A researcher in the field of cultural evolution – whom I never met in person and who would be probably very surprised of this wildly out-of-context mention – twitted, few weeks ago, that "Implementation is the hard part, not the idea. [...] I have five ideas in the shower every morning. That's the easy part." My showers are, alas, far from being that exciting, but, for some reason, the musing resonated with me when I first saw it, and it continued to resonate through the reading of *The Origins of Monsters*.

There is much to like in David Wengrow's book. *The Origins of Monsters* inspects the diffusion of a very specific cultural item (first plus) making use of Dan Sperber's epidemiology of representation (second plus), and exploring how both universal cognitive factors and local, socio-economical, ones contribute to the item's success (third plus).

Let me unpack this sentence. Wengrow examines the reasons of the success of images of monsters, or, better, "composites", i.e. images of fictional beings, composed using combinations of anatomical parts of real beings: the chimaera in the Greek mythology is a well-known example of such images. According to Sperber and other cognitive anthropologists, these composite figures explicitly violate our intuitive, domain-specific, expectations (lions do not usually have a snake as a tail) and, in the same time, conform to them (heads are where heads are supposed to be, etc., and composites are readily recognised as "living kinds"). It is this combination, in jargon the fact that they are minimally counter-intuitive (MCI), that makes supernatural beings in general, and composites in this particular case, cognitively appealing.

Wengrow endorses this hypothesis, but also notes that the distribution of such composites may follow a peculiar pattern in space and time, difficult to explain if "MCI" were the only reason of their success. Such images appear to become more common "in the first age of mechanical reproduction", that is, with the emergence of the earliest urban societies, together with their commercial network and social elites, whereas they are relatively rare in the figurative art of Palaeolithic and Neolithic.

Why is it so? "The Origins of Monsters" advances an interesting hypothesis: composites, Wengrow writes, "imply within their own structures certain principles of integration that were weakly developed in prehistoric societies, becoming prominent only with the emergence of urban life (p. 59)". It is only in the first cities that the physical and social world became divided "into standard and interchangeable subunits" (p. 7) and the success of composite images, themselves representing beings built with "interchangeable subunits", is interpreted as a reflection of these new circumstances.

While surely fascinating, how convincing is this hypothesis? Obviously, its plausibility chiefly depends on the main assumption of the relative absence of images of composites in prehistory, and of their later success. I am far (very far) from being an expert, but I would have liked to see a more systematic – quantitative – analysis of the empirical support. Wengrow dismisses well-known prehistoric "monsters" such as the Löwenmensch (lion-man) figurine or the Breuil's "sorcerer" as isolated and rare exceptions, and takes later examples of composites (say the Mesopotamian lion-faced Humbaba) as representative for the period. I would be curious to know what art experts and historians have to say about that. A different line of reasoning would involve considering contemporary hunter-gatherer cultures. If the "interchangeable subunits" hypothesis is true, composites should not be particularly successful there, as individuals in these cultures do not experience the social and physical subdivision typical of urban societies. Wengrow quickly mentions that, in fact, composites are present in hunter-gatherers performances, but less in their plastic and visual art, substantiating this statement with a couple of references to Ingold and Descola (p. 30). It seems that there is here ample space for additional ethnographic and comparative studies here.

In addition, differently from the MCI explanation, it is difficult to understand exactly what kind of

cognitive mechanisms would enhance the salience of representations of composites, just because "interchangeable subunits" become more prominent in the social environment. The MCI explanation is supported by psychological results: what about the "interchangeable subunits" hypothesis? One could imagine to assess it by testing how appealing images of "monsters" are for children, and the prediction should be that they would become appealing only when children are able to appreciate the modular nature of their social environment. I am unaware of studies of this kind, and nothing similar is discussed in the book.

In sum, as a minimum the "interchangeable subunits" hypothesis cries for support from ethnography, as well as comparative and developmental psychology. That is why Wengrow lost me in his conclusion, claiming the superiority of its "archaeological – rather than laboratory-based or ethnographic – approach" (p. 112). I really would like to see in our field more ideas like the ones presented in *The Origins of Monsters*, but the book left me with the feeling that the "hard part" is yet to be done.