studio
DESIGN
d'INTERACTION
orienté OBJET

This studio took place from October 2006 to May 2007 in the ENSAD (Ecole Nationale Superieure des Arts Decoratifs, Paris) programme to introduce students to the interaction design field. There were students from the 2nd to the 5th year.
This page gives you a quick overview of the studio. If you have any questions, please contact us, Virginia Cruz, Nicolas Gaudron.

Introduction

"In the same way that industrial designers have shaped our everyday life through objects that they design for our offices and for our homes, interaction design is shaping our life with interactive technologies-computers, telecommunications, mobile phones, and so on. If I were to sum up interaction design in a sentence, I would say that it's about shaping our everyday life through digital artifacts-for work, for play, and for entertainment.
[...]
We've come to a stage when computer technology needs to be designed as part of everyday culture, so that it's beautiful and intriguing, so that it has emotive as well as functional qualities.
[...]
To designing for usability, utility, satisfaction, and communicative qualities, we should add a fifth imperative: designing for sociability."

Gillian Crampton Smith, extract from Designing Interactions by Bill Moggridge.
Gillian is one of the pioneers of interaction design. She has created the Computer Related Design department at the Royal College of Art in London (1989), the Interactive Design Institute Ivrea (2000). She's now in charge with Philip Tabor of a graduate programme of interaction design in the faculty of design of the IUAV University in Venice.

Studio design d'interaction oriente objet, ENSAD (Paris)

Objectives

Beyond the questions and methods of product and graphic design, the studio deals with the new issues raised by the evolution of objects towards 'smartness': connected objects, 'communicating' objects, objects that are sensitive to their environment, objects as containers of information, capable of processing information, interface object, an object as one element of a larger service ecosystem.
The scope of the studio is to work on the relationship between people, objects and their contexts of use.

We look at three types of questions (cf. Bill Verplank):

1. how do I do?
How do I trigger an action, how do I activate a function? I can press a button, turn a handle, blow, shake etc. Does this manipulation make sense in its context, with its associated function, with its result? Which codes does it use? (cultural codes, affordances, breaking existing patterns etc.)

2. how do I feel (feedback)?
What sensorial feedback reassures me that i've triggered an action? the springy feeling of pushing a key, the clicking sound of a button etc.
What is the information feedback of my action? The playlist starts to play, a pop-up opens on the screen etc. Is this consistent with my sensorial feedback?

3. how do I know? (where am I in the system?)
I need to understand what is going to happen if i do something. I need to know where i am in a complex system thanks to a map and/or to information about my path at a specific moment, all this translated/shaped in the language of the object.
In that way, I have an overview of the system and understand how things work.

We need to answer these questions in a way that makes sense on a functional, emotional, but also social and cultural levels in order to design and develop these new objects and services. In that way, the interaction designer contribues to shape a rich and enjoyable experience that unfolds over time between the user and the object (and/or service).

The **first objective** of the studio is to teach students tools and methods that are specific to interaction design and how to develop a critical point of view on these new objects:
- *electronics and prototyping* (physical computing, "experience prototyping" IDEO) enables to prototype physically ideas to test their interaction and get potential users' feedbacks. Also experience prototyping helps in communicating ideas in situations where people of different fields don't share the same language: "by enabling others to engage directly in a proposed new experience it provides common ground for establishing a shared point of view."
- *video and storyboarding* enables to communicate ideas dynamically and to present them in their context of use.
- *notions of ethnography and the technique of probes* enable to better understand the users we design for and to reveal potential innovation directions.
- *aesthetics*: what are the aesthetic impacts of these new types of everyday objects? which new forms of expression can emerge?

The **second objective** of the studio is to familiarise students with the interaction design field, its history, its applications and its main protagonists:
- tangible interfaces (TUI) (ex.: <u>D. Bishop</u>, <u>H. Ishii</u>)
- graphic interfaces (GUI) (ex.: <u>D. Liddle</u>, <u>D. Engelbart</u>)
- ambiant intelligence (ex.: <u>Philips</u>, <u>MIT TMG</u>)
- service design (ex.: <u>Nathan Shredoff</u>, <u>Live|work</u>)
- experience design (ex.: <u>IDEO</u>, <u>Marti Guixe</u>)
- critical design, "design noir" (ex.: <u>Dunne&Raby</u>, <u>Auger-Loizeau</u>)

Team

Supervisors and teachers:
- <u>Virginia Cruz</u>
- <u>Nicolas Gaudron</u>

Coordinators:
- Jean-Francois Depelsenaire, coordinator of the graphics and multimedia design department (DGGM), ENSAD
- <u>Patrick Renaud</u>, coordinator of the product design department (DO), ENSAD

Electronics:
- <u>Interface-Z</u>: <u>courses</u> "Capteurs et Isadora" ("Sensors and Isadora") - november, december 2006
- Michel Davidov: technical support, ENSAD

Visiting lecturer:
<u>Michel Beaudouin Lafon</u>, director of LRI, the Laboratory of Computer Science at Universite Paris-Sud: lecture - 8 march 2007

Students 2006-2007

- Diane Alexandre, DGGM 3rd year
- Olivier Beorchia, DO 3rd year
- Guillaume Binard, DO 3rd year
- Haejong Choi, DO 3rd year
- Alexandre Elmir, DGGM 4th year
- Sammuel Graf, DGGM 3rd year
- Alexandre Huin, DO 3rd year
- Hyeri Lee, DO 3rd year
- Jonathan Liebermann, DGGM 2nd year
- Alexis Masurelle, DGGM 3rd year
- Myriam Mortier, DO 3rd year
- <u>Sitraka Rakotoniaina</u>, DGGM 4th year
- Baptiste Rischmann, DGGM 2nd year
- Abhishek Shrivastava, video
- Maxime Talan, DO 2nd year
- <u>Edouard Wautier</u>, DO 5th year
- Virginie Willerval, DO 3rd year

Courses 2006-2007

- Introduction
- Making your own switch
- Sensors and Isadora, by Interface-Z: <u>cours</u>
- Exercise, navigation in a database
- Exercise, object/screen interaction
- Project brief on souvenirs
- Ambiant intelligence
- Michel Beaudouin Lafon's lecture
- Last term project: in progress