Knowing with images

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The platitude that pictures say a thousand words and, correlatively, that words can say very little does not isolate what makes images so interestingly different from linguistic representations. We can do better:

Immediacy = Extractability + Syntactic salience + Semantic salience

Extractability: the information that x is F is extractable iff there is some non-semantic feature of the representation in virtue of which it carries the information that x is F and no more specific piece of information about x.

- *Syntactic salience*: the properties in virtue of which a representation carries a given piece of information stand out perceptually.
- *Semantic salience*: the plan that correlates features of the representation with what they carry information about is easy to grasp.

Concrete floor: the most determinate information about x a representation makes immediately available. Abstract ceiling: the least determinate information about x a representation makes immediately available.

We can distinguish representations based on the distances between their floors and ceilings and the number of salient steps between them. For example,

Pictures, like color photographs, have quite low floors and very high ceilings. The steps in between mimic the steps between the most determinate information we can glean *perceptually* and the abstract steps above that. In that sense, seeing pictures is like seeing what they represent.

Images more generally are like pictures but more permissive in their contents. We can tailor the steps between their low floors and high ceilings to help us find the information of interest. Images carry information immediately across many levels of abstraction.

Descriptions and other linguistic representations typically have short distances between their floors and ceilings, or at least very few salient steps between them, and they can have very high floors.

Abstractions over the features of pictures, images, and diagrams correspond to abstractions over the determinate contents of such representations.

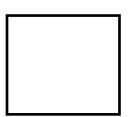
By contrast, abstractions over features of linguistic representations typically do not correspond to abstractions over their determinate contents.

It's a common thought that diagrams, pictures, and the like represent by exhibiting isomorphisms with what they represent. This might be true, but it's not terribly interesting by itself. Isomorphism is cheap.

Isomorphisms between syntactically salient qualities that are paired in an easily grasped way with contents are very interesting: in such cases one typically finds information carried immediately across levels of abstraction.

SQUARE

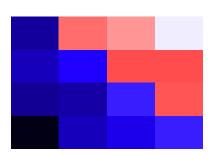
Closed, right-angled polygon



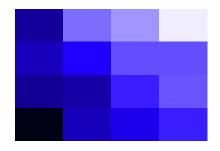


23	49	54	65
27	35	45	45
22	24	39	46
06	27	33	37

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22	24	39	46
06	27	33	37



1, 1, 06	3, 1, 33
1, 2, 22	3, 2, 39
1, 3, 27	3, 3, 45
1, 4, 33	3, 4, 54
2, 1, 27	4, 1, 37
2, 2, 24	4, 2, 46
2, 3, 35	4, 3, 45
2, 4, 49	4, 4, 65



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