Interspecies Collaboration – Making Art Together with Nonhuman Animals Lisa Jevbratt

There is an overwhelming amount of anecdotal evidence suggesting interspecies altruism and new scientific research is starting to corroborate those anecdotes. A current study with chimpanzee toddlers indicates that they harbor something akin to interspecies altruism (Warneken and Tomasello, 1301-1303). Everyone living with a pet can testify that their non-human companion seems to know and respond to their needs. In some extreme cases, pets have been known to aid their owners during an acute or chronic illness or an accident. But it doesn't end there – animals of different species who don't know each other often provide help and comfort to one another. We hear amazing stories such as the gorilla who rescued a 3-year-old boy who fell into her zoo enclosure¹, the hundred years' old tortoise who "adopted" a baby hippo orphaned in the 2004 tsunami², and numerous accounts of interspecies nursing. Could this willingness to support each other across species barriers be formalized into collaborations? Could we be working on artistic and scientific projects together with non-human animals? Both animals and humans would have much to gain by such collaborations. Imagine what we could learn about the world by experiencing it with or through a profoundly different being. In addition, interspecies collaborations could generate unprecedented respect and understanding of other species.

This paper explores interspecies collaboration by discussing a class I am teaching at the University of California at Santa Barbara (UCSB). It looks at various forms of collaboration using examples of student work. Next, the paper touches on some of the important aspects of interspecies collaboration, such as ideas of what is natural and the concept of anthropomorphism. Then, in order to explain why this is a good time to start collaborating with other species, Interspecies collaboration is contextualized within contemporary technology and art practice. The paper concludes with a discussion about why art is the field to spearhead Interspecies collaboration.

Art 185 - Interspecies Collaboration

In 2006, I started to explore interspecies collaboration with my students in the Art Department at UCSB and I continued that exploration with a second class in the spring of 2009. Interspecies collaboration will now be offered yearly as an elective requirement in the art department.

The class is ten weeks' long, with 15 to 20 undergraduate and graduate students in each class. The students are asked to collaborate on art projects (loosely defined as aesthetically driven projects) with individuals of other species. My goal is to provide students with a situation in which they can "indulge" in their curiosity, experiences and closeness with animals. The class acknowledges and validates the interactions they have with the non-human animals around them. The student should feel justified to stop to talk with a scrub jay on the way to campus, spend a day watching and perhaps telepathically communicate with a turtle, or attempt to catch the interest of the dolphins swimming in the ocean near shore. Students are asked to set up systems allowing them to experience and examine the world together with animals – not to look at or make studies of animals. The process should force them to rethink the way they make art, because in order to change the power relationship between human and non-human animals, the shift needs to be embedded in our methodologies. The students should engage in and be confronted personally by the issues at stake: Our treatment of non-human animals, and the potentiality of learning about the world together with them, not merely making comments on these issues. Most

¹ http://en.wikipedia.org/wiki/Binti Jua (last checked Oct. 2009)

² In the news: http://news.bbc.co.uk/2/hi/africa/4152447.stm (last checked Oct. 2009)

importantly, the animals should under no circumstances be subjected to harmful or abusive practices.

Artists have long used animals for artistic endeavors. Their practices have included everything from using cadavers for anatomy studies to arranging dead butterflies in patterns. In recent years, there has been an upswing of artists interested in human/animal relationships and there has been several art shows³ addressing issues such as the plight of animals, animal domestication, and other uses of animals in our culture. Unfortunately, much of the artworks in these shows are very traditional in their mode of production as they cement, rather than challenge, the species hierarchies they often attempt to discuss. Animal corpses are taxidermied, mutilated and arranged in "decorative" patterns, while live animals are locked in small rooms with other animals or humans⁴, or outfitted with (potentially uncomfortable) gadgets, such as cameras, sensors and robotic devises.

One goal of this class is for students to learn to treat animals with respect. The animals are not the students' material to use to communicate an issue, however noble that issue is. Thinking about the animals as collaborators, even if it sometimes might feel contrived, ensures that they are treated as the fully sentient beings they are. You don't kill, harm or abuse someone you collaborate with.

Working with domesticated as well as wild animals, the students spend a significant amount of time at animal sanctuaries and nature preserves, participating in several overnight trips to remote locations in search of interested non-human collaborators. A large portion of the class is spent finding animals to interact and work with, and that search is an important aspect of the class, and any attempt at interspecies collaboration. In addition to creating projects, the students write about their experiences – the collaborative process as well as their successes and frustrations – on a weekly basis. They post their writing and project documentation to the website interspeciescollaboration.net, which I developed for the class. The site aids in acknowledging and validating the sometimes ephemeral experiences the students have. It also allows a larger audience to see and take part in the projects. To contextualize their projects, the students research relevant topics in books, films and websites and post them to the site.

How is it possible?

The prospect of interspecies collaboration seriously questions our leading scientific and artistic paradigms. The most obvious and overwhelming obstacle one faces when imagining or engaging in interspecies collaboration is an unusually severe case of the old philosophical issue of "the Problem of Other Minds," simply defined as: How can we know how others think, feel and experience the world? And, as an extension of that issue, how do we conduct scientific or artistic research in collaboration with someone whose experiences, sensations, and knowledge is difficult

³ For example the show *Interspecies* at the Cornerhouse Gallery in Manchester, UK in Winter of 2009 and here in the US the show *Interspecies: Intelligent Design* at the Sweeney Art Gallery at UC Riverside in Fall of 2009, in which the two years of Interspecies Collaboration classes and the website interspeciescollaboration.net was exhibited together with works from a wide range of artists.

⁴ Many of these works function as commentaries on the performance/installation "I Like America and America Likes Me" by Joseph Beuys from 1974. It consisted of Beuys living and communicating with a coyote for three days in a gallery in New York City. It's clearly debatable whether the project was a collaboration but it is significant that Beuys described the project as such. Was it ethically defensible? Maybe the fact that this was the first time such a project was done, and that it was made in 1974, when the effect was so much larger, makes its end justifying its means. It is difficult to find any information on the wellbeing of the coyote, but it is certainly not happy about being locked into a room with a strange human.

or impossible to understand? Can one collaborate with someone whose intention and agenda is not known? And how do we define success if we cannot communicate (at least in a traditional way) with our collaborator? Throughout the class, the students have approached collaboration in a multiple of ways, each alleviating, if not solving, these issues.

Following is a description of four different ways or forms of collaboration, each illustrated by a small selection of student projects. However, all projects use a combination of collaborative forms. There were approximately 15 students in each class, each working on a different project such as performances with a chinchilla, cats, or a hamster; drawings made together with ants and dogs; music made with frogs and cats and much more. All the projects were successful in some way. While the projects might not yet be at a point where we can detect quantifiable knowledge, there are glimpses of wisdom in them. In general, to get a sustained message from the artworks one has to be very quiet and listen carefully.

Collaborative Form 1: Protocol



My background working in network art with collaborative information filtering systems and Internet visualization has led me to appreciate the new types of collaboration that are emerging due to new network technologies.

Humans are becoming increasingly involved in, and know the benefits of, collaborations that don't require an understanding of the other participants' agenda or intention. Collaborative information filtering a la Amazon.com, open-source software development, and, of course, the Internet⁵ itself are all distributed, large-scale and "non-explicit" forms of collaboration. They are

⁵ The Internet is developed through the RFC (Request For Comments) system. It allows people to add and update the protocols that the Internet consists of. The RFC system was created in 1969 after the initial physical Internet infrastructure of just a few nodes and protocols were created. It can now be accessed on the web, http://www.rfc-editor.org/. See also http://www.livinginternet.com/i/ia_rfc_invent.htm and http://rfc.sunsite.dk/rfc/rfc2555.html. An important aspect of the Internet as a distributed and "non-explicit" collaboration is the "end to end" principle. It states that the core of the network should be as simple as

non-hierarchical, self-organizing to some degree, and we participate over space and time — sometimes unintentionally. I call these *species collaborations* because it is not our individual contribution that matters with these collaborations, but what we can all accomplish together. As the many examples of *species collaborations* have shown us, sharing a common agenda is not important for a collaboration to be successful. Nor does one have to know or understand the intention of one's collaborators. Take the World Wide Web, for instance. While the definitions and protocols that form the foundation of the Web — URLs, HTML and HTTP — were invented by one person, Tim Berners-Lee⁶, around 1989 the Web as we know it today is an ongoing creation by all the people rewriting those protocols, inventing new scripting languages, creating web services and APIs making websites and mashups, writing blogs, etc. The Web is an enormous collaborative project; still we don't sit down to discuss what needs to be done, or what our goals are. Instead we create and respond to protocols and guidelines and all these individual responses together form a whole – the Web.

The same strategy can be utilized in interspecies collaborations by making protocols or rule systems that formalize interactions between a human and a non-human and generate some output. It can be as simple as responding to the behavior of an animal in a pre-determined manner: *If my collaborator does this, then I do that.* There is plenty of inspiration in the art world. Conceptual artists such as Yoko Ono and others in the Fluxus group have been creating rule-based artworks⁷ since the 1960s. We can also draw inspiration from the holistic worldview found in indigenous cultures such as the ones of the Australian aborigines. In such cultures, everything in nature is interconnected in chains of causalities: if that tree is in bloom, then this fish is finished spawning, and thus we will start catching it.



Cori Arnold, The Turkey Vulture Project, 2009.

Cori Arnold, one student in the class, made a very specific protocol to create interaction with turkey vultures. Her protocol reads:

possible in order to facilitate an infinite number of complex implementations at the ends of the network. See http://en.wikipedia.org/wiki/End-to-end_principle,

http://web.mit.edu/Saltzer/www/publications/endtoend/endtoend.pdf and

http://ipv6samurais.com/ipv6samurais/demystified/end-to-end-principle.html. All URLs last checked Oct. 2009. Additional suggested reading about the Internet as a collaborative space (and threats to that space) is *The Future of Ideas* by Lawrence Lessig.

⁷ Many of these projects have been published in books and online. For example see *Grapefruit: A book of Instructions and Drawings* by Yoko Ono.

⁶ For an interesting personal account on the invention of the Web, see Tim Berner-Lee's book *Weaving The Web*.

1. If there are two vultures flying together and weaving in and out of one another, then I will lay down on the ground for one minute.

2. If there is one vulture flying over my head scavenging, then I will flail my arms in the air with large circular motions.

3. If there are more than two vultures in the area at any given time, I will take my dog out of the car and walk him in three large circles.

4. If the vultures seem uninterested in me, then I will do ten jumping jacks and make an "ooing" noise to see if that entices their interest.

5. If I am fortunate to find road kill on the side of the road with vultures eating it, then I will stop my car on the side of the road, close to the birds and sit beside my car with my knees tucked into my chest.

Finding the turkey vultures compelling, Cori had made attempts to connect with them at other occasions but felt that she failed. Armed with her protocol, the level of success of the interaction was a bit more quantifiable. She was excited when, out of the blue sky, three vultures showed up and started to fly over her and her husband's heads. As dictated by her protocol, they took her dog out of the car and her husband started running in circles while Cori was taking photographs. To Cori's amazement the vultures appeared as though they where flying along with him. The protocol created a sense of reciprocity, which might of course only be in their minds, but then their determination and straightforward behavior might have lured the vultures into a dance with them.



Chelsea Hunter and Pandora, Pandora's Box, 2009.

One can also think about an environment as a protocol⁸, and invite an animal to respond to objects and spaces one makes for them. Chelsea Hunter created a "smellorama" for her friend's ball python, Pandora. She rubbed colored cotton balls on different people and let Pandora experience the smells, rearranging the balls and other elements in the environment as she moved around.

⁸ In his book *Protocol – How Control Exists After Decentralization*, Alex Galloway describes speed bumps as a protocological artifact, embodying a rule system.



Masha Lifshin and Mixture, from Spatial Practices with Mixture, 2009.

Another approach is to respond to an environment or objects that an animal creates. Masha Lifshin found depressions in her yard where her cat, an orange tabby named Mixture, had slept repeatedly. Masha marked these depressions with rose petals, and then documented how the petals were dispersed by Mixture and the wind.



Stephanie Vasquez, Spider Webs, 2009.

Stephanie Vasquez found that the forest fires scorching the hills above Santa Barbara in the spring of 2009 had caused ashes to dust all the spider webs in her yard and she set out to clean these webs with pinchers.



Collaborative Form 2: Interference Pattern

Another non-explicit form of collaboration is to set up an environment where two or more different *Umwelts*⁹ are overlapped. *Umwelt* is a German word used by the biologist Jakob von Uexküll (1864-1944) to signify the specific physical, emotional and semiotic environment an individual (of any species) live in and through. Think of the *Umwelts* as grids that, when overlapped, create an interference pattern – that is, a new set of shapes not part of any of the separate *Umwelts*, but something that is created through the co-existence of the two. In these collaborations the participants are not following a common protocol, but they might be developing a protocol together as they go along.



Laura Hyatt and Dru, Ode to Richard Long, 2009.

One student, Laura Hyatt, re-contextualized walking her dog as art. Her *Umwelt* included knowledge of the artists Richard Long's walking as art and the *derives* of the Situationists, and

⁹ The correct plural form of Umwelt is Umwelten. To make it flow better with the English language I use Umwelts instead of Umwelten.

she experienced her walks through a filter created by that knowledge. Her dog, Dru, sees and experiences the walk from her dog perspective, enjoying the smells of other animals, pondering picking up a stick and the enjoyment of being close with her favorite person. Through the overlap of these two different *Umwelts* something slowly started to emerge. There are outward signs of this change: the walks became longer and Dru appears to take the lead more often. But the most important change is difficult to quantify. It is in the interpersonal protocol that emerges between the two of them and in how they start to experience the world around them through that common protocol — an experience potentially transmitted through the photographs Laura took during the walks.



Kevin Saddi, Concept & Location: Goleta Slough, 2009.

Another student, Kevin Saddi, spent hours each week at the Goleta Slough, slowly developing a project with the squirrels there. He spent his time there walking around, sitting still, listening to birds, watching the squirrels, and thinking about his relationship with nature. The squirrels go about their daily activities, scurrying around, looking for food, and playing with each other. Once in a while these perspectives, the *Umwelts of* Kevin and the squirrels, overlap. Something happens and they become aware of each other and they acknowledge it by stopping in their tracks, by a gaze, and perhaps by uttering a sound¹⁰. Kevin marked these moments and places where their *Umwelts* overlapped with sculptural objects he made from materials he found on the site. He then documented the squirrels' interactions with the sculpture.

¹⁰ At one occasion Kevin tried food as means for the squirrels to take notice of him. It was a muchdiscussed topic in the class. Does it count as collaboration if the other party does it for the food involved? Humans of course work for food as well. Maybe the more important realization is that in order to be creative there needs to be sufficient leisure time, which can be spent on activities other than hunting/scavenging for food, nest building etc.

Collaborative Form 3: Communication



While the non-explicit forms of collaboration above offer a way of working together with others without understanding them or knowing their intention, it became obvious in my classes that the students needed more guidance on how to relate to their potential non-human collaborators in a more direct way. That is when I decided to invite an animal communicator, Barbara Janelle, to the class. She taught us how to manipulate the energy we project to the world and how to figuratively become smaller and less threatening to the animals we want to collaborate with. She instructed us to listen for communications from the animals using all our senses, including sensations in our bodies, and how to send information back to them via images.



Hannah Vainstein, Dance of the Octopus, 2009.

Hannah Vainstein decided to communicate with the resident octopus in the UCSB public touch tank. She visited him for several weeks and attempted to communicate with him about his experience and reactions to the stream of people walking past his tank, often trying to catch his attention. She used the information she received from the octopus to create a reenactment of his situation and reactions, with herself playing the part of the octopus. The result was an intense

performance involving all the visitors to the exhibition that took place at the end of the school quarter. As people walked into the room where Hannah (as the octopus) was, she reacted to them by changing clothes and assuming different body postures depending on the emotions they evoked in her.



Collaborative Form 4: Limbic Resonance

The methods used by animal communicator seemed to help the students to become more attuned to the thoughts and interests of their non-human collaborators. In some instances, however, a student already had an intuitive sense of what an animal was thinking and feeling. Such a connection with an animal that one has a close relationship with could be a case of *limbic resonance*; a term coined by the psychiatrists Thomas Lewis, Fari Amini and Richard Lannon in their book *A General Theory of Love*. Limbic resonance is defined as "a symphony of mutual exchange and internal adaptation whereby two mammals become attuned to each other's inner states" (Lewis et al, 63). This attunement can have both psychological and physical causes; it can be facilitated by mirror neuron, pheromones and electronic signals. From such an intense connection, the transition to collaboration can be easy. At times, we feel as if we are one with an animal, and we believe the ideas that appear in our minds may originate in theirs. It may, in fact, feel as if one shares a brain with the other. However, I have noticed that for many students, the intensity in this type of relationship might stand in the way for a more open-ended and open-minded exchange. We expect too much out of the collaboration because we are too engaged in it.



Masha Lifshin and Mixture, from Spatial Practices with Mixture, 2009.



Masha Lifshin and Mixture, Cat Scratch Fever, 2009.

Nevertheless, Masha and Mixture, mentioned above, have a very close relationship and they collaborated successfully and seamlessly on several projects during the quarter. One such project was an installation piece inspired by Mixtures love for yarn. As often happens in these collaborations, Masha got the role of an assistant, working away under the leadership of her companion animal, who dictated the choice of materials and the details of the execution without raising a paw. In another project, the duo created a scratching post for humans, complete with cat claw prosthesis gloves (made out of sharpened nails attached to custom made gloves), allowing the audience to experience Mixture's pleasure of scratching.

Why Interspecies Collaboration?

The concept of interspecies collaboration is intended to be somewhat humorous, invoking a smile, and possibly a laugh, but also to shed light on pertinent and serious issues. By imagining and conceptualizing collaborations with other species, humans will be forced to question our self-proclaimed center position in the world, a position that has lead to immense destruction of the planet, as manifested by pollution, climate change and mass extinction of species¹¹. The criticality

¹¹ For a discussion on humans involvement in the current mass extinction see "Colloquium Paper: Are we in the midst of the sixth mass extinction? A view from the world of amphibians" by David B. Wake and Vance T. Vredenburg.

of interspecies collaboration functions in several different ways: First, by asserting that nonhuman animals have an aesthetic sensibility, second by questioning ideas of what is natural and thus undermining the foundation of speciesm, and third by treating animals as individual persons, with a complex range of thoughts, emotions and needs (sometimes similar to ours sometimes not).

Animal Aesthetics?

We have been forced to realize that the use of tools and language are not exclusively human. Now we might be at a point where we have to realize that art making is not exclusively human either. Giving up the trait of artistic activity helps flatten the species hierarchy we have constructed with humans firmly on top. Humans tend to expect and want nature (individuals of other species are commonly categorized as being "nature") to be "natural." Artistic activity is commonly seen as a purely human endeavor, something that sets us apart from non-human animals, which are often thought to primarily engage in activities that are purposeful in terms of survival and reproduction. We assume that non-human animals act with purpose, and in the modernist paradigm, fine arts is partially defined as a purposeless aesthetic activity. Therefore it is not considered natural for non-human animals to create art. Artistic interspecies collaboration is thus both an opportunity to challenge ideas of what is natural for non-human animals, and to challenge the definition and role of art itself.

It is important to remember the dangers of assigning ideas of what is natural to others. In the early 1800s, it was assumed unnatural for women to think, and in the early 1900s it was said that it was natural for Africans to dance. Determining what is natural for another leads to sexism, racism and speciesm. Thus burdening non-human animals with our idea of what is natural for them leads to speciesism, and perhaps one should refuse to engage in issues of what is or is not natural. Having said that, it is still interesting and relevant to examine what types of aesthetic activities non-human animals engage in¹².

The beautiful, mysterious (and one can argue "useless") bowers built by the bowerbird are a compelling example of aesthetic behavior in non-human animals. These nest-like structures, used by the male as a show off for the females, not as nests, are decorated with colorful objects, some natural such as stones, feathers and shells and some man-made such as pens. They are sometimes painted with a mix of saliva and chewed up plant material. Color choices and objects differ among species, within communities of birds, and between individuals. Do bowers provide an evolutionary advantage or are they an aesthetic "purposeless" whim, or both? (Diamond 1982, 1988.)

An elephant named Siri, who lived at the Syracuse zoo in New York in the 1980s, displayed a very different, but equally interesting example of aesthetically driven behavior. When Siri's trainer saw her using pebbles to make drawings on the ground, he provided her with paper and crayons, which she used feverishly, producing a wealth of rather interesting drawings. Her behavior was not an isolated phenomenon. When elephant trainers at other zoos were shown the drawings by Siri, they confessed to have seen "their" elephants draw with pebbles as well (Gucwa and Ehmann).

¹² Other research debunking ideas of what is natural for non-human animals is also important for the process of breaking down species hierarchies. In *Biological Exuberance: Animal Homosexuality and Natural Diversity* the Canadian biologist and linguist Bruce Bagemihl provides plenty of examples of non-humans animals very imaginative and creative sex life, completely purposeless in terms of reproduction.

There are many examples of artistic activity in our closer relatives, the apes. A gorilla named Koko not only likes to paint but can also tell us about her artwork since she knows human sign language. She was once caught on video criticizing her own abilities, exclaiming her painting is "toilet."¹³

In his book *Why Birds Sing*, David Rothenberg examines musicality in birds. He describes unwillingness among scientist to answer the question stated in the title, but he also identifies several interesting research projects attempting to understand the function of bird songs. One example is research on the structure of the song of zebra finches conducted by Parha Mitra. Mitra argues that to be able to see the structure of their song, we must go beyond human perceptual bias. To do so, he developed an algorithm to analyze a huge quantity of data from months of zebra finch recordings. What he found was that the song was highly structured. It had a defined beginning and end, and thus the song is in some way designed. The finding seems to indicate that the birds' song is not just an immediate response to their surroundings, but a deliberate aesthetic activity.

Musician and author Jim Nollman is using interspecies collaboration as a way of researching communication and behavior of the animals he collaborate with. Nollman, the founder of the non-profit organization interspecies.com and a pioneer in musical interspecies collaboration has been playing music with marine mammals successfully for more than 20 years. Some of the recordings are mind-blowing, as they clearly demonstrate even for a layperson how accurate and creatively the animals respond to the tones they are hearing. The collaborations have generated a wealth of events, data and experiences indicating that the animals he plays with are creative, aesthetic beings. Nollman has written several beautiful books on the subject of interspecies collaboration and he also supports others' interspecies collaborations through his non-profit organization and website.

The Wild

Nollman's work is important because it breaks another taboo vis-à-vis what is considered natural for non-human animals. Non-human animals are not expected to interact with us. For several years, Nollman returned to the same location off Vancouver Island in Canada, with his guitar, underwater loudspeakers and microphones. He found that many of the same orcas come back to play with him year after year, clearly choosing to interact and even collaborate with him.

We want nature to be wild and for that, they, the *Others*, need to be at a distance. The suggestion of collaboration questions the exoticism inherent in our adoration of the pristine wild. Nature, we believe, should live up to the National Geographic fantasy we have about the exotic wild. We want wilderness to be something we can get lost in. It should provide a counterpoint to the worlds we build, as if these worlds get more civilized the wilder wilderness is. Interaction between humans and animals are deliberately edited out of nature movies. In the 2005 movie *The March of the Penguins*, some of those outtakes are shown in a small frame as the credits role at the end of the film. There we see penguins waddle up to the camera, curiously examining it and the humans behind it. Throughout the movie, they have been these eerily majestic creatures from another world. There is no common frame of reference and it is almost impossible to relate them to us in size, behavior and intellect. Then, all of a sudden, they are there together with the camera crew, in our world, and the effect is stunning. We realize the extent of the effort going into

¹³ http://edcommunity.apple.com/ali/story.php?itemID=545&version=286&pageID=1110 (last checked Oct. 2009)

maintaining the human/animal split in the rest of the movie, and as an extension, wildlife movies in general.

It should be made clear that interspecies collaboration in no way should be seen as a justification to disturb animals — wild or domesticated. However it questions the motives behind some non-interaction policies of wildlife management that seem to equate interaction of any kind with disturbance. Why are these policies in place? Who or what are we protecting? And from what? In his book *The Man Who Talks to Whales: the Art of Interspecies Communication* Nollman propose we need to create new protocols for interacting with wildlife that builds on trust and respect taking into account the needs and (what should be) the rights of the individual non-human animals we interact with.

Anthropomorphism/Anthropodenial

To invite someone into a collaboration is to acknowledge that there is a someone — a person with agency, feelings and needs. Such an assertion triggers the anthromopohic taboo. Anthropomorphism — assigning (what is believed to be) human characteristics to non-human animals, is a term uttered with disdain within both scientific and humanistic research communities. It is seen as error of sentimentality that makes (objective) research impossible. The ethologist Frans de Waal (Professor of Primate Behavior at the Emory University in Atlanta, GA) argues instead that the anthropomorphic taboo has a rather detrimental effect in research and he introduces the term anthropodenial to open up a discussion about these effects. He writes: "I propose 'anthropodenial' for the a priori rejection of shared characteristics between humans and animals when in fact they may exist. Those who are in anthropodenial try to build a brick wall between themselves and other animals. They carry on the tradition of French philosopher René Descartes, who declared that while humans possessed souls, animals were mere machines. Inspired by the pervasive human-animal dualism of the Judeo-Christian tradition, this view has no parallel in other religions or cultures" (de Waal 2001: 69). The term *anthropomorphism* was originally used in Judeo Christian theology as a condemnation of assigning human features to gods, an act of pagan blasphemy (Daston & Mitman 2005:2). It is ironic that the Judeo-Christian belief system is allowed to dictate how science sees non-human animals. As the philosopher Elliott Sober argues: From an evolutionary perspective it is actually more reasonable to assume that similar behavior in species with a common heritage stems from similar reasons. In the terminology of evolutionary biology it is a more "parsimonious" assumption (Sober 2005:85). Could the resistance in the scientific community to acknowledge non-human animals as persons, with feelings and needs be a result of how animals have been, and still are, used in scientific research? There is a paradox in the scientific relationship to anthropomorphism. It goes like this: Research on animals is possible/ethical because we are not similar; they do not experience the pain, anxiety, and stress that we do. Meanwhile, research with/on animals is useful since we can infer things about us, humans, from the research we make on animals — it works because we are similar.

While the fear of anthropomorphizing in the sciences is mostly problematic, there might be reasons for rejecting anthropomorphism that are valid. When we assume that animals are experiencing what we would have experienced, we might not look for the sometimes more interesting differences in experience. One purpose of interspecies collaboration is to learn from and with someone who is different, so those differences must be explored and acknowledged. But it is rather arrogant and anthropocentric to assume that we are the only species with specific emotional, ethic, artistic and altruistic sensibilities. We need to assume that similarities in morphology and/or behavior are a sign of a similarity in sensation. And by acknowledging these similarities we have grounds for exploring potentially profound differences in our experience of

the world. Ludwig Wittgenstein's famous $lion^{14}$ <u>can</u> speak and it is interesting and important to listen, exactly because we don't understand what he is saying.

Why now?

The technologies that have been emerging (or have become more ubiquitous) over the last 20 years have done a tremendous amount to prepare us for interspecies collaboration. As discussed above, the Internet has given us new kinds of non-explicit collaborative structures, allowing us to imagine new collaborative partners. Moreover they have made us more directly aware of our place as just another species. New visual technologies have helped moved humans away from our self-assigned center-position in the universe: Satellite imaging puts us in place from above, letting us experience ourselves as just another species down there, and DNA arrays and other micro-imaging technologies, puts us in place from below, allowing us to see ourselves as just another combination of genetic code. New network technologies have also generated a fascination for non-organic forms of life and intelligence. As our networks start to become more complex, they begin to exhibit life-like qualities. The network structures of the web have clear similarities to organic "networks" (communication between cells) (Barabasi). Judging from the large amount of theoreticians and artists who have switched from researching technology to researching animal issues, the dehumanization of intelligence and agency has generated an interest in other non-human intelligences around us.

Another cause for why this is a good time to start interspecies collaborations can be found in the current state of contemporary art practice. Starting with conceptual artist in the 1960s, artists no longer only (re)arrange visual components but create systems and "social sculptures" by arranging resources, media, people and interactions between them. It's a shift from a focus on the aesthetic and meaning of a single image or object to an aesthetic and meaning in systems and interactions and relations within systems¹⁵. Interactive networked technologies have accelerated this shift immensely and changed the role of the author dramatically. With artists creating and participating in communication and interactive systems, authorship in the work exists on several different levels. The initiator/inviter, the participants/invited, and the audience, are all co-creators of the work. Art made in this paradigm can avoid the Problem of Other Minds and the "dark side" of anthropomorphism by inviting other species into the process of contemporary art making, not to generate copies of our own aesthetic expressions, but to create a forum where other species can be creative. We can take commands from non-human animals; allow them to invite us, and help them to perform creative and aesthetic acts within their systems.

An interesting example of a collaborative relational artwork is the "The Asian Elephant Art and Conservation Project" by the artist duo Komar and Melamid. The project is a painting school for elephants formerly employed in the logging industry. As the logging industry is modernized these elephants and their mahouts (their caretakers) end up on the streets without any means of supporting themselves. Komar and Melamid teach them painting skills and provide a system for distributing their paintings all over the world via the project website¹⁶. In addition they lend their name recognition to the project, they are well renowned conceptual artist and painters, making the

¹⁴ "If a lion could talk, we could not understand him." (Wittgenstein 1953: 223)

¹⁵ See for example Jack Burnham's text "System Esthetics" from 1969, Joseph Beuys about the social organism/sculpture as a work of art in "Searching for Field Character" from 1973, "The Art of Cyberspace" by Pierre Levy 1996, and Nicolas Bourriaud's book *Relational Aesthetics* from 1998.

¹⁶ http://www.elephantart.com/ (last checked Oct. 2009). See also Dave Eggers' and Mia Fineman's informative and entertaining book about the project *When Elephants Paint: The Quest of Two Russian Artists to Save the Elephants of Thailand.*

project a success in the art world. At first glance, it might seem similar to the painting endeavor by Koko the gorilla and Siri the elephant's drawing projects, but there is a fundamental difference. Komar and Melamid are setting up a collaborative process involving the elephants, the mahouts, and themselves, all performing services for each other in one way or another. The end result is not only collaborative paintings, but an extensive collaborative system.

Why artists?

I teach in the art department and my students are primarily art students, so that is where I have applied the concept of interspecies collaboration. It would be interesting to apply the concept of interspecies collaboration to research in other fields. However, there are many obstacles to overcome in the sciences before non-human animals will be seen as collaborators¹⁷. One implication of the interspecies version of the Problem of Other Minds is that the process (the collaboration and communication) and the results (scientific or artistic) are very difficult to evaluate and validate. Here, artists have an advantage. According to the psychologist Mihaly Csikszentmihalyi, who has been studying creativity extensively (Csikszentmihalyi, 1997), to be creative, a person cannot be dependent on the approval of others as a driving force. Creative people internalize the rules of their domain, and what is meaningful to do (and not to do) within and with the domain, in order to make creative changes to it. The artistic profession is intrinsically creative, meaning that there is an ongoing urge and importance to go beyond and change what is being done within the domain.

One can argue that the contemporary artist must continuously push boundaries in order make art¹⁸. This is true because the artistic domain is very complex. It is constantly changing. What is art today might not be art tomorrow. Through an ongoing process of practice and study, the artist need to internalize not a fixed domain but an ever-changing system, learning not set rules, as a mathematician would, but rather rules for how the rules can be changed¹⁹. Artists spend a large amount of time on this process. This skill helps an artist stay on track, being systematic and precise even when one does not get the validation from one's collaborator, or an audience.

The interspecies version of the Problem of Other Minds is also an issue about not having a cultural belief system that allows us to understand other species. What is lacking is not the observations and experiences — people have meaningful exchanges with other species all the time — but the theories and worldviews that make the observations and data cohesive. This discrepancy between what is experienced and observed, the data, and what our models of the world allow us to believe, is highly frustrating. However, artists are trained in creating alternative yet believable vistas/cosmologies, and to take responsibility for them. Artists, with great courage, choose a vista point and explore the view from it as rigorous and systematic as possible, through methods they invent and are accountable for. Because they can (potentially) fit their observations into these alternative models, they are less prone to frustration.

¹⁷ A place to start is to insert the word collaboration into the "use of animal in research" forms that any researcher planning to use animals have to submit to their institution's animal care and use committee – an idea suggested by Dona Haraway after a presentation about my class a couple a years ago.

¹⁸ Even if the idea of the artistic avant-garde has been thoroughly criticized within postmodernism, it was never very successful dismantled.

¹⁹ This complex internalization often leads to eerie unspoken agreements between artists about what is quality, agreements that seem either like conspiracy or whim to the outsider.

Final Word

Interspecies collaboration is taking advantage of this specific moment in time when new technologies are starting to remove us from our self-proclaimed center-position in the universe, and providing us with new non-explicit methods of collaboration, allowing us to invite our non-human fellows to work and learn together. Art is no longer limited to function only as an object for interpretation. It now encompasses creative modifications, interactions or disruptions of systems that allows its participants/audience to experience the systems in a new, questioning, amplified, expanding and empowering way. This new(ish) art paradigm and new collaborative methods lend themselves perfectly to artistic interspecies collaborations since we don't need to know the intention of another to collaborate, and it's not necessary that we have a common goal.

Creativity and aesthetic interests in non-human collaborators are important to research, but we must be careful not to limit our ideas of what is creative and aesthetic. We need to look for more than an interest in mark making and vocalizations in non-human animals, look for signs of system-, performance- and conceptual art and try to imagine the art-forms only they can invent. We need to put ourselves in the animal's position (zoomorphism) and imagine other senses and the creative realms of those senses. For example, what "sculptures" would one make if one used sound to understand one's spatial surroundings, like dolphins and bats. We need to consider other species in all aspects of the art generating process, as inviters, as invitees, and as audience — all with the humble goal to, for a brief moment, generate intersections and overlaps of our different cosmologies or Unwelts. The benefits could be profound. We could learn things about our world we (quite literary) cannot imagine, and we could learn how to live together well with Others who we truly don't understand. By introducing the term collaboration into our work with animals, be it artistic or scientific, we are compelled to acknowledge their agency and personhood, thereby making it much harder and more ethically complex to put animals through the suffering we do today. Instead of using animals for our personal and professional gain, we need to invite them to be our intellectual, emotional and spiritual partners in a quest for a sustainable environment for all of us to thrive within.

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²⁰Video clips from the study: http://email.eva.mpg.de/%7Ewarneken/video.htm#helping_study (last checked Oct. 2009)