

Visual methods and researching human-animal-technology relationships: cows, people and robots



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Introduction

- Exploring human-animal-technology relationships through a study of robotic milking machines
- Structure of the paper:
 - The ‘animal turn’ in geography and new problems of methodology
 - The promises of visual methods for animal geographers
 - Strengths and limitations of visual methods in the robotic milking project
 - Conclusions

Animals and the 'more-than-human' turn

- Wolch and Emel (1995) 'Bringing the animals back in'
- Recognition of co-constitutive relationships between animals and humans
- Understanding that the world cannot be neatly divided into 'nature' and 'society'
- Lorimer (2005) 'more-than-human' geography can include technologies, machines etc

Visual methods and more-than-human geographies

- Lack of engagement with visual methods by (animal) geographers
- Most work on wildlife photography or media depictions
- Despite calls for more work on animals, discipline lacks methodological sophistication
- This paper explores some ways in which visual methods can be used to research the more-than-human, using case of robotic milking

What is Robotic Milking?



Aims of the project

- To understand the three-way relationships between humans, cows, and robots
- Co-constitution of the farm, unsettling established ethical and social relations
- Desire to treat all three groups symmetrically, in theory and method
- Avoiding anthropomorphism and anthropocentrism
- Can we say anything meaningful about animals? Risan (2005)



Our methods

- Interviews with 24 farmers, further 27 interviews with animal welfare experts, vets, manufacturers etc.
- 3 observation periods on case study farms
- Video, photos, audio files, maps and diagrams



Sensuous geographies

- Changing sensory experiences on the farm
- Drawing on sensuous geographies e.g. Rodaway (1994), Pink (2009) – understanding of the world comes through sensory perception of it
- Introduction of robots brings about new forms of interaction, new uses of space, and new sensory environments
- Visual methods better for both identifying and recording these changes

Visual methods and the non-verbal

- Overcoming anthropomorphism?
- Problem of using language (fieldnotes, written descriptions, interviews) to research and represent animals with no linguistic capacity
- Visual methods allow both humans and nonhumans to be researched non-verbally
- Challenges reliance of visual methods on the verbal – asking for clarification, triangulation with interviews etc

Representation and interpretation

- Creates data open to multiple interpretations: portable, sharable experiences
- Especially important in the case of nonhumans due to contingent and partial 'explanations' of behaviour
- Is work with nonhumans more resistant to interpretation?

Bringing the robots back in?

- What about the robots?
- Essential difference between cows and robots – robots have no ‘inner life’
- Distinction between ‘animates’ and ‘nonanimates’ (Risan 2005)
- Both subject to anthropomorphism, but we can hope to say far more about the subjectivity of cows than robots



More-than-human methods

- Difference between cows and robots calls more-than-human category into question
- Cows have more in common with humans than robots
- Implications for methodology – impossible to develop blanket approaches to the study of nonhumans



Making claims about non-humans

- Can anthropocentrism really be avoided?
- Research still driven by human choices, preferences and framings
- Example of focus on cow-robot interactions
- Techniques developed to overcome problematic power relations in human-human research (e.g. Participatory video) not possible with animals

Conclusions

- Visual methods hold much promise for the rapidly growing field of more-than-human geography
- This paper is a contribution to a much needed discussion of methodology
- Visual methods offered us a way of exploring symmetry and relationality between humans and nonhumans
- But as our case shows, the category of the nonhuman is problematic – animate/nonanimate is more helpful

Thank you



Lorimer, J (2010) 'Moving image methodologies for more-than-human geographies' *Cultural Geographies* 17

Pink, S (2009) *Doing sensory ethnography*. London: Sage.

Risan, L (2005) 'The boundary of animality' *Environment and Planning D* 23

Rodaway, P (1994) *Sensuous geographies: body, sense and place*. London: Routledge.

Wolch, J and Emel, J (1995) 'Bringing the animals back in' *Environment and Planning D* 13