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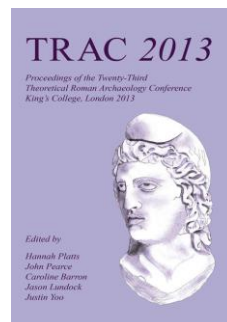
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# Dalmatian Silvanus: A Cognitive Approach to Reinterpretation of the Reliefs Representing Silvanus from Roman Dalmatia

*Josipa Lulić*

## *Introduction*

Cognitive psychology and research on evolutionary adaptive changes in the nervous system have enhanced understanding of cognitive processes (Neisser 1967; Murray 1995; Bly and Rumelhart 1999; Quinlan and Dyson 2008). The discovery that the cognitive and automatic and unconscious processes play an important role in understanding and creating the world and the self transformed the way in which most psychological phenomena were studied (Sloman 1996; Bargh and Ferguson 2000; Smith and DeCoster 2000; Sun 2002). Through a domino effect this made an impact on many disciplines. The materialistic approach which proposes that cultural facts are the products of cognitive processes tries to root the models offered by historical disciplines in a firm scientific framework – ultimately, discussion is about *things*, Kant would say (Popper 2002). It acknowledges that the material that is the focal point of research in the humanities and social sciences is a product of the human mind, and thus necessarily must conform to the laws of psychology: it offers us a tool to evaluate interpretative theories proposed on a particular subject. This is important especially when discussing the problems of integration in the Roman world. The vacuum left by the abandonment of the term and the concept of Romanisation has never been adequately filled, and different conceptualizations of the process are struggling for recognition (Bartel 1980; Mattingly and Alcock 1997; Webster 1997; Woolf 1997; Webster 2001; Mattingly 2004). The goal of this paper is not to propose a new model, or to advocate any existing one, but to offer a tool for re-examination of any interpretative theory. The premises I start from are the following: a) every interpretation stems from preconceptions, even in the cases where the author does not openly approach the material from the theoretical perspective: *atheoretical interpretation* is an oxymoron; b) there are numerous imaginable models with the explanatory power for the same evidence, sometimes contradictory among themselves; c) the use of the findings of cognitive sciences allows us to test out the proposed model not only against material evidence, but in terms of what is possible in accordance with the laws of cognition. The case study of the Dalmatian Silvanus is suitable for this task in many aspects: it is by far the most numerous religious image in Roman Dalmatia; it is accompanied by a large body of work that used the cult of Silvanus with respect to questions of the integration of the Delmatae tribe into the Roman world, and different interpretative models have been used to explain the material which came to opposing conclusions, for which there is still no consensus in the

scholarship. I will succinctly present the basic tenets of the cognitive theory of culture, and use them in re-evaluation of the case study of Silvanus in Roman Dalmatia.

### *Case Study: Dalmatian Silvanus*

Silvanus reliefs from Roman Dalmatia differ in quality, but retain common principal iconographic characteristics. Silvanus is regularly depicted as a male figure with the legs of a goat, and is often horned. In most examples he is surrounded by trees with a dog or a goat by his side, carrying a *syrix* and a *peditum*, clad in a *nebris*. We often find other deities with Silvanus, almost exclusively nymphs and Diana. In the fifty-five fragments I have collected for the corpus, he is pictured alone in thirty-three of them, and accompanied by other deities in twenty-two. Researchers have recognised two major types of Silvanus, one an older bearded man, an iconographic formula wholly corresponding to the Greek Pan; the other a younger man without a beard, typical respectively for the coastal part of the province and its interior (Rendić Miočević 1955). From a closer examination of iconographic differences related to geographical distribution I, however, propose a different classification, i.e. a series of clusters. The biggest of these can be detected in the Salona area, where we find an older bearded and horned deity often depicted in a cave, almost exclusively frontal, alone and with a number of attributes including a dog and a goat, and, an iconographic peculiarity typical for this cluster, surrounded by vegetation, as visible in figure 1. The other cluster is the Rider area, where Silvanus is also most often alone, but shown in movement, often with crossed legs and beardless. In the hinterland he is almost exclusively shown in company of other deities – Nymphs in the Salona hinterland and Diana in the Glamočko polje cluster. Inscriptions are found on eight reliefs, seven of which mention the deity: as SILVANO (Skarić 1932; CIL III 9754), shortened to SIL (Brunšmid 1905; Sergejevski 1927) or S (Kubitschek 1928; Rendić-Miočević 1984). Inscriptions (eighty-one in total) roughly follow the distribution of reliefs – out of the three epithets most often found, *augustus* is almost exclusive for the Salona area, and *silvestris* is dominant in Rider and western Bosnia, with sporadic occurrences of *domesticus* in those areas. Figure 2 is a good example of a young Silvanus with the three Nymphs.

Roman Silvanus is an ancient deity of pastures, forests and boundaries between fields and the unknown, wild nature. It is mentioned in several written sources, including Cato (*De Agricultura*), Varro, according to Augustine (*De Civitate Dei* 6.9), Virgil (*Aeneid* 8, 600–602; *Georgics* 1. 20), Plautus (*Aulularia* 674–676), Hyginus Gromaticus (*De limitibus constituendi*), Horace (*Epodes* II. 21–22) and Pliny the Elder (*Naturalis Historiae* 12.3). According to Peter Dorcey's monograph, there are some 1,100 inscriptions in the Roman Empire mentioning Silvanus from 39 BC to 339 A.D. The dedicants were most often male, urban, and from lower economic classes (Dorcey 1992). Silvanus' typical iconography is of an older bearded man, often accompanied by a dog, holding a sheaf of wheat and wearing an oak wreath. In the provinces we can often find him syncretised with an autochthonous deity: an inscription that links Silvanus to a Celtic deity Succellus (the deity of agriculture and forests) was found in Augst (AE 1926, 40) and Cernunnos, another Celtic deity, can sometimes be found in connection to Silvanus in his forest aspect (Bober 1951). In Roman Britain Silvanus can be found in relation to Cocidius, an autochthonous deity of the hunt (Green 1989).

The cult of Silvanus was not primarily a public one. There was no festival of Silvanus in the calendar, a public shrine or a *collegium* of priests, so the cult remained in the private sphere for the most part (Dorcey 1992). However that did not lower its popularity, proven by the number of

inscriptions. The largest number was discovered in Italy (half the 1,100 inscriptions), followed by Pannonia, Dalmatia and Dacia. Although the area under Silvanus' protection points to a rural setting (forests, meadows), the greatest number of inscriptions was found in the city of Rome, a fact Dorcey explains by nostalgia for a simpler life (Dorcey 1989).

The first publication of the Dalmatian reliefs in the late 19th century (Hirschfeld and Schneider 1885) interpreted them as representations of Pan. Later scholars accepted the name found in inscriptions and interpreted it as an autochthonous Illyrian god (Sergejevski 1929; Čremošnik 1957). The most influential scholar of the reliefs is Dujе Rendić-Miočević, who adheres to the autochthonous theory. Moreover, he develops this even further, arguing that the specific nature of the reliefs from the hinterland is due to the conservative attitude of the Delmatae tribe that kept its language and culture in resistance to Romanisation much longer than the coastal region (Rendić-Miočević, 1955;1989). After the 1960s the intensity of research slowly diminished, with sporadic publication of new finds (Bojanovski 1979; Rendić-Miočević 1984; 2007). On the other hand, Peter Dorcey writes that if we take into consideration that all of the figural reliefs with inscriptions mentioning Silvanus show the Pan iconography (*syrix* and *pedum*), the dedicants most probably had Silvanus in mind, and recognises this as a sign of advanced Romanisation (Dorcey 1992). In 2013 D. Džino approached the cult from a more theoretical point of view, arguing for the interaction of Roman, Greek and autochthonous agencies.



Fig. 1. Silvanus, limestone, found near Salona, now at the Archaeological Museum Split, inv. no. D437. (Reproduced with kind permission).



Fig. 2. *Silvanus and Nymphs*, limestone, found in Tilurium, now at the Archaeological Museum Split, inv. no. D153 = A1.170. (Reproduced with kind permission).

In the historiography of research, we find two main ways to interpret the reliefs. Rendić-Miočević, who understands Silvanus as an autochthonous deity of the Delmatae tribe, represents the first, rooted in the scholarship tradition of the first half of the 20th century. The second is the ‘outsider’s’ view of Peter Dorcey, who, approaching the study of the reliefs unburdened by the legacy of the traditional local scholarship, sees the abundance of finds (reliefs as well as the inscriptions), as a sign of Romanisation. That difference is something to be expected, considering the knowledge we have on cognitive schemata (Neisser 1967). While Dorcey had tuned his neural structure through the cognitive architecture of the mind to look for the Roman Silvanus, Rendić-Miočević was looking for signs of resistance. While Dorcey’s focus is easy to explain (he was writing a monograph on the Roman Silvanus), Rendić-Miočević needs some further clarification. This scholar, mostly known for his onomastic work on Illyrian names in Latin inscriptions, was born in Split in 1916 into an old noble family. His family played a significant role in the second half of the 19th century and the conflict between *autonomaši*, a political party that advocated the use of Italian language and later supported the irredentist politics of the Italian fascist government, and *narodnjaci* who were firmly claiming a Croatian identity for Dalmatia (Zaninović 1992). Rendić-Miočević grew up with the notion of a Croatian identity and tradition that resisted foreign (Italian) cultural influences for centuries, an idea that must have played a great role in his work on Illyrian culture. Some quotations from his work (in my translation) help emphasise this point: ‘[T]he image we get from any Roman province (...) can be completely wrong if we allow ourselves to be seduced by false impressions and the often unimportant elements of superficial icing, under which there was a completely different world’. (Rendić-Miočević 1989: 425) By ‘icing’ he refers to the textual sources and material remains, and this different world beneath is the undocumented world of resistance and tradition.

Apparently, Rome asked for a ‘cosmopolitan levelling of the peoples she ruled, which, according to Rome, had the same meaning as Romanisation (i.e., a liquidation of certain national values), which are the basic component of the resistance of a nation to everything that is being forced on them from the outside’ (Rendić-Miočević 1989: 427). So it was easy to see how Rendić might have unconsciously identified Croats, with whom he identified, with the Illyrians: ‘[T]he problem of continuity is gaining more and more importance, here and everywhere in the world, (...) and this is especially important to *us*, because while investigating the cultural and ethnic components of *our own beings* we find many particles that survived due to those people who struggled and fought for centuries, on the battlefield and in their homes, in everyday life and in craftsmanship, to preserve their individuality, national characteristics and faithfulness to tradition’ (Rendić-Miočević 1989: 425–6, my emphasis).

It is not my intention to give my *opinion*, or even my best educated *guess* about which of the interpretations is truer, since my view is also inevitably skewed due to my own cultural upbringing and education. My aim is to investigate how sustainable each of them is when measured by the yardstick of cognitive theory of culture.

Even before we use tools provided by cognitive theory, we must realise that the existing interpretation leaves many questions unanswered. We do not have any names preserved in inscriptions for this putative autochthonous deity. The traditional conceptualisation of *interpretatio Romana* (Wissowa 1916–19; Ando 2005) is hard to use in this case. It is not that an outsider saw the strange rituals to an unknown deity and dubbed it Silvanus because it was closest to the idea he had in his pantheon, but that every single inscription confirms that the people who created the monuments (as patrons or directly as stone carvers) thought of this deity as Silvanus. Even if we can believe that an educated member of the Delmatae elite in the urban areas decided to adopt a Roman name, or a Roman newcomer appropriated a foreign god under a known name, it is difficult to apply that reasoning to the reliefs found high in the mountains. On the other hand, there is the iconography. If we accept Dorcey’s claim that the popularity of Silvanus is due to the extent of Romanisation, why did that Romanisation not bring with it a Roman representation of Silvanus as well? And why is Silvanus depicted with Diana or three nymphs? That is definitely not the standard Roman arrangement.

### *Cognitive theory of culture*

Human culture is a product of the human mind. The human mind is a product of countless generations of evolution, survival and passing on of genes and, like any other complex system, is the answer to evolutionary problems posed by the life of a hunter-gatherer in the Pleistocene era, in the same way as sight, balance or proprioception. Since *Homo sapiens* evolved in a social environment, living in groups, it was important to compute social relationships, motives, emotions and intentions through a theory of mind (Povinelli and Preuss 1995), not only distances or language (Barkow *et al.* 1992). The human mind is modular, claim the evolutionists, along with neuroscientists and cognitive scientists; it is not a *tabula rasa* that can be imprinted with any kind of representations, and direct learning is far from the only way new concepts are acquired. As the mind works in a certain way, it will also create content to reflect its own structure (Anderson 1983). The idea that culture is a product and therefore dependent upon the human mind is the premise in a great body of work on the cognitive theory of culture (Atran 1990; Boyer 1990; Cosmides and Tooby 1992; Sperber 1996; Sperber and Hirschfeld 1999; Pyysiäinen 2003; Todorov *et al.* 2011).

The basic premise is the following: our minds are filled with ideas, concepts, and representations. Only a small part of those myriad thoughts or images that cross our minds every minute will be communicated. Of that small number, others will understand and find interesting and significant enough to retain but a handful. And some of them will be so captivating that others will communicate them further, thus creating a new process of cognition and communication. The ideas that will spread through a large part of the population in that manner and remain recognisable enough to become widely understood as the same concept will become cultural ideas. Therefore, any idea that is being communicated could in fact be considered cultural on a scale, instead of being understood traditionally, as a binary opposition that regarded some ideas as cultural and others as individual (Knight and Malley 2008; Tooby and Cosmides 1992). This is in fact the basics of Sperber's so-called epidemiological theory of culture, beautifully defined as 'the precipitate of cognition and culture in a human population' (Sperber 1996: 90).

One of the most important functions of our cognitive system is to make sense of the available stimuli and to organise them in a way that we can use them. The things we take for granted as real and objective are quite often socially (and thus cognitively) constructed (Panofsky 1991; Houdé *et al.* 2000; Neath and Surprenant 2005). We interpret the *importance* of information on a subconscious level and are far more likely to notice and remember information similar to that which we already have, and ignore that which is unfamiliar (Conway *et al.* 2001; Pashler *et al.* 2001). Our cognitive architecture that creates those filters did not evolve in order to make our world view more accurate, but, maybe counterintuitively, to make it *less* accurate, and therefore more useful – our mind has developed to think in terms of categories. One of the main vehicles for categorical thinking is domain-specific modularity (Fodor 1981; Farah 1990; Hirschfeld and Gelman 1994). We create categories of objects so we can make the distinction between a fruit and the tree it grows on, but also of people, so we can make the distinction between friends and foes. The fact that we have evolved in complex groups is responsible for the development of a series of other domain-specific modules concentrated in social cognition – cheating detection, kin recognition and many others (Cosmides and Tooby 1992). We are a *zoon politicon* in the fullest sense. Domain-specific modules create a framework for the central theme of cognitive psychology: cognitive schemata. Cognitive schemata are a network of small compartmentalised units of knowledge that we acquire in different ways, which form a sort of a theory about the world outside. They are internal abstractive representations that allow us to think in terms of species rather than single occurrences of individual representation (Sommerhoff 2000). The same concept has been referred to as scripts, concepts, states or internal goal states (Chartrand and Bargh 1996; Barrett *et al.* 2004). In return, every time we meet an individual occurrence (for example, a black four-legged animal with a yellow collar and a chip of its ear missing in the street just outside my window), we will put it in the box of a cognitive scheme it fits best. We will call it a *cat*, although nominalist philosophy was actually right: *cat* is not a real thing. We use those terms to describe countless individual occurrences, and in return, when we fit one of those in a box, we ignore the differences and highlight similarities on a perceptual level, long before we even become aware of noticing a cat (Boyer 1986). Perception and interpretation of the same event is completely different depending on the cognitive schemata that we use to experience the world around us. Therefore, if cognitive schemata are responsible for our perception and interpretation of a tangible reality, what happens with more delicate, vague, symbolic cultural products like rituals? Jacob Mackey (Mackey 2009) shows the importance of cognitive schemata in understanding Roman rituals by contrasting naive and informed observers of the inauguration ritual. Since 'social practices and institutions – unlike molecules, magnolias,

or marsupials – are constituted by and hence ontologically dependent upon human cognition’ (Mackey 2009: 117), the cognitive schemata of a person who knows about and believes in the agency of a supernatural power called ‘Jupiter’ will enable them to recognise messages and signs in the way birds fly, while the whole meaning of the ritual will be lost on the one who possesses different schemata.

### *Cognitive theory of religion*

The main premise of the cognitive view of religion is that religion is nothing more than a cultural institution, and, like any other part of culture, it is a product of the human mind, and as such governed by all the mechanisms and laws discussed above. Why did humans evolve in order to create gods and rituals? We did not; rather we evolved so we could make the most of life in groups, knowing our kin, organizing relationships, transferring knowledge – and religion is just a by-product of such mechanisms (Andersen 2001; Atran 2004; Barrett 2000; 2001; Pyysiäinen 2001). We do not have specific ‘religious’ minds, and in that sense we do not have a specific thing called ‘religion’ that could not be understood in the same way as any other cultural products. So what are the essential mechanisms responsible for religion?

The first one is the detection of human agents. Guthrie elaborates that no religion is non-anthropomorphic: every deity is grounded in the ontological module of the human agent: it communicates, listens, acts and decides (Guthrie 1993; Boyer 1992; 1994a; 1994b). Humans have evolved to ascribe intentional agency and causality to random events, since the cost of mistaking the sound of wind for a sound made by a predator is much smaller than the other way around. In the former case, we would be startled, and in the latter we would be dead. However, those intentional agents that we see everywhere and end up transforming into gods come with a twist, as Boyer would point out: all supernatural agents are ontologically minimally counterintuitive. They break just a large enough number of ontological boundaries to be extremely cognitively salient and at the same time not odd enough not to have a module to which we can assign them (Boyer 2000). Based on a cognitive theory of religion, those two mechanisms – anthropomorphisation of our environment and cognitive salience of minimally counterintuitive concepts – are the reason behind the origin of religious thought. Once created, a religious concept will behave in the same way as any other cultural concept during its transmission, thus blurring that sacred/profane boundary. Taken from there, it will create an ever-growing complex system around the simple idea of a counterintuitive agent. Religious institutions will arise, among other reasons, from the need to support religious cognition. Human mind uses the environment to delegate a series of cognitive processes to it. The extended mind theory (Clark and Chalmers 1998; Dennett 2000; Clark 2008) has blurred the borders we used to be so certain of, the ones that divided our thoughts and ourselves and the world around us, pairing us with objects from the environment into functioning systems. Instead of being mere tools for thinking, the extended mind places a part of the cognitive process into objects themselves (Geertz and Jensen 2011). In that regard, Matthew Day writes:

‘[T]he recognition that in some contexts not all of the relevant computational machinery fits inside the head suggests that we should reconsider the possible role(s) and significance of material culture in religious cognition. More specifically, the broad spectrum of rituals, music, relics, scriptures, statues and buildings typically associated with religious traditions may be more than quaint ethnographic window dressing.



Rather than thin cultural wrap around that decorates the real cognitive processes going on underneath, these elements could represent central components of the relevant machinery of religious thought.’

(Day 2004: 101).

If pen and paper are the outer parts of the system of mathematical thought, Day recognises the pen and paper of religious thought in rituals, images, scriptures and other parts of religious culture. Conceptualisation of an image as a possible agent, especially in a religious setting, has also been proposed in Gell’s cognitive anthropology of art, and the germs of this idea can be found in Freedberg (1989) and other scholars concerned with reception (Gell 1998; Layton 2003).

Keeping all this in mind, I propose that we define religion in cognitive terms as a loosely connected coupled system of cognition, action and objects understood by a large part of a population as pertaining to the same supernatural concept. It is a network of representations that can vary greatly for a single agent, depending on their cognitive schemata and on their access to the public part of the system comprised of texts, rituals, statues and any other material objects the agents associate with it. Richard Gordon has already defined it in similar terms: ‘the religion of any society is not an internally coherent set of rituals and beliefs practised and held by all its members, but rather a loose federation of beliefs only partly expressed in a series of cult institutions’ (Gordon 1996: 92). Therefore, religion could be seen on two levels. RELIGION (like *N* in mathematics) is a set of all the beliefs of all the agents who hold a certain religious concept, and all the external depositories used for some of the religious cognition. And religion (like *n* in mathematics) is seen as a single subset of concepts held by a single agent and external depositories available to him or her. As cultural historians, we are interested in the whole of the *N*, but we must never make the mistake of assuming that any given element of *N* can be ascribed to a single *n*. What we know about Roman religion from Varro or Lucian, for example, is relevant only to Varro, Lucian, and those who read them, and even then only as a part of the whole dynamic system. We assume that their understanding of Roman religion is grounded within the wider shared beliefs, and we are right to a certain extent, but we must never forget that we are dealing with a part, rather than the whole and that discovery of a different part will not necessarily fill the lacuna of the religious system we are interested in. Some of those cautionary measures might appear trivial but close reading of scholarship on religion in the provinces often shows that it is not trivial at all. Every aspect of this cognitive scaffolding (prayers, rituals, space, architecture, sacred objects, and so on) requires a special study, but I shall concentrate on the images.

Richard Gordon discusses the role of religious art in the Graeco-Roman world as following:

‘[M]aking, then, involves knowing. Making is the process of literally reifying knowledge; it is an act of translation. This objectified knowledge alters the world in a patterned and systematic way. In the special case of religious art (a tiny sub-system of the totality of human making) the objectification of the taxonomy of power, subject as it is to the wider rules of making in a given society, conditions in turn the taxonomy which created it. Because each object embodies choices, it opens up some further possibilities while foreclosing others. Religious art becomes itself a generative source of evocation (...) At the same time, the freedom of the maker is constrained by the knowledge which he is making, a knowledge which does not derive from himself’.

(Gordon 1979: 21).

We now know the mechanisms of the mind that regulate that conceptualisation of art. We can go even further, and investigate what is special and particular in the role of images in religious cognition (Gauthier *et al.* 1997; Kastner and Ungerleider 2000; Hayward and Tarr 2005). Concepts that are regarded high on the imagery scale (visually attractive) are recalled easier than the ones that are not (Slone *et al.* 2007), so those concepts will be transmitted more frequently. Concepts that are visually attractive are more easily turned into images. If we follow that reasoning, on the one hand, images will appear because of the way our brain works, and on the other, they will help retain religious concepts, as they will serve as constant reminders of specific choices of concepts that are repeated and transmitted (Sommerhoff 2000). They will form a part of our cognitive schemata, which will influence the way we experience religion. The problem of images changing (or ‘distorting’, from the theological point of view) the concept of divine was recognised throughout history in large iconoclastic movements. The fear was always that the image would corrupt the idea one should have of the Christian or Muslim God if it were depicted, because its nature is far beyond the possibility of human representation. Research done by Barrett and Van Orman shows that those fears were in place: ‘exposure to images for purposes of worship may lead to distorted, more limited concepts of God. In this particular case, image use is related to a tendency to hold anthropomorphic characterisations of God’ (Barrett and Van Orman 1996: 44).

### *Dalmatian Silvanus: A Cognitive Approach*

How does theory help us with our case-study? It provides us with a scientifically based yardstick against which we can evaluate the existing interpretation of the material, and it enables us to pinpoint the important elements in the process of the construction of a cultural institution, like religion.

What would resistance theory have us believe, in terms of cognitive processes? It assumes that an agent, a particular person, believed in the existence of a supernatural agent, a belief that was common in his social group. That god had a name, and responded to a particular visual idea: of a young shepherd with goat legs and horns. So far, so good. Although no names are preserved, we should presume that if they had a notion of a god, they would have a way to address it. The psychological experiments (Slone *et al.* 2007) showed us how important visual concepts are, so they could have had an image of a god in their minds, even if the absence of evidence in this particular case of pre-Roman representations is indeed an evidence of absence. The reasons why an idea of a deity would appear and end up being transmitted to the level of a cultural fact have been discussed at length elsewhere and we should assume that the whole system would be strengthened by the underpinnings of ritual, sacralisation of space and time, and so on. Therefore, when a person who is a part of that religious system encountered the Roman newcomers, the resistance theory proceeds, they were forced to accept a new system (although the mechanisms of that enforcement have not been explained). But they would keep the old concept in their mind, and at the same time consciously pretend that they actually believed in the Roman god. So they would put a kind of a Roman mask to the face of an Illyrian deity and keep both concepts in mind at the same time. Moreover, they would communicate two separate concepts to their children, teaching generations for centuries how to interpret one same stimulus through two different cognitive schemata simultaneously. They would keep in mind the ‘original’ name and concept, but use the Roman name in every public representation without exception.

What cognitive theory teaches us is that such complex notions are not possible in linear cognition (Bargh and Chartrand 1999; Sun 2002; Pyysiäinen 2004), and certainly cannot be transmitted in this way (Thagard 2005; Schönplflug 2008; Padilla 2008). Even in the case when we have very extensive external repositories for religious thought that help us deal with highly developed abstract concepts – like the theological books of Christianity – those professed beliefs have very little to do with our actual beliefs: notable examples include the preference for a certain type of miracle and the temporality of God (Barrett 1999). The resistance model also does not take into account that images *are* a part of religious cognition, they do not *represent* it, so we cannot talk about one *true* image of this deity, and its contamination. The image we see is an important part of the concept: it is how the believers saw the deity.

What is also vital to remind ourselves of is that the relationship between thought and image is multifold, even with those objects that do not necessarily make part of the extended cognitive process: not only do we create gods in images as we see them; the image that we see helps create the concept of gods as well. Everything we know about learning in the cognitive paradigm, from Chomsky onwards, teaches us that explicit teaching plays a minimal role in learning: our mind has evolved to implicitly pick up extremely large quantities of information that were never knowingly presented to us. Being born into a world populated by images of Silvanus will help create a cognitive schema of that deity that will later on serve as a filter for perceiving, interpreting, categorizing and retaining all subsequent information regarding this concept. The familiar pieces of information will be much more easily recognised and retained, the less familiar will be changed to fit the existing concept better, and the completely unfamiliar will in most cases be completely left out from our perceptible fields. Therefore, what the mechanics of our mind prove is that we cannot be dealing with two separate concepts the way we used to by studying Roman religion the traditional way, where the gods were fixed material entities and the believers could get it right or wrong, but the cultural concepts existed outside of them. Believers have an active role in creating a religious concept or any other cultural concept – there is no fixed sacred/profane border in the cognitive theory of culture – and what they create is a new deity that deserves attention in its own right.

What of model that claims that the popularity of Silvanus is due to the extent of Romanisation? The cognitive translation of this theory goes as follows: the Romans came to the territory of Dalmatia. They believed in a god called Silvanus (or at least performed rituals dedicated to him, to leave to one side the debate over belief in Roman religion). The agents who were identified as a part of the indigenous population had, or did not have, their own beliefs (irrelevant to the model), and accepted the concept brought to the area by the Romans, through rituals, inscriptions, and probably images as well. The differences seen in the iconography mean that they did not *understand* the concept well enough. This standard model of Romanisation, which sees cultural concepts as fixed material entities that are actively transferred by one group to the other, which then passively learns them (successfully or less than so), falls on the first test of cognitive theory. Cultural concepts are not passively transferred from one group to the next; they are dynamically created in the processes of cognition and communication.

The Dalmatian Silvanus is not a Roman masking of an indigenous deity; it is also not a poorly understood Roman god: it is a reduction of all the interpretations, of all the individual concepts, of all the understandings of the religious universe about the contact of two civilizations. It is a cultural concept that should be investigated in its own right, created in a negotiation of different communicated ideas, concepts, pre-formed rituals and created images. We can easily recognise the different sub-concepts co-existing in the area (such as the Silvanus of Salona, or the Silvanus

and the Nymphs) that are corroborated by the geographical distribution of the finds. The fact that it is difficult, if not impossible, to depict Silvanus alone and surrounded by vegetation in the Dalmatian inland, or to imagine two Silvanus in a single relief (which we can find on an example from Jajce) in Salona, shows more than a superficial difference in taste or abilities of the local craftsmen: it points to different understandings of the concept and it is absolutely explicable by the cognitive pattern of a religious concept created from the ‘bottom up’.

### *Concluding remarks*

What cognitive theory makes evident is the need for further re-evaluation of the concept of Romanisation (used here as a technical term), bringing further proof to or discouraging the existing models. The cognitive approach therefore does not provide another great theory that will solve all of the open questions on the subject; it provides us with the tools grounded in scientific research to start from the material and build the models from the bottom up, just as culture and society are built from the numerous instances of cognition and communication. It also provides us with the tools to evaluate any given interpretative theory to available evidence. It serves as a framework within which to fit possible explanations.

I will conclude with a quote from Thomas Habinek, to end with a question mark, as any excursion into a new and exciting interdisciplinary field should:

‘[B]ut what if we actually believe in neuroscience (or Stoicism for that matter) – that is, take seriously the unity of brain, body and environment, and accept that knowledge is a secure reconfiguration of the mind in accordance with sense-presentations that fully grasp reality? In that case we have to accept some scary if ultimately exhilarating consequences, as the Stoics themselves already recognised. We have to accept that our thoughts are as much a product of our environment and experience as of our volition or biology, that our minds are not exclusively our own. Are we ready to accept the consequences – for our academic disciplines, but more generally and more importantly for our ethics, aesthetics and politics? Once again the Stoics provide a useful reference point, a way for humanities and historians, even as we immerse ourselves in the total mixture of a materialist universe, to metastasise our knowledge into the body of science. The Stoics took seriously the implications of their materialism; they regarded ethics, physics, and logic as variant presentations of and means of access to the same physical reality. Are we – humanists and scientists alike – willing to do the same?’

(Habinek 2011: 72–73)

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### *Bibliography*

- Anderson, J.R. 1983. *The Architecture of Cognition*. Cambridge, MA: Harvard University Press.  
 Anderson, J.R. 2001. *Religion in Mind. Cognitive Perspectives on Religious Belief, Ritual, and Experience*. Cambridge: Cambridge University Press.  
 Ando, C. 2005. Interpretatio romana. *Classical Philology* 100(1): 41–51.

- Atran, S. 1990. *Cognitive Foundations of Natural History*. Cambridge; Paris: Cambridge University Press; Editions de la Maison des Sciences de l'homme.
- Atran, S. 2004. In *Gods We Trust: The Evolutionary Landscape of Religion*. New York: Oxford University Press.
- Bargh, J.A. and Chartrand, T.L. 1999. The Unbearable Automaticity of Being. *American Psychologist* 54: 462.
- Bargh, J.A. and Ferguson, M.J. 2000. Beyond Behaviorism: on the Automaticity of Higher Mental Processes. *Psychological Bulletin* 126: 925–945.
- Barkow, J.H., Cosmides, L. and Tooby, J. 1992. *The Adapted Mind. Evolutionary Psychology and the Generation of Culture*. New York: Oxford University Press.
- Barrett, J.L. 1999. Theological Correctness: Cognitive Constraint and the Study of Religion. *Method and Theory in the Study of Religion* 11: 325–339.
- Barrett, J.L. 2000. Exploring the Natural Foundations of Religion. *Trends in Cognitive Sciences* 4: 29–34.
- Barrett, J.L. 2001. How Ordinary Cognition Informs Petitionary Prayer. *Journal of Cognition and Culture* 1: 259–270.
- Barrett, J.L. 2008. Why Santa Claus is Not a God. *Journal of Cognition and Culture* 8: 149–161.
- Barrett, J. L. and Van Orman, B. 1996. The Effects of Image-Use in Worship on God Concepts. *Journal of Psychology and Christianity* 15: 38–45.
- Barrett, L.F., Tugade, M.M. and Engle, R.W. 2004. Individual Differences in Working Memory Capacity and Dual-Process Theories of the Mind. *Psychological Bulletin* 130: 553–573.
- Bartel, B. 1980. Colonialism and Cultural Responses: Problem Related to Roman Provincial Analysis. *World Archaeology* 12: 11–26.
- Bly, B.M. and Rumelhart, D.E. 1999. *Cognitive Science*. San Diego: Calif. Academic Press.
- Bober, P.F. 1951. Cernunnos: Origin and Transformation of a Celtic Divinity. *American Journal of Archaeology* 55(1): 13–51.
- Bojanovski, I. 1979. Novi spomenici Silvanove kultne zajednice s Glamočkog polja. *Vjesnik Arheološkog muzeja u Zagrebu* 10/11: 115–131.
- Boyer, P. 1986. The 'Empty' Concepts of Traditional Thinking: A Semantic and Pragmatic Description. *Man* 21: 50–64.
- Boyer, P. 1990. *Tradition as Truth and Communication: Cognitive Description of Traditional Discourse*. New York: Cambridge University Press.
- Boyer, P. 1992. Explaining Religious Ideas: Elements of a Cognitive Approach. *Numen* 39: 27–57.
- Boyer, P. 1994a. Cognitive Constraints on Cultural Representations: Natural Ontologies and Religious Ideas. In L. Hirschfeld and S.A. Gelman (eds.) *Mapping the Mind*. Cambridge: Cambridge University Press: 391–411.
- Boyer, P. 1994b. *The Naturalness of Religious Ideas*. Berkeley: University of California Press.
- Boyer, P. 2000. Functional Origins of Religious Concepts: Ontological and Strategic Selection in Evolved Minds. *Journal of Royal Anthropological Institute* 6: 195–214.
- Brunšmid, J. 1905. Kameni spomenici Hrvatskoga narodnoga muzeja u Zagrebu. *Vjesnik Arheološkog muzeja u Zagrebu* 7: 205–222.
- Chartrand T.L. and Bargh J.A. 1996. Automatic Activation of Impression Formation and Memorization goals: Nonconscious Goal Priming Reproduces Effects of Explicit Task Instructions. *Journal of Personality and Social Psychology* 71: 464–478.
- Clark, A. 2008. *Supersizing the Mind*. Oxford; New York: Oxford University Press.
- Clark, A. and Chalmers, D. 1998. The Extended Mind. *Analysis* 58: 7–19.
- Conway A.R.A., Cowan N. and Bunting M. F. 2001. The Cocktail Party Phenomenon Revisited: the Importance of Working Memory Capacity. *Psychonomic Bulletin & Review* 8: 331–335.
- Cosmides, L. and Tooby, J. 1992. Cognitive Adaptations for Social Exchange. In J. H. Barkow, L. Cosmides and J. Tooby (eds.) *The Adapted Mind*. New York: Oxford University Press: 163–228.
- Čremošnik, I. 1957. Narodna simbolika na rimskim spomenicima u našim krajevima. *Glasnik Zemaljskog muzeja u Sarajevu*: 217–235.

- Day, M. 2004. Religion, Off-line Cognition and the Extended Mind. *Journal of Cognition and Culture* 4(1): 101–122.
- Dennett, D.C. 2000. Making Tools for Thinking. In D. Sperber (ed.) *Metarepresentations*. Oxford: Oxford University Press: 17–29.
- Dorcey, P.F. 1989. Silvanus Vilicus?. *Zeitschrift für Papyrologie und Epigraphik* 79: 293–295.
- Dorcey, P.F. 1992. The Cult of Silvanus. *A Study in Roman Folk Religion*. Leiden: Brill.
- Dzino, D. 2013. The Cult of Silvanus: Rethinking Provincial Identities in Roman Dalmatia. *Vjesnik Arheološkog muzeja u Zagrebu*, 45(1): 261–279.
- Farah, M.J. 1990. *Visual Agnosia*. Cambridge, Mass.: MIT Press.
- Fodor, J.A. 1981. *Representations*. Cambridge, Mass.: MIT Press.
- Freedberg, D. 1989. *The Power of Images. Studies in the History and Theory of Response*. Chicago and London: University of Chicago Press.
- Gauthier, I., Anderson, A.W., Tarr, M.J., Skudlarski, P. and Gore, J.C. 1997. Levels of Categorization in Visual Recognition Studied Using Functional Magnetic Resonance Imaging. *Current Biology* 7: 645–651.
- Geertz, A. and Jensen, J. 2011. *Religious Narrative, Cognition and Culture: Image and Word in the Mind of Narrative*. Sheffield: Equinox Publishing.
- Gell, A. 1998. *Art and Agency*. Oxford: Clarendon Press.
- Gordon, R. 1979. The Real and the Imaginary: Production and Religion in the Graeco-Roman World. *Art History* 2(1): 5–34.
- Gordon, R. 1996. *Image and Value in the Graeco-Roman World*. Aldershot: Variorum.
- Green, M.J. 1989. *Symbol and Image in Celtic Religious Art*. London – New York: Routledge.
- Guthrie, S. 1993. *Faces in the Clouds*. New York: Oxford University Press.
- Habinek, T. 2011. Tentacular Mind. Stoicism, Neuroscience, and the Configuration of Physical Reality. In B.M. Stafford (ed.) *A Field Guide to a New Meta-field. Bridging the Humanities-Neuroscience Divide*. Chicago: University of Chicago Press: 64–83.
- Hayward, W.G. and Tarr, M.J. 2005. Visual Perception II: High-Level Vision. In K. Lamberts and R.L. Goldstone (eds.) *Handbook of Cognition*. London, Thousand Oaks, Calif: SAGE: 48–71.
- Hirschfeld, L. and Gelman, S.A. (eds.) 1994. *Mapping the Mind. Domain Specificity in Cognition and Culture*. Cambridge: Cambridge University Press.
- Hirschfeld, O. and Schneider, R. 1885. Bericht über eine Reise in Dalmatien. *Archaeologisch-Epigraphische Mittheilungen aus Oesterreich-Ungarn.*: 1–84.
- Houdé, O., Zago, L., Mellet, E., Moutier, S., Pineau, A., Mazoyer, B. and Tzourio-Mazoyer, N. 2000. Shifting from the Perceptual Brain to the Logical Brain: The Neural Impact of Cognitive Inhibition Training. *Journal of Cognitive Neuroscience* 12: 721–728.
- Kant, I. 1955. *The Critique of Pure Reason*. Chicago: Encyclopaedia Britannica.
- Kastner, S. and Ungerleider, L.G. 2000. Mechanisms of Visual Attention in the Human Cortex. *Annual Review of Neuroscience* 23: 315–341.
- Knight, N. and Malley, B. 2008. Some Cognitive Origins of Cultural Order. *Journal of Cognition and Culture* 8: 49–69.
- Kubitschek, W. 1928. Aus Dalmatien und seinem Hinterlande. *Vjesnik Arheološkog muzeja u Zagrebu* 15: 35–42.
- Layton, R. 2003. Art and Agency: A Reassessment. *Journal of the Royal Anthropological Institute* 9: 447–464.
- Mackey, J. 2009. *Rethinking Roman Religion: Action, Practice, and Belief*. PhD Thesis, Princeton University.
- Mattingly, D.J. and Alcock, S.E. (eds.) 1997. *Dialogues in Roman imperialism. Power, Discourse, and Discrepant Experience in the Roman Empire*. Journal of Roman Archaeology Supplementary Series 23. Portsmouth: Journal of Roman Archaeology.
- Mattingly, D.J. 2004. Being Roman: Expressing Identity in a Provincial Setting. *Journal of Roman Archaeology* 17: 5–25.

- Murray, D.J. 1995. *Gestalt Psychology and the Cognitive Revolution*. Harvester Wheatsheaf.
- Neath, I. and Surprenant, A.M. 2005. Mechanisms of Memory. In K. Lamberts and R. L. Goldstone (eds.) *Handbook of Cognition*. London; Thousand Oaks, Calif. SAGE: 222–240.
- Neisser, U. 1967. *Cognitive Psychology*. New York: Appleton-Century-Crofts.
- Padilla, A.M. 2008. Developmental Processes Related to Intergenerational Transmission of Culture: Growing up with Two Cultures. In U. Schönplflug (ed.) *Cultural Transmission*. Cambridge: Cambridge University Press: 185–211.
- Panofsky, E. 1991. *Perspective as Symbolic Form*. New York; Cambridge, Mass: Zone Books.
- Pashler, H., Johnston, J.C. and Ruthruff, E. 2001. Attention and Performance. *Annual Review of Psychology* 52: 629–651.
- Popper, K.R. 2002. *The Logic of Scientific Discovery*. London: Routledge.
- Povinelli, D.J. and Preuss, T.M. 1995. Theory of Mind: Evolutionary History of a Cognitive Specialization. *Trends in Neuroscience* 18: 418–424.
- Pyysiäinen, I. 2001. Cognition, Emotion, and Religious Experience. In J. Andresen (ed.) *Religion in Mind*. Cambridge: Cambridge University Press: 70–93.
- Pyysiäinen, I. 2003. Ontology of Culture and the Study of Human Behavior. *Journal of Cognition and Culture* 2: 167–182.
- Pyysiäinen, I. 2004. Intuitive and Explicit in Religious Thought. *Journal of Cognition and Culture* 4: 123–150.
- Quinlan, P.T. and Dyson, B.J. (eds.) 2008. *Cognitive Psychology*. Harlow: Pearson Prentice Hall.
- Rendić Miočević A. 1984. Područje Ridita u ilirskoj kulturnoj plastici (s posebnim obzirom na neobjavljene spomenike). In: A. Benac (ed.) *Simpozijum Duhovna kultura Ilira*. ANUBiH/CBI 67/2. Sarajevo: 119–133.
- Rendić Miočević, A. 2007. Ulomci reljefa s prikazom Silvana i Dijane s lokaliteta Tršćenica u Splitskom polju. *Vjesnik za arheologiju i povijest dalmatinsku* 100: 13–30.
- Rendić Miočević, D. 1955. Ilirske pretstave Silvana na kulturnim slikama s područja Dalmata. *Glasnik Zemaljskog muzeja u Sarajevu*: 5–40.
- Rendić-Miočević, D. 1989. *Iliri i anticki svijet*. Split: Književni krug.
- Schönplflug, U. 2008. Introduction to Cultural Transmission: Psychological, Developmental, Social, and Methodological Aspects. In U. Schönplflug (ed.) *Cultural Transmission*. Cambridge: Cambridge University Press: 1–8.
- Sergejevski, D. 1927. Rimski kameni spomenici sa Glamočkog Polja. *Glasnik Zemaljskog muzeja u Sarajevu*: 255–272.
- Sergejevski, D. 1929. Dijana i Silvan. *Glasnik Zemaljskog muzeja u Sarajevu*: 95–103.
- Skarić, V. 1932. Altertumer von Gradac in der Lepenica (Bosnien). *Glasnik Zemaljskog muzeja u Sarajevu*: 1–22.
- Sloman, S.A. 1996. The Empirical Case for Two Systems of Reasoning. *Psychological Bulletin* 119: 3.
- Slone, D.J., Gonce, L., Upal, A., Edwards, K. and Tweney, R. 2007. Imagery Effects on Recall of Minimally Counterintuitive Concepts. *Journal of Cognition and Culture* 7: 355–367.
- Smith, E.R. and DeCoster, J. 2000. Dual-process Models in Social and Cognitive Psychology: Conceptual Integration and Links to Underlying Memory Systems. *Personality and Social Psychology Review* 4: 108–131.
- Sommerhoff, G. 2000. *Understanding Consciousness*. London; Thousand Oaks: SAGE Publications.
- Sperber, D. 1996. *Explaining Culture*. Oxford: Blackwell.
- Sperber, D. and Hirschfeld, L. 1999. Culture, cognition, and evolution. In R.A. Wilson and F.C. Keil (eds.) *The MIT Encyclopedia of the Cognitive Sciences*. Cambridge (Mass.): MIT Press: cxi–cxxxii.
- Sun, R. 2002. *Duality of the Mind a Bottom-up Approach toward Cognition*. Mahwah, N.J.: L. Erlbaum Associates.
- Thagard, P. 2005. The Emotional Coherence of Religion. *Journal of Cognition and Culture* 5: 58–74.

- Todorov, A., Fiske, S., and Prentice, D. (eds.) 2011. *Social Neuroscience. Toward Understanding the Underpinnings of the Social Mind*. Oxford: Oxford University Press.
- Tooby, J. and Cosmides, L. 1992. The Psychological Foundations of Culture. In J.H. Barkow, L. Cosmides and J. Tooby (eds.) *The Adapted Mind*. New York: Oxford University Press: 19–136.
- Webster, J. 1997. Necessary Comparisons: A Post-Colonial Approach to Religious Syncretism in the Roman Provinces. *World Archaeology* 28: 324–338.
- Webster, J. 2001. Creolizing the Roman Provinces. *American Journal of Archaeology* 105: 209–225.
- Wissowa G. 1916–19. Interpretatio Romana. Romische Götter im Barbarenlande. *Archiv für Religionswissenschaft* 19: 1–49.
- Woolf, G. 1997. Beyond Romans and Natives. *World Archaeology* 28: 339–350.
- Zaninović, M. 1992. In memoriam Duje Rendić-Miočević. *Opuscula Archaeologica* 16(1): 9–15.