Gestalt

The whole is greater than the sum of its parts?

According to a tight group of German psychologists gathered around Max Wertheimer in the first part of the twentieth century: No, not really. They suggest that we perceive the world in organized *wholes*, not in parts at all. These wholes are our primary sense reports — they are not contingent on, nor constituted by elementary sensations. So, then, the whole isn't *greater* than the sum of its parts at all, it's simply *different* from the sum of its parts.

This was a break from the dominant scientific rationalism that worked to explain a given reality by analyzing the pieces that construct it: principles were discovered and stacked brick by brick, bean by bean to produce a coherent account. Instead, for Wertheimer and his associates parts are rendered secondary. What matters are wholes, their specific organization — a set of relations, a particular configuration, a form, a shape, *gestalt*.

Gestalt roughly translates from German as "shape," and it is the proper name given to this account of perception. Gestalt has been a central tenet of graphic design for the last 100 years, or approximately as long as the discipline has existed. When design is employed to the careful manipulation of the relationships between distinct visual forms, a synthesis can be realized, with a corresponding multiplier effect to the power of that graphic form to contain and carry meaning.

You're probably familiar with the visual illusion (shown on the next page) of the vase that is also two faces. It was first described by Danish psychologist Edgar Rubin in 1915 while unpacking how our brain distinguishes figure and ground in the visual field. The positive form of the vase carries within its negative space the silhouettes of two human faces in profile. As you read the graphic, it appears first as a vase; but when attention is shifted to the negative spaces, another reading comes forward and the two profiles appear. The figure and ground relation becomes fuzzy and the form flips back and forth at the mercy of our own perceptual capacities. This effect is neither as tricky nor as trivial as it might seem.

The vase / face reversal is achieved through careful organization (*design*) of precise graphic form. Balance, shape, line, positive and negative spaces are all motivated to realize the essentially equal balance between these two possible readings. Similar techniques and attention to graphic form are used to encode visual messages of all varieties from corporate logos to public signage. For example, a forward-pointing arrow is produced by the negative space between the "E" and "x" in FedEx, making this logotype instantly recognizable. Or, the octagonal form of a stop sign together with its all caps, sans-serif typography, red ground and white border creates a sign whose visual form, its wholeness or gestalt, trumps its literal message.

This is an introductory graphic design class, aimed at students with no previous background in the subject. The course will demand a commitment to the close reading of graphic forms to foster sensitivity to their slight differences. We will be looking at graphics all around us, from the public environment, electronic media and the flotsam of commercial messaging that we navigate daily. By making your own work and critiquing the work of your classmates, you should build both a formal vocabulary for approaching design and a literal vocabulary for speaking about it.
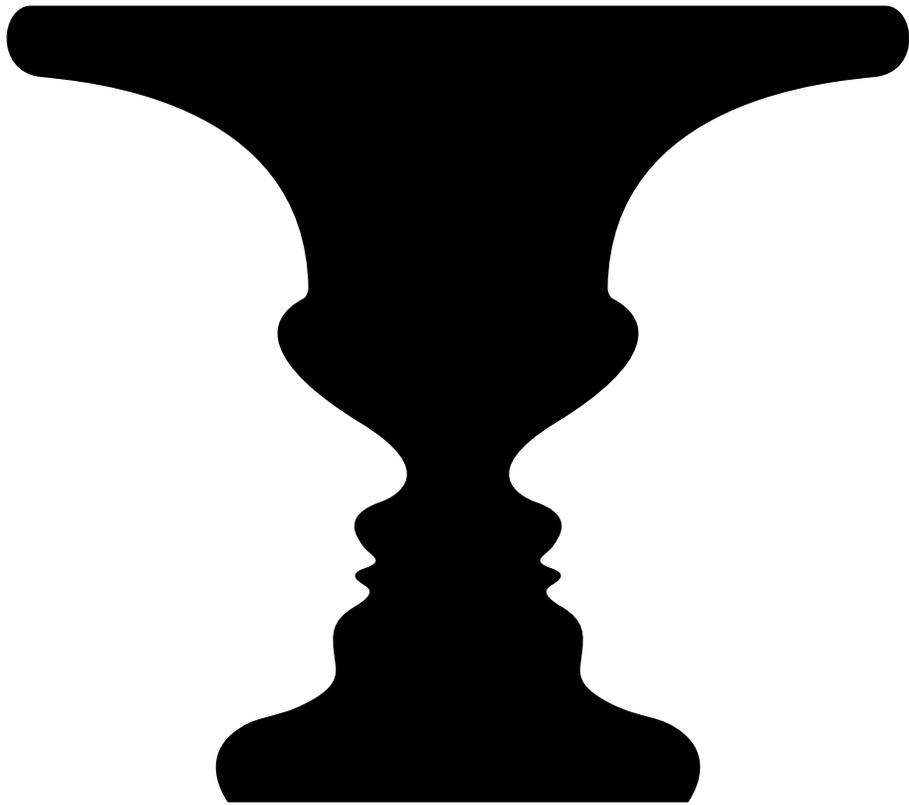
Rubin's Vase, an ambiguous figure identified in 1915 with conflicting figure-ground perceptual cues

VIS 216, Visual Form
Princeton University
185 Nassau Room 206
Mon 1:30 – 4:20 pm, 7:30 – 9:20 pm
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www.g-e-s-t-a-l-t.org

Class Schedule

September 17	Introduction
	Lecture — "Gestalt, or Wholeness & Graphic Design"
	Exercise — Vase / Face
September 24	Assignment 1
	Project introduction and review of class tools
	Lecture — "A Few Forms"
	Reading — "Laws of Organization in Perceptual Forms,"
	Max Wertheimer
October 1	Assignment 1 continues
	Group review and pin-up of individual projects
	Lecture — "Max Bill and Bezier Curves"
	Reading — "Continuity and Change," "Function and Gestalt,"
	Max Bill
October 8	No class
October 15	Individual meetings
	Lecture — "The Language of Visual Thinking"
	Reading — "The Language of Vision," from *Language of Vision*,
	Gyorgy Kepes, "Visual Thinking," Rudolf Arnheim
October 22	Assignment 2
	Review, in-class critique (Assignment 1)
	Lecture — "Currently in process . . ."
	Demonstration — animated gifs
	Reading — *A Primer of Visual Literacy* (excerpt), Donis A. Dondis,
	Interaction of Color (excerpt), Josef Albers
October 29	Fall break
November 5	Assignment 2 ends
	Lecture — "After Effects (on Bruno Munari)"
	Reading — "A Language of Signs and Symbols," *The Triangle*
	(excerpt), Bruno Munari
November 12	Assignment 3
	Project review, in-class critique
	Lecture — "Auto-Vision"
	Reading — "Structure and Movement," Karl Gerstener
November 19	Assignment 3 continues
	Individual meetings
	Lecture — "Desktops, trashcans, and other assorted metaphors
	or Why computers look like this: On Muriel Cooper and Susan Kare"
	Reading — "Swedish Campground," on Susan Kare, "Muriel
	Cooper's Visible Wisdom," Janet Abrams
November 26	Assignment 3 continues
	Individual meetings and class discussion

Lecture — "The NeXT Intuition"
Video — "The whole is more incredible than the sum of its parts."
Reading — "The Next Logo" and "Intuition and Ideas," Paul Rand

December 3   Assignment 3 continues
                Individual meetings and class discussion
                Lecture — "Global Branding"
                Reading — "G-e-s-t-a-l-t," from The Serving Library

December 10   Assignment 3 ends
                Final review

January 7   Final portfolio due by 1:30 pm

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Course Description, Rationale and Assessment Plan

Exercise	Construct a Vase / Face using your own sillouhette for the illusion
Assignment 1	Design an autonomous graphic form (i.e., one not relying on either symbolic or literal conventions) that means "STOP."
(Adjusted)	Design an autonomous graphic form to mean "GO."
Exercise	Render the masthead of The NEw York Times at several resolutions using 1/4 inch? graph paper grids
Assignment 2	Design an autonomous animated graphic form which means neither STOP nor GO but rather, WORKING (or IM WORKING ON IT, or IN PROCESS) Progress spinning wheel? (Thinking icon)
Assignment 3	Prepare a set of graphic forms which have an integral relationship one to another, and which can be combined or used separately to signal a complex whole. Project review, in-class critique

Assignment 3: Using the family of graphic forms developed in Assignment 2, construct a system of meaning. In other words, build a network of syntactic relationships between the symbols you have created (modified and expanded) and use these to form a plastic, visual language with a limited vocabulary.

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Course Description, Rationale and Assessment Plan

This studio course provides an introduction to Graphic Design focusing on the making and reading of graphic form. Graphic Design relies on a mastery of subtle manipulation of abstract shapes and the development of a finely-tuned sensitivity to the relationships between them. In this 200-level class, students will be exposed to a wide variety of graphic form-making over a circumscribed period from the late 19th-century to the present, a length of time that corresponds to the rise of a mass public and the establishment of graphic design as a discipline. Studio assignments and group critique will foster the students' individual abilities to realize sophisticated forms and motivate these towards carrying specific meanings.

This new course offering would sit alongside the existing VIS 215, Graphic Design — Typography and provide an alternate, parallel route into the exploration of design. Since it's inception in Fall 2010, VIS 215 has been had consistently full enrollment with a considerable overflow of interested students. A second section was added in Spring 2011 that immediately filled, and again this was the case for Spring 2012. This Fall (2012), roughly twice as many students than the enrollment allows showed up to the first class to compete for any seats that might open. Now that we have established this broad base of interest in graphic design, it seems to be a good idea to introduce an second 200-level course for interested students. We imagine that a Princeton student may take either VIS 215 or this new offering, or might reasonably take both as a pathway into a closer exploration of Graphic Design.

Visual literacy is an essential skill in our massively visual culture, and this course will arm students with the skills to decode and create graphic messages in a variety of media. In contrast to VIS 215, which focuses on the specific typographic forms of messages, this class will look at their more purely (abstract) graphic surfaces. To this end, the class will do as much looking at existing graphics as they do in making new graphics and constructing systems of meanings. We will examine some of the pervasively visual and graphic messages that surround us including logos, information graphics, public signs, charts, diagrams and maps.

The Visual Arts Program is committed to the idea of teaching Graphic Design as a liberal art. The skill set that students develop through individual projects, group discussions and theoretical texts applies far outside the conventional boundaries of the field. We are also set on introducing graphic design as a primarily speculative practice. It thrives on new thinking, new approaches and new models—not for the sake of newness, but in order to compete in the crowded array of contemporary messages. Graphic design problems are just that: they require the kinds of circular, iterative, and intuitive responses that serve students well in many disciplines and professions. It is our hope that the Princeton student intersecting graphic design in this course would bring that expertise back to the other subjects they are studying.

Studio work would be supplemented by critiques, readings and guest lectures as described in the attached syllabus. Overall, students would refine their approaches to visual problem solving and develop the critical acumen necessary for decoding and producing graphic design in a variety of traditional and electronic media. A series of linked studio assignments will move us through the semester and the duration and complexity of each will extend the previous. All work will be ongoing with periodic reviews, and a complete portfolio is due at the end of the class.

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Assignment 1

Design an autonomous graphic form* that means "STOP."

* i.e., one not relying on either symbolic or literal conventions. (good luck.)