

**Title: ‘Umamimi: the wind of heaven blows between the gentle flicks of my robotic horse ears’**

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Steve North. 2018. Umamimi: the wind of heaven blows between the gentle flicks of my robotic horse ears. In Proceedings of the 'Horses, Moving' conference (Museum of Archaeology, University of Stavanger, Norway. 25-27 September 2018). <http://dx.doi.org/10.5281/zenodo.1446222>

### **Abstract**

“The wind of heaven is that which blows between a horse's ears” (anonymous, widely attributed as a proverb of Arabic origin). ‘Umamimi’ is a project based at the intersection between Computational Anthrozoology (North, 2018) and Horse-Computer Interaction (North, 2016). Umamimi means ‘horse ears’ or ‘horse eared’ and the author has used this name to reflect the Japanese tradition called ‘Kemonomimi’ (animal eared), which is found both in manga and anime. The Umamimi robotic horse ears are a prototype device, allowing the author to explore what it means to be a horse, using expressive ear movements to communicate.

Umamimi’s ear movements are fully customisable via software programming. Subtleties of ear movement expression may be modelled, to reflect the varying personalities found in individual horses. Different profiles could be developed, with variations in the speed, range, frequency (of events) and degree of synchronisation displayed in the ear movements.

The author will describe his autoethnographic work, which reflects on his experiences as an ‘embedded horse’, spending time within his own small herd of domesticated horses. How did it feel to communicate with horses through the movements of robotic ears and what was the nature of the resulting ear-mediated horse-human interactions?

North, S. 2016. Do androids dream of electric steeds? The Allure of Horse-Computer Interaction. ACM Interactions. 23. 2 (March-April). 50-53. <http://dx.doi.org/10.1145/2882529>. ISSN: 1072-5520

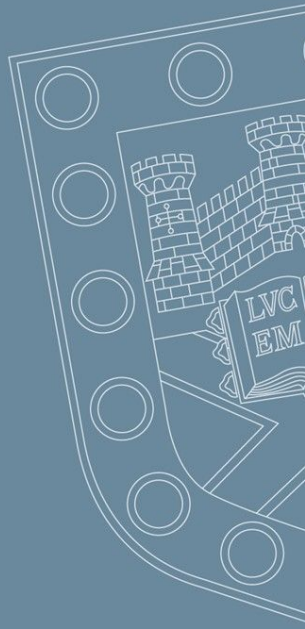

Steve North. 2018. Computational Anthrozoology - a manifesto: ‘as the lens’ and ‘under the lens’. In Proceedings of the 27th International conference of the International Society for Anthrozoology (ISAZ 2018): 'Animals in Our Lives: Multidisciplinary Approaches to the Study of Human–Animal Interactions' (Charles Perkins Centre, University of Sydney, Australia. 2 - 5 July 2018). 83. <http://dx.doi.org/10.5281/zenodo.1319034>

## Presentation slides

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**Umamimi: the wind of heaven blows between the gentle flicks of my robotic horse ears**

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**Me**



## A good place to start...



## Writing about Umamimi...

**Autoethnography = a useful way of accounting for or describing the particular, the micro and the situated elements of our lives**

A sample from my autoethnography field notes for Umamimi:

“I share space, spend undemanding time and practice ‘deep hanging out’... The wind blows over the long tall grass as I sit with the horse herd. Living amongst them and yet separated by our morphology and divergent evolution. As subtle signals are exchanged through the smallest movements of their ears, I am reminded how crucial these long, expressive ears are to a horse. Two long signal flags, clearly visible above their heads, with the ability to move together, or when orientated individually to signal divided attention, or a newly identified audio event in the soundscape”



## What are the origins of the 'Umamimi' name?



馬耳

= 'horse ears' or 'horse eared'

A similar naming pattern to: 'Kemonomimi'  
(獸耳 'animal eared')

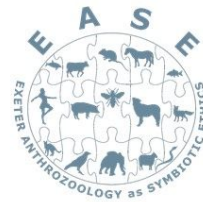
馬 = horse (uma)  
耳 = ear (mimi)

## About me – previous work

Using quantitative, ethology-based approaches for the analysis of human-animal interactions:

- HABIT (Horse Automated Behaviour Identification Tool) project:  
<http://habithorse.co.uk>
- Parelli vs. ISES project: evaluating less orthodox horse training programs, against evidence-based 'good practice' in equitation science – using computer-based logging

Commonalities between these projects: video analysis, use of ethograms





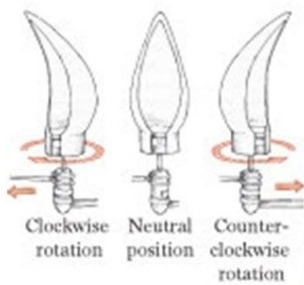
## About me – more recent interests...

More esoteric themes, lenses and methodologies:

- non-human animal somatechnics
- autoethnography
- ethnographic science fiction, design / speculative fiction
- imaginary studies



## Inspiration for Umamimi...

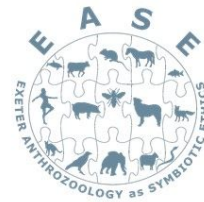


## Human and other animal assemblages



Marion Laval-Jeantet (left and right) from the arts group 'Art Orienté objet': 'May the horse live in me' (2011) and other works... "artist injects herself with horse blood, wears hooves" and Lisa Bufano (centre) on her Queen Anne table legs, All Worlds Fair, 2013

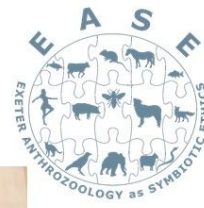
## Human and other animal assemblages (cont.)



**"I tried to become a goat to escape the angst inherent in being a human"**

Thomas Thwaites. 2016. Goatman: How I took a holiday from being human. Chronicle Books

## Horse ears and their use in equine communication



## Making Umamimi...



## Further work

- Submitted paper for publication: describing the technical aspects and the configurable profiles (including a workflow for observing 'real' horses and modelling their characteristics using the device)
- Submitted paper for publication: using autoethnography / speculative fiction to tell the story of an imaginary study: quantitative research to evaluate how horses respond to see attentional cues from Umamimi
- Working on an autoethnography of 'a summer lived en-eared'

