How We Learn
(Media & Technology Across the Lifespan)

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HWL Tracer Bullet #101

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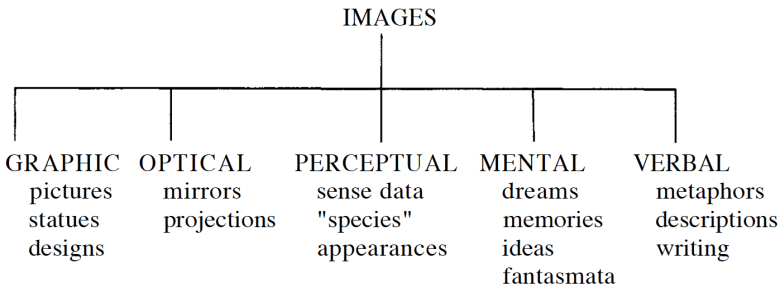
Image, Text, Sound, Object

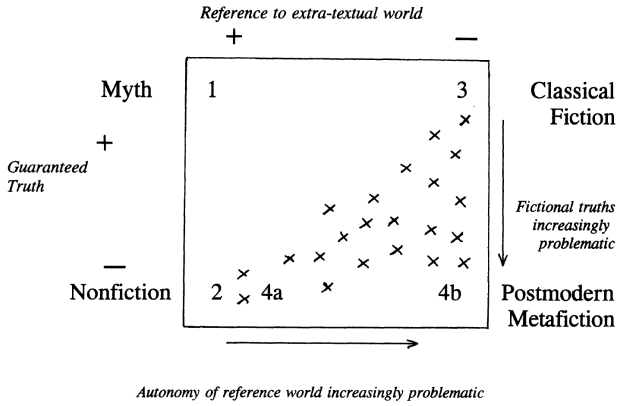
Draft

1. **Working Problems**
    a. Data reduce to image, text, and sound (ITS) and 3D data include object (ITSO), artifact, or material culture (ITSMC). Depending on how inclusive one defines object, we might also add body and space to 3D data typologies.
    b. Similarly, video design and production apps readily enable mixing ITS while virtual reality (VR) involves a convergence of ITSO, and perhaps body and space or beings and things.
    c. We commonly acknowledge four physical phenomena (ITSO) or perceptual and phenomenal modes (Visual, Narrativistic, Aural, and Haptic) and four associated productive movements or practices (Depiction, Description, Desonification, and Designification):
        i. Image → Visual → Depict
        ii. Text→ Narrativistic → Describe
        iii. Sound→ Aural → Desonify (or Desonate)
        iv. Object→ Haptic → Designate (or Designify)
    d. Realists make the point that concepts are within our grasp— are haptic objects along with others more physical. So here, one can certainly interpret object to include concept.
    e. Phenomena, in very simple terms, reduce to Beings & Things
        i. Another way of accounting for or describing the phenomena we encounter is to simplify to Beings and Things (B&Ts).
        ii. Compare with Weiss (1961, p. 7): The four movements [that "constitute distinctive beings" of the physical universe] are conceptualization, dissection, withdrawal, and dissolution; they are engaged in when we are interested in respectively understanding, acting on, identifying, or isolating an object.
    f. What range of images, texts, sounds, and objects or beings & things might one encounter? Of course, taxonomies or typologies have faults…

2. Helpful taxonomies or typologies of ITSO:
    a. Taxonomy of Images (Still & Motion or Moving) (Mitchell, 1985, p. 505):



    b. Taxonomy of Texts (Narrative & Non-narrative) (Ryan, 1997, p. 183):



c. Taxonomy of Sound #1 (Gerhard, 2003, p. 8):

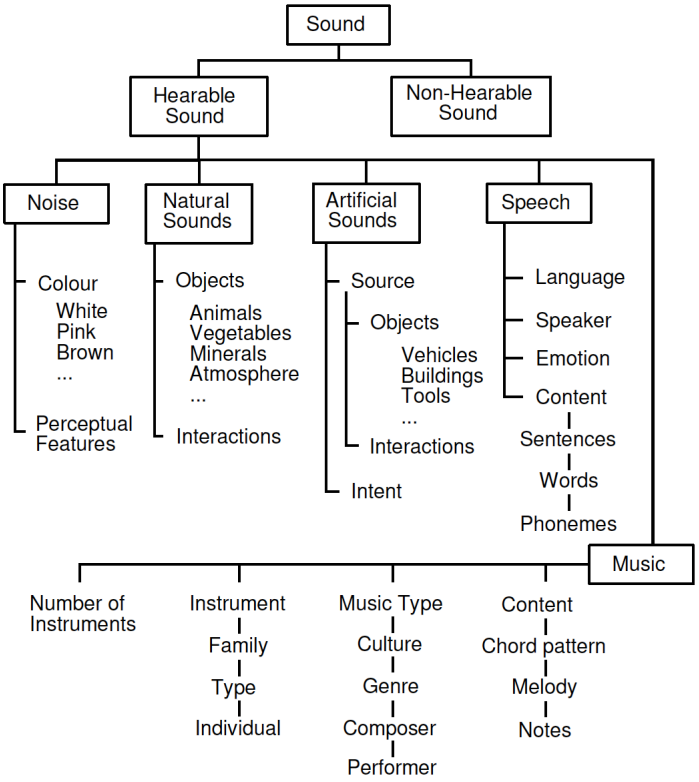


Figure 1: A taxonomy of sound.

d. Taxonomy of Sound #2 (Solomon, 1959, p. 493):

TABLE II. Scales used to define each of the seven psychological dimensions.

Factor I—Magnitude	
heavy-light	84[a]
large-small	79
rumbling-whining	76
wide-narrow	73
low-high	71
Factor II—Aesthetic-evaluative	
beautiful-ugly	67
pleasant-unpleasant	60
good-bad	59
pleasing-annoying	58
smooth-rough	54
Factor III—Clarity	
clear-hazy	58
definite-uncertain	52
even-uneven	51
concentrated-diffuse	43
obvious-subtle	43
Factor IV—Security	
mild-intense	53
gentle-violent	51
calming-exciting	48
safe-dangerous	48
simple-complex	48
Factor V—Relaxation	
relaxed-tense	64
loose-tight	57
soft-hard	36
gentle-violent	34
mild-intense	33
Factor VI—Familiarity	
definite-uncertain	39
familiar-strange	35
wet-dry	34
active-passive	30
steady-fluttering	30
Factor VII—Mood	
colorful-colorless	41
rich-thin	34
happy-sad	31
deliberate-careless	30
full-empty	22

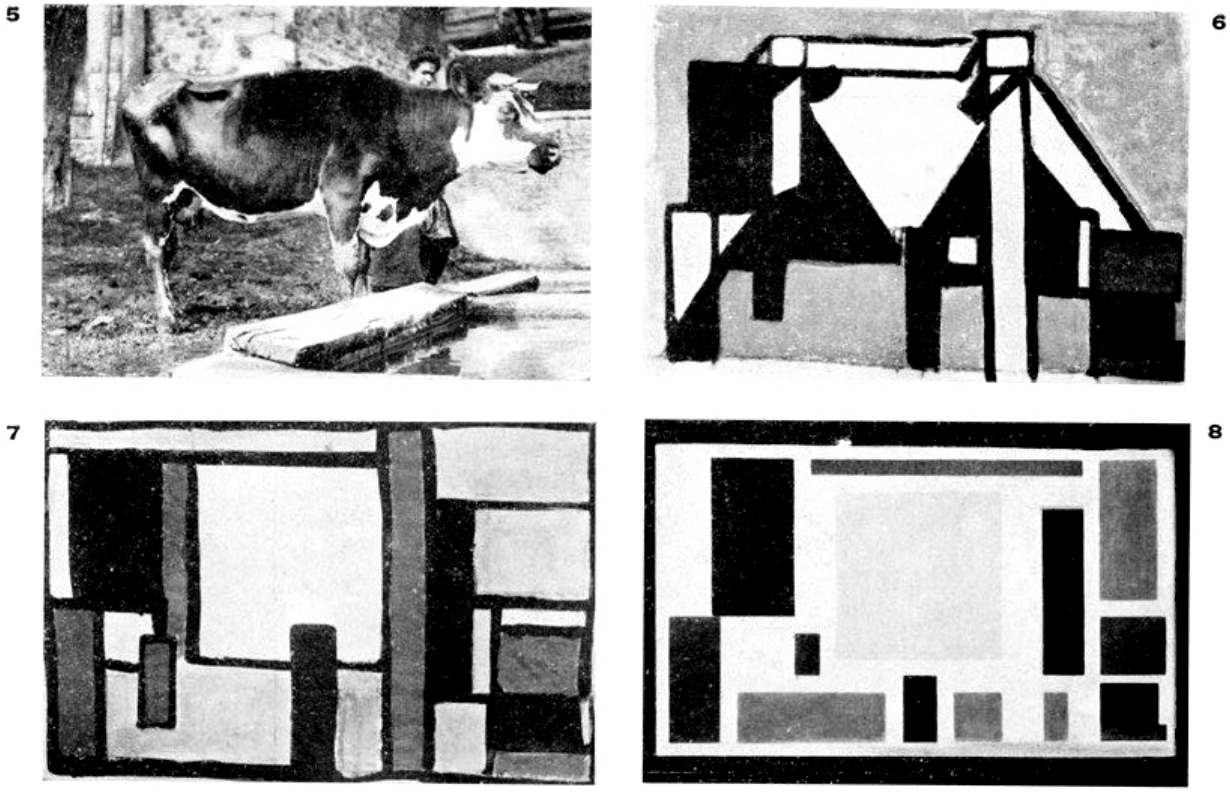
[a] Decimal points omitted.

e. Commonly, analysts begin with a very basic typology of images & objects: **Real, Representational, and Quantum**. In visual culture, the range of focus is on representational objects. Taxonomy of Objects #1 (Ocvirk et. al. 2006, p. 13):

Development toward Abstraction

Object from Nature	Naturalism	Realism	Semiabstract	Abstraction (objective)	Abstraction (nonobjective)
	Fully representational. (very objective)	Representational but emphasizing the emotional. (more subjective)	Partly representational but simplified and rearranged.	*Based* on a subject but visually appears nonobjective.	Nonrepresentational, started without *any reference to subject* and assuming artistic value resides in *form* and *content* completely.

i. van Doesburg's (1925, p. 47) cow in *Grundbegriffe der neuen gestaltenden Kunst* demonstrates the point:



ÄSTHETISCHE TRANSFIGURATION EINES GEGENSTANDES

Abb. 5: Photographische Darstellung. Abb. 6: Formgebundene Akzentuierung von Verhältnissen. Abb. 7: Aufhebung der Form. Abb. 8: Bild

ii. Fritsch also demonstrates an extension of realism to abstraction. Abstracted Swiss army knife (Kelsey Fritsch, https://kelsey4142.wordpress.com/drawing-i/):

f. In archaeology, history, and sociology, etc. the focus is on **objects**-in-interaction-with-humans, animals, or insects, or on **material culture** created, modified, or used by animals, humans, insects, etc. Taxonomy of Objects #2 (Baudrillard, 1972/1981, p. 66):

> *A Logic of Signification*
>
> So it is necessary to distinguish the logic of consumption, which is a logic of the sign and of difference, from several other logics that habitually get entangled with it in the welter of evidential considerations. (This confusion is echoed by all the naive and authorized literature on the question.) Four logics would be concerned here:
>
> 1. A functional logic of use value;
> 2. An economic logic of exchange value;
> 3. A logic of symbolic exchange;
> 4. A logic of sign value.
>
> The first is a logic of practical operations, the second one of equivalence, the third, ambivalence, and the fourth, difference.
>
> Or again: a logic of utility, a logic of the market, a logic of the gift, and a logic of status. Organized in accordance with one of the above groupings, the object assumes respectively the status of an *instrument*, a *commodity*, a *symbol*, or a *sign*.

g. Taxonomy of Objects #3 (Parsons, 1960, p. 470):

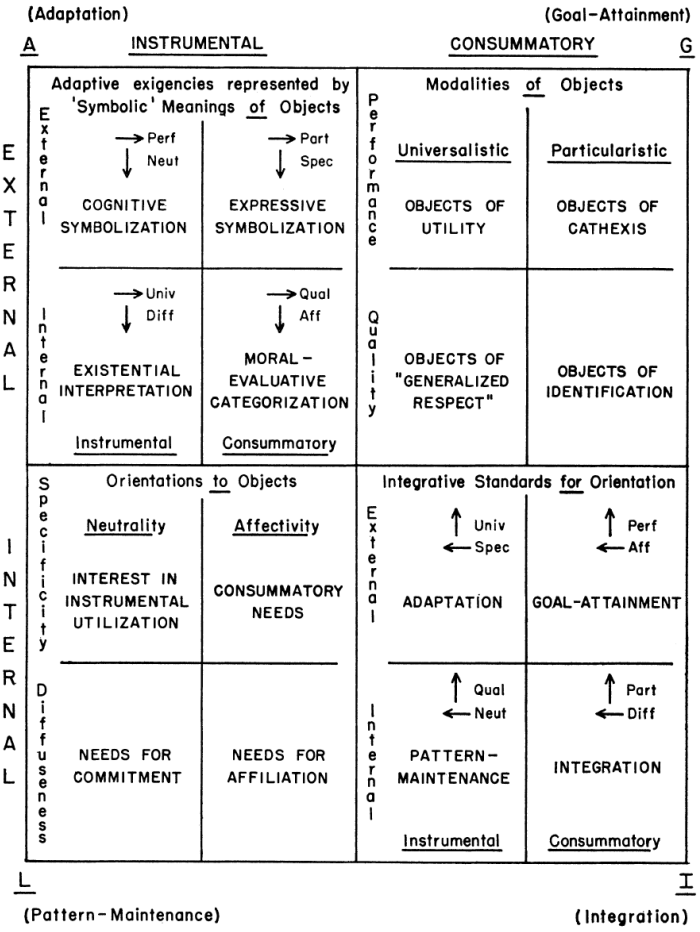
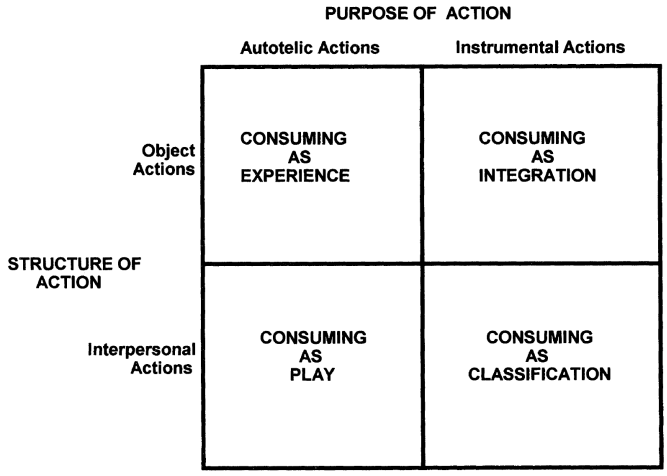


FIGURE 1. THE COMPONENTS OF ACTION SYSTEMS

h. Taxonomy of Objects #4 (Holt, 1995, p. 3):



i. Taxonomy of Material Culture (McGrew, 1987, p. 249, derived from Oswalt, 1973, pp. 23-39 and 1976, pp. 63-153) *Note that Oswalt (1976) includes "Exploitative Networks" in the taxonomy; hence, technounits or objects (naturefact or artifact) that

range from 1) subsistent, 2) instrument, 3) weapon, 4) facility, 5) exploitative network:

Subsistant	Extrasomatic form that is removed from a natural context or is manufactured and is applied directly to obtain food
Technounit	Integrated, physically distinct, and unique structural configuration that contributes to the form of a finished artifact
Instrument	Hand-manipulated subsistant that customarily is used to impinge on masses incapable of significant motion and is relatively harmless to the user
Weapon	Form that is handled when in use and is designed to kill or maim species capable of motion
Facility	Form that controls the movement of prey or protects it to the user's advantage. *Tended* if physical presence of user is essential for functioning; *untended* if functions in the absence of user.
Naturefact	Natural form, used in place or withdrawn from a habitat, that is used without prior modification
Artifact	End product resulting from modification of a physical mass to fulfill a useful purpose
Simple	Retains same physical form before and during use
Complex	Parts change their relationshp with one another when form is used

Owalt's (1976) modes of technounit or object production:

Reduction	Reduce mass of form, whether natural or man-made, to produce a functioning form; e.g., flaked stone
Conjunction	Combine two or more technounits to create a finished form; e.g., hafted axe
Replication	Craft two or more similar structural units used to function as one part of a form; e.g., prongs of leister
Linkage	Make physically distinct forms combined to perform particular purpose; e.g., bow-and-arrow