

BRIEF ANALYSIS REPORT

CONCRETE ENTITIES AND NON-CONCRETE ENTITIES IN
COGNITION

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I.

Our ontological common sense conception of entities (i.e. adults' metaphysical conceptual scheme [AMCS]) is mainly about complete concrete entities (objects), say tables, buildings, trees and so forth (*vid.*: Strawson (1959); Part. I, sec.: 3.). Depending on the activity adults perform they can conceive parts as complete concrete entities, e.g. hitting a ball with a broom's handle. From this conception the relevant kind of entities with which we (adults) establish and design interactions and predictions to move us in the world is the kind of concrete entities known by us as agents –i.e. the kind of entities which we effectively could touch, manipulate, reconstruct, and such objects that we could avoid etc. Shadows and holes seem to remain outside the domain of this kind and then the relevant kind to establish and design interactions and predictions by adults not includes these non-concrete entities. This conclusion needs to be clarified.

II.

Many studies have shown that cognitive development of the relevant body of capacities that gives rise to our AMCS depends on tracking and counting parts, holes and shadows. These studies have shown that infants start to track holes and shadows after they can individuate objects from spatiotemporal information (*cf.*: Spelke (1993); P.: 451- 458.), then, we could infer that the core aspect of objects in early interaction framework loses his central place since non-objects become to play certain roles in the following developmental stages.

We have evidence to claim that the domain of entities tracked by 3-years-olds not only includes objects but also includes non-object entities (*cf.*: Giralt & Bloom (2000)). We

need to specify the place of these roles to establish interactions with external events in adult's life through developmental stages: the role of tracking parts, non-object entities and objects individuated from spatiotemporal and featural information. This analysis will allow us to specify how special non-objects and objects are to strengthen a human adaptive ontological pretheoretical conception.

We are tempted to accept that the final status of *our* cognitive metaphysical framework is to provide human beings with necessary capacities to interact with external events in favour of their purposes. In this sense, non-objects could work as pointer entities, slave of and derivative from objects (*vid.*: Casati & Varzi (1994)) to establish and design interactions with external events (*vid.*: image). This hypothesis will be briefly explored here.



Some scientists (*cf.*: Burke (1952), Spelke *et. al.* (1995), Pylyshyn (2001) and Scholl (2001)) have shown that spatiotemporal information –indexed by, e.g., continuity in movable objects through displays- has the central role to individuate concrete complete entities. The question concerning how young children (under 10/12 months) early individuates entities lies on identify from what type of information (*cf.*: Xu (1999), Carey & Xu (2000); P.: 188 and Van de Walle, Carey & Prevor (2000)) an indexed object retains its index. In this sense, some researchers have claimed that featural information has a secondary role (*vid.*: Carey & Xu (2001)). From some evidence (*vid.*:

Xu & Carey (1996)), I'm tempted to think that infants use featural information as soon as they used spatiotemporal information to individuate objects, thus that objects spatiotemporally individuated are the initial stuff for interaction. This reason supports the idea that the basic stuff which external events consist in are moving, mutable, stable objects, instead holes and shadows are hosted in these events.

A presupposition that I adopt here lies on accept that there's no holes and shadows that do not depend on objects' properties (*vid.*: Casati & Varzi (1994)), then, I'm tempting to think that, firstly, objects individuated from spatiotemporal information and, secondly, objects individuated from featural information are the basic stuff to interact with external events, despite these events includes non-objects, as holes and shadows.

How much importance objects would have in human cognition may depend on which kind of stuff constitutes the basic reference of core beliefs in our AMCS. This could sound as a limited defense a strawsonian approach (*vid.*: Strawson (1959)): descriptive metaphysics tell us how special objects are whereas cognitive science doesn't need to fit with our AMCS.

My thesis is that how special are objects depends on what explanatory intentions we have: descriptive or revisionist (*vid.*: Goldman (1992)). If we adopt the later from the beginning plausibly we are asking for how special are objects to cognitive science to explaining human cognition development and, otherwise, if we adopt the former we are asking for how much central are objects in our AMCS. Understand which is the basic ontological stuff relevant to the fixation of core beliefs in our AMCS could help us to identify "strange principles of individuation" (*vid.*: Hirsch (1982)) restrained in our AMCS. I think that to adopt the descriptive way implies to start from characterizing AMCS –this differs from beginning from early cognitive develop of metaphysical schemes. Perhaps this strategy allows us to avoid overstated conclusions in cognitive sciences but, I think, we need initially to adopt an intermediary view. This is a methodological strategy since in science we could arrive to revisionist views that would favour prescriptive metaphysics.

III. Conclusion.

Seems plausible to accept the thesis that “it is not objects per se that have a special status in the mind of the child” (Giralt & Bloom (2000); P.: 497). I grasp this thesis in the sense that the only stuff that infants can individuate are not objects, but this not implies that objects do not make the core contribution to our AMCS, i.e. to constitute a platform for basic adaptive environmental performances in adult life. Plausibly, any young human cognitive system needs to stabilize capacities to track holes and shadows since these non concrete entities could be indispensable in a world perceived as populated with objects.

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