible the invisible work,actants and processes in both production and use of technologies.
eg. Accounts + Seams

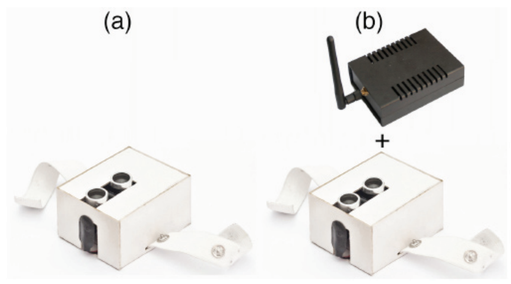
Awareness:
. the awareness of each actant about their own role and responsibility
. the awareness about other actants' role and contribution.

Participation:
. the recognition and inclusion of multiple and heterogeneous sources of influence in design processes.
. cognitive justice (valorizing marginalized views, values etc.)

Designing (configuring)-in-use:
. supporting the tuning processes in technology use by making the technologies configurable, flexible, modular and open.

New Metaphors:
. facilitating reconfigurations in use and enabling recognition of every human and non-human actants in a fair way.

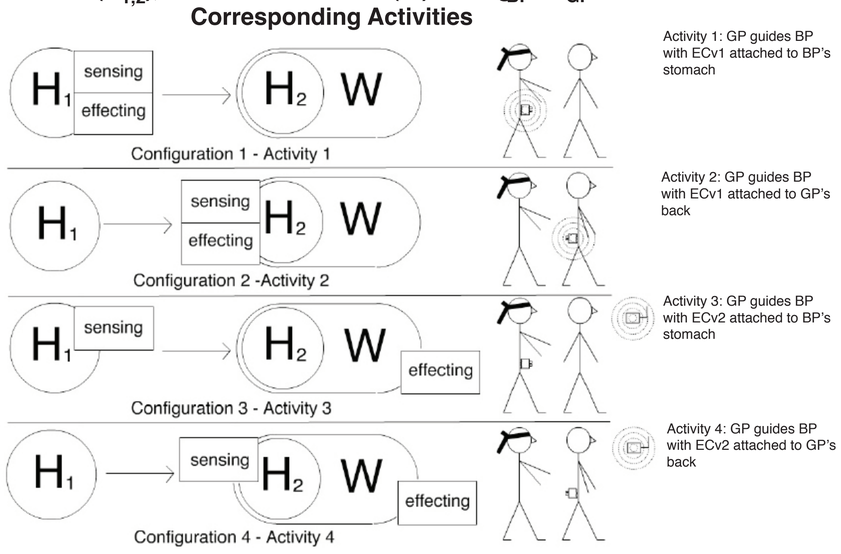
Enactive Coupler (EC) Version 1 (a) and Version 2 (b)



Configurations of the Sensing (S) and Effecting (E) Capacities of Machines across Workshops (Ws) 1,2 and 3

Configurations	Body 1		Body 2		Space		Workshops
Config. #1	*S*	*E*					Ws1, Ws2
Config. #2			*S*	*E*			Ws1, Ws2
Config. #3	*S*					*E*	Ws2
Config. #4			*S*			*E*	Ws2
Config. #5	*S*			*E*			Ws3
Config. #6		*E*	*S*				Ws3
Config. #7		*E*			*S*		Ws3
Config. #8				*E*	*S*		Ws3
Config. #9					*S*	*E*	Ws3

Human ($H_{1,2}$), Machine and World (W) Configurations and Corresponding Activities



STAGES OF THE RESEARCH

Stage 1

- configs #1 to #4
- emergence and evolution of new forms of agency

Stage 2

- configs #5 to #9
- principles and strategies for Agency Sensitive Design

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