

51-263

Industrial Design

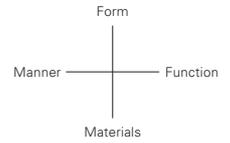
“It is well, at certain hours of the day and night, to look closely at the world of objects at rest. Wheels that have crossed long, dusty distances with their mineral and vegetable burdens, sacks from the coalbins, barrels and baskets, handles and hafts for the carpenter’s tool chest. From them flow the contacts of man with the earth...The used surface of things, the wear that the hands give to things, the air, tragic at times, pathetic at others, of such things — all lend a curious attractiveness to the reality of the world that should not be underprized...In them one sees...the abiding presence of the human engulfing all artifacts, inside and out.” — Pablo Neruda

“A myth of power, and a myth of origins: whatever it is a man lacks is invested in the object...Since blood, birth, and titles of nobility have lost their ideological force, the task of signifying transcendence has fallen to material signs — to pieces of furniture, objects, jewelry, and works of art of every time and every place.” — Jean Baudrillard

Syllabus

Overview

Objects play such important roles in our lives. Aesthetics, ergonomics, materials, functionality, engineering, and craftsmanship serve as a starting point for discussion. Industrial design's history is rooted in the rise of mass production and flourished through the consumption of the 20th Century.



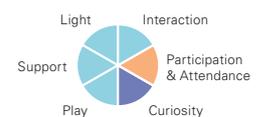
Today we find ourselves searching for and implementing new ways of making things that serve the needs of the ecosystem and people alike. But these matters aside, the role of three-dimensional things like chairs, phones, buildings, and kitchen utensils answer to a higher calling than just filling up our world: they are the props in our lives and they support the interaction between people, our environment, and society at large.

Objects are also a part of our personal narrative and serve a role in how we identify ourselves. Most obviously, objects can become symbols of status — a BMW, a leather chair, an attaché case. But objects that are more democratic in nature — an iPhone, an Aeron chair, or ones that are shared by a community — serve a similar role in helping us tell stories about who we are and what we as a culture value. They are a testament to our place and time.

In this course, we'll go through a process of research, ideation, and prototyping in the pursuit of form-giving. They won't become manufactured or machined, but will — I hope — become usable, enjoyable, and interactive. You will be pushed to explore the boundaries of the projects and are required to develop various concepts for each. Your sketchbook is just as valuable as your final piece at demonstrating your effort in this class. Both process and final product will be equal factors in evaluation. 9 credit hours; no pre-requisites.

Evaluation

Your course grade is determined by your four project grades, written assignments, and participation and attendance. Three or more unexcused absences or excessive tardiness *may result in failing the class*. Please email me *in advance* of any planned absences.



No grades will be discussed over email. No extensions are granted unless a medical note or an email from your academic advisor is received. Please be aware of deadlines on the attached calendar and the deadlines of your other classes in order to be properly prepared for each class. Incomplete course grades are not granted without an arrangement with the academic dean.

Texts

- *The Language of Things* by Deyan Sudjic ISBN: 978-0393070811
- Moleskine Squared Notebook Extra Large ISBN: 978-8883707247

Instructor

Alexander R. W. Cheek Email: alexcheek@cmu.edu
 Visiting Assistant Teaching Professor Qatar: +974 66-00-5996
 Office: 2187; Hours: Two hours before each class USA: +1 914-432-3053

Course Assistant

I am pleased to have Zaid Haque as our course assistant for the semester. zaid@cmu.edu

Course Flow

SPR '11 Monday and Wednesday 10:00 AM – 11:20 AM, D&A Studio 1030

Introduction

- M 10.01 Syllabus Review & Welcome
SLIDES: History of Objects
- W 12.01 READING FOR TODAY: Deyan Sudjic, *The Language of Things*, Introduction
Show and tell your favorite objects — bring in tools, electronics, furniture, vehicles, (or photos), but no cell phones or computers.
-

For Light

- M 17.01 READING FOR TODAY: Deyan Sudjic, *The Language of Things*, “Language”
PROJECT 1: With bristol board alone, and without any surface decoration, build a tea light holder that is aesthetically pleasing and does not burn. It should be easily assembled and foldable.
What constitutes ‘good’ and how will your solution be greater than its parts alone?
- W 19.01 Sketch and prototype several concepts ●
- M 24.01 FILM: Vanessa Gould, *Independent Lens: Between the Folds*
Sketching and prototyping
- W 26.01 Modeling and finalization
- M 31.01 Project 1 critique ●
-

For Interaction

- W 02.02 FILM: “BBC The Genius of Design: Ghosts in the Machine” ●
READING FOR TODAY: Deyan Sudjic, *The Language of Things*, “Design and Its Archetypes”
- M 07.02 PROJECT 2: Using materials of your choosing, create a cube that elicits the user to turn it, rub it, and squeeze it. Objects are more than just props alone; they form facilitation and mediate relationships and interaction. Bring in materials for today.
- W 09.02 FILM: “BBC The Genius of Design: Designs for Living” — *professor is out of town*
- M 14.02 Sketch and prototype several concepts
- W 16.02 Sketching and prototyping ●
- M 21.02 Modeling and finalization
- W 23.02 Project 2 critique ●
-

For Support

- M 28.02 *Spring Break — No Class* ✈
- W 02.03 *Spring Break — No Class* ✨
- M 07.03 FILM: “BBC The Genius of Design: Better Living Through Chemistry”
READING FOR TODAY: Deyan Sudjic, *The Language of Things*, “Art”
PROJECT 3: With cardboard alone, build a full scale sitting device that functions as a chair and is inviting for people to use. It should be so well designed that it gains the trust of the user.
- W 09.03 Survey chairs in the building, then begin sketching ●
- M 14.03 Sketch and prototype several concepts
- W 16.03 Small prototyping
- M 21.03 Small prototyping and cardboard modeling
- W 23.03 Cardboard modeling ●
- M 28.03 Project 3 critique ●
Review format requirements for Looking Outward booklet

Industrial Design Fundamentals

Carnegie Mellon University | School of Design | Alexander Cheek

For Play

- W 30.03 DUE TODAY: Your finished Looking Outward booklet ●
 - PROJECT 4: With recyclable kitchen materials found at the store or in your home, create a monster.
 - SHORT VIDEO: Anne Leonard, "The Story of Bottled Water"
 - Collect as many materials as you can for next class.
- M 04.04 FILM: "BBC The Genius of Design: Objects of Desire"
- W 06.04 Materials deconstruction, sharing, and sketching
- M 11.04 Sketching and modeling
- W 13.04 SHORT FILMS: Pixar Studios
 - Modeling
- M 18.04 Modeling
- W 20.04 Modeling and finalization
- M 25.04 Project 4 critique ●