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The intricate dialectics of iconization and structuration

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Primary and secondary iconic signs – Taking stock

- In “Prolegomena to a semiotic analysis of prehistoric visual displays”, *Semiotica* 100: 3/4, July 1994, 267-332, I suggested a distinction between primary and secondary iconic signs
- I explained the distinction using visual examples
- Since then, however, other people, and to some extent even I, have applied this distinction also to language, gesture, and music.
- It is time to take stock.



”How to read Peirce”



- You cannot talk about iconicity without referring to the scholar who introduced the concept, Charles Sanders Peirce
- But this does not mean you should employ yourself to find out ”what Peirce really meant”. Instead, starting from Peirce’s ideas, you should work *in the spirit of Peirce*,
 - not only in the sense of revising his ideas, as he did his whole life
 - but in pursuing the final interpretant as far as it is possible at present



The concept of "ground"

Peirce says that the "ground" is *the point of view* from which the sign is seen, a kind of "abstraction", "the blackness of two black things". Rather than applying only to the expression or the content, as some Peirce-experts have claimed, it thus has to do with the relation between them, - i.e. it is *a principle of relevance*, corresponding to the distinction between *form* and *substance* in structuralist linguistics



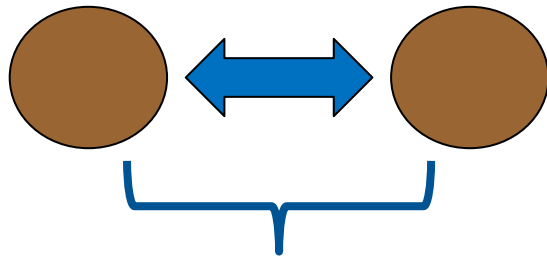
Categories, grounds, and signs

	Firstness	Secondness	Thirdness
Firstness	Iconicity	—	—
Secondness	Iconic ground	Indexicality = indexical ground	—
Thirdness	Iconic sign (icon)	Indexical sign (index)	Symbolicity = symbolic ground = symbolic sign (symbol)



From iconic ground to iconic sign

- An *icon* is a sign, in which the "thing" serving as expression is *similar in one respect or another to* (or has properties in common with) the "thing" which serves as its content
 - But the sign is an icon only if the similarity between these relata (the elements which are related) obtains *independently of the sign relation and independently of possible relations between the relata as such*



Peirce's restrictions on the concept of iconicity

- Iconicity is *independent of the sign relation*
 - That is, the similarity is not *created* or *apprehended* only because the relata are part of the sign relation
 - We shall see that this is not always true (only in primary iconicity)
- Iconicity is *independent of possible relations between the objects put in contact by the sign relation*
 - Thus, iconicity, in Peirce's sense, is not really similarity, but only a list of properties which may be related
 - In the iconic sign two iconicities are related - we have an iconic ground



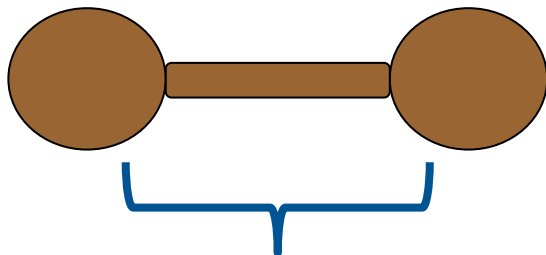
From indexical ground to indexical sign

- an *index* is a sign in which the "thing" serving as expression is *connected in one respect or another to* the "thing" which serves as its content
 - But the sign is an index only if the connection between these relata (the elements which are related) obtains *independently of the sign relation*
- In a *symbol* (a conventional sign), in contrast, there is *nothing, apart from the sign relation*, which relates expression to content



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Primary and secondary iconic signs

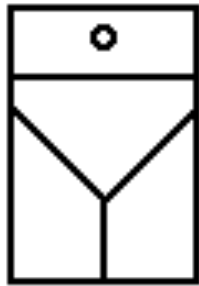
- A primary iconic sign (such as a picture) is a sign in which the similarity between the expression and the content is at least one of the reasons for positing a sign relation
- A secondary iconic sign is a sign in which the existence of a sign relation is at least one of the reasons for positing a similarity between expression and content
 - Exemplifications
 - “Doodles”







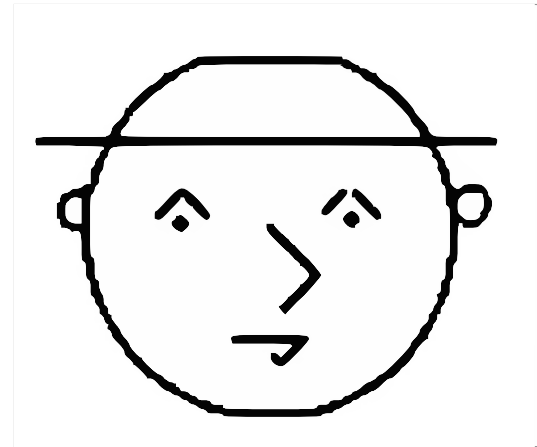
The difference between pictures and "doodles"



a



b



- Arnheim's and Carracci's drawings can only be understood with a "key" - a preceding symbolic relation
- In Hermerén's example there is a picture interpretation which overshadows the "doodle"-interpretation proposed by Hermerén



- Primary iconicity: the perceived similarity is a condition for the position of the sign character
- Secondary iconicity: the known sign character is a condition for the perception of the similarity

- Either because you need a convention to see that something is a sign rather than an object in its own right



- Or because the figure as such is too ambiguous to be given a specific interpretation without a “key”



a



b





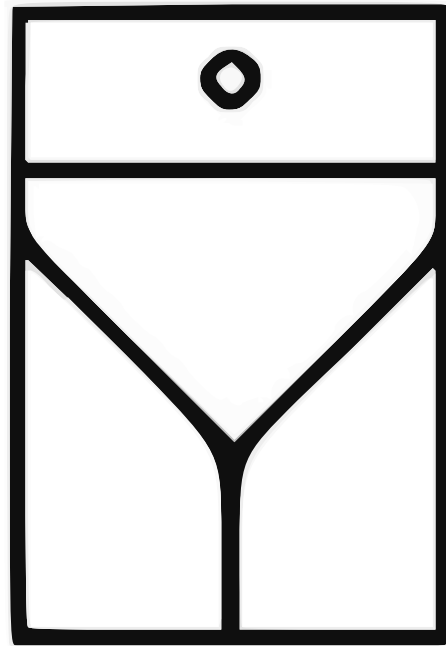
↑
Peirce

- Couldn't we simply say that my secondary iconicity is a mixture of iconic and symbolic grounds? This is clearly a more familiar Peircean explanation
- We certainly could, but that would be to miss the whole intricate interaction of the iconic and symbolic grounds — and we will see that this interaction can really be very intricate.
- We have also showed experimentally that, for small children, all iconicity (or at least pictures and scale models) *appears to be secondary secondary* — indeed of the kind needing a convention to see that something is a sign rather than an object in its own right





↑
Peirce



↑
**"Olive dropping
into martini glass"**



↑
**Picasso:
"Kahnweiler"**





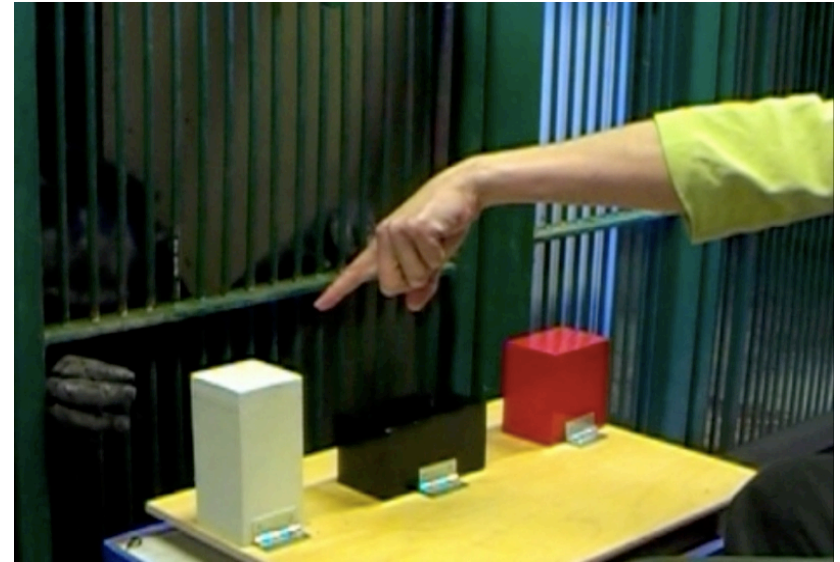
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Hiding-Finding Game

Zlatev, J., Alenkaer Madsen, E., Lenninger, S., Persson, T., Sayehli, S., Sonesson, G., & van de Weijer, J.) Understanding communicative intentions and semiotic vehicles by children and chimpanzees. In *Cognitive Development*, 28: 312-329



Children: 72
18 m, 24 m, 30 m (24/ group)
at Humanities Lab, Lund

Chimpanzees: 4
(3 adults, 1 juvenile)
at Lund University Primate
Research Station Furuviik
(LUPRSF)

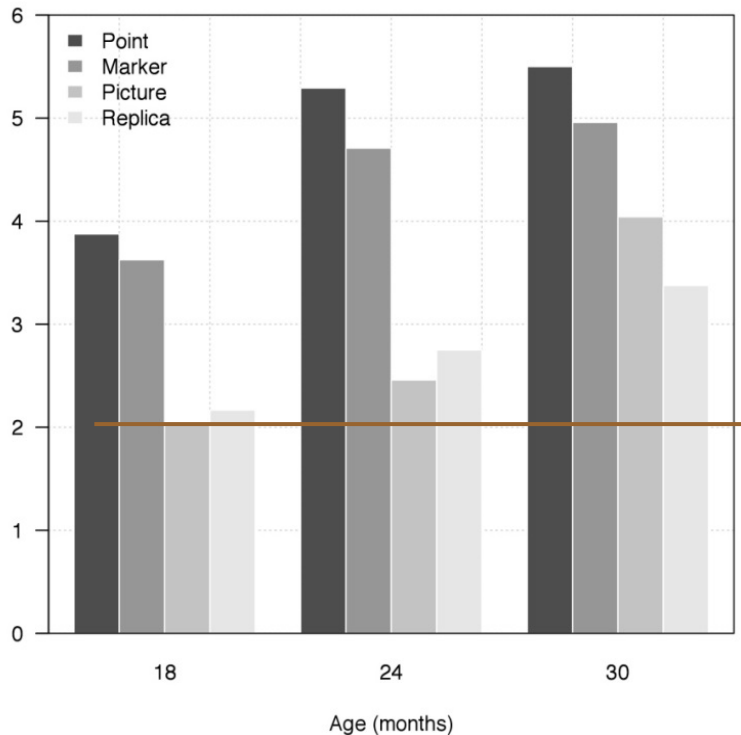


Results: children

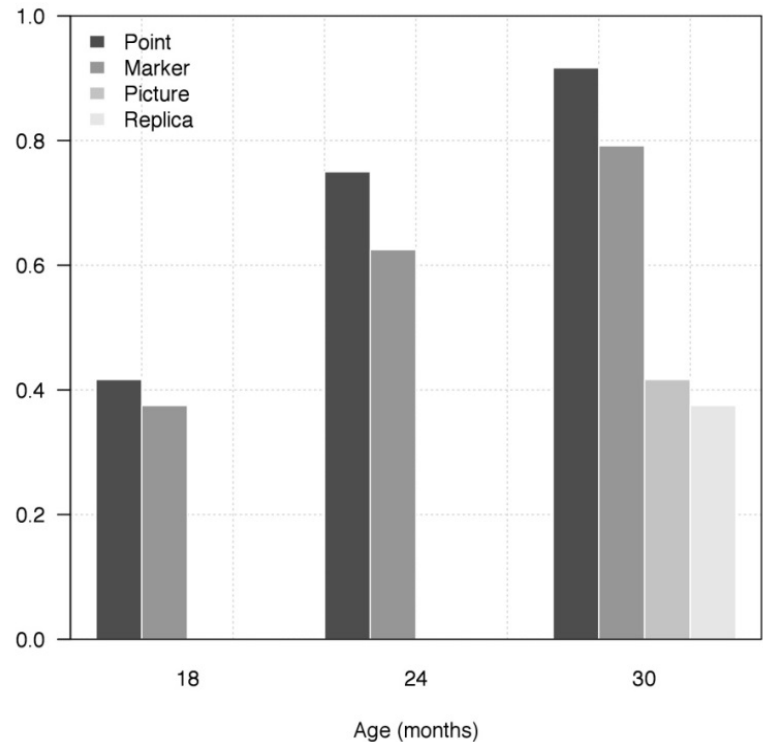
18 < 24 m (Pointing, Marker)

24 < 30 m (Picture, Replica)

Pointing = (?) Marker > Picture = (?) Replica

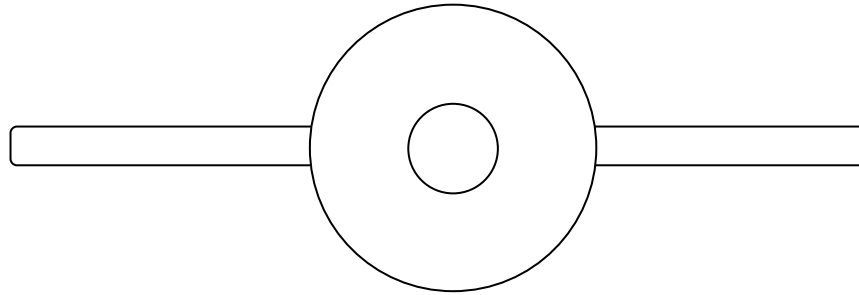


Mean number of trials correct (Max = 6)



% children, at least 5 trials correct

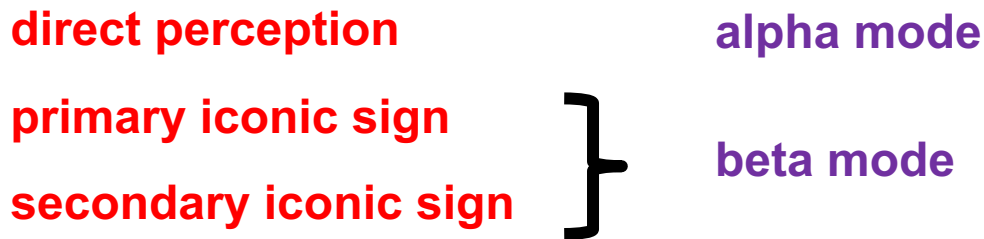




- “I define as *alpha mode* that mode in which, even before deciding we are confronted with the expression of a sign function, we perceive through surrogate stimuli a given object or scene which we then elect as the expression plane of a sign function. I define as *beta mode* that mode in which, in order to perceive the expression plane of sign functions, it is necessary first to presume that we are in fact dealing with expressions, and the supposition that they are indeed expressions orients our perception.” (Umberto Eco, *Kant and the platypus: essays on language and cognition*, Vintage, London, 1999: : 383)
- Like Ludovic De Cuypere (*Limiting the iconic: from the metatheoretical foundations to the creative possibilities of iconicity in language*, John Benjamins, Amsterdam, 2008: 73), I originally thought this was the same distinction.



- I owe mainly to Piero Polidoro, (“Umberto Eco and the problem of iconism”. *Semiotica* 2015; 206: 129–160) to have understood that this is a different distinction: ”alpha mode /.../ is the mode through which we normally perceive, with which we recognize the objects in the world around us” (p. 157), but we can also perceive pictures that way, that is as if they were reality. Cf. Peirce 3.362: “when we lose the consciousness that it is not the thing, the distinction of the real and the copy”, a painting may appear to be a pure icon.
- The key to the difference is that Eco’s lacks my distinction definition of the sign



It would therefore be more correct to say that animals and small children perceive everything in alpha mode



Ludovic De Cuypere (*Limiting the iconic: from the metatheoretical foundations to the creative possibilities of iconicity in language*, John Benjamins, Amsterdam, 2008: 48):
“My thesis builds on the elegant distinction originally suggested by Göran Sonesson (cf. for example Sonesson 2004b) between primary and secondary iconicity. /---/ I will argue that iconicity may be involved in a secondary level in language, which I consider to be fundamentally arbitrary (or in Peircean terms, symbolic)”

De Cuypere (p. 72) also exemplifies this with gesture: “tree” in Flemish sign language
(Also cf. Lücking, Andy, *Ikonische Gesten: Grundzüge einer linguistischen Theorie*, De Gruyter, Berlin, 2013)



Primary iconicity in language?



Takete



Maluma

- Wolfgang Köhler (Gestalt psychology, 1930) already showed that the correlation between figures and sounds are not arbitrary
- More systematically studied by V.S. Ramachandran and E.M. Hubbard (“Synaesthesia — A Window Into Perception, Thought and Language”, *Journal of Consciousness Studies*, 8, No. 12, 2001, pp. 3–34) using the terms “kiki” and “bouba”
- Mentioned as “phonological iconicity” by De Cuypere (p.110)



- More systematically studied by Felix Ahlner & Jordan Zlatev, "Cross-modal iconicity: A cognitive semiotic approach to sound symbolism", *Sign Systems Studies* 38(1/4), 2010: 324
 - “a) Two words with different vowels, but the same sonorant consonant, for example, lili vs. lulu.
 - b) Two words with different consonants, but with the same vowel [i], for example, kiki vs. nini.
 - c) Incongruent combination: a word with a ‘hard’ consonant and ‘round’ vowel was contrasted with a word with a ‘soft’ consonant and ‘sharp’ vowel, for example, tutu vs. lili.
 - d) Congruent combination: a word with a ‘hard’ consonant and a ‘sharp’ vowel was contrasted with a word with ‘soft’ consonant and ‘round’ vowel, for example, titi vs. lulu.”
- Result: the correlations work for both vowels and consonants



Primary iconicity in music?

- In “From mimicry to mime by way of mimesis: Reflections on a general theory of iconicity” (*Sign Systems Studies* 38(1/4), 2010, 18-66), I suggested that “programme music” had to be a case of secondary iconicity.



- **But what is “programme music”?**
- According to Wikipedia: “ programme music is a type of art music that attempts to musically render an extra-musical *narrative*. The narrative itself might be offered to the audience in the form of program notes, inviting imaginative correlations with the music.” (my italics). Examples include well-known works by Liszt, Berlioz, Strauss and Beethoven. This correspond to the simple secondary iconic technique of labelling
- Oxford Music Online: “Music of a narrative or descriptive kind; the term is often extended to all music that attempts to represent *extra-musical concepts* without resort to sung words”. (my italics)



- Verónica Giraldo, *Referential iconicity in music and speech within and across sensory modalities*. Lund university master thesis 2018.
- An experiment in which 21 Swedish and 21 Chinese native speakers had to match musical fragments or spoken word-forms to referents (represented by schematic pictures) was designed. It included two different conditions.
 - In one there were two sound-stimuli and two referents (*more contrastive*).
 - In the other, a single sound-stimulus was to be matched to one of four alternative referents (*less contrastive*).



The musical stimuli consisted of the six introductory melodies corresponding to six of the characters presented in Prokofiev's Peter and the Wolf: Hunters, Bird, Cat, Duck, Wolf and Grandfather.



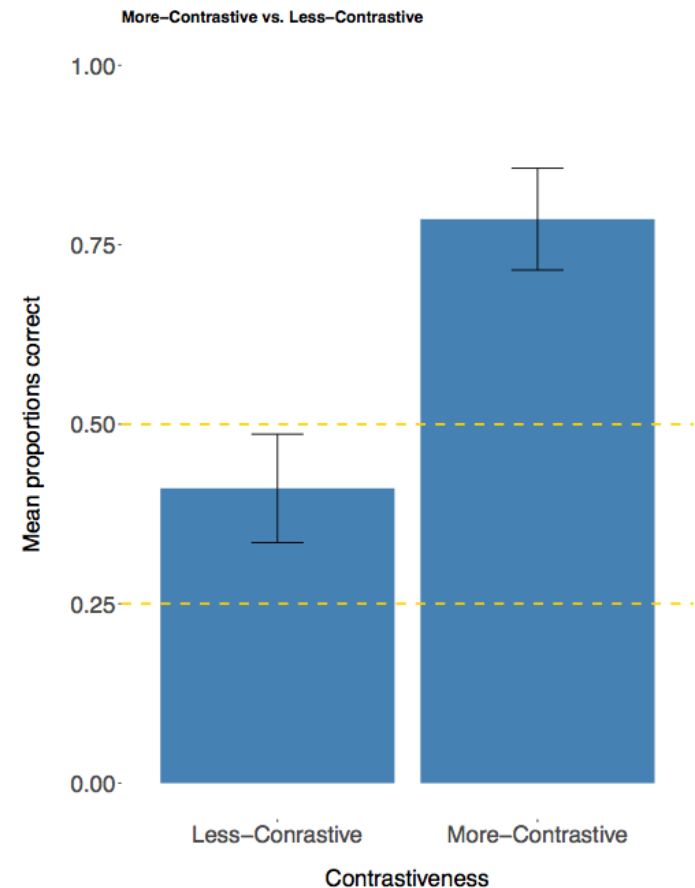
- In the more-contrastive condition, the participant was presented with two contents, and two objects, which were determined by the nature of each task.



- In the less-contrastive condition, the participant was presented with one expression and four contents, which, as in the more-contrastive condition, were determined by the nature of each task.



- Result: the participants of both language groups solved both music and linguistic tasks equally well
- Result: more-contrastive tasks were more transparent to participants of both language groups.



Proportions of accurate answers for less- and more-contrastive conditions for all tasks (T1-T4). The golden dotted line represents the chance levels (50% for more contrastive and 25% for less contrastive conditions).



Ahlner & Zlatev 2010 (p.319): A combination of primary and secondary iconicity

- “First, the interpreter is told that a combination of sign relations exists between the pairs of representamina R1 and R2 and perceptual objects O1 and O2. This is a precondition for discerning the composite analogous ground in Step 2. That is, knowledge of the existence of sign relationships, ‘is one of the reasons for the perception of an iconic ground’, that is, conforming to the definition of secondary iconicity, given earlier”.
- “Once this analogous ground is perceived, however, it serves as the basis for positing specific sign relations between R1–O1 and R2–O2 in Step 3. That is, quoting again Sonesson’s definition of primary iconicity ‘the perception of an iconic ground obtaining between two things is one of the reasons for positing the existence of a sign function joining two things together as expression and content’”.



(Perhaps) beyond Ahlner & Zlatev 2010: Primary and secondary iconization

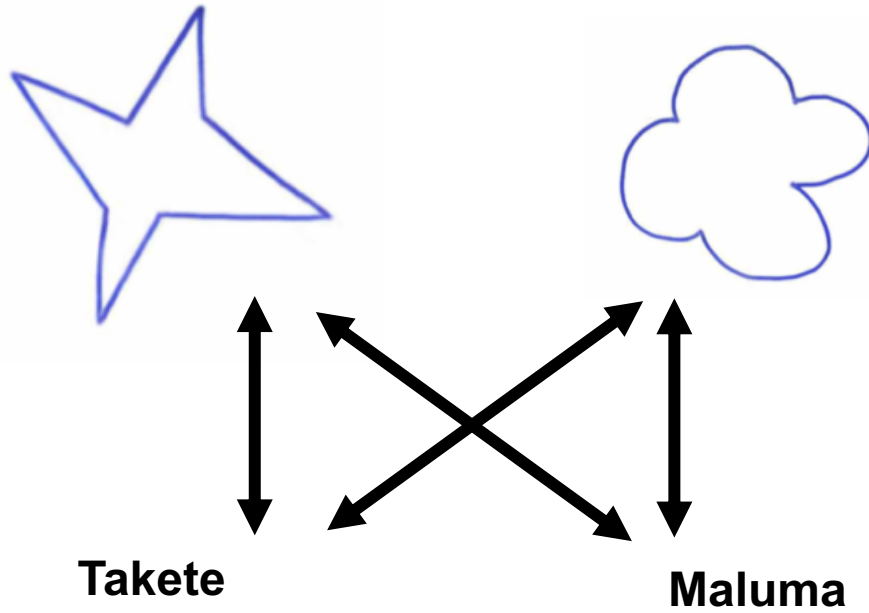
- Since the definition of the terms consists in an inversion, I find this explication contradictory if considered as properties of specific signs.
- Although this is not explicitly said, however, this description seems to reconstrue primary and secondary iconicity *as mental operations or perceptual strategies* instead of kinds of iconic signs. It may then be more correct to speak of primary and secondary iconization — which happens to be coherent with the specific kind of primary iconization I have called resemantization (see below).
- However, it should not be forgotten that *secondary iconization is not convention*, it is precisely the case when pre-existing iconic potential is enhanced by other means – in this case, not by labels or context (including different cultures), but by structure.

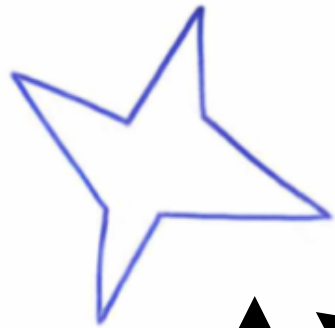


Primary and secondary iconization

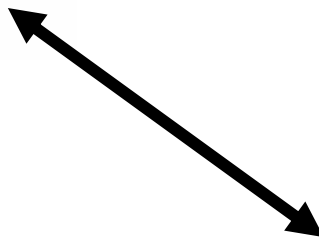
- However, it should not be forgotten that *secondary iconization is not convention*, it is precisely the case when pre-existing iconic potential is enhanced by other means – in this case, not by labels or context (including different cultures), but by structure.
- What we have in the case of maluma vs takete is precisely structure, or more particularly, structure upon structure, as in Lévi-Strauss' notion of proportionality:
- not only A vs B,
- $A : B :: C : D$
- Different versions of this is what Giraldo calls *more or less contrasted conditions*





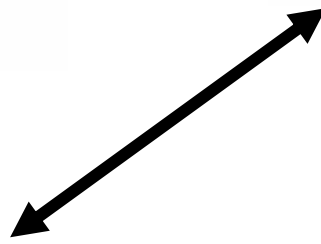
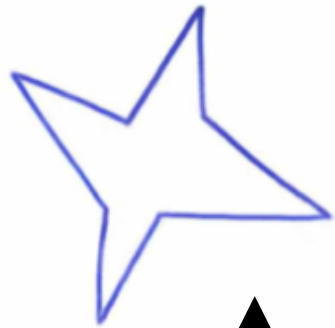


Takete



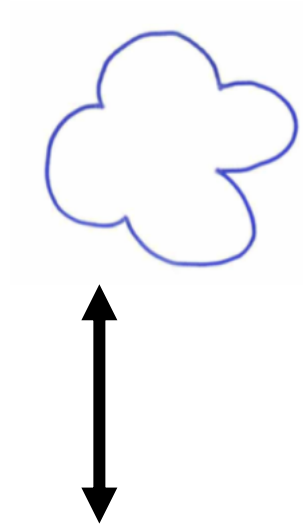
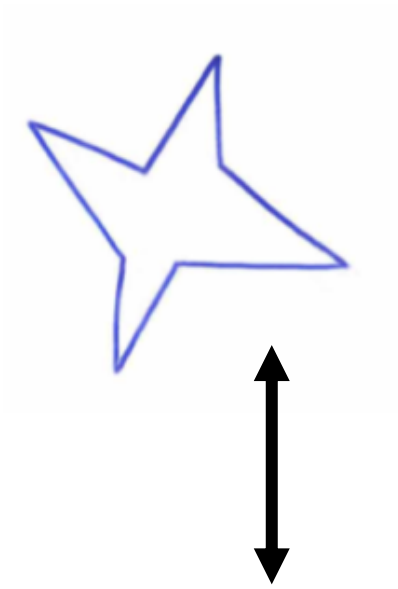
Maluma

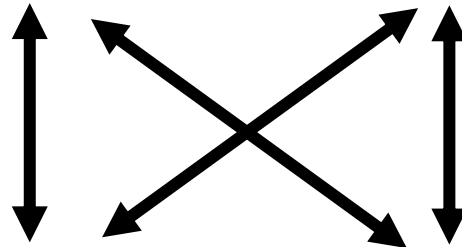
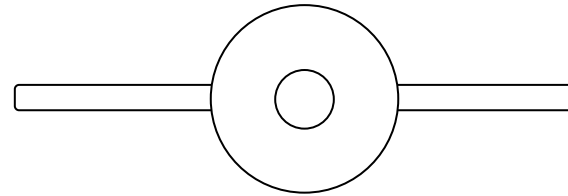
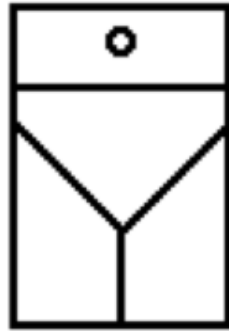




Takete



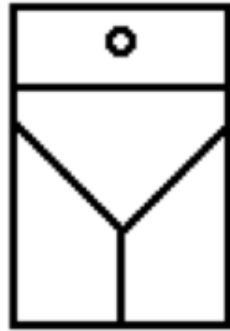




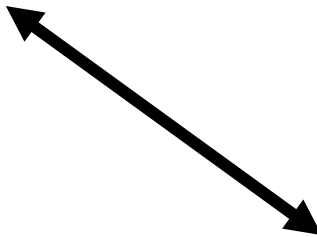
**”Olive
dropping
into martini
glass**

**Mexican on
a bicycle**



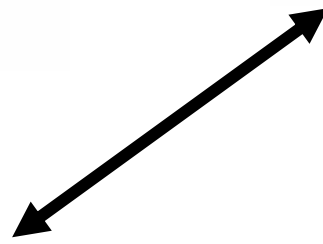
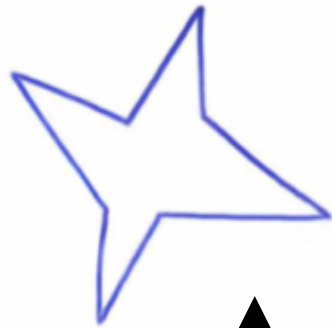


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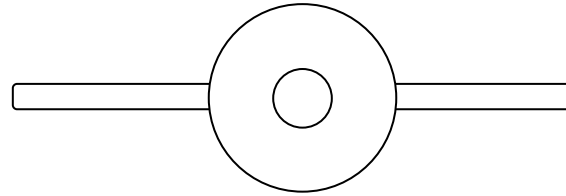
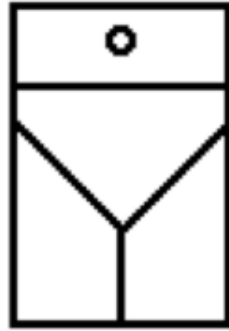
**Mexican on
a bicycle**





**”Olive
dropping
into martini
glass**





Resemantisation in pictures



The isolated parts lack meaning,
just as in language

But once they are seen as part of
the whole they become carriers
of particular parts of the
overall-meaning



a

b



c



d



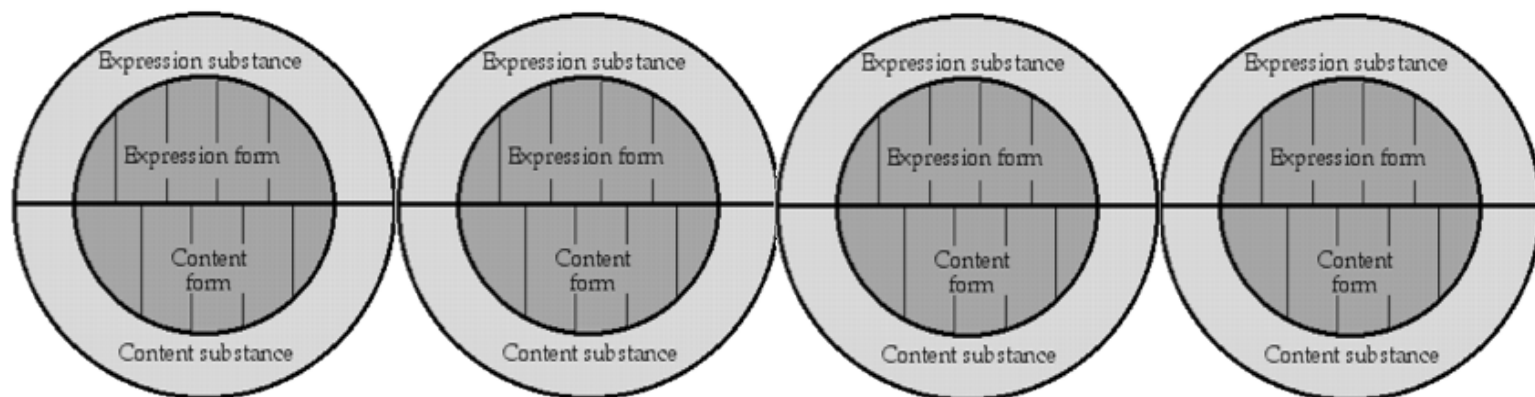
e



f

“Double articulation” (Martinet)

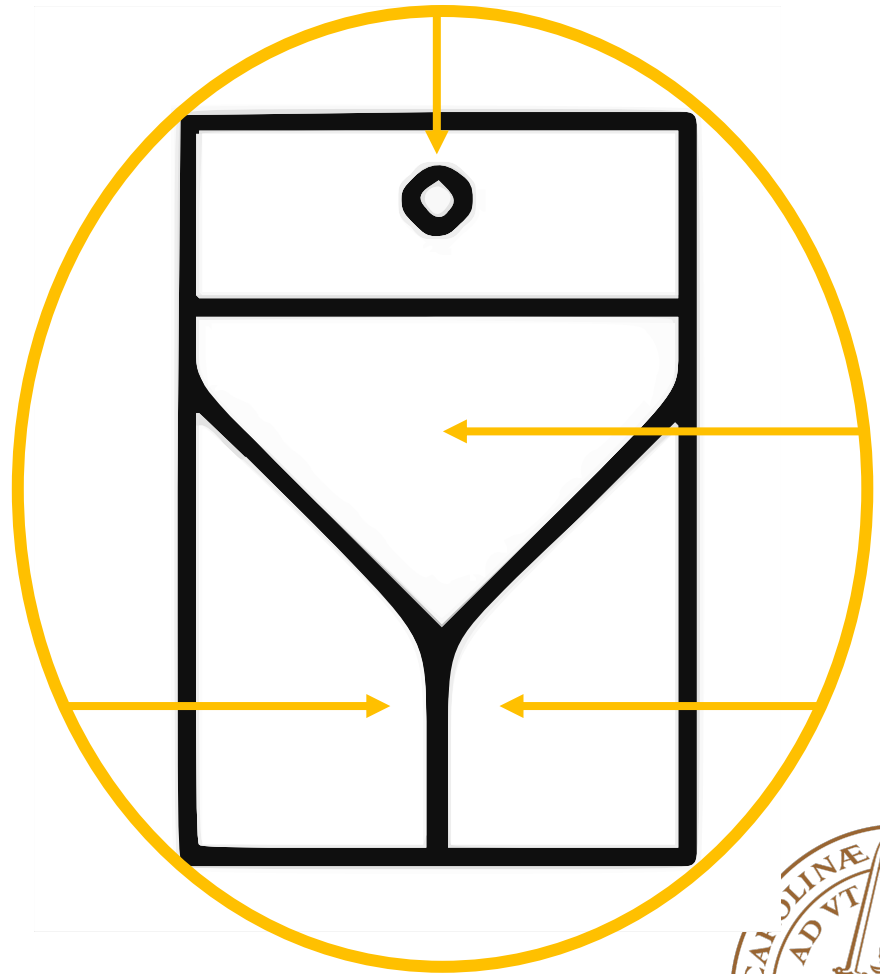
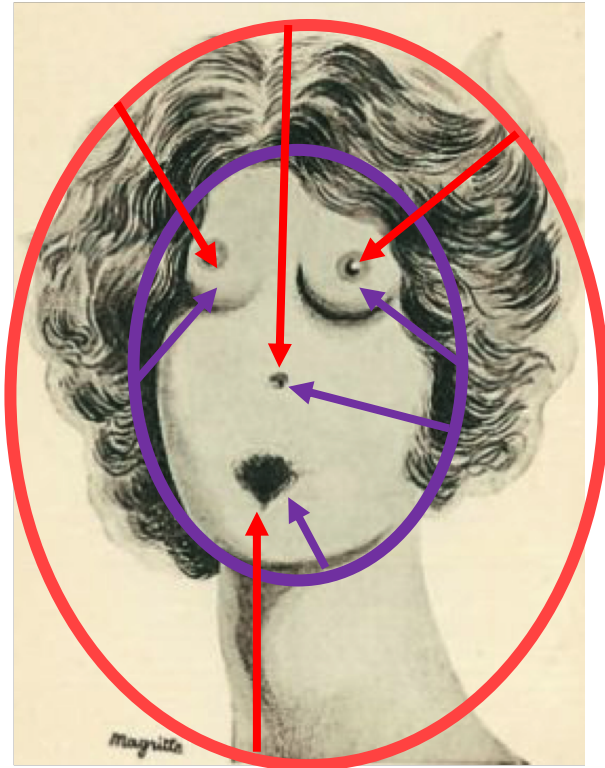
– “Duality of patterning” (Hockett)



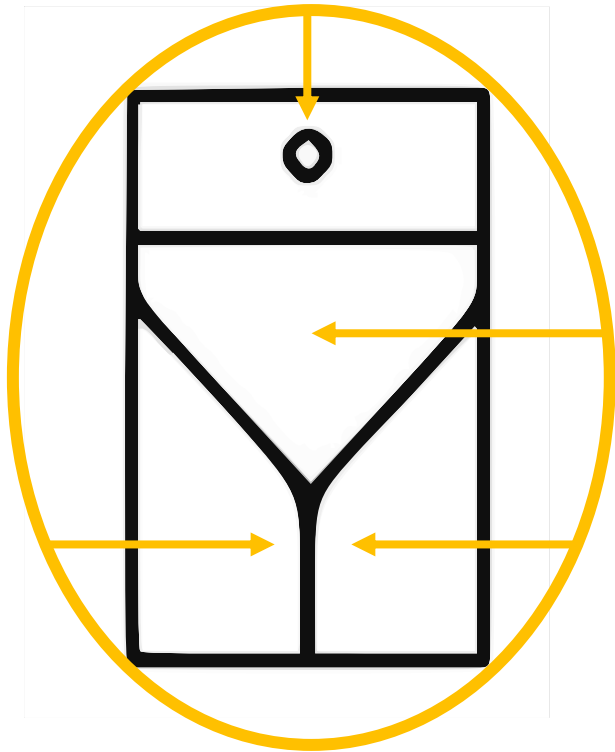
In the word “face”, the letter “f” does not stand for the front, the letter “a” for the nose, etc., not even after the letters have been put together.



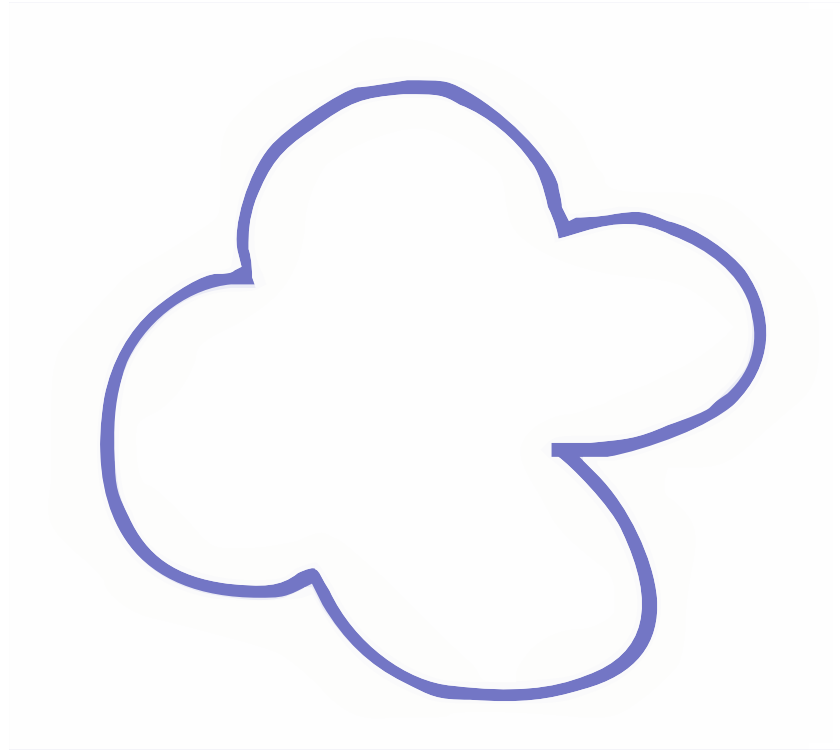
Resemantisation as applied to structurally determined doodles



So what is the difference between a doodle and a maluma?



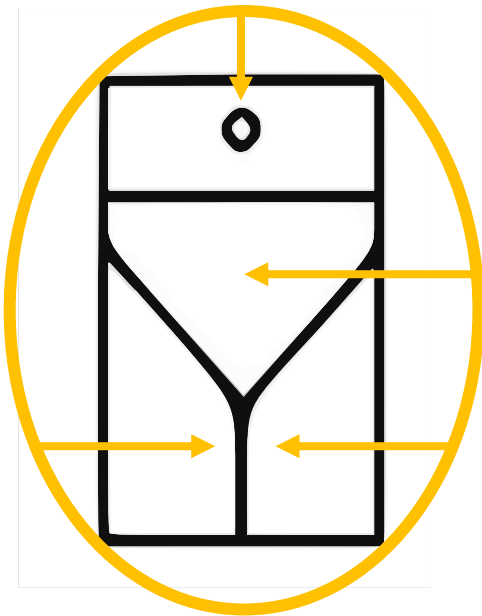
Part of our perceptual experience



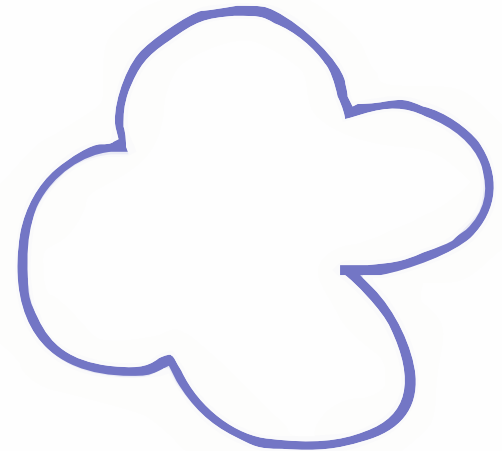
Maluma ("roundedness") all the way



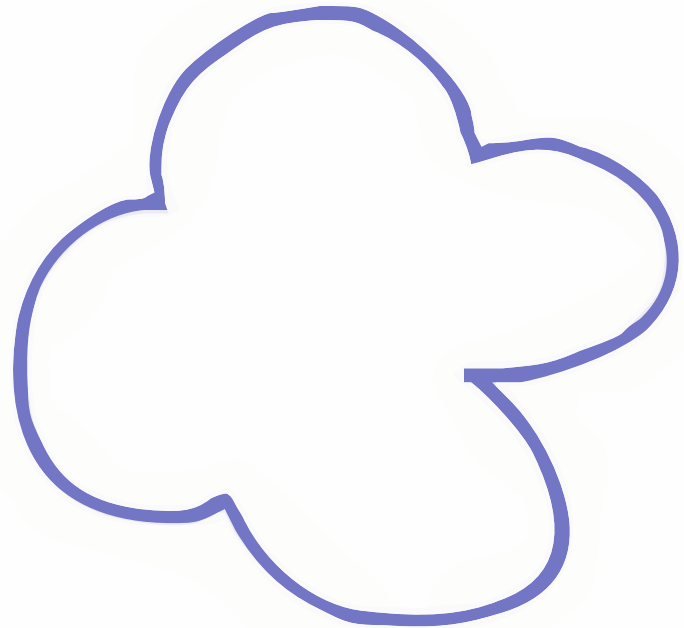
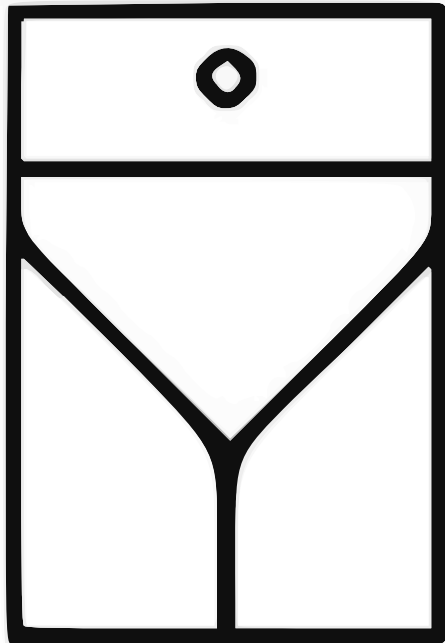
Provisional conclusion: What we have in both cases is secondary iconicity, but commonly induced by different factors: labels, in one case, and structure in the other



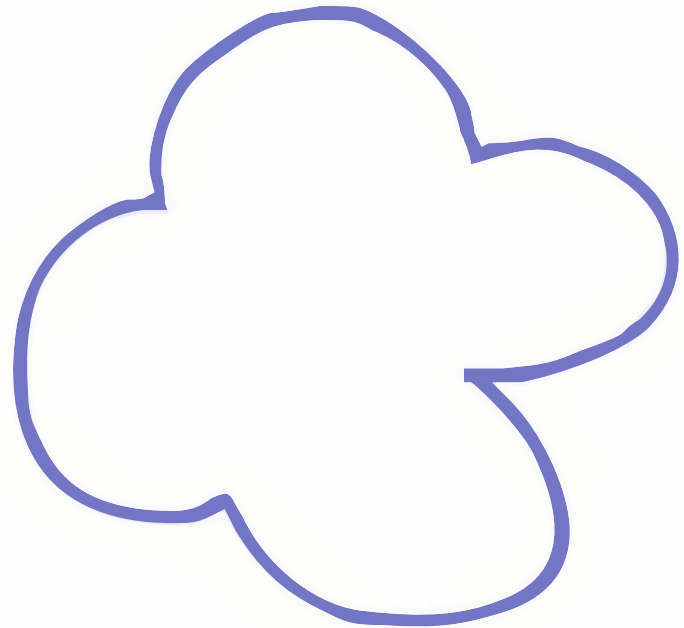
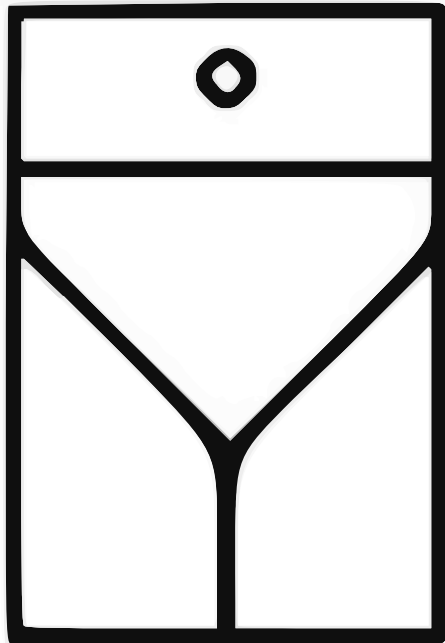
The whole point of the notion of secondary iconicity, as opposed to pure convention, is the idea that there is, beforehand, a potential iconicity, but it needs to be determined in some way, by means of labels, context, or structure



Provisional conclusion: The advantage in thinking of primary and secondary iconicity as mental operation, that is, as primary and secondary iconization, is that we can admit that it is possible, but difficult, to perceive the iconicity of both kinds of figures directly



Provisional conclusion: This also applied to phonetic segments, pieces of music, and other kinds of semiotic resources with an iconic potential: what happens depends on the mental operation applied, and the context of its application.



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