Animal Intelligence is collaborative project involving Paula Closson Buck's Worldly Writer Foundation Seminar, and Joe Meiser's Sculpture 1 course. In this project Closson Buck's students will create erasure poems while Meiser's students will create lost wax aluminum sculptures—the final result in both cases will come from a process of careful subtraction. Students will learn about the intelligence of non-human animals by reading articles, listening to podcasts, and watching videos. Students will then extract guiding notions from the material they've researched and use the notions to inform their creative works. By meeting with the other class at the beginning, middle, and end of the process, students will gain a broader understanding of the creative process, learning how complex ideas can be explored through language, images, and the creation of objects, and how the oscillation between linguistic and image-based thinking can enhance one's creative work.

PART 1
Before our first meeting on November 6, please do the following:

1) Go to the bibliography of materials on Google Docs and select a chapter, video, or podcast to study. Here's the link (copy and paste this URL into your web browser):

https://docs.google.com/spreadsheets/d/1VrHll9JXygJNorokvrpTmW-jS6ljUZDwkpUroYjB43A/edit?usp=sharing

Each student should choose a different item to study, and selections will be made on a first-come first-serve basis. Please put your name in the far left column to show which item you've selected. *To be clear, it IS acceptable for two students to read the same book as long as they select different chapters.*

2) Once you've read, watched, or listened to your selection, please write a 150-word response to the following prompts:
- Provide a brief summary of the chapter, video, or podcast you studied.
- Describe the main ideas that stood out in the item you studied.

3) On a separate sheet of paper, please type up five sentences that come directly from the item you studied. (If you're watching or listening, you'll want to write some sentences down as you go.) Look for three sentences that include interesting details and descriptions or language that you like, and two sentences that represent main ideas from the piece. Each sentence should come from a different part of the document. PUT EACH SENTENCE IN 18-PT. TYPE and print them all out on a single sheet of paper.

4) On a separate sheet of paper, please find and print at least three IMAGES to represent the main ideas of the item you studied.

* Please bring both your printed sentences and your images to class on November 6, and be prepared to give a 60-second presentation on the guiding notions of the item you studied.*

Examples of guiding notions to consider:
- Non-human animals are less intelligent than humans, but with training they can mimic some human behaviors like speech and rudimentary logic.
- Some non-human animals, like dolphins, are more intelligent than humans. We just aren't able to recognize this because 1. It would be too hard for our frail egos to accept 2. We haven't yet found mechanisms for effective communication with animals.
- Non-human animals have a more spiritual intelligence than humans. Native Americans understood this, and used animals as totems, or spiritual symbols.
- Non-human animals have a sixth sense that enables them to communicate with ESP.
- The idea of a hierarchy of animal intelligence (the Scala Naturae) is an outdated and incorrect way of thinking. Every animal has a specialized set of skills and attributes. Humans are specialized for cognition. Tigers are specialized for predatory behavior toward medium sized land based creatures. There is a type of bird called a Clark's Nutcracker that stores seeds in 1,000s of different locations and can remember where all of the seeds are, which far outclasses what a human's capacity for this particular activity. Rather than think of intelligence hierarchically we should regard it as a radiating branching out series of specialized adaptations.

Your printed sentence sheet should look something like this (note the 18-pt. type):

1. Black swans signal their young in flocks of hundreds with a call as precise as a scientist making lab notes.

2. The human being, considered in Medieval times to be the only animal possessing a soul, now seems lacking in that distinction.

etc.

PART 2

In this project you will create a thesis statement about the intelligence of animals, and then create a sculpture to explore your thesis.

Here are some examples of effective thesis statements about the posthuman from my Digital Sculpture course:

> "In the distant future, technology will allow humans to explore the universe through surrogates controlled by their own minds on Earth. Ultimately, their lives will be consumed by this technology, in which they are able to live a fantasy life through any robot, animal, or being for eternity."   View images of the student's project by following this link:
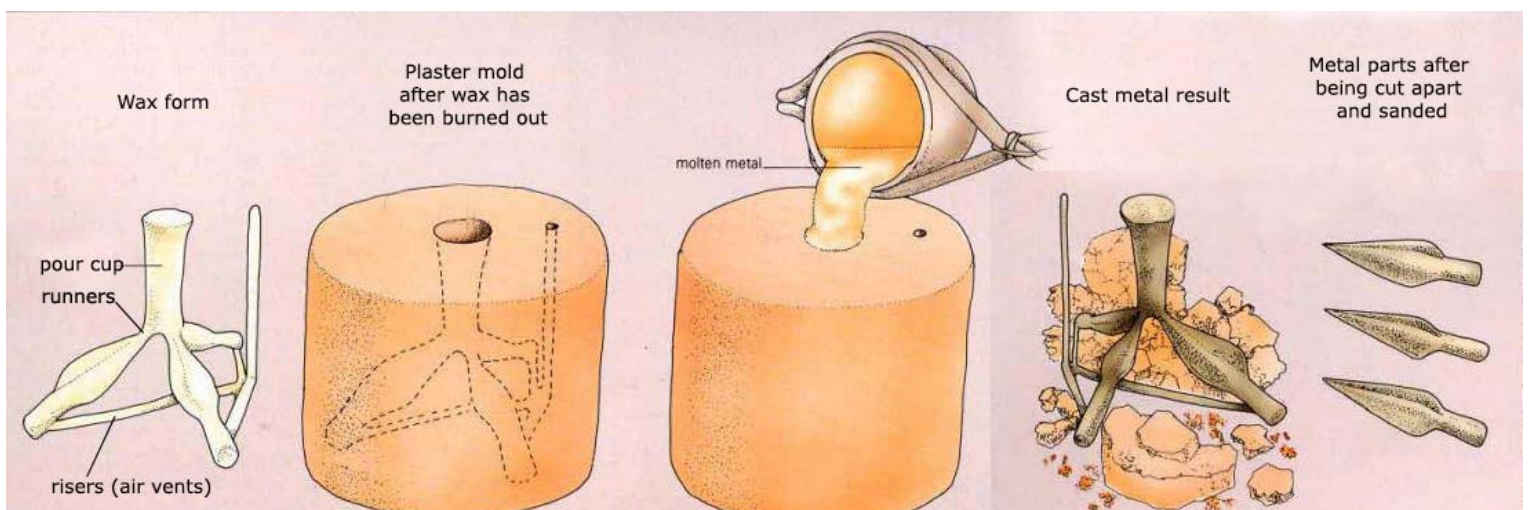> http://arst349.blogs.bucknell.edu/2014/04/15/1453/

> "Human technology is a power so potent that, if taken to the extreme, could make us nearly divine, complete with extreme longevity, strength, health, and intelligence.   While many argue about whether technology is good or evil, it is our choices as to what we do with this technology that will determine whether we become angels or demons. Advanced technology could just as easily move us closer to nature as it could separate us from it."   View images of the student's project by following this link: http://arst349.blogs.bucknell.edu/2014/04/15/posthumanism-the-duality-of-technology-cusa

By the start of class on Tuesday, November 11, students should do the following:

> • <u>Create a thesis</u> statement about animal intelligence that you'll explore in your project. Your thesis should consist of 1-3 carefully written, descriptive sentences posted to the "project 3" category of the class website.

> • <u>Create sketches</u> --- One's final product can be improved when, at the beginning of a project, one considers a variety of possible end results. Create at least five detailed sketches of five distinctly different project ideas. Please bring these sketches to class on November 11.

Dimensions:
Because our crucible can hold approximately 7 fluid ounces of melted aluminum, your project will need to be very small. You'll want to scale your project so that a single 7 ounce pour will fill the entire mold. Since the runners, risers, and pour cup will take up some of this volume you'll probably need to keep your project to a volume of approximately 4 or 5 ounces. We have containers in the sculpture lab that you can use to calculate volume -- check with Kendra or Prof. Meiser if you have a question.

Wax form · pour cup · runners · risers (air vents) · Plaster mold after wax has been burned out · molten metal · Cast metal result · Metal parts after being cut apart and sanded

Projects will be evaluated by the following rubric:

	Above Standards	Meets Standards	Approaching Standards	Below Standards
Conceptual strength	Student's project explores a richly written, carefully defined, and highly thoughtful thesis statement about the intelligence of animals.	Student's project explores a well written and thoughtful thesis statement about the intelligence of animals.	Student's project explores a thesis on animal intelligence, but the thesis is not well written or carefully defined.	Student fails to create a thesis on animal intelligence.
Craftsmanship	Student manipulates the project with an exceptional degree of effort and skill, producing a result of remarkably high quality; forms are extremely neat in construction and demonstrate mastery with materials; a high attention to detail causes the project to appear fully finished; project fully utilizes 3-D space.	Student manipulates the project with a good degree of effort and skill, producing a result of high quality; forms are fairly neat in construction and demonstrate skillful use of materials; the project appears highly finished, but some details could be further addressed or more fully resolved; project utilizes space well, but could in some areas be sculpted with greater depth.	Student manipulates the project with moderate effort and skill, producing a result of decent quality; forms are somewhat neat in construction and demonstrate developing skill; project may appear somewhat unfinished due to a number of unresolved details; project is visually interesting from some points of view, but often executed in a flat or low relief manner--lacking depth in form.	Project is completed in a slapdash fashion; materials are used sloppily without concern for detail; fabrication looks unfinished due to many unaddressed technical shortcomings; project fails to take advantage of 3-D space.
Communication with Professor and Teaching Assistant (TA) during all stages of project development.	Student is proactive about seeking advice from the Professor and TA, and maintains a strong dialogue with them in and beyond the class.	Student is receptive to input from the Professor and TA, and sometimes seeks additional assistance beyond class.	Student talks with the Professor and TA during class and occasionally speaks with them beyond class.	Student does not seek Professor or TA's input, or even seem interested in improving their project.
Degree of self-motivation and self-discipline while working on project. Degree to which student takes advantage of in and out of class work time.	Student's work ethic is outstanding. Student is extremely focused during class and consistently works on their project outside of class (even going beyond the university standard of 6 hours per week).	Student has strong work ethic. Student uses class time well and works consistently outside of class.	Student is still developing in work ethic, or may not be putting in much time beyond class, or may have waited until the last minute to complete the project.	Student consistently wastes class time by being disorganized, disinterested, and/or disinclined to work. Student has not put any focused outside of class time into their project.
Quality and ambitiousness of the work relative to the student's potential.	Student has clearly pushed him/herself by taking on an extremely difficult project, (almost too much to accomplish during the time frame) yet succeeded in its fabrication.	Student challenged him/herself by taking on a *fairly difficult* project.	Student chose a project that was moderately challenging; however, student has enough talent to have been capable of a more complex or demanding project.	Student set the bar way too low, and should have been able to complete a far more complex or challenging project – student is clearly not working up to potential.