

Chapter 6: Research and Visual Communication

Evans & Thomas, pp. 188 – 217

COM232
Graphic Communication

Problem solving

Information becomes useful when it is examined in the context of solving a specific problem.

It is a process of analysis and synthesis
(Noble and Bestley, p. 21).

Analysis relates to the methods of investigation, enquiry and understanding central to the research of a brief, concept or a particular context.

Synthesis is the means by which a designer is able to draw upon his/her initial analytical work and investigation to produce meaningful solutions or inventions (Ibid).

Problem solving

The designer is involved in a constant process of enquiry leading to:
an outcome or solution
a prototype
a discourse or debate.

Linguistics, communication studies, philosophy and social sciences serve to provide relevancy to visual communication.

Problem-solving relies on invention (Evans and Thomas, p. 203). Introduce newness by combining existing things.

What is research?

- 1 : careful or diligent search
- 2 : studious inquiry or examination; *especially* : investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws
- 3 : the collecting of information about a particular subject

Everyone does research

Research is an intellectual inquiry or examination, experiments aimed at the discovery and interpretations of facts.

How do I find a topic?

Where do I find information on it?

What do I do with it when I find it?

Research

Research is an intrinsic aspect of design practice and an essential part in problem solving.

Research can be deliberate and methodical or intuitive and unsystematic.

Intuition relies on personal experience which can be limited.

If it's beyond our experience and knowledge, research comes in handy.

The benefits of research

- The world changes because of research.
- It changes the way you think by giving you more solutions to a puzzle.
- It offers the satisfaction of discovering something new.
- It contributes to the wealth of human knowledge and understanding.

Curiosity doesn't kill the cat.

- Research is hard work combined with frustration, confusion, and confidence.
- Start with something that interests you.
- Have a plan – be flexible.
- Be specific enough to search for data.
- Data is evidence to support a claim.

The role of a researcher

- As a researcher, you have to adopt the role of someone who knows what others need to know and to cast your reader as someone who doesn't know but needs to.

Source: The craft of research. Wayne C. Booth, Gregory G. Colomb & Joseph W. Williams. Publisher: The University of Chicago Press. (p. 19)

Primary research

Designers work directly with raw materials which may include marketing strategies such as audience surveys or interviews or the direct testing of potential visual solutions within a “real world context” (Noble & Bestley, p. 28)

Secondary research

Established or existing research already undertaken in the field used to support the designer's own research.

This might include published surveys and/or interviews with potential audience groups, together with the analysis of a range of successful visual communication strategies within a similar context (Noble & Bestley, p. 28)

Noble, I. and Bestley, R. (2005). *Visual Research: an introduction to research methodologies in Graphic design*. New York: Sterling Publishing.

Tertiary research

Research based on secondary sources and the research of others synthesized to simply restate what others have undertaken.

A summary of the existing body of knowledge and accepted methodologies relating to the range of intentions, audience and context of the project. (Noble & Bestley, p. 28)

Ask journalistic questions of...

- WHO
- WHAT
- WHEN
- WHERE

but focus on

HOW and WHY

**Step 1: Name
your topic**

I'm trying to learn about
(working on, studying)

_____.

**Step 2:
Add a question**

I'm trying to learn about X
because I want to find out
who/what/when/where/
whether/why/how _____.

Step 3: Motivate your question by adding a 2nd question

I'm trying to learn about X
because I want to find out
who/what/when/where/wheth
er/why/how _____ in order
to help my reader understand
how _____.

Step 4: Narrow your topic down.

Pushy passengers on public transportation in Singapore.

From a broad to a focused one.

I am studying passengers on public transportation in Singapore because I want to find out why they are being pushy in order to help transportation companies create a much more pleasant riding experience for all of us.

Research: In summary

Your aim is to explain...

What you are researching – your topic.

I'm trying to find out....

What you don't know about it –
your question: *because I want to*
...

Why you want your reader to know
about it – your rationale: *in order*
to ...

Communication in design

Effective design is about managing visual elements and communication objectives.

Managing both the visual elements and objectives.

What must these do?

A corporate logo?

A book cover?

An advertisement?

Communication in design

Communication directs design decisions: What needs to be said must be understood and accepted by an audience.

Communication artists must translate verbal language into visual communication of information.

Interrelated issues affecting the creation of a successful solution: audience, effectiveness and acceptance of the message or product, budget, material, production means and appropriate visual forms.

Communication in design

Communication design begins with verbal language.

Communication venues rely on concepts that are written or spoken. (Ibid, p. 190).

Verbal messages drive the decision-making process that ultimately determines graphic content and the form it needs to take.

Translating verbal concepts into visual form is a matter of testing ideas.

There are many ways to interpret the concept: literal, symbolic, abstract...

Communication in design

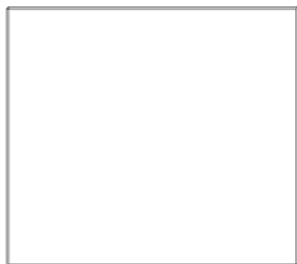
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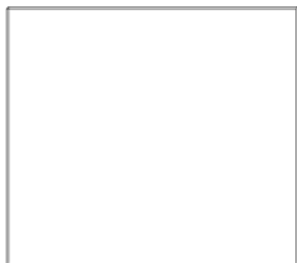
According to Roland Barthes, all images are polysemous.

Images have more than one meaning.

An image is an “open text.”



Cube seen frontally



Cube seen from above



Traveller's rest



Safety and security



Welcome home



Enter at your own risk



Don't talk to strangers



The death of the owner

The reader is the author

On the surface, there could be 2 authors: the client (or the commissioner) who owns the message and the designer who creates the design.

Meaning is determined in large part by social aspects (race, gender, class etc).

Meaning is created at the moment a text is read, not when it is written.

Psychological foundations

To communicate with an audience, you need to know:

how people behave,
how they think,
how they feel and
how they interact with one another.

Behavior

Refers to the actions or reactions.

Behavioral outcomes, or what is determined to be a desired response, are a key aspect in design communication that intends to persuade the viewer.

What usually are the ads seen during daytime slots?

Thinking

Cognition is another word for thinking.

Mental processes include reasoning, acting, and processing of information.

Design solicits a cognitive response.

Feeling

An emotional expression that produces psychological change.

Can you name them some of the expressions?

How about feelings through sensations of touch, visual perception, olfactory perception, auditory and taste.

Graphic designers are mostly interested in visual perception.

What do visual artists use to communicate a mood or sense of feeling to their audience?

Levels of intellectual maturity

Dualism – good or bad.

multiplicity – diversity in thinking. There is no single right solution to a problem.

Relativism – knowledge is relative, a matter of context and situation.

Commitment - knowledge is from experience, interactivity and from reflective thinking.

Source: William G. Perry Jr., Forms of Intellectual and Ethical Development in the College Years: A Scheme (New York: Holt, Rinehart and Winston, 1968). As quoted in Evans and Thomas, p. 197.

Branches of communication design

Persuasive design

Information design

Directional design

Enhansive design

Persuasive design



Advertising, promotional and social advocacy designs are examples of this category.

Information design

Textbook , exhibit design, annual reports, charts, diagrams, etc are graphically organized and design to assist the audience to understand a specific content

SEE'S TEAR-OUTABLE TOOL FOR LIVING IN THE 21ST CENTURY

KEY QUESTIONS: EXTINCTION
How much will potentially be lost? How many animal species? How many of human civilization?

CRIBSHEET #7
EXTINCTION

More than 99% of all the life that ever existed on Earth is now extinct. Many species vanished in Earth's five major mass extinctions—geologically brief periods of time when large numbers of species died off. In order, they are:

- End Ordovician (445 MYA)
- Late Devonian (365 MYA)
- End Permian (250 MYA)
- End Triassic (200 MYA)
- End Cretaceous (65 MYA)

There are two broad causes of extinction: **catastrophe and competition.**

CATASTROPHE
Catastrophic extinction occurs when environmental changes happen faster than a species can migrate or adapt to survive. An **asteroid or comet impact**, the likely culprit in the disappearance of the **dinosaurs** at the end of the **Cretaceous** period, is a prime example of rapid and global catastrophic extinction. Gradual **climate change** has also caused mass extinction. In the **Ordovician** event, extensive glaciation on landmasses reduced sea levels, exposing and devastating the organism-rich continental shelves. Some examples of catastrophic extinctions are:

- 1 A volcanic eruption rapidly wipes out a localized species.
- 2 Glaciation slowly drains, cools, and deoxygenates an aquatic environment, threatening a species's survival.

COMPETITION
Rivalry can also result in extinction when one species out-competes another. For example, competition with *Homo sapiens* might have led to the extinction of **Neanderthals** some 30,000 years ago. A species can even evolve to compete against itself. Here is a hypothetical scenario:

- 1 A newly formed river isolates some members of a species.
- 2 Environmental pressures select for new traits.
- 3 Over time a new species evolves.
- 4 If beneficial adaptations have occurred, intermingling could eliminate the original species.

ILLUSTRATION NOTE
The sample biome includes a river, an ocean, a volcano, and a glacier. Geometric shapes such as spheres, cones, and icosahedrons indicate different species, and deceased organisms are darkened.

EXTINCTION AND SPECIATION
Extinction appears to be vital for the creation of new species. Pressures from mass-extinction events typically select for genetic innovation. This usually results in the rapid expansion of new species with better adaptations for inhabiting ecological niches vacated by vanished organisms. Strangely, two mass extinctions, the **Devonian** and the **Triassic**, were characterized not only by increased extinction rates, but also below-average speciation rates, amplifying the loss of biological diversity. Scientists aren't yet in agreement about the causes of these two extinctions.

PREDICTED EXTINCTION HOTSPOTS
Map showing current extinction hotspots (blue) and predicted extinction hotspots (yellow) across the globe.

FREQUENCY OF PAST MASS EXTINCTIONS
Line graph showing the frequency of mass extinctions (Extinctions of marine families per million years) over time (Millions of Years Ago). Key events include the End Ordovician, Late Devonian, End Permian, and End Triassic.

FUNCTIONAL EXTINCTION
Even when a catastrophe wipes out members of a species, if they successfully reproduce, the species is not functionally extinct, or **extinct in the wild**. **Passenger pigeons** became functionally extinct in America in the early 1900s, but they were later reintroduced, reducing their numbers.

THE ISSUE: ARE HUMANS CAUSING ANOTHER MASS EXTINCTION?
Some scientists blame humanity for a sixth, modern extinction. The World Conservation Union (IUCN) has documented the disappearance of 784 species since the year 1500, while the group's 2006 Red List identified 16,000 species facing extinction. Climate change played a key role in one of Earth's five mass extinctions, and recent studies show that global warming threatens the Arctic habitats of polar bears and other species. More research is needed, however, to determine if the current level of extinctions is "natural," or if it signifies the leading edge of a mass extinction from anthropogenic climate change.

SOUND
Current level of climate change threatens land-based species with extinction.

Illustrator: Cybil Koss - www.cybil.com
Map data by GeoEye et al. ©2009
Writer: Jason Stronach
Consultant: Andrew Knorr, former Professor of Marine Biology at Harvard University
Graphic Data: Regis DM, Sepulveda J (2002) "Mass extinctions in the marine fossil record." Science 295:1501-1503.
*Millions years ago, all ages are approximations.
Source: Source: CD Thomas et al. (2009) "Extinction risk from climate change." Nature 427:145-148.

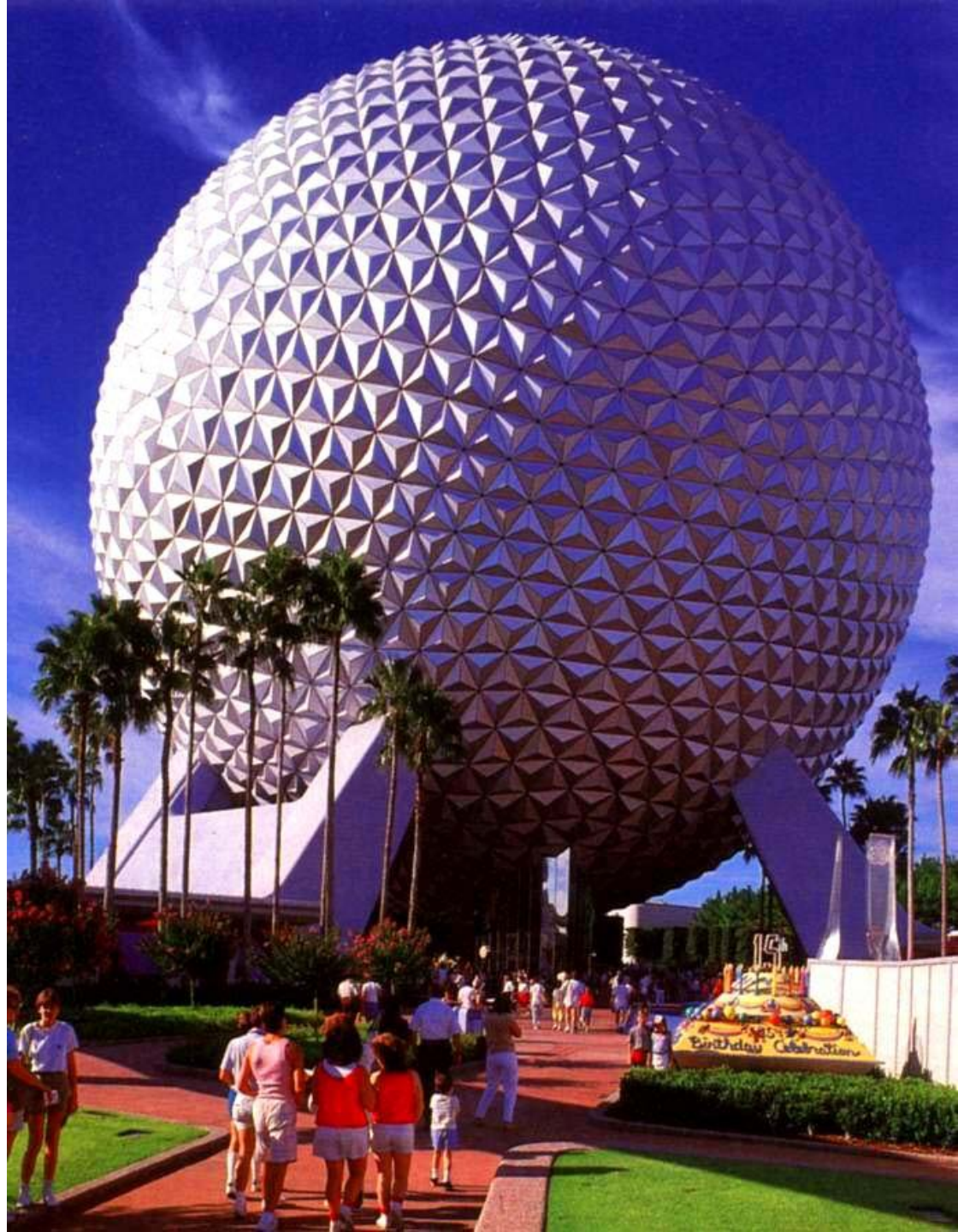
Directional design



Helps people to find their way through architectural, virtual or environmental spaces.

Enhansive design

Embellishes the look of a design venue. Theme parks, retail industry, games, advertising, editorial, etc.



Visual intelligence

Visual learning requires an ability to think visually.

Visually oriented tend to learn more through observation and perception (Ibid, 204).

Visual thinking is a problem-solving activity: mental and physical manipulation of an idea.

It's a rigorous process of research, practice, testing and revision to translate invisible concepts into tangible forms.

Design as process

3 skills to overcome:
Rationalization (critical skills)
Visualization (creative skills)
Execution (practical skills)

Break a design problem into
manageable tasks.

Designing requires thinking.

How about chance or accident?

Designers have to “think up” solutions
to design/visual problems.

Designing involves choices, determined
by selection after elimination.

Thinking is necessary in deciding
whether the result is **worthwhile** or
acceptable.

Four components of Vis Comm

Purpose
Need
Benefit
Expectation

Message
Verbal communication
Visual communication

Audience
Demographics
Psychological foundations

Image
Visual language
Visual organization

Four components of Vis Comm: Purpose

Apart from your stylistic choices, the client's wants and needs are important to determine your solution.

Ask Questions:

How to improve the current status of the client?

How to create a higher level of awareness?

What are the expectations of the client?

Four components of Vis Comm: Message

What type of message will be sent?

What will be received?

Is the message:

... informational,
*KC YEOH IS RUNNING FOR
PRESIDENT*

... persuasive
VOTE FOR KC YEOH

... directional?
*MEET KC YEOH AT THE
TOWN CENTER.*

Four components of Vis Comm: Audience

What effect or feeling do you wish to create?

To whom is the visual message directed?

What reactions do you want from this audience?

What are the demographics?

What are the psychological foundations?

Four components of Vis Comm: Image

How will the image function? Is it type- or image-driven?

Does the content support/address the purpose message, and audience?

Establish a relationship between Form and content.
Form – what it looks like
Content – what it says

What are your sources for inspiration? Nature? History and Culture?

What are the limitations?

Four components of Vis Comm: Image

What is to be achieved? What specific visual or intellectual effect is desired? Unity or Variety?

Applicable visual stylistic requirements? – illustration, abstract, realism, etc.

How can your concept be communicated visually?

Which image or pictures could represent your concept? Start by listing or sketching.

Discuss your ideas – People may offer suggestions and it also helps to conduct some research.

Narrow your ideas to a few worthy ones – Elimination starts the moment you choose.