syngva: An Object that Raises Questions of Agency, Relationship, and Control

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ABSTRACT

The division between subject and object, agent and non-agent, has consistently been dubious philosophically. Now we are increasingly faced with computational objects and relational artifacts that put into question cherished notions of human agency and intentionality. I describe one such object, syngva, a creature that develops through evolutionary processes idiosyncratic movements in response to non-speech vocalizations. syngva serves two parallel roles. For the user, syngva enables a form of non-linguistic expression, serving as a catalyst for novel vocal behaviors provoked by the motions of the object. For myself, syngva acts as a sociological probe, allowing me to study in-situ relationship formation, agency, and control in response to an "intelligent" creature. I describe an evaluation approach that draws heavily from actor-network theory (ANT), a methodology that in part places objects on the same ontological level as human agents. This recentering of agency intimates a different way of looking at the person-object dyad that focuses on the interactions themselves without reference to pre-existing theories.

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Author Keywords

Robotics, agency, non–speech expression

QUESTIONS OF AGENCY

Philosophically, the division between subject and object has always been muddy. Yet it has only been recently that in our day-to-day lives, with the proliferation of computational objects and relational artifacts, that we personally witness situations that upset the seemingly clean distinctions between subject and object, agent and non-agent. The place of agency in the human is slowly being joined by a type of agency (or at least presumed agency) in the object itself. From the Aibo to Paro, ubicomp and situated technologies, a better understanding is needed of how we interact with objects with (presumed) overt agency. Questions arise as to the nature of our relationship with these new objects.

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I propose to study these questions through the design of a new object called *syngva*, a robotic creature that moves in response to non–speech vocal sounds. This object is a transitional object in the Winnicottian sense [3, p. 2], creating an "intermediate area of experience" through its non-anthropomorphic, non-zoomorphic appearance and actions. It enables the exposure of the user to a positive uncanny situation where things resemble "what was once well known and had long been familiar" [1, p. 124].

THE DESIGN AND STUDY OF SYNGVA

The first version of syngva was extremely simple technically, yet its shape and movement already provoked interesting responses. The later versions of syngva will push these movement and control mechanisms into the idiosyncratic realm, exploring evolutionary development of control based on individual characteristics of a person's non–speech vocal sounds. By encouraging the expression of strange vocal sounds I can explore how the design, movement, and development of syngva influences behavior.

An understanding of syngva's effect on people will come through *in-situ* studies where I give people the object for a week or more. I propose a mixed ethnographic method that pulls from both interviews as well as diary-type entries. My evaluation draws from actor-network theory (ANT) [2], a methodology that is specially suited to study of fluid situations such as the one I am creating. ANT will allow me to follow the traces of syngva's effect through the accounts of my informants, looking for the creation of new assemblages, multiple realities, and novel social groupings by the actors, both human and not.

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