

# What do we talk about when we talk about affordances?

1. My research
2. Theoretical evolution of affordances
3. My approach
4. Discussion



The Open  
University

@Becky\_Faith

[www.beckyfaith.net](http://www.beckyfaith.net)

# My research: Gender, technology & inequality

Research question: **“How does the use of mobile devices by socially excluded women aged 16-24 impact on their capabilities?”**

Exploratory research: gaps in literature and data

Qualitative approach: Semi-structured interviews women & intermediaries, observation

## My research framework: Gender, technology & inequality

**Capability approach:** how technology might contribute to women's capabilities to lead lives they value

**Relational affordances:** what actions the phones might enable or inhibit – need to understand the materiality of the device

Thematic analysis based on this framework

# Technology and Society: Some theoretical approaches

**Semiotic** – social constructivist, meaning of technology co-created by user and social context

**Material** – technological determinism, technology determines actions

**Affordances** – bridge between two.

Acknowledging context but recognising actual possibilities for human action afforded by device

# Affordances

**Gibson** – possibilities for action in the environment – can be positive or negative (e.g. knife can cut sausages or flesh)

**Norman** – HCI – clues as to the operation of things – can be used in design

Different interpretations; communications studies, organisational studies, HCI/activity theory

# Affordances reconsidered

**Sun** - Relational approach

*“...today’s HCI landscape is dramatically different, influenced by heightening user participation in an increasingly globalized world. Issues such as identity, agency, power, structure, politics, and social justice compete for designer’s attention alongside traditional metrics”*

# Affordances reconsidered Kaptelinin & Nardi Mediated action perspective

Regrounding in  
Vygotskian  
approach.

Activities and  
minds mediated  
by culturally  
developed tools  
inc. technology.

## Instrumental and auxiliary

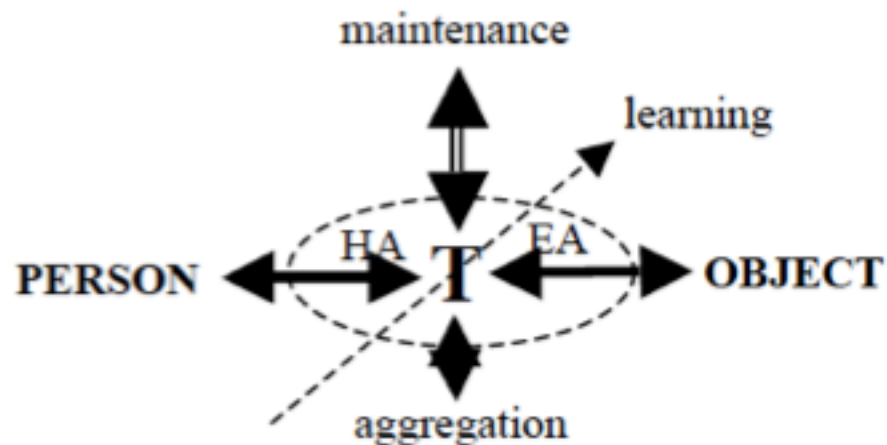


Figure 2| Technology affordances: Instrumental, maintenance, and aggregation (T – technology, HA-handling affordances, EA-effector affordances)

# Instrumental and auxiliary affordances

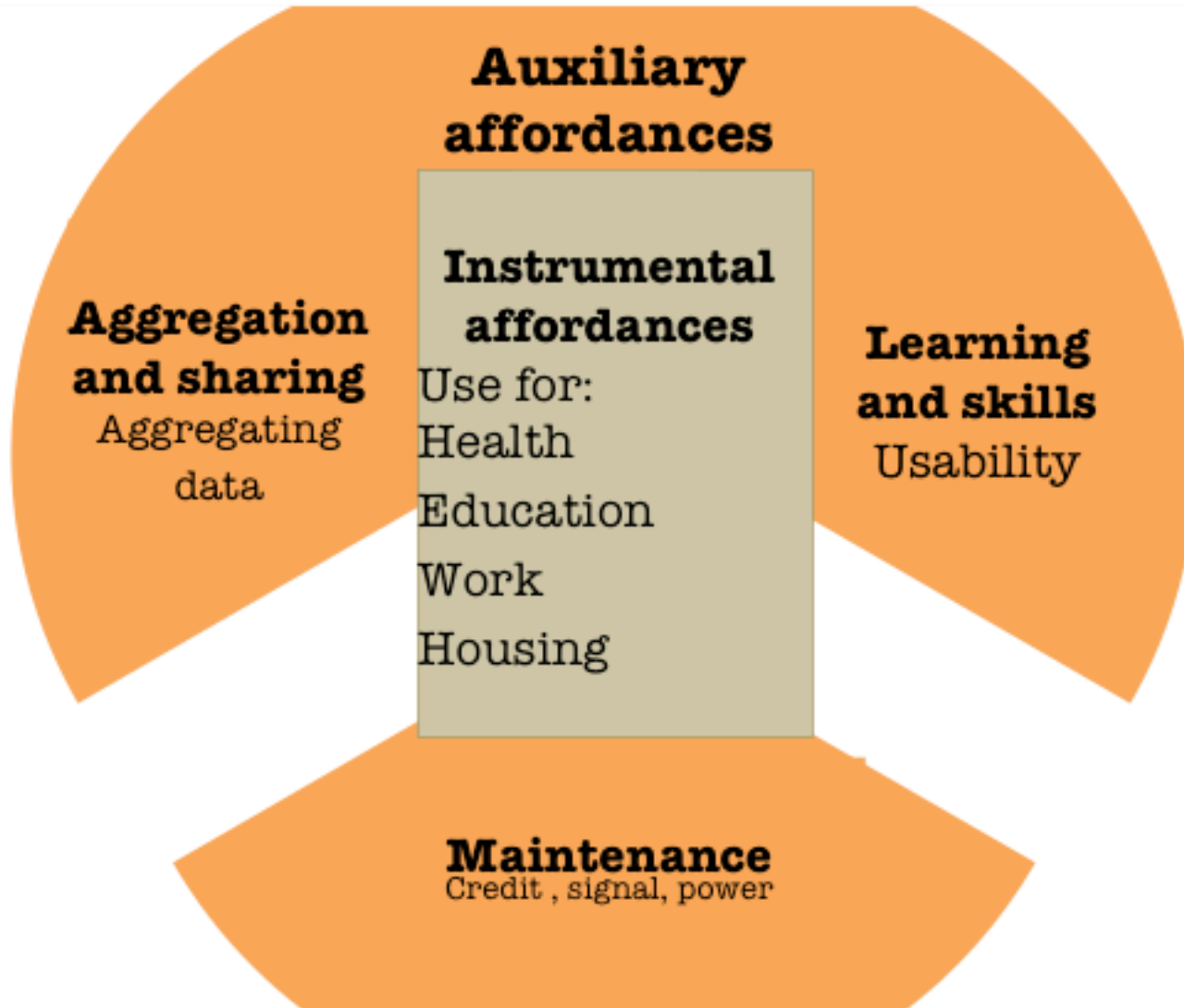
## Kaptelinin & Nardi

**Instrumental** *“possibilities for acting through the technology in question on a certain object”*

**Auxiliary** *“generic types of indirect, auxiliary affordances emerging in the complex relations within webs of mediation”* maintenance, learning and aggregation affordances



# My research



# References

- Gibson, James J 1977. The theory of affordances. *Hilldale, USA*.
- Kaptelinin, V & Nardi, B. Affordances in HCI: toward a mediated action perspective. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2012. ACM, 967-976*.
- Sun, Huatong & Hart-Davidson, William F. Binding the material and the discursive with a relational approach of affordances. *Proceedings of the 32nd annual ACM conference on Human factors in computing systems, 2014. ACM, 3533-3542*.
- Vygotsky, L. S. 1978. *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

# Discussion

- When and why might we use affordances in our research?
- Theoretical regrounding – is it necessary?
- How do we operationalise in our research?
- My interpretation – does it fit?