

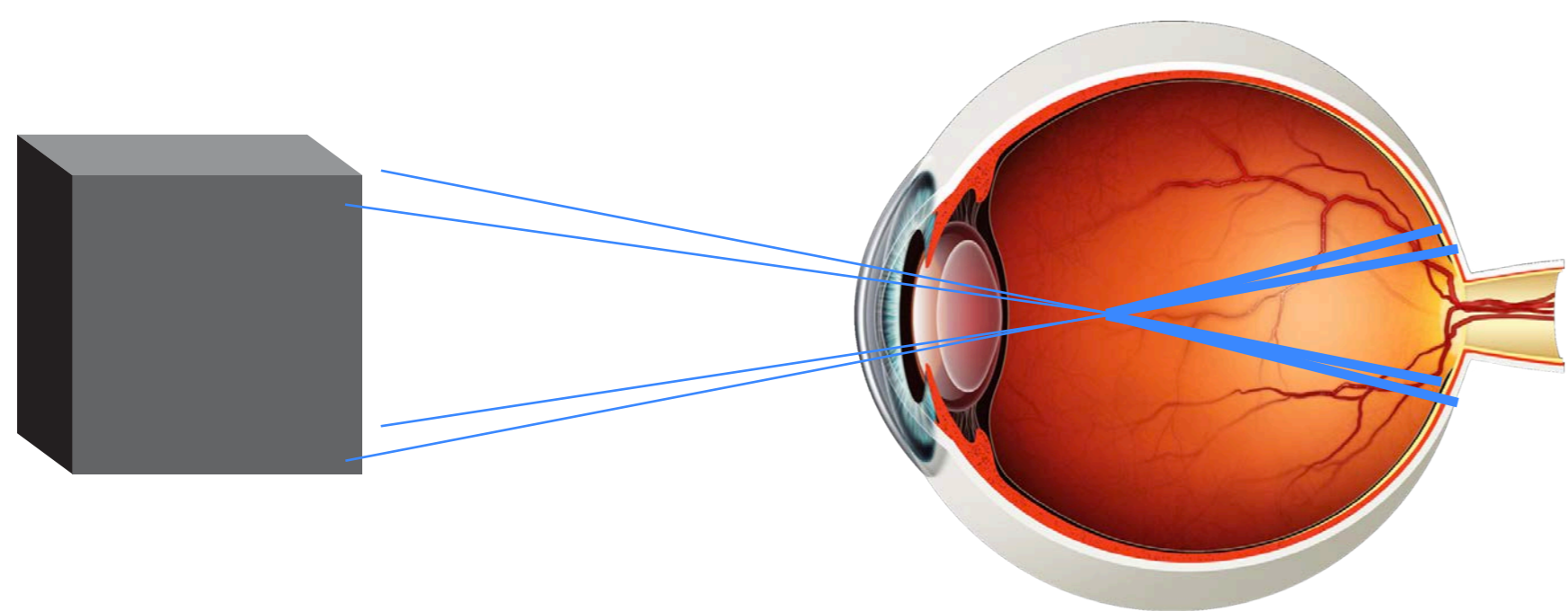
Constraints of Human Perception

Goodman on depiction. “The plain fact is that a picture, to represent an object, must be a symbol for it, stand for it, refer to it; and that no degree of resemblance is sufficient to establish the requisite relationship of reference. (5) ... Nor is resemblance necessary for reference; almost anything may stand for almost anything else. A picture that represents- like a passage that describes- an object refers to and, more particularly, denotes it. Denotation is the core of representation and is independent of resemblance.” (5)



Neander replies. Goodman concludes that almost any picture may represent almost anything—even Constable's Haywain could represent a pink elephant. He argues in support of this that 'given picture and object there is usually a system of representation, a plan of correlation, under which the picture represents the object'. However, all that is required to divert this much feared slide from Gombrich's insights to Goodman's outrageous conclusion is that visual recognition has its limits. (221)

Perceptual constraints. Normal visual recognition also involves the 'taking into account' of many factors which alter visual input; but although we are adept at doing this, our capacity for transforming visual information has natural limits. Our evolved perceptual processes constrain our interpretations, and we cannot see just anything as any other thing. In normal visual recognition, and pictorial interpretation of real and imaginary objects, there is a matching of internal representations of visual information. (225)



Phil 16 I: Systems of Resemblance

I.20.25 • Prof. G. Greenberg • Quotes from Neander 1987

Conventionalism v. Resemblance Theory

Considerations that support...

Conventionalism

(= pictorial meaning is assigned by convention, similar to words)

1. **Cultural variation.** Styles of depiction vary widely from culture to culture.
2. **Unified theory.** Choice and habit determine the meanings of linguistic expressions; a unified account holds the same for visual representation.
3. **Failure of optical accounts.** Most styles of depiction (esp. pre-20th century) do not even remotely satisfy the demands of a fully optical account (like Gibson's).
4. **Structural failure of resemblance.** Resemblance is symmetrical, depiction is not.
5. **Descriptive failure of resemblance.** Anything is similar to anything else in some way. A resemblance theory must specify the kind of resemblance in question--- but no one answer is plausible.

Resemblance Theory

1. **Words v. pictures.** Words and pictures *seem* to convey content in very different ways; one is governed by arbitrary convention, the other by resemblance.
2. **Mutual comprehensibility.** Pictures from distant cultures are mutually comprehensible in a way that languages from distant cultures are not.
3. **Productivity.** We understand pictures we've never seen without trouble. Resemblance generalizes easily; but convention does not.
4. **Limits of depiction.** A bambi-picture cannot be used to accurately depict Ronald Reagan; there is not enough resemblance!

Neander's Contextualist Resemblance Theory

1. **Resemblance-based.** According to Neander's theory, accurate/successful depiction is based on resemblance.
2. **Cultural variation.** The type of resemblance that is relevant for interpreting a picture varies from culture to culture, and more specifically it varies between systems of depiction.
3. **Constraints of human vision.** The human visual systems puts constraints on the types of resemblance that can be used in successful depiction.

Restricted Resemblance



Restricted resemblance. Picture and pictured are not alike in all respects, and nor are there fixed respects in which the resemblance always holds. Rather, we look to see what a picture resembles once we have allowed for its particular mode of representation. We take into account its flatness, the materials used, and its style. (225)

No Universal Resemblance. The point is that our criteria have altered along with our judgement of what kind of picture it is. The visual match required varies with the mode of representation. And here lies the solution to the puzzle posed by the objection. It is not to be expected that the respects of resemblance will be universally generalizable. Since the mode of representation varies from one picture to another, so too will the relevant respects of resemblance. (216)

Restricted Resemblance

P resembles X with respect to G iff P and X share all G-properties.

Restricted Resemblance

Object 1

- Redish green
- Round
- Bump on side
- Has stem
- Sitting on a desk
- Reflecting yellow light

Object 2

- Blue
- Round
- Smooth sides
- Has stem
- Hanging from tree
- Reflecting yellow light

Systems of Depiction, Types of Resemblance

Systems of Representation

Languages

- English
- Spanish
- Chinese
- Zulu
- Binary
- Tally

Systems of Depiction

- Black and white photography
- Color photography
- Line drawing
- Line drawing w/ shading
- Cross hatching
- Linear perspective
- Stick-figure drawing



System:

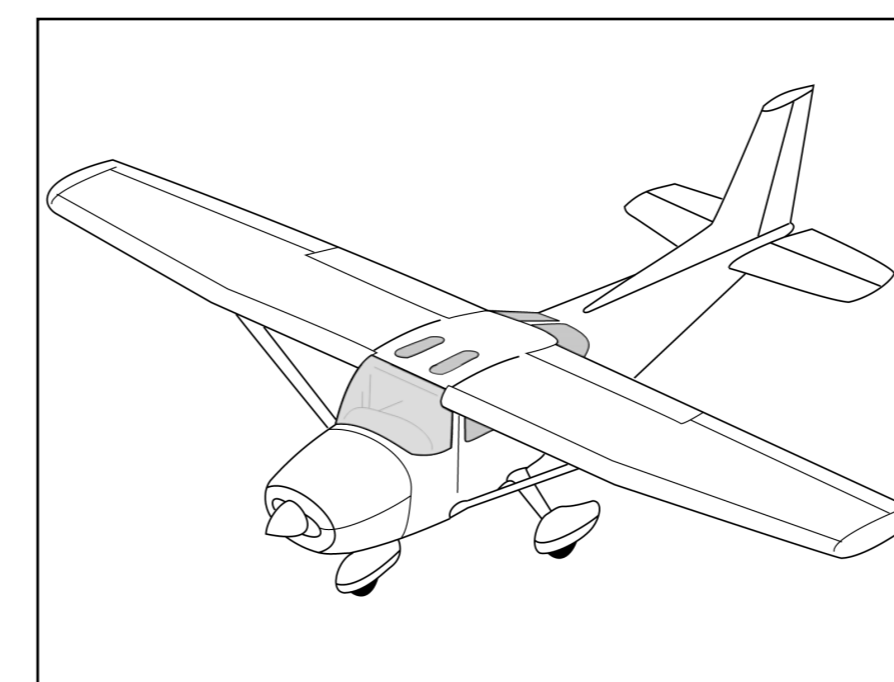
black and white photography

Relevant respects of resemblance:

Apparent shape, overall spatial organization, light intensity

Irrelevant respects of resemblance:

3D shape, color



System:

line drawing sketch

Relevant respects of resemblance:

Apparent shape, overall spatial organization, edges

Irrelevant respects of resemblance:

3D shape, color, light intensity



Contextual clues. Pictures can be represented within (or by) pictures because we assume consistency of style and materials within a work. Imagine, if you will, a Photo-realist oil painting of a woman slumped in an armchair, with a child's crayon drawing of a cat on the wall behind her chair. The drawing of a cat is the picture within the picture. Let us suppose, to exclude all contextual clues, that the cat-picture is of the right size, relative to the woman, to be a real cat, and its bottom rests on the base of the wall. Why do we interpret that part of the painting as a representation of a childish crayon drawing of a cat, rather than as a representation simply of a cat? I suggest that the answer is that after we have taken into account the fact that we are perceiving a Photo-realist painting, in oil, on canvas, we are not left with something that, in other respects, looks like a cat.