

The Specificity of Human Aesthetics

Bouchet, Dominique

Published in:
Knowledge Cultures

Publication date:
2015

Document version
Final published version

Citation for pulished version (APA):
Bouchet, D. (2015). The Specificity of Human Aesthetics. *Knowledge Cultures*, 3(3), 16-41.

Terms of use

This work is brought to you by the University of Southern Denmark through the SDU Research Portal. Unless otherwise specified it has been shared according to the terms for self-archiving. If no other license is stated, these terms apply:

- You may download this work for personal use only.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying this open access version

If you believe that this document breaches copyright please contact us providing details and we will investigate your claim. Please direct all enquiries to puresupport@bib.sdu.dk

You have downloaded a document from



The Central and Eastern European Online Library

The joined archive of hundreds of Central-, East- and South-East-European publishers, research institutes, and various content providers

Source: Knowledge Cultures

Knowledge Cultures

Location: United States

Author(s): Dominique Bouchet

Title: THE SPECIFICITY OF HUMAN AESTHETICS

THE SPECIFICITY OF HUMAN AESTHETICS

Issue: 3/2015

Citation style: Dominique Bouchet. "THE SPECIFICITY OF HUMAN AESTHETICS". Knowledge Cultures 3:16-41.

<https://www.ceeol.com/search/article-detail?id=413193>



THE SPECIFICITY OF HUMAN AESTHETICS

DOMINIQUE BOUCHET

dom@sam.sdu.dk

University of Southern Denmark;
 James Cook University

ABSTRACT. Today, humankind is being reintroduced within nature. Humankind is no longer presented as supernatural to nature. There is no longer a clear divide between animal and human. What makes us human is neither culture, nor language nor labor, nor art, but the degree of complexity those products and capabilities have reached for us as a species. Neither are love, learning, power, fantasy, communication, affection, hierarchy, strategy, altruism, community, social relations, social norms or social status the defining characteristics of humanness. All of these are to be experienced by other animal species. Today, what is regarded as the essential characteristic of humankind is the ability to use a complex articulated language, to have thoughts entailing abstraction and conceptualization. It is the ability to operate with deferred representations, the necessity to relate to inner worlds of representation, and the craving to make sense of all kinds of relations that characterizes humans. Being able to produce artworks as external representations aimed at “the other,” made of internal representations is thus essential to humanity. Human aesthetics is not so much an issue of beauty but of imagination and social creativity. Art is fundamentally about shaping visions and very closely related to this specific human ability to make projects. Especially in times of crisis, when the old sources of meaning hardly can make sense in a new context, imagination must be used in order to survive.

Keywords: aesthetic; art; creativity; culture; imaginary; language; technique

“From the birth of our *species* ... the human species in the strict sense of the word made works of art. Art is its distinguishing characteristic, along the same line as its aspect, which is both upright and slender.”¹
 Georges Bataille

1. Beyond Utility and Technique

From an historical and anthropological point of view, art is an expression of humankind relating to its surroundings including itself. Even at the individual level one has to distinguish art from craft and technique,² one of the main

reasons being that we need a concept to distinguish between creative works that really make a difference and those that merely please. Artworks can neither be replaced nor created twice. They are different, for example, from scientific discoveries that can be postponed. Another scientist or another community of scientists is most likely to push knowledge further even though a great scientist may die just before revealing his or her impending new discovery. Similar to the situation in science, some individual craftsman or community of craftsmen is most likely to develop a new technique or a better design. True artworks, on the other hand, are epochal in a fundamental way: they change our relation to the world including ourselves. And those – individuals or groups – who created such artworks are irreplaceable: it had to be them, specifically, in the time and context they were in. Adding to this, the implicit choices and outbursts of creativity cannot be understood from within their own frame of reference but have to be placed in a logic of continuity and difference.

If by language we refer to a system of signs used by the members of a same species to communicate among themselves, we know now for certain that humans are not the only animals to produce tools, are not the only animals to use a language, are not the only animals to have a culture, and are not the only animals to create beautiful designs.³ Such evidence is in contrast with a long prevailing prejudice. This self erected pedestal on which we had proudly put ourselves in self-contemplation now shows serious cracks and is pretty unstable. We seem to have lost the exclusivity of all the properties which made us nearer and dearer to our gods.⁴ We seem to have lost our means; though, essentially, we still have them. But we now know that the demarcation line between humankind and other animals is not of kind but of degree and goes through all of these abilities (Bourg, 2013). What differentiates human beings is only a matter of degree of complexity in the elaboration and usage of all distinguishing capabilities.⁵

2. The Specificity of Human Language

Humankind still stands out (if not necessarily “up”). Not only is every single one of those capabilities used by humans in an outstanding manner, these means combine with one another in outstanding ways. Thus, the kind of language used by humans is much more complex than the systems of communication that are used by other species: there is not only a distinction of degree but also of complexity. The symbolic language that humans use to pass, address and discuss meanings and significations is much more complex than precisely languages that cannot be used to assign and combine significations. Observations of animal messages and theoretical progress made in general linguistics during the last century revealed the importance of the two-fold structuring of

human language (Ricoeur, 1990: 438). This *double articulation* refers to the possibility of combining a phonological level and a syntactic level in order to express meaning. There is a *duality of structure*. A message is structured into meaningful units consisting of a signifier and a signified. The minimal non-reducible signifying units called *monemes* (or *morphemes* in the American linguistic terminology) can be combined in various ways to convey different messages. They are themselves made of a combination of meaningless sounds called *phonemes*. Thus the double articulation is not only about lexicon and syntax, about words and sentences: words themselves are made of non-signifying but distinctive units (the phonemes). It is this outstanding possibility to combine those different kinds of units in order to communicate that is considered to be the major characteristic of human language (Langaney, 2000: 23).

The fact that some apes can learn some words from humans and use them to communicate with humans should not be interpreted as if there was no difference in language use between humans and apes. As the Canadian psycho-linguist Steven Pinker said: “Language is obviously as different from other animals’ communication systems as the elephant’s trunk is different from other animals’ nostrils” (Pinker, 1994: 334). Pinker points out that the discrete combinatorial system called “grammar” makes human language infinite, digital and compositional.⁶

The French psychologist Jacques Vauclair as well as the neurobiologist Jean-Didier Vincent point out that human words have a *declarative* function which enables humans to comment upon their world and to share experiences, knowledge and impressions. Only the *imperative* mode is available for chimpanzees to communicate with.⁷ They can point out things to ask for food or to go out for instance, but they cannot reflect upon what that “pointing out” in a broader context could mean. Moreover, they do not seem to be able to endow others with intentions (Vauclair, 1999: 155). Besides, no natural language, even in an embryonic state, has ever been encountered in any kind of ape but humans (Vincent, 2000: 174). In every experiment, it is always humans that teach apes. As the French ethologist Dominique Lestel points out, research concerning great apes’ linguistic ability always occur in the context of a communication between humans and apes in which humans are those who inquire (Lestel, 1998: 1006).

On the other hand, the ability to speak lies in the human brain just like the ability to sing or fly lies in the bird’s brain (Vincent, 2000: 169). “People know how to talk in more or less the sense that spiders know how to spin webs” (Pinker, 1994: 18). Still, even though there are anatomic dispositions and neural organizations enabling the human young child to learn how to speak during a critical period of time, the infant has to learn how to speak through human contact (Vincent, 2000: 171).⁸ The researchers who studied

the acquisition of language by humans and by the bonobos emphasize a radical difference between how small children learn and how bonobos do. For a start, a three-year-old human child is a grammatical genius. His or her tacit knowledge of grammar is “more sophisticated than the thickest style manual or the most state-of-the-art computer language system” (Pinker, 1994: 19). Adding to this, David Premack stresses that never ever did he experience a bonobo wanting to share the experience of its discovery just for the sake of sharing it. Conversely, even before being able to talk, a child will go and fetch its mother to bring her to the window to point out something new it just discovered, “not because it wants the thing, just to share with her the excitement of the discovery” (Premack, 1999: 147 author’s translation). The French philosopher Luc Ferry sees in such behavior from the part of the child an expression of “freedom and gratuitousness” (Ferry and Vincent, 2000: 101).⁹ Jean-Didier Vincent stresses that human language allows the sharing of “subjectivity,” whereas there is not a trace of socio-affective content in any animal language. It is totally absent (Vincent, 2000: 180). The child endowed with the inborn ability to learn to communicate linguistically uses language to discover the world and share it with others. The behavior of the human child clearly demonstrates that he or she wants to know the name of things just for the sake of knowing and sharing.

This of course is based on the faculty also shared with other animals and especially with primates, the faculty of having and expressing emotions. Yet, in the human mind, these emotions enter another system of representation. Thus, they fill the human mind in a much more advanced way¹⁰ and act upon human relations in a more complex manner. Thanks to conceptual language, human emotions contribute to structure and feed conscious reflexive thoughts. And above all, the willingness and ability humans’ show to share and express, through language, their emotions, their experiences of pleasure and pain, is at the root of culture and *aesthetics*. Even though other animals do create patterns similar to human art, they still do so in an *imperative* mode. Consider, for instance, those Australian birds that make difficult and beautiful designs of blue colours in order to attract their mate. Again, their aim is action not signification. Sharing experiences in a declarative significative manner, is still the privilege of humankind. “Artworks, the Mona Lisa in the Louvre, the Cow in Lascaux, are external representations aimed at the ‘the other’, made of internal representations conceived of in the artist’s brain” (Vincent, 2000: 194 author’s translation).

Thus, there is indeed a similarity and continuity between how animals and humans manage to represent and communicate. Humans, however, manage to communicate more and communicate differently. Human language extends and combines cognitive and communicative components into a system that increases significantly what can be taken into consideration and communicated

in and between human minds. This is why it can be said that humans live in a different world.

3. The Specificity of the Human World

Animals have an immediate relation with objects they are driven to. All the rest does not matter to them so to speak, and they do not have to think about it, just act. As the French philosopher Max Marcuzzi expresses it, for the most part, human conduct “implies the undertaking of action on the basis of an understanding of the situation” (Marcuzzi, 1996: 170 author’s translation); but the specificity of human consciousness is involved and “for a large part, human consciousness relies on the effort to reconstruct foreign worlds on the basis of signs emitted by those inhabiting those worlds” (Marcuzzi, 1996: 357 author’s translation).

The fact that for instance a chimpanzee does learn, from experience, to reach for a banana with a stick clearly shows its intelligent behavior. This stick is a tool, and understanding was required to produce such a tool, but not reason, as many philosophers would point out. Understanding relates to means, not necessarily to ends. In this case, ends are set for the chimpanzee in advance, by its instincts. In contrast, reason provides humans with the ability to set goals. It is possible for a human being to survey the means-end relationship. Knowledge and intelligence do not only accompany the act of producing the tool then, they generate the act of willing to produce it, and this in a broad context in which a whole word of signification is involved. This is why many philosophers introduce a specific concept for this: that of *reason* or – we will come back to it – that of *imagination*.

Animals are bound to bite into the world in the same way they are cast in it. They do not – and cannot – add anything to their enclosed world, their environment. They cannot relate to anything that does not already pertain to their world. Of course, something new can turn up, but it just happens to be placed there. And, whether they will confront this new thing is also a matter of whether it can immediately make sense – or rather find a place – in their enclosed world, in their environment. The kind of relation animals have with their surrounding is always triggered by a *drive*. Objects do not have to make sense other than as drivers. Outside of their enclosed surroundings there is nothing animals can relate to. They can neither escape their programming nor influence the particular objects beyond the scope of this programming. Some can memorize. Some can even dream about objects in their enclosed world. Here again, the *incorporeality* experienced among humans is just a more complex development of a potential experienced among other animals. The specific human way of acting not only involves something more, as Marcuzzi says, it “takes form integrating understandable intangibles (incorporeals)

when acting” (Marcuzzi, 1996: 162 author’s translation). This, according to Marcuzzi, makes the human body different from that of the animal. And this is why it is worth having a specific concept to name specific human behaviors.

The German philosopher Martin Heidegger named it *comportment*, stressing the fact that it is possible for humans to let be or not let be, a fact that is indeed central to creativity. In his philosophy of being (*Sein*) and world (*Welt*), Heidegger (1992 (1983): 397§64) presented the thesis that “*der Mensch ist weltbildend*” – “*man is world-forming*,” whereas the animal is poor in the world. He opposed the animals’ behaviour of captivation (*Benahmen*) to the possibility that humans have to let something be or not. It is this relation to something, “which is thoroughly governed by this letting be of something as a being” that he called *comportment* [*Verhalten*] (Heidegger, 1992 (1983): 397§64). Here is how he summarizes his understanding of what a world is and how it is specific to human beings:

Only where beings (*Seiendes*) are manifest *as* beings *at all*, do we find the possibility of experiencing this or that particular being as determined in this or that particular way – experiencing (*erfahren*) in the broader sense which goes beyond mere acquaintance with something, in the sense of having experiences with it (Heidegger, 1995 (1983): 274).

According to Heidegger, as far as humans are concerned, nature does not just stand there, surrounding humankind with an abundance of objects. Rather “human Dasein is intrinsically a peculiar transposedness (*Versetztheit*) into the encompassing contextual ring (*Umringszusammenhang*) of living beings” (Heidegger, 1995 (1983): 278§66).

Depending on what their brains allows, animals will indeed relate and connect images that pertain to their enclosed world. Thus there is an opening, but it is still deeply attached to the enclosed world and motivated by drives. Still, being able to memorize images and even to unify certain representations within a consciousness is by far the creation of a radically new world of constructed and interrelated representations. Apes for instance do not produce an ape world. They do not – and cannot – question the world they live in. They do not attach meaning to what they perceive. They just express what they want, and what they want are things or actions. As for the human child, their language develops simultaneously as their human world takes form. Even the things and actions they might want are bound to be infected by their emerged world of significations and nothing, no object, in itself makes sense. In order to make sense, an object has to be related to a context, for instance to its production, its destination. Anyway, there is always something more – that is not (just) a thing – that overwhelms the object. Everything can enter various systems of significations. Every object has several meanings depend-

ing on actual and virtual contexts, and on who is looking at it. Every object is meaningful within a virtuality that exceeds utility.

This is the origin of *desire* (Bouchet, 2011). But I will not expand on this concept here, since – for now – I am heading to the concept of culture. So I have to stress that for the human child entering a world of significations, all things and actions refer to one another and acquire new definitions and utilities in relation to this developing system of significations. Even though the human child is programmed to be able to make use of language, what this language is going to be and how the representations within this language will enable, now depend on the state of development of this new incorporeal human world of *imagination*.

As the French philosopher Gilbert Simondon expressed it: “The mediation between man and the world becomes a world itself, the structure of the world” (Simondon, 1989 (1958): 181 author’s translation). And elsewhere in this same book on the mode of existence of technical objects Simondon points out, with reference to the specificity of operating knowledge, that reality does not precede knowledge but comes after it, “because this knowledge only grasps reality by reconstructing it by manipulating elements” (Simondon, 1989 (1958): 235 author’s translation). In this passage Simondon opposes operating knowledge to contemplative knowledge. As I see it, however, the so-called contemplative knowledge becomes a dream for human beings as all experience becomes mediated by – and filled with – the above-mentioned specific human signification systems. This of course can trigger a desire for contemplation and communion. But again this will have to take the form of imagination, art or religion.

This specificity of the human’s world is not a new idea, and many philosophers did point to it of course. Friedrich Nietzsche meant that Man was “*das noch nicht festgestellte Tier*” the “not yet determined animal,” that is to say “a not yet consummated being” that still has to complete himself, but enabled with a remarkable ability to make up for natural defects with skill and intelligence (Nietzsche, 1980). Henri Bergson wrote in 1907 in *Creative Evolution* that “in the animal, invention is never anything but a variation on the theme of routine.” Even though individuals can show initiative and enlarge their habits, they escape automatism only for an instant “for just the time to create a new automatism.”¹¹ Whereas with humans, “consciousness breaks the chain. In man, and in man alone, it sets itself free” (Bergson, 1998 (1907): 264). And one page later, Bergson adds:

Our brain, our society, and our language are only the external and various signs of one and the same internal superiority. They tell, each after its manner, the unique, exceptional success which life has won at a given moment of its evolution (1998, (1907): 265 my emphasis).

We now know that it took three million years for the brain of an ape, little by little, to turn into a human brain. Still, at one point a decisive stage was reached. Jean-Didier Vincent uses the flick-knife metaphor to describe this moment in the evolution when humans became able to share experiences. Thus it is not only an issue of “consciousness”;¹² what was achieved is “intersubjectivity.” Vincent proposes the neologism “representaction” (Vincent, 2000: 166) to emphasize the link between action and representation related to this “intersubjectivity.” The human aptitude for sharing those “representations” with one another turns them into something that no longer belongs to one brain, but to a collectivity. This ensemble of “representations” is called “language.” It can be said to be a tool that turns others into instruments and nature into score. It provides humans with a very specific tool, a sort of shelter, headland/promontory, mirror, and screen – all in one.

The specific way humans have to relate to their surroundings (thus creating their world) is also a specific way to relate to themselves. Humans are beings who relate to themselves and cannot avoid doing so. Only humans have this ability for self-relation (in German *Selbstverhalten*, in French *réflexivité*). Reason and imagination involve this self-relatedness, enabling us to reflect upon what we are doing and what we might do. We take a step back from ourselves and survey the means-end relationship. The French philosopher Étienne Bimbenet contends that, regardless of the fact that its emergence was contingent and natural, mankind’s specific mode of being in the world is a “disanimalization:” an absolute appears as we experience our humanity, that of issues of right and dignity which is why “we have to think of mankind as both a natural fact and a bearer of absolute values, just like mingling of water and fire” (Bimbenet, 2011: 21 author’s translation). The German philosopher Rüdiger Safranski points out that “reason” comes into play “when we are able to set long-term goals for which the will must first be mobilized” (Safranski, 2005: 1). He stresses that this requires us to step outside or beyond ourselves: “The career of man as a rational being begins with this stepping out, this self-transcendence” (Safranski, 2005: 1).

4. Culture is not just a Tool

Humans seem to be bound to reflect upon this issue of transcendence which can be said to be fundamental to human culture (Bouchet, 2007). Still transcendence can be seen as the result of an immanent evolution process. In 1988, the French anthropologist and sociologist Georges Balandier referred to something that was scattered in other beings and other animal societies but that *converges* in humans (Balandier, 1990: 114). Today rather than convergence, it would be more appropriate to talk about *coevolution*: We know now that both innate and acquired characteristics played their part in the

evolution process that led to the kind of animal we became. All ethological studies of social species show that humans have not the exclusivity of parental behaviors, incest avoidance, communication rituals, power relations, cooperative behaviors. Even though they take a specific form among humans, these behaviors are all deeply rooted in our social animal condition. Let me give one example: like Kaspar Hauser or Truffaut's "wild child," in other words like us, the infant of an ape also cannot develop his genetic program if removed from his parents. In other words: Like humans, an ape cannot become an ape if removed from his culture (Cyrulnik and Morin, 2004: 25). Culture and nature did not only coexist but also coevolved. One of our time's most trans-disciplinary thinker, Edgar Morin was right when in 1973 in his seminal book *The Lost Paradigm: Human Nature*, he explained that humans are beings of culture thanks to nature as much as a natural being thanks to culture (Morin, 1973: 101). We cannot any longer maintain an opposition between the role played by what is innate and what is learned. As Morin explained: what develops – through the process that led to the human being as we now know it – is the innate aptitude to acquire the cultural system that makes it possible to integrate what is learned. Moreover, "it is the natural ability to develop human culture and the cultural ability to develop human nature" (Morin, 1973: 100 author's translation). Culture can be said to have been a potential, and nature to play at first the main role in human behavior until, one hundred thousand years ago, what the French paleontologist and paleoanthropologist Yves Coppens called the "reverse point" was reached (Coppens, 2008: 162). Since then, contrary to other species, *Homo sapiens* have mainly relied on their culture to remain *Homo sapiens*. If it was not for culture, humans would be one of the most helpless primates (Morin, 2003: 29).

A few decades ago, it was common to assume that technical intelligence preceded and helped developed language. Today after so many scientists (aided with new technologies and new collective ideas) studied the evolution of tools and skulls, the most convincing explanation is that both developed simultaneously. Jean-François Dortier, editor of the French journal *Sciences Humaines*, summarizes what we know about the coevolution of language and technique:

- "Recent hypotheses on the origins of language set its appearance about two million years ago, at the same epoch as the first tools and the first specimens of the type *Homo*" (Dortier, 2012: 241 author's translation).
- "There was most certainly a combined development of the two functions" (Dortier, 2012: 244 author's translation).
- "The concomitant appearance of language and of the first crafted tools is in accordance with the hypothesis of a mental ability to

produce deferred mental representations that would have been the common cause of the rapid development of both language and technique” (Dortier, 2012: 245 author’s translation).

Tools, language and social behavior are interdependent entities that evolved in relation with each other. Neurobiologist Kathleen R. Gibson points out that “no early hominid is likely to have reached modern levels of intelligence in any one of these domains without having reached it in all of them” (1995: 264).

In the *Handbook of Human Symbolic Evolution* Thomas G. Wynn states that tools which originally were used like apes use them today – have seen their use been transformed. Wynn observes that “by one million years ago tools present patterns well outside the range of anything we know for apes” (1996: 263). He stresses that “it is not until relatively late in human evolution, certainly by fifteen thousand, that tools present the volatile time and space patterns typical of the indexical role of modern tools” (Wynn, 1996: 263). In other words, by this time, “like modern tools, these tools carried information about the social status of the maker” (Wynn, 1996: 284).

Thus, tools became more and more elaborate, and tools became more than mere tools. Some meaning had to be attached to them. For instance, they had to look good in the eyes of those who made them and also in the eyes of others; like these beautiful bifaces shaped around a fossil. Coppens, as others point out suggest:

[Humankind] becomes conscious of symmetry and achieves it, chooses the material to work upon for its technical qualities but sometimes also for its aesthetical qualities – brilliance, patina, color – builds huts, tents, shelters, walls, controls and maintains fire ... divides his dwelling in specialized areas ... invents mattresses and blankets (1983: 135 author’s translation).

For Coppens, it is not much of an exaggeration to say that “for the first time in the history of life, a non biological life component gradually enters the definition of a living being” (Coppens, 1983: 107 author’s translation). This lends support to Bimbenet’s above mentioned theory of “disanimalization” (Bimbenet 2011), but certainly not to a theory of “disnaturalization.” The French archeologist Michel Lorblanchet insists upon the importance of abstraction for tool making and art marking. According to him, the production of the first tools, which he considers to be the first artworks, shows that, “without any external incentive, without reference to any preexisting model, the human intellect produces by itself the abstract schemes that are the source of art” (Lorblanchet, 2006: 119 author’s translation).

Abstraction is a process. Tools are shaped by brains that not only see but *foresee*. It is not only what humans see with their eyes and do with their hands; it is also how humans use what they see and what they do to combine with the mental images they already have, improve what they do, imagine

what they could do. In other words, as the prehistorian Henry de Lumley-Woodyear states: “It implies the conception of models and the emergence of conceptual thinking” (1999: 173 author’s translation). According to him this emergence did not occur in one go and is most likely to have existed in embryonic state in earlier humans or pre-humans. According to today’s scientists, the human brain evolved in the course of the hominization process. The increased size of the brain or of its component parts resulted in increased information processing capacity in those behavioral domains mediated by the enlarged regions. Gibson explains: “Just as brain size increased slowly, those aspects of language, tool use and social intelligence which depend on increased information processing capacity would also have evolved slowly” (1995: 263). Thus, the human brain was shaped by both genes and experience – like the experience of making tools for example, and it ended up being filled with mental images that mattered the most, for individuals, groups and the species. Those mental images became collective, accumulated, combined, selected in a way never experienced by other animals. In the words of the French ethologist and neurologist Boris Cyrulnik: “the human brain is the only one among living beings able to totally take information out of context. Thus, the only one able to make signs/produce signs, with gestures, sounds, clothes, etc.” (Cyrulnik & Morin, 2004: 18 author’s translation).

Filled with *ideas* not only in their personal brains but in their *culture* humans transformed what they saw and what they thought. This process became materialized in design, and in art. (It is also worth mentioning that long before the emergence of elaborated tools “the first human beings had a sense of form and color, and were endowed with a certain touch of delicacy” (Lorblanchet, 2006: 67 author’s translation). Archeologists remind us that the history of culture is not a steady one. There have been long periods without innovation and short ones with an overabundance. Nevertheless, again, once what Coppens called the “reverse point” was reached, and culture became a faster source of innovation than nature, the ability to innovate became related to the transmission of traditions and innovations. In the above mentioned *Handbook of Human Symbolic Evolution* the British social anthropologist Tim Ingold summarized clearly what makes the difference:

Human beings are distinguished neither by consciousness nor by their possession of learning-transmitted tradition. They *are* distinguished by the extreme elaboration of certain cognitive specialisms – above all by the faculty of language – which provide a necessary psychological foundation for reflective self-awareness, for society as a moral or regulative order, for tool-making and production of planned activities, for the construction of symbolically-encoded systems of knowledge, and for the transmission of these through teaching. In all these respects it may truthfully be said that the

world we inhabit is one that, to an ever greater extent, we have made for ourselves, and that confronts us as the artificial product of human activity (1996: 199).

Thus, as already stressed, what makes us human is neither culture,¹³ nor language nor labor, nor art, but the degree of complexity those products and means of evolution have reached for us as a species. Neither are love, learning, power, fantasy, communication, affection, hierarchy, strategy, altruism, community, social relations, social norms or social status the defining characteristics of humanness. All of these are to be experienced by other animal species. Among those are insects, birds, and of course, mammals and primates. The difference lies in the way humans “make use” of all these. It is also the consequence of such a level of complexity. Still, as a result, as the French philosopher Cornelius Castoriadis echoing Bergson and Heidegger puts it: “Man is the sole living being to break the informational/representational/cognitive closure in and through which every other living being exists” (Castoriadis, 1997: 323).

Because of all this, we have to specify what culture, the symbolic, art and labor are in human societies. They are all a product of – and means for – our *imagination*. This is why human creativity and innovation outmatches by far that of other animals. Humans have developed the mental ability to represent the world in the forms of “ideas” that they can combine, remember and reflect upon. It is the ability to operate with deferred representations, with this necessity to relate to inner worlds of representation, and this craving to make sense of all kind of relations that characterizes humankind.

5. The Phylogenetic Antiquity of Aesthetic Behavior

This is precisely what the French philosopher Georges Bataille was pointing out in the 1950s when, commenting on the beautiful paintings in the caves of Lascaux in France, he related art to the sacred (Bataille, 1955). Still, forty years after he wrote his comments, another cave, that of Chauvet, was discovered a few hundred miles away (Clottes, 2010). It is twice as old, that is to say thirty five thousand years old, and covered with similarly beautiful and elaborate paintings.¹⁴ Since then many traces of symbolic and artistic activities were discovered around the world such as the seventy seven thousand year old stones found in the caves of Blombos in South Africa in 2002. They are not very beautiful but they seem symbolic in many ways (Anati, 2003: 69). Thus it is now believed that art and symbolic thinking did not originate in one place and in one go. For what we know today, the emergence of symbolic thinking has to be placed into a cultural dynamic that started much earlier than in the times of Lascaux and must have passed

through various stages. Also, it might have taken place in various species. The French paleoanthropologist Picq (2005) tells us that forty thousand years ago four types of *Homo* still cohabited the earth. At least three of those endowed with consciousness and speech were concerned about what might happen to them after death (Picq, 2005: 50). As it seems, most of what – until when Bataille wrote his comments – was believed to characterize our species turned up to be something we had in common with the other three. Our branch of *Homo* is not the only one to have stolen fire and who knows since when, may be long before the domestication of fire, which branch started to dance and play with shadows and lights.

When Bataille was puzzled and filled with wonder in the Lascaux caves little research had been done on prehistoric art. “Fifty years ago specialists of prehistoric art could be counted on the fingers of two hands and almost all of them were from Europe” (Anati, 2003: 63). Also, “three quarters of the known forty five million rock paintings was discovered during those last fifty years” (Anati, 2003: 18). We cannot any longer ignore that artistic creativity was expressed outside Europe for at least as long a time as in Europe and we must be aware that European prehistoric art cannot be explained independently of what we know from prehistoric art from other continents (Anati, 2003: 56).

Today archeologists claim that “Man has been an artist from the outset” (Lorblanchet, 2002: 8). Prehistorians became conscious of the phylogenetic antiquity of aesthetical and symbolical behaviors (Lorblanchet, 2002: 159). They state that an “innate taste for beauty” has been present in the species we descend from as well as in our cousin species (Lorblanchet, 2002: 160). They stress that there was an evolution, that “curiosity, taking a fancy to adorn one’s body precede and foreshadow art proper” (Coppens, 1990: 102), and that domestic art contained the seeds of the greatest rock paintings (Lorblanchet, 2006: 161). They point out that some kind of aesthetic sense can be traced two million years back when the first types of *Homo* as just mentioned were gathering stones the forms or colors of which they fancied (Lorblanchet, 2002: 8). The gathering, transport and use of exogenous hard to hew rocks from faraway origins clearly shows that all along in prehistoric times “non utilitarian and non functional requirements, purely aesthetical concerns related to beliefs, often had the priority over comfort and efficiency” (Lorblanchet, 2002: 84). Thus, an interest in the aesthetic dimension of tool making has been traced to before the time of Chauvet, in various branches of the *Homo* species. Adding to this, one should not ignore that many objects and performances that we would consider to be artistic did not stand the test of time (Anati, 2003: 18). Still, this aesthetic sense co-evolved with other intellectual and social characteristics among the different types of *Homo*.¹⁵ Human intellectual abilities developed in a combining manner for many years before reaching such a level of complexity that forty thousand years

ago made possible this “artistic and symbolic explosion” (Lorblanchet, 2002: 9) to which the paintings in Chauvet and Lascaux are a testimony.¹⁶

The specialists believe that visual art – which is constituted of representative figures (pictograms) and of conceptual signs (ideograms) that are willingly combined in associations – can only be traced fifty thousand years back (Anati, 2003: 74). The generalization and multiplication of symbolic expressions first happened around the world between fifty and forty thousand years ago (Lorblanchet, 2006: 78).¹⁷ As such, “there is no ‘cradle of art’” (Lorblanchet, 2006: 31; 164). Nevertheless, “an artistic and symbolic explosion” did take place at that time when cave paintings emerged, thus “expressing the emergence of new spirituality” (Lorblanchet, 2002: 9). In Bataille’s view though, it was a radical change. He thought that “never before Lascaux did we reach the reflection of this inner life of which art – and art alone – assumes the communication” (Bataille, 1980 (1955): 12). He was right, but it occurred fifteen thousand years earlier than Lascaux, in the caves of Chauvet and in many other places, and there was no evolution between the times of Chauvet and Lascaux (Lorblanchet, 1999: 107). Referring to a “cradle of humanity” or “birth of art” is thus inappropriate. Both caves are the outcome of a more than two million year evolution process in the materialization of mental images.¹⁸ Their outbreak therefore should not be compared to a big bang, but rather seen as a “qualitative jump” (Lorblanchet, 2006: 155; 164). As Lorblanchet stresses such outbreaks appeared in different forms in much distant places and times. As Coppens (2008: 201) explains these different outbreaks occurred for specific populations in specific places on earth at specific times, and there is no immediate and direct correspondence between the “birth” of art and the “birth” of modern humankind (Lorblanchet, 2006: 31). “Man is an artist by nature and the history of art begins and is one with that of mankind” (Lorblanchet, 2006: 168). The evolution of art followed extremely different paths in different regions of the world (Lorblanchet, 2006: 31). The Italian archeologist Emmanuel Anati points out that “prehistoric artworks were produced during a time period that lasted for at least twenty times longer than our own [Christian] era” (Anati, 2003: 18). During that long period of time they were often retouched and served different functions (Lorblanchet, 1999: 109). The themes, styles and techniques of the oldest motives differ radically from each other. Even sophistication levels differ (Lorblanchet, 2006: 34). Nevertheless, according to Coppens “in Europe, the painted caves are indisputably sanctuaries” (Coppens, 2008: 201 author’s translation). Adding to this, Anati points out that all the paintings and engravings recently rediscovered in remote hidden places on the five continents “are like sacred historical texts in which are stored the mysteries of the origin of the intellect” (Anati, 2003: 389 author’s translation). Such points of view are close to that of Bataille’s. Even closer is the following statement by

Anati: “As a matter of fact many of those works serve the dialog with the forces regulating natural phenomena conditioning/determining human existence” (Anati, 2003: 392 author’s translation).

Thus, even though it is the result of a long co-evolutionary process, the “birth of art” as analyzed by Bataille can – as I see it – still be considered as epochal. The human race had then reached a level of complexity where cognitive and analytical competences allowed humans to communicate intentions and to program actions. It is now common to assume that “everywhere the brain mechanism at the origin of artistic creativity had the same common denominator” (Anati, 2003: 318–19 author’s translation). Today, being able to produce artworks, to use a complex articulated language and to have thoughts entailing abstraction and conceptualization, is regarded as the essential characteristic of humankind. Those abstraction, conceptualization and aesthetical abilities were used in a specific way though. Bataille stressed the importance of a mythical dimension in the essence of humankind. It is also very important to stress what is absent in Bataille’s approach to the essence of humankind. Bataille does not relate to humankind’s essence as an issue of specificity or hierarchy. Bataille’s purpose is neither to maintain a distance from the other animals nor to establish the superiority of humankind in the light of God, but to clarify humankind’s main problem and potential. Bataille does not link humankind’s specificity to necessity, utility or technique. Neither does he place the human being on the very top of a ladder from where to haughtily contemplate and dominate the rest of the world. Bataille just points out that humankind fundamentally has to deal and play with the representations they now mentally and culturally have of the world around them.¹⁹ A three thousand year old anthropocentric tradition has been claiming that what makes sense is that humans are *not* an animal but an elected creature, God’s favorite, the only biped²⁰ and sole tool producing creature that – thanks to their tools – can and may master the world. Cyrulnik, Morin, Picq and many others stress that we are witnessing the extinction of this pervading western ontological opposition between animal and human. Humankind is no longer presented as a supernatural being by nature. There is no longer a clear divide between animal and human. Today humankind is being re-introduced within nature. Humans are no longer against nature nor are they supernatural.²¹ Nevertheless humans are an outstanding animal as they do keep specific human space (Cyrulnik and Morin, 2004: 17–18). A place – the human world – where the imaginary cannot be avoided and imagination must be used. This is why Castoriadis called it *radical imagination*:

I believe the radical imagination is what distinguishes the human psychism from the animal psychism. What makes the psyche capable of producing those representations, those phantasms, which are not the outcome of perceptions? It is the radical imagination.

That would be a first approach. The human psyche is characterized by the autonomy of the imagination, by a radical imagination: It is not simply a matter of seeing – or seeing oneself – in a mirror, but also of the ability to formulate what is not there, to perceive, in just anything, what is not there. For the human psychism there is a flux, a representational spontaneity that is not subordinated to a predetermined end (2007 (1999): 203).

Castoriadis clearly states that this radical imagination not only makes the difference but also is a collective creation: “It is the radical imagination that presents an outside world formed in this way and not otherwise” (2005, (1992): 249–50).

6. Aesthetics are more than Technique

At the time when Bataille was writing his essays the prevailing ideologies had a common premise that there was an inherent logic in the development of the tool: humans had been liberating themselves – and will continue to do so – thanks to technique. These ideologies proposed a common optimistic vision for the future of humankind in which production and consumption as a binomial played the main role and nature none (Bouchet, 1994). Nature was just an external means for the tool. Art and play made sense when serving economic development. Those ideologies were not only political, they were also scientific. Among others, the French philosopher, Georges Gusdorf stressed that “science is incapable of providing by its own means its origin and goals. It always has to rely on an eschatology” (Gusdorf, 1984 (1953): 326 author’s translation). Science is not autonomous: it always must originally receive and keep on borrowing its principles from a decree of human will (Gusdorf, 1984 (1953): 325). These ideologies were to be traced in all branches of scientific activities, more than often as helpful *apriori* for scientific research, and of course in all branches of human sciences. At a time when it was not yet evident that human beings are not just tool-producing animals who inherited the earth and cannot be distinguished by consciousness or by their possession of learning-transmitted tradition, Bataille went beyond the varnish of animality and technique to find the sacred.

Indeed, another related essential characteristic of humankind is the relationship to death expressed in the sacred that Bataille pointed out. Bataille was right, the perception of death seals the gap between the human mind and the biological world because, as Morin says, “it is in relation to death that mind, consciousness, rationality and myth meet, collide, unite” (2003: 39 author’s translation). And here again Anati’s observations echo those of Bataille on *eros* and *thanatos* original human concerns: “starting from the time man

developed his complex abilities of abstraction synthesis and association, his two main concerns were life and death” (Anati, 2002: 553 author’s translation).

However, complex abilities of abstraction synthesis and association do not have to lead to rational thinking alone. Creativity and imagination feed rational and irrational thinking alike, and those support each other. Anati puts it this way: “One can guess that art emerges as one of the components of a ‘package’ of expression and communication faculties acquired by man thanks to new kinds of associative and speculative cerebral capacities” (Anati, 2003: 75 author’s translation).

Art is thus essential to humankind. It can be compared to what some theologians refer to as the “original sin.” This fact should be kept in mind and not overshadowed by an interest in the historical variations of expressions of art than in the essential creativity of art. As Anati stresses: “The logic of art is also the logic behind language and later writings. It originates in the fundamental mechanism of the system of associations by making use of terms that originally were universal before vernacular factors gradually played their part” (Anati, 2003: 321 author’s translation).

Art is fundamentally about shaping visions and very closely related to this specific human ability to make projects. Visions and projects will of course vary over time, especially now that the visions themselves are part of what humans have to relate to. In times of great change it can be hard to maintain visions or shape new ones. Such trying times are times of *crisis* when it becomes much harder for a group of humans to interpret and represent what they are experiencing, especially in relation to their future.

Following Morin I use the term of crisis to refer to situations when uncertainty enters and prevail in domains where some sort of predictability seems to be secured. We have to remember that humans make plans and do so on the basis of their perception and representation of some kind of regularity. Which is why what seems out of control is not only the external natural forces humans have to deal with, but it is also the inner appreciation they have of those forces. As a matter of fact in times of crises, the loss of control also affects representations, which no longer seem to make sense with such certainty. Decisions concerning appreciation, action and representation have to be taken, which is why Morin stresses that “the moments of indetermination and decision are concomitant inasmuch as decision and uncertainty rely on each other” (1984 (1976): 140 author’s translation). Indeed, the crisis is a decisive moment of indecision.

7. The Indomitability of the Aesthetics

Art can be said to be even more essential then. Is it not bound to be in such times when representations and creativity are challenged the most? Again, as

Bataille pointed out, art essentially has to do with core representations and creativity, with, as earlier mentioned, what Castoriadis (1997: 343) calls “the giving-of-form to the Chaos” once Chaos is perceived as such. Art is neither just a product nor design or technique. Art is much more central and relates to this ability to project oneself in time, the ability that Heidegger thought to be the essential characteristic of humankind. For Heidegger, *Zeyn=Abgrund*, in other words Being as such (translated into English as “Be-ing” or “Beying”) equals Abyss (Heidegger, 2003 (1989): V; Heidegger, 2012 (1989): V). Heidegger also related meaning to the Abyss when pointing out that “the meaning of Being can never be contrasted with entities, or with Being as the ‘ground’ which gives entities support; for a ‘ground’ becomes accessible only as meaning, even if it is itself the abyss of meaninglessness” (Heidegger, 1977 (1920): 152; Heidegger, 2007 (1920): 194). Heidegger’s conception seems to me to be pretty close to that of Castoriadis when he writes: “Meaning is the ‘upon-which’ of a projection in terms of which something becomes intelligible as something; it gets its structure from a fore-having, a fore-sight, and a fore-conception” (Heidegger, 1977 (1920): 151; Heidegger, 2007 (1920): 193). The French sociologist Duvignaud expressed it this way: “In order to exist, Being must represent itself, put its existence into play in order to become a concrete reality” (Duvignaud, 1966: 81 author’s translation).

It is thus essential to humankind as individuals and groups to represent the world and themselves in it. A crisis is when the old sources of meaning are worn out or – more precisely – hardly can make sense in a new context, and new ones are almost impossible to identify and exploit. Not that the old sources run dry, it is more that they become silted or end up in a void. As I see it, the whole point of Bataille was to stress the how fundamental role – once the sacred and desire have emerged – art plays in creating new representations of what matters the most in terms of representation and meaning (Bouchet, 2011; Bouchet, 2014).

This does not entail that a determinist logic is then established. Nor that art has from now on to “reflect” changes. As I earlier alluded to without giving it a name, *culture* can evolve in manifold forms once this imaginary system of representations has overlapped and added to reality (or to put it another way, once it has become an inevitable part of reality and – in a recursive manner – of its interpretation).

Castoriadis tells us that “this giving-of-form to the Chaos (to the Chaos of what is and that within man himself) ... is, perhaps, the best definition of culture” (1997: 343). Castoriadis also stresses that this profound and innovative kind of form-giving “manifests itself with striking clarity in the case of art” (1997: 343). Creativity persists even when it seems asleep, and it is a common understanding of all the main authors I refer to in this article, that creativity is characterized by unpredictability and indomitability.

Understood as such, artistic creativity is irreducible to an all-encompassing determinism and, therefore, cannot be said to “reflect” a society that it contributes to change. Even if we refer to what fills the art museums, to assume that artworks in history only reflect social change would be a reductionism, a contradiction even. Creativity and the social imaginary play an active part in social change. Art is a construct.

This radical and irreducible character of creativity applies to each individual artist as well as to art in general. Here is what the great French historian and sociologist Pierre Francastel²² wrote about in the introduction to his seminal work *Art and Technology*: “Art is a construct, a power to give order and to prefigure. The artist does not translate; he invents. We are in the realm of *imagined realities*” (Francastel, 2003 (1956): 19 my emphasis).

8. *Homo Aestheticus*

Humans are more than tool making animals and even their rational actions feed on radical imagination. Attention should be given to the conditions given to radical creativity. There are more fundamental issues than those of economic policies and efficient techniques, and the answers given to those are precisely what is challenged the most in times of crises. There is a part of human creativity that is not dedicated to instrumentality. Is not this why we differentiate between art and technique, between *poiesis* and *techne*? Human creativity can be used in different ways.

In the words of the paleoanthropologist Pascal Picq, the human race/species essentially is also: “a species that cannot live without attributing meaning to its life, an ontology, in a cosmos devoid of meaning” (Picq, 2005: 50 author’s translation). Human beings invest the world, make sense of it thanks to their *imagination*, if with that word we summarize the above mentioned complex set of intensified abilities. They have to make sense and to accept that the way they ended up doing it can be challenged at any time, and this is even more so within modern societies that value questions higher than answers (Bouchet, 1994; Bouchet, 2007).

NOTES

1. Bataille, Georges (2005/1959), *The Cradle of Humanity. Prehistoric Art and Culture*. Brooklyn, NY: Zone Books, 89.

2. Art has to be distinguished from craft and technique even though the Greeks only had one term to refer to art and skill, *tekné*.

3. Animals other than humans are intelligent. They are not only acting upon innate behavior mechanisms, they do learn, solve problems, explore and discover. Some of them like chimpanzees share many a social trait with humans. However

nothing indicates that chimpanzees can turn those representations into systems of significations.

4. Within Christianity language was long conceived as a gift from god to man thus making it very difficult to even ask how language and art came into being (Hombert and Lenclud, 2014: 56). Their outstanding book came out after I had written this paper. This note written just before publication ensures it is listed in the bibliography.

5. We now have to reconsider how to make sense of our capabilities. This new awareness of how much we have in common with other animals, of how much we owe our biological components and our natural ground roots opens new reflections, new images, new forms of dialogue and understanding. The psycho-physiologist Philippe Ropartz stresses how important it is that the old animality-humanity dichotomy be replaced by the idea of a continuity animal man (Ropartz, 1989). In my opinion, this bodes for a reorganization of the social imaginary. I will of course come back to it in a longer text.

6. Pinker points out that “Nonhuman communication systems are based on one of the three designs: a finite repertory of calls (one for warnings of predators, one for claims to territory, and so on), a continuous analog signal that registers the magnitude of some state (the livelier the dance of the bee, the richer the food source that it is telling its hivemates about), or a series of random variations on a theme (a birdsong repeated with a new twist each time)” (Pinker, 1994: 334).

7. To say that animals communicate in an imperative mode means that animals always refer to things or actions to say “I want this to happen.” Humans can refer to communication as such (Vauclair, 1999: 157; Vincent, 2000: 179).

8. Left alone, the child will not learn and if the infant does not make use of this genetically given potential early enough, it will take a much greater effort to learn any language.

9. Ferry considers freedom to be the differentiating criteria. He defines it as a capacity to distance oneself from nature transcending the bare necessities to take a moral stand (Ferry and Vincent, 2000: 100).

10. Pinker notes that, “Even the seat of human language in the brain is special. The vocal calls of primates are controlled not by their cerebral cortex but by phylogenetically older neutral structures in the brain stem and limbic system structures that are heavily involved in emotion. Human vocalizations other than language, like sobbing, laughing, moaning, and shouting in pain, are also controlled subcortically. Subcortical structures even control the swearing that follows the arrival of a hammer on a thumb, that emerges as an involuntary tic in Tourette’s syndrome, and that can survive as Broca’s aphasics’ only speech. Genuine language, as we saw in the preceding chapter, is seated in the cerebral cortex, primarily the left perisylvian region” (Pinker, 1994: 334).

11. In Japan it has been observed that the knowledge acquired by a single ape was communicated to the next generation. The ape lost some kind of potato in salty water and picked it up again. As it liked the new taste, it went on dipping other potatoes in the salty water. Other members of the community copied the procedure.

12. Consciousness is the ability to conceive of objects and integrate them in some sort of unity: be it materially given objects or ideal ones such as images for example.

We know now that most mammals and birds do have some kind of consciousness. However, being conscious of an object is not the same as being able to assign a meaning to it. Only then does the object acquire a signification. For a signification to be given to an object, this object has to be related to a whole interactive system of significations maintained by interactions that cannot exist in one consciousness alone. This inability that nonhumans have to combine the ideas of others in their own personal mind has been stressed. Johann-Gottfried Herder criticized Jean-Baptiste Rousseau's individualistic view of culture. In his *Outline of a Philosophy of the History of Man* from 1784 he defends the idea that social relations were crucial to the history of humankind, that it is "speech" alone that has rendered humans human and pointed out that the ideas apes might have cannot be combined in their individual brain with the ideas of others.

13. Of course it is always a question of degree of complexity. Nevertheless, the understanding of cultural phenomena has to build upon the observation of other animal cultures and this at least "since we know that chimpanzees share so many social, cognitive and cultural abilities with us" (Picq, 2005: 115). Picq even qualifies chimpanzees' social relations as "machivellical" (2005: 107 author's translation). The French ethologist Dominique Lestel concludes that "we have to accept the idea that there is a plurality of culture, not in quantitative terms ... but by nature" or in other words in qualitative terms (2009: 330 author's translation). That is to say there are different kinds of intelligence, different kinds of perceptions relative to different kinds of animals, there are different kinds of cultures with different characteristics. Specialists in ethology, ecology and animal cognition have identified a limited number of organizational principles in the range of animal societies (See: Cézilly, 2006: 175). They stress that we cannot just keep imposing the conceptual models emerging from the observations of our human societies on all types of societies. This calls into question humankind's understanding of itself. Again, as stated earlier, if it was not for culture *Homo sapiens* would be one of the most helpless primates (See: Morin, 2003: 29 or Morin 2008: 1899).

14. The Chauvet-Pont-d'Arc Cave was granted UNESCO's World Heritage status in 2014. It is located in southern France near the beautiful Ardèche Canyon in a limestone cliff above the former bed of the river. An impressive full-size facsimile has been constructed above ground. In it, visitors can experience the same sensations of silence, acoustics, temperature, obscurity and humidity as in the original cave. It is ten times bigger than the Lascaux Cave facsimile. <http://en.cavernedupontdarc.fr>

15. Lorblanchet also points out that "it is impossible to exclude the symbolic dimension of the most simple actions from everyday life" (Lorblanchet, 2006: 83).

16. It is now common to assume that artistic activities must have appeared much earlier than when humans were able to produce such elaborated paintings in the caves. Over the many years between the first evidence of aesthetic sense and the outburst of art discovered in the caves artistic abilities developed in various ways among different environments in different groups of *Homo*. In an article Sally McBrearty and Alison S. Brooks articulated a systematic classification based upon their readings of several hundreds of researchers work. They state that "modern human adaptation appeared gradually [and that] the process can be broken into its constituent parts, each having its own origin and demanding its own explanation"

(McBrearty & Brooks, 2000: 534). Still, even though it is important to look into the different constituent parts, I shall stress that today's specialists refer to those processes as being co-evolutionary. McBrearty and Brooks trace this "gradual assembling of the package of modern human behaviors in Africa" (2000: 453). The development of an aesthetic sense does play a part in their presentation of the last three stages of this evolution process: About three hundred thousand years ago as new kinds of tools were made coloring agents such as ochre were first used. Two hundred thousand years later, one hundred thousand years ago, the new kinds of *Homo*, the *Homo sapiens*, started using pearls and necklaces. And, it is only fifty thousand years ago that *Homo sapiens* made the first rock and cave paintings.

17. Lorblanchet refers to "triggering social mechanisms" which were still absent in Europe forty six thousand years ago, which were already present in Australia. This, according to Lorblanchet, explains why Australians already painted figurative motifs on rocks at that time.

18. In her careful studies of the paintings in the Grotte of Chauvet, the prehistorian Valérie Féreglio traces an evolution of techniques as well as radical innovations, some of them clearly motivated by the structure of the material painted upon. She concludes saying that "the art in Chauvet cannot have been created out of nothing" (Féreglio, 2006: 219 author's translation).

19. And to do that technique and economy is not enough. Morin insists: "The creation of an imaginary world and the fabulous surge of myths, beliefs and religions are for mankind as important as technique. Up to now all through history technical and rational developments did not succeed in ruling them out" (Morin 2003: 35; Morin, 2008: 1907–08 author's translation).

20. Pascal Picq criticizes the over importance given to bipedy to differentiate humans from other animals.

21. Morin says that we are "hyper and super living beings." We have further developed abilities from all former stages of our evolution, for instance, that of being a mammalian. Every one of us has to spend so many months with our parents to learn to do and experience love (Morin 1980: 421–23; Morin 2008: 1096–98). Picq stresses that like humans chimpanzees do spend a long time in childhood and apprenticeship that favors a considerable adaptative flexibility. For humans the amount of information accumulated is larger and the organization of all cultural institutions much more complex (Picq, 2005: 113).

22. Francastel also claimed that "as long as art is considered a reflection of a real but eternal world or as a generator of illusions, it will be impossible to reconcile practical activities with contemporary art" (Francastel, 2003: 324). "

REFERENCES

- Anati, Emmanuel (2002), "Les premiers arts sur la terre," in Yves Coppens and Pascal Picq (eds.), *Aux origines de l'humanité. Volume 1: De l'apparition de la vie à l'homme moderne*. Paris: Fayard, 510–559 & 623–624.
- Anati, Emmanuel (2003), *Aux origines de l'art. 50 000 ans d'art préhistorique et tribal. Traduit de l'italien par Jérôme Nicolas*. Paris: Fayard.

- Ferry, Luc, and Jean-Didier Vincent (2000), *Qu'est-ce que l'homme? Sur les fondamentaux de la biologie et de la philosophie*. Paris: Odile Jacob.
- Féreglio, Valérie (2006) "De la faune au bestiaire – La grotte Chauvet-Pont d'arc, aux origines de l'art pariétal paléolithique," *Compte Rendu Palevol, Elsevier* 5 (1/2)(Janvier/Février): 213–222.
- Francastel, Pierre (2003/1956), *Art and Technology in the Nineteenth and Twentieth Centuries (Art et technique aux XIXième et XXième siècles)*. New York: Zone Books.
- Gibson, Kathleen R. (1995), "Tool Use, Language and Social Behavior in Relation to Information Processing Capacities," in Kathleen R. Gibson and Tim Ingold (eds.), *Tools, Language and Cognition in Human Evolution*. Cambridge: Cambridge University Press, 251–269.
- Gusdorf, Georges (1984/1953), *Mythe et métaphysique*. Paris: Flammarion.
- Heidegger, Martin (1977/1920), *Sein und Zeit*. Tübingen: Max Niemeyer Verlag.
- Heidegger, Martin (1992/1983), *Die Grundbegriffe der Metaphysik. Welt-Endlichkeit-Einsamkeit. Gesamtausgabe, Kt, Bd. 29/30*. Frankfurt am Main: Klostermann.
- Heidegger, Martin (1995/1983 & 1992), *The Fundamental Concepts of Metaphysics. World, Finitude, Solitude*. Translated by William McNeill & Nicholas Walker. Bloomington and Indianapolis, IN: Indiana University Press.
- Heidegger, Martin (2003/1989), *Beiträge zur Philosophie (vom Ereignis) – Gesamtausgabe, Ln, Bd. 65*. Frankfurt am Main: Klostermann.
- Heidegger, Martin (2007/1920), *Being and Time (Sein und Zeit)*. Translated by John Macquarrie & Edward Robinson. Tübingen: Blackwell.
- Heidegger, Martin (2012/1989), *Contributions to Philosophy (Of the Event)*. Translated by Richard Rojcewicz and Daniela Vallega-Neu. Bloomington, IN: Indiana University Press.
- Herder, Johann Gottfried (2002/1784), *Ideen Zur Philosophie Der Geschichte der Menschheit. Werke Band III/1. Herausgegeben Von Wolfgang Pross*. München, Wien: Carl Hanser Verlag.
- Hombert, Jean-Marie and Gérard Lenclud (2014), *Comment le langage est venu à l'homme*. Paris: Fayard.
- Ingold, Tim (1996), "Social Relations, Human Ecology, and the Evolution of Culture: An Exploration of Concepts and Definitions," in Andrew Lock and Charles R. Peters (eds.), *Handbook of Human Symbolic Evolution*. Oxford: Clarendon Press, 178–203.
- Langaney, André (2000/1998), "La conquête du territoire," in André Langaney, Jean Clottes, Jean Guilaine, and Dominique Simonnet (eds.), *La plus belle histoire de l'homme*. Paris: Seuil, 19–66.
- Lestel, Dominique (1998), "Les singes parlent-ils vraiment?," in Boris Cyrulnik (ed.), *Si les lions pouvaient parler. Essais sur la condition animale*. Paris: Gallimard, 990–1009.
- Lestel, Dominique (2009), *Les origines animales de la culture*. Paris: Flammarion.
- Lorblanchet, Michel (1999), "Pourquoi l'art est-il apparu. Entretien," *La Recherche* 326(Décembre): 107–109.
- Lorblanchet, Michel (2002), "L'art des premiers hommes. Entretien," *Sciences Humaines, Hors Série* 37(Juin-juillet-août): 8–11.

- Lorblanchet, Michel (2006), *Les origines de l'art. Les origines de la culture*. Paris: Editions le Pommier.
- Lumley-Woodyear, Henry de (1999), "Hominidés et hominisation," in Edgar Morin (ed.), *Relier les connaissances. Le défi du XXIe siècle. Journées thématiques, Paris, du 16 au 24 mars 1998*. Paris: Seuil, 169–178.
- Marcuzzi, Max (1996), *Les corps artificiels. Peurs et responsabilités*. Paris: Aubier.
- McBrearty, Sally, and Alison S. Brooks (2000) "The Revolution that Wasn't: A New Interpretation of the Origin of Modern Human Behavior," *Journal of Human Evolution* 39: 453–563.
- Morin, Edgar (1973), *Le paradigme perdu. La nature humaine*. Paris: Seuil.
- Morin, Edgar (1974/1973), *Das Rätsel des Humanen*. München & Zürich: Piper.
- Morin, Edgar (1980), *La méthode. 2. La vie de la vie*. Paris: Seuil.
- Morin, Edgar (1984/1976), "Pour une théorie de la crise," in Edgar Morin (ed.), *Sociologie*. Paris: Fayard, 139–153.
- Morin, Edgar (2003), *La méthode 5. L'humanité de l'humanité. L'identité humaine*. Paris: Seuil.
- Morin, Edgar (2008), *La méthode II: 3. Les idées; 4. L'humanité de l'humanité; 5. Éthique*. Paris: Seuil.
- Nietzsche, Friedrich (1999/1980), *Jenseits von Gut und Böse. Zur Genealogie der Moral. Sämtliche Werke. Kritische Studienausgabe in 15 Bänden. Hrsg. Colli/Montinari. Band 5*. München: dtv.
- Picq, Pascal (2005), *Nouvelle histoire de l'homme*. Paris: Perrin.
- Pinker, Steven (1994), *The Language Instinct. The New Science of Language and Mind*. London: Penguin.
- Premack, David (1999), "Ce que nous apprennent les chimpanzés. Entretien," in Jean-François Dortier (ed.), *Le cerveau et la pensée. La révolution des sciences cognitives*. Paris: Éditions Sciences Humaines, 145–152.
- Ricœur, Paul (1990), "Langage (Philosophies du)," *Encyclopædia Universalis*. Paris: Universalis, 434–444.
- Ropartz, Philippe (1989), "L'animalité," in André Jacob (ed.), *Encyclopédie philosophique universelle. Volume 1. L'Univers philosophique*. Paris. Presses Universitaires de France, 389–397.
- Safranski, Rüdiger (2005/2003), *How Much Globalization Can We Bear?* Translated by Patrick Camiller. Cambridge: Polity Press.
- Simondon, Gilbert (1989/1958), *Du mode d'existence des objets techniques*. Paris: Aubier.
- Vauclair, Jacques (1999), "Les animaux pensent-ils?," in Jean-François Dortier (ed.), *Le cerveau et la pensée. La révolution des sciences cognitives*. Paris: Éditions Sciences Humaines, 153–159.
- Vincent, Jean-Didier (2000) "Initiation à la biologie," in Luc Ferry and Jean-Didier Vincent (eds.), *Qu'est-ce que l'homme ? Sur les fondamentaux de la biologie et de la philosophie*. Paris: Odile Jacob, 145–278.
- Wynn, Thomas G. (1996), "The Evolution of Tools and Symbolic Behaviour," in Andrew Lock and Charles R. Peters (eds.), *Handbook of Human Symbolic Evolution*. Oxford: Clarendon Press, 263–87.

Dominique Bouchet is Chair Professor of International Marketing at the University of Southern Denmark. His main research fields are cultural differences and social change. During his career Bouchet has also worked as an associate professor in international economics and an associate professor in sociology and social psychology. He is the author or co-author of more than 40 books and 180 articles in ten languages. He has given university lectures and research seminars in 25 countries in five different languages. His approach has always been trans-disciplinary. For this reason he was awarded the Danish researcher's prize in 2007.