Biomimetic Design
ITP Fall 2013
Final Project

OVERVIEW

THE DESIGN CHALLENGE: Redesign a system from a biological perspective

ASSIGNMENT FOR WEEK 4:
1. Generate a Point of View statement (follow the guidelines below)

2. After doing some user research, design 1 Wireframe of three possible concepts for the system you will build.

This documents who the user is, what is the POV statement, what is the interaction of the user with three separate systems that address the need of the user
(ie three systems might include an app, a robot, and a new type of metrocard. Next week we will decide on the system we will build)

3. 1 Visual Diagram : What biological system are we drawing inspiration from for your system? Demonstrate why does this optimize the system/design.

4. Technical : What materials might we think about for the final project? Make a list or a schematic.

THE DESIGN CHALLENGE

Redesign a system, a concept, or a solution that is improved by looking to a particular biologicalfeedback system as a reference. The starting point will be a user, and the user can be human or non-human.

Your built system should enhance the user in some way. It might improve their methods of communication or information exchange with others. It might augment sensory or physical capabilities.

Possible platforms and mediums:
A concept, device, user interface, an Architectural replica, a web application

Week 1 ASSIGNMENT. User research & Generate a POV statement :
In class, we should have identified the user and developed an initial concept.

1. RESEARCH & OBSERVE. What are the characteristics of the user? How can you learn more about the user? Is it from talking to people? Going outside? Looking on the web?

3. EMPATHY: Gather as much information as possible. Document through writing, photographs, and drawings. Explore by touching, talking to people, and even physically-interacting.

From the perspective of your user / object, consider the following questions:
What are the things I want to do? What do I need? What do I like to do? How do I move and travel? Who do I communicate with? Why do I communicate?

4. SYSTEMS: What are your initial ideas for a biomimetic system that would enhance this user?

5. DEFINE

DEFINE the USER: is it a person, animal, insect, plant fungus? What is its name?
DEFINE the NEEDS: what are the emotional & physical necessities when that user interacts with others? Needs should be ACTIONS (not NOUNS).
Ask : WHY when you notice something particular, or contradictions.
INSIGHTS: Write down some insights, contradictions, surprises.

Generate 3 POINT OF VIEW [POV] statements from the perspective of the user

examples:
USER [Bumblebees] NEED to communicate with each other to come join in eating honey BECAUSE [some people left a big sugary sandwich on the ground].
or
USER [Spider] NEEDS to run away when it sees shadows BECAUSE [it fears that the shadow is a human foot that will crush it].

Choose 1 POV statement you like the most.
It should be the most remarkable realization that you can leverage for a design solution that pertains to communication.

6. Identify / Plan.
Gather any materials that you might use in designing your solution.

RETURN NEXT WEEK