

## Man-Made Values in an Inhuman Cosmos\*

Béla MESTER  
Hungarian Academy of Sciences  
Research Centre for the Humanities  
Institute of Philosophy

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**Abstract:** After the emergence of natural sciences in the age of Romanticism, a new approach of nature has appeared due to the historical view of the objects of natural philosophy. *Mineralogy* was paradigmatic; it made *culturally valuable, historical* objects, exhibited in *Museums*, from the objects of dead, *culturally neutral nature*, which was evaluated before as an *unhistorical* world. In works of Kant, Herder, Schelling and others was established the topic of the early history of Earth as a *preface of the history* of the humanity. My paper outlines the consequences of the idea of *humanised and historicised dead nature*.

**E-mail:** mester.bela@btk.mta.hu

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*There* is an intrinsic tension in the vocabulary of environmental thinking and bioethics, hidden in their intentions connected with *axiological* topics. There are no texts where nature, the biosphere, the life and welfare of the inhuman beings are free from the concept of *values*, which is the fundamental category of philosophical *axiology*. The *world of values* as a phenomenon of human thinking and as the object of *axiology*, of the conscious reflection on it, was always considered the inevitable part of the human, societal world, without a possibility of the usage of this word by any inhuman meaning. However, we use the term of value as a human concept in the axiology: different concepts of nature have important roles in the history of the *revaluation of values* in the history of philosophy. It seems that from as early a time as the Cynic doctrine of *following the way of nature* the concepts of nature had an instrumental role in philosophical cultural criticisms, that of the constructed point of view, outside of the human world, created just for criticising it. Nature in these constructed situations is merely an instrument of axiological thinking within the sphere of the societal world of humanity, and it cannot be a value-in-itself.

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## Introduction: An Axiological Problem of Bioethics - Nature as an Inhuman Value – Conceptualised by Humans

The above mentioned instrumentality of nature in the world of values is clear on the surface of the environmental thought, especially in its old-fashioned writings, before the emergence of *deep ecology*. The word *natural* was used in the meaning that something is optimal for the humans; it is *fitted to human nature*. The identification of nature with the human environment, and the interpretation of its existence as the prerequisite of human life, and of its good condition as the prerequisite of human welfare is also a wide-spread method in the environmental discourse of today. There is the opposite approach of the axiological relationship of humans and the other parts of nature: the enlargement of the world of values for a restricted part of inhuman nature, usually for several animals, especially mammals. A known example is Benthamian classical utilitarianism with the use of the utility calculus for a well-defined sphere of an animal-human continuum, which has individuals who are able to feel *pleasure and pain*.<sup>1</sup> It is clear that the concept of Bentham's inhuman moral subjects was based on his anthropological ideas. He calculated with individual beings, not with populations, species or ecological systems, based on his individualistic view of the human society, and he modelled their welfare on his conception of the welfare of humans. By his method of the *morally humanised nonhumans* another problem has emerged, that of the boundaries; which part of the universe can be a part of the moral world, and which will always be out of it? What are the criteria of the distinction? Supposing that the enlargement of the *utility calculus* for all the beings of the biosphere were possible, the problem of the humanisation of nonhumans is not clear on the surface of bioethical thinking. A more radical idea, enlargement of the world of values for the universe must suppose a new moral quality for the non-living objects of the *cosmos* as a pass for the world of values that is itself the inhumanity, the human-free character of the universe.

In the following sections I will speak about the dilemma of the ambivalent concept of axiological thinking, based on this paradox concept of the values of inhumanity for the humans, and conceptualised by the humans. In the first part I will touch the antique roots of the axiological problems of environmental thinking. The controversies of the theory of humanised nonhumans will be discussed in the second part; and the enlargement of the question for non-living nature is the topic of the third part. The roots of the humanisation of nature in the history of sciences and philosophy will be discussed in the fourth part. The emergence of the idea of historicity of nature, its role in the humanisation of nature, and the triumph of the historicist model are the topics of the fifth, sixth, and seventh parts. A special case of

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<sup>1</sup> "It may come one day to be recognised that the number of the legs, the villosity of the skin, or the termination of the *os sacrum* are reasons equally insufficient for abandoning a sensitive being to the same fate. What else is it that should trace the insuperable line? Is it the faculty of reason, or, perhaps, the faculty of discourse? But a full-grown horse or dog, is beyond comparison a more rational, as well as a more conversible animal, than an infant of a day or a week or even a month, old. But suppose the case were otherwise, what would it avail? The question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?" Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation*, 2<sup>nd</sup> edition (London: Pickering, 1823), Vol. 2, 236, footnote.

historicism in the sciences is the emergence of *mineralogy*, which will be discussed in the eighth, and the last part before the conclusions.

### **Antique Roots of the Axiological Problems of Bioethics, and Environmental Thinking**

However, the idea of the harmony *with* nature and the rule *above* the nonhuman beings of the biosphere is a controversial thesis; it is well-known in the history of philosophy. The solution of the controversy is hidden in the different concepts of nature. In the thought of the classical or early Stoic philosophy, *Chrysippus*, by the testimony of *Cicero* in his well-known *De finibus bonorum et malorum*, the ideal of the human being as *cosmopolitēs* and the human rule above the animals often appear in neighbouring *loci*. The Stoic philosopher, in the interpretation of *Cicero*, declares a universal, juridical covenant between the gods and all the members of humanity on the one hand, and the impossibility of any covenant, juridical relationship, or obligation between humans and animals. His opinions and vocabulary about the instrumental usage of the animals by humanity are almost the same as that of the point of view of the Judeo-Christian religious tradition. However, humans are just special kinds of animals by *Chrysippus*, and the relationship between the animal-human continuum and its environment, nature, is based on the same principle of the *oikeiōsis* both in the cases of the animals and humans; human beings can be the citizens of the Stoic *cosmopolis* only, animals are just materials and instruments for human usage in the same world, expressed in the next step of his thinking.<sup>1</sup> It is clear that the concept of the *physis* of the Stoics is highly different from our modern concept of nature. The Stoic term refers to the whole of the *cosmos*, and the Stoic philosophers are sometimes ambivalent about its part called by modern term *biosphere*. To be a good citizen of the *cosmopolis*, following the way of the *physis*, and using the *biosphere* merely instrumentally, in the same time, it is possible within the framework of the Stoic doctrine.<sup>2</sup> This theoretical controversy is not the privilege of the antique thought. Nowadays, in the idea of the political and juridical representation of the future generations is hidden a similar tension of the initial ideas. By this proposal of the green movements, the future generations have the right for living in as natural an environment as we do today. It is clear that this argumentation implies an enlargement of the political community for the *cosmopolis*, because the idea can work in global measurement, only. In the same system, *biosphere* appears just instrumentally, just the property, or fortune of our heiresses and heirs. For a non-instrumental point of view of nature another theoretical background is needed, which takes another subject of the demanded new rights.

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<sup>1</sup> “It follows that we are by nature fitted to form unions, societies and states. Again, they hold that the universe is governed by divine will; it is a city or state of which both men and gods are members and each one of us is a part of this universe; from which it is a natural consequence that we should prefer the common advantage to our own” Marcus Tullius Cicero, *De Finibus Bonorum et Malorum* (Cambridge/MA: Harvard University Press, 1967), 63–64.

<sup>2</sup> For a more detailed analysis of this question see my recent article: Béla Mester, “Human Nature and the Nature Itself: Natural and Social Aspects of the Human Nature”, *Limes: Borderland Studies* 2 (2012): 71–81.

### **Living Nature as an Inhuman Value – Conceptualised by Humans**

The opposite approach within the framework of the environmental thinking is based on similar political and juridical terms as the above mentioned theory. In this case the subjects of the demanded new rights are the nonhuman beings themselves, especially the animals. Contrary to the above mentioned instrumental interpretation of the *biosphere*, and the animals in it, which is deeply rooted in the tradition of the western thought, life and welfare of the nonhuman beings are values in themselves within the theoretical frame of this characteristically modern idea. One of the consequences of the juridical and political terminology is a palpable *humanisation* of the nonhuman subjects of the demanded new laws. Subjects of the law can appear as individuals, separate entities, not as organic parts of an ecosystem. For instance, a natural environment, which is needed for survival and welfare of the individually registered representatives of a protected *species*, can be a part of an article of the animal protection as the *territory*, *quasi-property* of these animals. In this juridical framework, the environment of several privileged individuals of several privileged animal species; the existence of mice is as instrumental in an act for the protection of owls, as that of the whole biosphere was in the previous theory. A couple of owls with their property, and the young of birds in the nest as their heirs in the ownership of their territory, protected by the law; it is a highly idyllic, but much anthropomorphized model of the animal rights. Within this type of the argumentation for the animal rights have emerged new kinds of the demanded rights, which are rooted in an anthropomorphic thinking, and come from the moral canon of the western civilisation. Amongst them the *rights of several privileged animals for privacy* is the most characteristic, for example in the practice of the recent actions for the animal welfare, the right of the female whales in the time of their labour.

### **Enlargement of the Axiological Dilemma for Non-Living Nature**

The above discussed intrinsic anthropomorphic element of the current argumentation for the animal rights has a principal theoretical problem with practical consequences; the anthropomorphised protected animals have lost their autonomy as nonhuman entities, consequently their several nonhuman needs can be on the blind spot of this way of thinking. The axiological autonomy of the nonhuman entities requires a new, different theoretical approach, which is based directly on their *inhumanity*. By this reasoning, values of the natural objects are the consequences of the absence of the signs of any human activity on theirs; the absence of the humans is a value in itself in this way of thinking. The logic of the argumentation of this theoretical discourse follows the idea of the values of non-living nature, at this point. Non-living objects are more alien ones from the humans than the living ones, consequently they contain more values. A contemporary example for this way of thinking is the discourse about the *pollution of the space*. Several elements of this discourse are the parts of the anthropocentric environmental thinking; the space-trash near the Earth is dangerous for the practical human practices and services, which use the polluted space. Other elements of this way of thinking, like the interpretation of the footprint of Armstrong on the face of the Moon as a trash in nature, caused by humans, or the protestation against the explorations of the Moons of other planets by firing and

destroying their surface. In the latter cases the inhuman fundamentals of the idea are clear with a hidden, developed aesthetics and ethics; someone is beautiful and good, if it has *no* human spectators, or interactions. On the bottom, there is a hidden anthropomorphic metaphor of personified nature *as virgin*.<sup>1</sup>



The way the new blends with the old

**Patricia Todoran**, *The New Blends with the Old*  
40 cm x 50 cm, lambda print, 2015

### **Humanisation of Nature in the Sciences and in Natural Philosophy<sup>2</sup>**

The personification of intact nature awakes our suspicion about the effectiveness of the approach for considering axiological autonomy for the nonhuman beings and non-living objects of nature, based purely on their inhumanity. In the end, it will be always demonstrated that this point of view has its roots in a *negative anthropomorphism*, which is not better and not worse, but more sophisticated than the direct humanisation of the privileged animals in the cases discussed above. This negatively humanised nature is not able to contain axiological values, as an entity,

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<sup>1</sup> For a more detailed analysis of this question see my article: Béla Mester, “A Wanted Environment – Alive or Dead”, *Philobiblon* 14 (2009): 174–183.

<sup>2</sup> This question was discussed in details in my recent paper in Hungarian, see: Béla Mester, “As ásvány mint történeti emlék. Az élettelen természet történeti szemléletének kialakulása (Mineral as Memory of History. Rise of the Historical Aspect of Inanimate Nature)”, in: Dezső Gurka, ed., *Formációk és metamorfózisok. A geológia, a filozófia és az irodalom kölcsönhatásai a 18–19. században* (Formations and Metamorphoses. Interactions of Geology, Philosophy, and Literature in the 18<sup>th</sup> and 19<sup>th</sup> centuries) (Budapest: Gondolat, 2013): 97–105, with English summary.

which is intact from humanity; its concept was pre-formed by the history of the philosophy and the sciences in the 18<sup>th</sup> and 19<sup>th</sup> centuries. It was the topic of a separate presentation to outline the process of the changing images of nature from the unhistorical models of the seventeenth-century cosmologies till the recognised historicity of inhuman and non-living nature in the middle of the 19<sup>th</sup> century.

### **Emergence of the Idea of Historicity of Nature**

In the previous sections at first I have outlined the core of the axiological problem in the environmental and bioethical thought; later I have discussed the methods of the instrumental calculation with nature in the human welfare, a direct and an indirect way of its humanisation, with the causes of the latter one in the history of philosophy and science. In my opinion, all the fallacies of the above mentioned models are rooted in an instrumental usage of a culturally embedded concept of nature for the cultural criticism. My chain of ideas was rooted in the paradox of the postulated inhuman values as an intrinsic problem in the environmental system of ideas. The world of the values, and the reflection on it, called *axiology*, was a human world, a *counterpart* of inhuman nature. A concept of nature was used mainly as an instrument for the critique of the civilisation from the time of the Cynic philosophers. “Follow nature (*physis*)” meant that you should not follow the societal laws and customs (*nomos*); nature has not any intrinsic value in itself in this way of thinking. When Jeremy Bentham enlarged the boundaries of the utility calculus for the beings able to observe pain and pleasure, as it was mentioned above; it was just an enlargement of an individualistic anthropology, and, consequently, the human world of values, for all the animals. An opposite approach was a colonisation of the non-human world in the concept of nature as a prerequisite of the human welfare, from the form of human–nature relationship, formulated by Chrysippus, to the conception of the representation of (humanised) nature as a part of law. In the latter thoughts nature is just a human property, a heritage of the future generation, without values in itself. Neither the enlargement of human values for the animals, nor the colonisation of nature could offer a theory for a special, inhuman axiology of nature. It has its roots in the idea of the value in itself of inhuman nature. *It is the inhumanity as a value in itself, formulated by humans for humans, hidden in nature.* This concept of nature is based on several features of the sciences at the turn of the 18<sup>th</sup> and 19<sup>th</sup> centuries, when *historicity* emerged in the exploration and interpretation of nature, connected by several hidden axiological elements. By my hypothesis, we cannot find inhuman values in nature, excluding the ones which were put into a concept of nature. In this meaning, nature with moral values, whether human or inhuman ones, is a *man-made world*. A reconstruction of the rise of the historicity in the history of the research of nature has a crucial role in my argumentation. The confirmation of my thesis about the intrinsic axiological problems of the environmental thought depends on the truthfulness of my theses on the history of philosophy and sciences. According to my narrative, the historical method has penetrated into the explorations of nature and into natural philosophy within two centuries. The protagonist of this change of the point of views was the *mineralogy*. The institutional symbols of the change are the *museums of natural*

*history*, where the objects as the signs of typical natural processes have become the *witnesses of a narrative of nature*, a needed prehistory of the humanity, on the same level with the archaeological objects as the *witnesses of the human nature*. In this interpretation, *historicised* nature has been fulfilled with the human values of the historical way of thinking, and it has been suddenly *humanised*. The above mentioned model of the axiological autonomy of nature takes this humanised concept of nature, and considers it an inhuman, autonomous axiological value, but the signs of the original humanisation will be unmasked in several cases during the chain of the argumentation within this model.

### **A Humanisation of an Alienated Earth, and an Alienation of a Humanised Cosmos**

After the rise of the natural sciences of the early modernity, in the age of Romanticism a new approach of nature appeared on the historical view of the living and dead objects of natural philosophy. From this point of view, the *mineralogy* of the late 18<sup>th</sup> and early 19<sup>th</sup> centuries was paradigmatic; it has made *culturally valuable, historical* objects, worthy of exhibiting them in a *Museum*, from the object of dead, *culturally neutral nature*, which was evaluated before as an *unhistorical* world. In the following, at first I will show the role of mineralogy in the new system of the modern knowledge, in the sciences, and in philosophy. Natural history (*historia naturalis*) has become a really historical discipline, a part of the new historicist system, with the establishment of the scientific narrative of non-living nature. This process will be exemplified by the classics of philosophy, by loci of textbooks and popular manuals of this epoch, and by data of the history of the sciences. Textbooks and manuals as systematic works show well the *supposed role of the new sciences in a new system of knowledge*. My first topic will be the jump from *causality to teleology* in an early work of Kant, and in an 18<sup>th</sup>-century textbook of physics. The second one is the historicity of the geosciences in the works of Herder, Hegel, and in a 19<sup>th</sup>-century Hungarian manual. My next topic is the problem of the presence in contemporary geosciences. In the end of my article, I will return to the initial problem: whether the hidden moral values, observed in nature, were put into nature, before, by the historicist program of the sciences.

### **Transition from an Ahistorical Model of Nature to an Historical One in the Turn of the 18<sup>th</sup> and 19<sup>th</sup> Centuries**

The approach of the middle of the 18<sup>th</sup> century is clearly mirrored in the main work of the pre-critical period of Immanuel Kant, entitled *General Natural History and Theory of the Celestial Bodies; or, an Attempt to Account for the Constitutional and Mechanical Origin of the Universe, upon Newtonian Principles* (1755). Its aim is to offer a general scientific interpretation of the jump from the non-living to the living sphere, and, consequently, from the *causality* to the *teleology*.<sup>1</sup> This problem is as ancient as Plato's *Timaeus*; but Kant's work contains several elements of a new,

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<sup>1</sup> Immanuel Kant, *Allgemeine Naturgeschichte und Theorie des Himmels oder Versuch von der Verfassung und dem mechanischen Ursprunge des ganzen Weltgebändes nach Newtonischen Grundsätzen abgehandelt* (Königsberg–Leipzig: Petersen, 1755).

hidden system of knowledge. The first challenge is to explain the origin of the living being, with its intrinsic teleology, based on the rules of the Newtonian physics; by Kant's words, the real challenge is a clear and entire deduction "of the emergence of a single leaf of grass, or that of a worm from the laws of mechanics".<sup>1</sup> The next teleological jump is to describe the genealogy of the Universe, and the history of the Earth, based on the same Newtonian basis, as an entity being for living nature, and for the humanity. Kant's hidden programme in this period is to establish a *historical*, at least, *narrative* system of knowledge. In his framework, non-living nature is not a neutral, ahistorical scenery of the human activity; it has its own history, and the scientist's task is to offer a link between the two narratives, the history of the Universe, and the history of humanity, and to unify them.

A widespread textbook of physics of the second part of the same century, written by a good Central-European Jesuit professor, who later, in the nineties became an anti-Kantian protagonist, Horváth's *Physica particularis* mirrors the dilemmas of the transition from *historia naturalis* to the modern physics, from the point of view of the *school philosophy*.<sup>2</sup> Horváth was a typical figure of the so-called Jesuit Enlightenment; his physics was based on Newton, his philosophy remained an old-fashioned late Scholasticism. His work was characterised by this difficult background; its main part contains the disciplines of modern physics; other parts discuss geographical and geological questions, with a short botanical appendix. His textbook has in its structure two crucial points by the point of view of the scientific methodology. The first one is the gap between the eternal, testable laws of physics and the reconstructed *narrative of the history* of the Earth; the second one is the gap between non-living and living nature. However, these gaps are out of the disciplinary boundaries of modern physics, they are the central questions of the science and philosophy of his lifetime.

Telling a relatively unified narrative of the Universe, Earth, living nature, and humanity is the achievement of the German historicism of the next generation. In Herder's masterpiece, *Outline of a Philosophical History of Humanity*,<sup>3</sup> the history of the Earth, within the whole of geology, is a *prehistory* of the human history. The unified narrative from the cosmogony to the human culture is surprisingly continuous; jumps from non-living to living nature and from nature to humanity have not clearly formulated methodological problems in his basically teleological interpretation.

Hegel, in his *Encyclopaedia* (1817) has found a structured description for the jumps within nature, and between nature and history. In the second part of his work he describes the history of minerals as the steps for living nature. Another

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<sup>1</sup> Ibid., XXXV.

<sup>2</sup> I have discussed its Venetian edition, based on several previous versions, published since the sixties of the 18<sup>th</sup> century by the Hungarian University: Joannes Baptista Horváth, *Physica Particularis. Auditorium usibus accomodata*, excuebat Antonius Zatta, Editio Prima Veneta (Venetiis 1782). With a short Italian preface written by the editing committee of the *Serenissima Repubblica*.

<sup>3</sup> Johann Gottfried Herder, *Ideen zur Philosophie der Geschichte der Menschheit* Vol. I. (Riga–Leipzig: Hartknoch, 1784).



problem for him is the method of the description of the world of the minerals *historically*. His metaphors in the relevant *loci* are interesting from this point of view. On the one hand, “the Earth is a whole, a system of the life”; but “as a crystal, it is dead, similar to a skeleton”, on the other. New theories of *geognosy*, both the concurrent *Neptunist* and *Vulcanist* theories and the moderated *Plutonism* of the later period are based on a method of reconstruction, borrowed from the relatively new science of archaeology. Both the human history and the history of the Earth have historical facts, which can be reconstructed on the basis of the physical signs of the activity in the past. The task of the archaeologist and that of the geologist are the same, reconstructing a history, a narrative, and describing the subject of their research by its history. The historical value of a *stalactite* or a *stalagmite* in a cave is similar to an ancient arrow and bow in the same cave; however, they are used for the reconstruction of different, human and non-human histories.

The link between the new, historical humanities of this epoch, and the another new science, called mineralogy, was formulated clearly, within a program of the system of sciences, by Schelling, in his *On University Studies*: “Every mineral is a true *philological problem*”.<sup>1</sup> (Schelling, in here, probably follows a commonplace, established by the letters written by Johann Georg Hamann to Immanuel Kant about natural philosophy in 1759.) From our point of view it is important that Schelling here thinks of the new, *historical* linguistics of his age, which was a kind of *archaeology of the language*. “Excavations for the fossils of the language” on the one hand, and “reconstruction of the grammar of the stones”, on the other were parts of the same metaphoric language of the new historicity emerged in the sciences in this epoch.

A typical 19<sup>th</sup>-century *real-lexicon* (1829–1831) summarised the problems of the historicity of the natural sciences in its system of knowledge.<sup>2</sup> According to the Schellingian author, all the sciences are organised by historicity; they are divided for the historical disciplines proper, and for the auxiliary disciplines of the history, amongst them *narrative disciplines*, natural history (*Naturgeschichte*) of the Heaven and the Earth, *as real historical studies*. In this system, which consciously refers to Kant’s work, mineralogy is the part of natural history of the latter one, and the geological findings are equal with the archaeological ones by their cultural values, as witnesses of an inhuman and human epoch of the history of the Universe. Historicity of the mineralogy, and the *value* of geological and paleontological findings, by the cultural and moral meaning, has become evident for the public opinion, in this time.

### Historicity in the Modern Geosciences as a Problem of Methodology

Nowadays, when mineralogy exists in the social environment of ahistorical natural sciences in the universities and research centres, its intrinsic methodological historicity, inherited from the age of Romanticism, the founding time of this discipline, appears as a question of identity for the scientific community. Historicity of

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<sup>1</sup> Friedrich Wilhelm Joseph Schelling, “Vorlesungen über die Methode des akademischen Studiums”, in: Friedrich Wilhelm Joseph von Schelling, *Werke* Vol. II. (Leipzig 1907), 576. First edition was published in 1803.

<sup>2</sup> István Nyíry, *A’ tudományok öszvesége (A Universe of the Sciences)* Vol. I–III. (S. Patak: Nádaskay, 1829–1831).

their own discipline was interpreted by the mineralogists within the framework of the informatics from the seventies. Their mineral findings as witnesses of the past were evaluated as a container of information, and the mineralogist's task was to reconstruct the crashed information from the remained elements, and decipher them.<sup>1</sup> It is a reformulation of the old historical method within the new requirements of the scientific methodology, saving cultural and moral value of the potential geological finding, as valuable information-containers. Another solution of the methodological tension is the aim for making mineralogy and geology a *synchronic*, modern science, instead of the *diachronic* view of its old historicity.<sup>2</sup> Why not? If, by Schelling, “every mineral is a true *philological problem*”, mineralogists can choose the *descriptive* method of synchronic linguistics, instead of the diachronic view of historical linguistics, which was a dominant approach in the time when mineralogy as a modern discipline was established. Surprisingly, this experiment of changing the methodological view of the geosciences, has not become a recognised theory, it remained an interesting, but isolated idea of the Novosibirsk school of geology.

It is characteristic that the last serious contribution to the philosophy of geological research recognises the historical method as evidence. In the argumentation of professor Şengör, the parallelism of the humanities and geosciences, based on their historicity, is more evident than it ever was.<sup>3</sup> The author's main question – *Is the present the key to the past or is the past the key to the present?* – is a fundamental problem of the philosophy of history. His direct comparison of the historical interpretations of the father of the *Vulcanist* school of geology, James Hutton, and Adam Smith on the one hand, and the father of the *Neptunists*, Abraham Gottlob Werner and Karl Marx on the other makes clear that there is one, homogeneous historicity in the sciences, only, for him. By the evidence of the title, all the mentioned ancient authors, both the mineralogists and philosophers *have just interpreted history* in the same sense.

We can say based on the evidences of this short overview that historicity in mineralogy, with all its consequences for the world of values, and for non-living/living, and nature/human relationships, seems to be a fact in science today. It concerns our initial problem.

## Conclusion

In the first half of my paper I have outlined my hypothesis about the intrinsic axiological tension within the environmental thought, in the approach of nature as a morally valuable entity, whose value is based on its inhumanity. I have supposed

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<sup>1</sup> For an overview of the question in Hungarian see: István Viczián, “Történeti szempontok a közettanban (Historical Aspects in Mineralogy)” *MTA X. Osztályának Közleményei [Transactions of the 10<sup>th</sup> Department of HAS]* 1–2 (1976): 83–89.

<sup>2</sup> The Novosibirsk school of mineralogy, under leadership of Yuriy Voronin was a characteristic representative of this approach. For the details see: Yuriy Voronin – E. Eranov, *Facii i formacii: Paragenesis* (Novosibirsk: Nauka, 1972).

<sup>3</sup> Ali Mehmet Célán Şengör, *Is the present the key to the past or is the past the key to the present? James Hutton and Adam Smith versus Abraham Gottlob Werner and Karl Marx in interpreting history* (Special Paper 355: Geological Society of America, 2001).

that this paradoxical concept of the value of inhumanity of nature, formulated by humans, for humans, is based on a view of nature rooted in the historical method of research. Historical approach of non-living and living nature is not neutral concerning the moral and cultural values. In the second half I have shown by the data of the history of philosophy and science, from the pre-critical Kant, through Herder, Schelling, and Hegel to the contemporary analyses of the philosophy of geology that historicised nature must be full of human values.

In other words, nature in our eyes always remains a *man-made world*.