SOCIO-CULTURAL DYNAMICS AND ETHOS OF CONTEMPORARY MAN IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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(Received 12 March 2014, revised 7 June 2014)

Abstract

Based on our historical experience in the form of macro-problems and the related threats of the contemporary man and his world, we are aware of the need of new socio-cultural dynamics, even of a broader change of the formed way of human existence. The challenge today seems to be to develop a new way of life and its ‘ethos’. The task is to apply new socio-cultural dynamics and quality to our practice with regard to the future that respects clear connection and mutual determination of social and environmental phenomena. The study is based on a presumption that in the intentions of sustainable development the new demanded socio-cultural dynamics requires a man oriented in the meanings of reality that is not axiologically and ethically neutral. In this context, among other things, the need to work on ‘new science’, in which the human dimension will be strengthened, is uncovered. In particular, it seeks to exceed the traditional frameworks of scientistic foundations. The authors also point out to the inevitable and anthropologically relevant cultivation and (spiritual-) cultural conversion of the human subject itself, which would lead to his new ‘ethos’. The focus is on its three important correlated moments (movements): ‘ethisation’, ‘ecologisation’ and ‘spiritualisation’. In this connection is raised the question of a new education paradigm in a democratic society, which could productively participate on the project of future world in the intentions of sustainable development.

Keywords: philosophy, education, ethisation, ecologisation, spiritualisation

1. Introduction

Based on our historical experience in the form of macro-problems and the related threats of a contemporary man and his world we are aware of the need of new socio-cultural dynamics, new human practice, or a broader change of the formed way of human existence. However, at the same time, we are aware of the fact that the needed change, in respect of the future, can’t be achieved right now.

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Similarly, it is hardly possible to speak about one universal mean of this change, quite the contrary. The given situation requires finding several solutions leading to practical precautions in the intentions of sustainable development. Today, such solutions, that are capable of sustaining what is socially positive and eliminate negative impacts of civilisation development at its maximum, need to be searched for [1].

It requires a consistent analysis of contemporary macro-problems that threaten sustainable development in the future. It may be stated in this context that historical experiences in the form of macro-problems, for instance, apart from other things, convince us of the need of harmonious inter-human sharing, and a partner and delicate relationship to nature and the world. They also lead to reminding of the existence of other things in this world than prosperity and consumption. They show us the dubiousness of human ideas as a subject built on itself that is ‘homo agens’ in the sense of a unidirectional anthropocentric self-provision. The dominating scientific-technical approach to reality as well as contemporary fetishisation of a pragmatic-utilitarian and aesthetic view of the man, without a deeper axiological-ethical anchoring seem to be problematic in this context.

Currently, we can and we must ask a question about possibilities and where they are outlined, we must talk about things, which our hopes can be pinned on, and what our chances for the future can be expected from. Further on, we are going to deal with the requirements and conditions of the new socio-cultural dynamics and the new ethos of a man in regard to the requirements of sustainable development. In this connection we identify, inter alia, a current task to work on a new science, as well as a task to look for a new paradigm of education in a democratic society. Science and education actually seem to be (inter alia) significant factors in the socio-cultural dynamics that could particularly and productively participate on the project of the future world in the intentions of sustainable development.

2. Requirements on the socio-cultural dynamics and ethos of a man in regard to sustainable development

At present, we find ourselves in the situation of civilisation threats and risks [2], while it is obvious that the risk of crossing the border of the endurable level is growing constantly. Apparently, the 20th century deprived us of the last illusions of comfortable provision of human existence. Actually, “it strongly reminded us that the lottery does not accept any more bets; everything is ready for the draw. The last ‘move’ that humanity can do, is the globalisation of the world of humans as united individualities capable of cooperation for their rescue through an elaborated and really responsible cultivation of nature and through an elaborated, creative utilisation of cultural capacities of each man, each human community.” [3]
In this situation we realise the difficulty of ideas of a man as an anthropocentric subjectivity, which has been developed by the modern spiritual tradition and which our existing socio-cultural dynamics was built on. Therefore, at present, it is the self-understanding of a man as the human ‘I’ built on itself that is becoming problematic – a subject that carries the basis of his being in himself and that relates everything in the Universe and the whole Universe to his powers and aims. It is a subject that uses the Universe, the world for his self-realisation as a material or mean. Anthropocentrically, he seizes and transforms it through his ‘tools’ (mind, will, science and technology) as ‘homo agens’ [4].

The needed socio-cultural dynamics, with respect to the future, requires new self-understanding of a man and understanding of the world, which will be demonstrated in his self-governing in the structure of the world. It is one of the fundamental requirements in the period representing a new situation for a man, which reflects anthropologically relevant cultivation and (spiritual-) cultural conversion of the human subject itself. It should lead to assertion of the new ethos in its practical-existential plain in the intentions of sustainable development.

At present, a man is supposed to allocate his human practice in a certain balance between oneself and the world, or oneself and the nature. For each allocation of human practice, or for social and cultural being of a man as such, an inevitable condition indicates that current risks and threats have a complex, system character. The distinct interconnection and mutual determination of social and ecological/environmental phenomena need to be taken into consideration. The interconnection of these phenomena, spiritual-cultural awareness and human relationships shall not be omitted in this context. “Ecological issue is primarily linked to thoughts, ideas and activity of a man and his relationship to other men […], certain detector of human relationship to nature is the relationship of men to themselves and to each other…” [5]

Our historical experiences in the form of the already mentioned interrelated macro-problems, various contemporary crises and risks clearly demonstrate that it is impossible to live without an axiological-ethical dimension. It is impossible to live the right way without this dimension so that we would not threaten the ‘human’ and the ‘extra-human’ that we meet in the horizon of the world. Therefore, the new understanding of self, nature and in the wider perception, the world, which would fund the new ethos of a man in the context of socio-cultural dynamics, can, according to us, occur only together with value-moral conversion of the human subject. The new ethos of human practice with respect to the future in the intentions of sustainable development cannot be expected without the axiological-ethical transformation of the current level of human consciousness.

We believe that today it regards the necessary anthropological change of the relationship of the man to himself, to the others, to nature and to the world, which has an essential axiological-ethical dimension. This change needs considering the socio-cultural dynamics for the future in the intentions of sustainable development. According to us, it should take place in personalistic
and ecologic/eco-social spirit. Authentic personalistic value-moral consciousness enables to live with the respect to a man who has a non-reducible character of a human person and at the same time with respect to nature, the Earth. Therefore, we believe that it is the ‘ethics of a person’ that is relevant for the socio-cultural dynamics with respect to the future. In this context we assume that contemporary personalism will discover its ecological moment, will fully appreciate the significance of transpersonal surroundings for a person and that contemporary ecologism will appreciate the significance of the man as a non-reducible person fully, too.

Considering these things we state that three current requirements for new socio-cultural dynamics can be found. They regard: a) ‘ethisation’, b) ‘ecologisation’ and c) ‘spiritualisation’. We believe that these moments need to be necessarily understood as correlated moments, referring to each other, mutually complementary. At this point it might be claimed that it is possible to be inspired by the Christian personalistic vision [6], too, which proves to be relevant in the context of sustainable development. It can apparently lay good ‘spiritual foundations’ for the ethos of a man and the society [7], which is relevant for our future in the intentions of sustainable development.

Finally, it can be stated that today we require and look for individual factors in cultural-social dynamics, which could participate in the project of the future world, in the intentions of sustainable development productively. It seems that the utilisation of great religions’ cultural heritage can be beneficial [8]. From our perspective, as it was already indicated, it regards Christianity in particular, for which the current situation is a challenge. However, Science as well as education prove themselves to be factors in cultural-social dynamics, which could and should participate in the project of the future world in the intentions of sustainable development specifically productively. Therefore, attention will be paid to them in the following paragraphs.

3. Science as a source of risks and a crucial socio-cultural factor for sustainable development

At present, there is no doubt that we are inheritors of the achievements of the technical-scientific civilisation and that we draw and live from the accomplishments of scientific knowledge. Despite, it seems that recently there have been doubts about the position and the positive role of Science in the society and culture. It can be said that we are witnesses to scepticism and criticism of Science and scientists, even resignation to scientific knowledge; not only from the side of general public or society, but from the ranks of scientific community, too.

The failure of technical-scientific rationality facing the growing civilisation threats and risks is the source of the critical and sceptical approach to Science. Paradoxically, the threats and risks grow disproportionately to the successes of Science and the development of technology, which can be fully observed at present [2, p. 78]. It is true that thanks to Science and technology
man has reached a really great level of commanding of the world, great power to make decisions about various fields of actuality. However, it takes place not only in a constructive direction, but unfortunately, also in a destructive direction. It is apparent that on one hand technical-scientific development has the command of nature to a large degree, but on the other hand, the unplanned and unpredictable side-effects, which can destroy the originally achieved development, are connected to it. They can lead to irreversible damages done on the man himself and his surroundings [1, 2, 9].

Organisation and technological development, which the Science has been through, have seriously complicated the relationship between man and nature, which can be seen in two plains – the ecological plain and the ethical plain, which are different on one hand, but interconnected on the other [10]. Shifting the borders of the customary man’s command of nature any further, proves to be maximally risky in these two plains at present [1, 2]. It is threatening and what is more, it is directly excluding the sustainability of human society’s development.

In this context a question can be posed: is it necessary to abandon Science and technology for the sake of our future? From the perspective of significance for our future does it already relate to the ‘fall of Science’ as a socio-cultural factor?

Today, it has become obvious that the abandonment of Science, technology and civilisation development (for instance, for the benefit of a certain form of a return to nature) needs to be perceived only as utopia [1]. It is getting clear that contemporary issues cannot be solved by the abandonment of Science and technology, but on the contrary, by a more intensive scientific-technological research. As Ganthaler reminds, due to a more intense research Science can enlarge or lessen the probability of some of its impacts, fact which is often overlooked [9]. Thus, at present, Science is getting to the centre of attention as a source of the causes of civilisation problems, but as well as a possible solver of the problems, as pointed out by U. Beck. New fields of action and application are being opened. According to Beck, regardless of all its mistakes a new way of its expansion has been already started [2, p. 258, 265-266].

Even if Science and technology, or in other words planetary technoscience, is and remains the ultimate factor of development of the (globalised) society [11], it does not mean that Science will continue to operate in the same established manner. Science, seems that has to start functioning differently so that it is possible to deal with the situation of great risk through Science itself [1]. It is obvious that the complexity of the current situation directly requires, as a condition, the change of ‘modo scientifico’ itself. With respect to sustainable development, the current requirement to work on a ‘new science’, which could participate in the project of the future world productively, is legitimate.

It actually regards changes in the modus operandi of Science. According to us, these changes should be determined by the processes of: a) ecologisation, b) ethisation and c) spiritualisation. Ecologisation is understood as integration of Science approach into the ecological context. Ethisation is understood as implementation of new ethics of Science, which needs to be worked on as on
appling the ethics of Science with its new principles. Spiritualisation is understood as rehabilitation and re-contextualisation of ethical-spiritual values in the teleological context of Science, which means the acceptance of deeper humane spiritual-cultural horizon in Science or in its ‘ethos’ that is individually bound to the anthropological aspects.

The above mentioned processes, which are necessarily to be perceived as correlated, referring to each other and complementary, should, according to us, intervene in the functioning of Science, its ‘modus’ in the methodological procedures themselves. Changes, on their basis, should be relevantly bound to the fundamental transformation of scientific concepts, methods and interpretations. Presumably, Science should be currently amended by such cognitive and evaluative procedures that will be able to take into account the risk [1, p. 38, 48, 50]. Due to it, at present, we are aware of the finiteness of the application of Cartesian tradition in the approach of reality, where the following is present: a strict dichotomy in understanding subject and object, the complexity of mechanistic model and the axiological-ethical neutral way of approach. We are aware of ‘shielding’ the human spiritual-cultural horizon in the traditional ‘ethos’ of Science. It was formed in the spirit of scientistic viewpoints (built on traditional positivistic foundations), which led to its reduction and limitation only to the plain of own methodological procedures: Thus, the traditional ‘ethos’ included the norm of impartiality, the norm of objectivity, the norm of criticism and the norm of intersubjectivity [1, p. 48].

At present, Science, turns out, regards and should regard a different model. Although, we need to admit that even if “the Cartesian method brought a great progress in certain fields and it still provides exciting results” [12], in the above mentioned ecological context, for instance, we realise the inadequacy and limitation of applying the Cartesian tradition in the approach to reality. We also recognise the complexity of the mechanistic model. From the epistemological point of view a different relationship, not a Cartesian one between the cognising and the cognised is required in the context of the needed change ‘modo scientifico’ and the new ‘ethos of Science’. And if Science has previously declared axiological autonomy and neutrality in cognition, at present, it is required to be specifically integrated into certain axiological fields [1].

The new ‘ethics of Science’ with new ethical principles that should form a better basis for the creation of Science’s ‘ethos’ also prove to be necessary [9]. The new ‘ethos’ of Science is particularly relevantly manifested in the relationship to ethical responsibility [1, 13]. It is obvious that current situation – a situation of risks and threats of sustainable development in particular – does not require only acceptance of strange, internal scientific responsibility (for a good, methodologically correct and defensible work), but also, to a larger extent, the acceptance of external scientific responsibility towards those who make the scientific work possible and mostly towards those who are directly or indirectly related to scientific work [9]. If Science, in its ‘classic’ perception, had based its objectivity postulate on the elimination of the subject of scientific cognition, and the episteme of classical Science had not created a sufficient basis for
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justification of the problem of the researcher’s responsibility toward society; Science, in its ‘non-classic’ perception, does not base its postulate of objectivity on a complete elimination of the subject and it creates better preconditions for solving of the problem of social responsibility of the researcher by far [13].

The human aspect of the quality of Science is essential in the morality and responsibility of Science. This fact lays the requirement of moral reflection or self-reflection on Science and scientists as a condition of moral decision-making in scientific practice, which should be, as we believe, a natural part of the scientific work as a ‘humane’ work. At the same time, moral consciousness and therefore, the moral consciousness of the scientist and of the scientific community, which is inevitable for the ‘ethos’ of Science and technology in the intentions of sustainable development, cannot be perceived, according to us, as shapeable only in the context of ethisation as implementation of the new ‘ethics of Science’ with its new principles. The point is that the humane aspect of Science’s quality requires a deeper grounded and formed ‘ethos’, which touches the very essence of a personal dimension in Science, i.e. the autonomous subject of a scientist. It is important not to forget about the spiritual-moral dimension of scientists’ consciousness funding the ‘ethos’ of Science.

In this context in particular, we would like to talk about the spiritualisation of science [14]. It regards a ‘countermove against’ the reduction of Science’s ‘ethos’ and its forming to the internal level, i.e. methodological rationality of Science. It represents the rehabilitation of human spiritual-cultural horizon in Science that is significantly bound to the anthropological dimension of ‘modo scientifico’. It resides in the re-contextualisation of ethical-spiritual values and the category of Good itself into autonomously moral decision-making of a human subject – a scientist in the practice of Science. We observe that conduction of Science that does not give up its ‘humanising’ or ‘culture-forming’ effect for the future, without which it ‘has no meaning’ [15], requires acceptance of the non-reducible participation of a person, of a scientist in the forming of relevant axiological-ethical horizon in Science. In this connection, personalistic moral consciousness of a scientist or the ‘person’s ethics’ is considered being prospective and substantial in the context of Science development with respect to the future.

We would also observe that today’s society, which functions through the outcomes of scientific research, likes accepting humane applications of Science and according to Langer it is therefore necessary to work patiently on strengthening of the morality of scientists. However and here we can absolutely agree, not only on strengthening of the morality of scientists [16]. Lots of real impacts of Science cannot be separated from their, for instance, political, economical and other determinations, as well as from their direct using by specific subjects (as ‘addressees’ of scientific research). They, as moral subjects, should also carry their share of moral responsibility for this purpose.
4. Education as a socio-cultural factor in the intentions of sustainable development

In the context of the preceding, we can open the issue of education that could, according to us, participate in the preparation of human potential for life relationships of the man in the intentions of sustainable development. Our assumption is based on the fact that socio-cultural dynamics and ethos of a man are formable in the context of education. However, according to us, the current situation, which has significant risks and threats for the sustainability of the development of human society and culture, places a demand on the search and work on its new paradigm. At present, philosophy of education is thus concentrated, or should be concentrated, on the issue of education and its possible positive contribution for a contemporary man with respect to the future. We think that due to our situation, education that is focused on practical-existential level of the man on one hand, as well as education that does not forget about the level transcending practical-existential determinations of the man on the other hand, could be relevantly applied. And since it is clear that the axiological-ethical neutral orientation of the man – only on the basis of axiological-ethical neutral knowledge from Science – is not sufficient in the world, according to us, education that has an inevitable axiological-ethical dimension could be relevantly applied with respect to the future. We mean humanistic education, whose core is the understanding of human world as a value world and a meaningful world. In this context we might talk about ‘trans-nihilistic’ education along with Andrej Rajský [17].

Such education should introduce ‘holistically’ all types of life relationships. It is not a preparation only for partial aims, life purposes, it is simply not purpose-built, it does not concern only capabilities of everyday providing, supplying or employment, but fundamentally vocation, the role ‘to be’ a man. It regards the maintenance of human way of existence, where a man needs ‘to be’ ‘responsible’ for what approaches him in the world. Involvement of a man in the responsible care of the world is perceived as real humanity. Such education is aimed foremost at an actualisation of human uniqueness and irreplaceability [18], application of one’s own strengths and own authentic responsibility for the circle of life.

Education as such that is relevant in the intentions of sustainable development should mediate essential eco-social competences, which are created by knowledge and developed dispositions (perception, value, approach, interaction dispositions, etc.). It should enable also understanding the ecological, social, cultural and other issues and help to create adequate ways of perception, evaluation and behaviour. We believe that in such education, similarly as in Science, would be relevant and applied in the future the already mentioned three moments required for the socio-cultural dynamics in the intentions of sustainable development (i.e. ethisation, ecologisation and spiritualisation).
Therefore, we can talk about needful ethisation or ethical imperative in education at present. How to understand this ‘ethisation’ or ‘ethical imperative’? [19] The purpose of education applying the ethical imperative is to teach, from childhood, human ethics based on moral values that are made accessible to human consciousness and conscience. This is firstly influenced by the task to look for and find the basis of these values and consequently, to express it transparently in the field of education, to project it into education [20]. It may be stated that the current ‘ethical imperative’ in education supports and confirms the fact that the categories of responsibility and conscience are becoming central in educational conceptions. Responsibility is the fundamental value and category, which is dynamically relatable to each dimension of human activity, as well as thinking and feeling. When it comes to ‘ecologisation’ in the context of education it heads towards the enhancement of communication environment of the man – it counts on the dialogue between people and the natural world. Here, nature is accepted as a subject whose value and moral relevance is not only the supremacy of practical rational subject. It is a subject with own authorisation independent from human species and culture. The meaning of the ‘ecologisation’ moment in education is to lead toward pro-natural emancipation of human species as species respecting their indispensable existential habitus [21]. Pro-naturally ‘enriched’ education leads, inter alia, to responsibility for the earthly natural environment and its inhabitants.

Finally, we talk about ‘spiritualisation’ that represents, in the field of education, the turn to ‘cultura animi’, which has been always represented by Philosophy. In this context, we may state, that on the basis of a certain, specific modern perception of a man and education, as we know it nowadays, there occurred a ‘cover’ of this significant moment of education. The meaning of education in this dimension is the effort for anthropologically relevant self-understanding of the man – understanding of human issues, situations, problems, which cannot be reductively based on the system of axiological-ethical neutral knowledge, information or facts. Apparently, it is particularly raised again by the current age and situation due to the ‘infotechnicism’ that is brought as a result of informatisation and fast technical transformation in our life.

In the previously mentioned context we state along with Miloš Lichner that it is informatisation that belongs to the processes that have been radically influencing fundamental social and cultural changes [22]. It is a significant socio-cultural factor, which has impacted the emergence of a number of new phenomena [23], related to education, too. The implemented information technologies are the source of ‘infotechnicism’, which represents one of the most significant challenges of present period. These technologies, in their current highest level of development, create a so called (virtual) ‘hyperreality’ [24] and they support and sustain, in connection with the hyperreality, almost a wild mania of information consumption in the lifestyle of a contemporary man. ‘Infotechnicism’ means for a man in his life an exposure to depersonalisation pressure of technosphere, which leads to the ‘technomorphism’ of his thinking, acting and values [25]. It also regards his exposure to proliferation and
consequent excess of information (and facts) that cause, according to us, a certain deficit or loss of ‘understanding’ in the life of the contemporary man, which is not axiologically-ethically neutral.

Apparently, it requires our ethical modus of life – ‘ethos’, as well as the political modus – in the context of the ‘over-pressure’ coming from too much information in our thinking and life – critical thinking, rational decision-making. And essentially, it requires the ‘understanding’ of own human situations and issues, which cannot be reduced to the system of axiological-ethical neutral knowledge or information and facts. Therefore, a man needs axiologically-ethically relevant ‘ideas’ for his thinking, decision-making and life. As Dale T. Snauwaert points out, ‘ideas’ are different to facts and information. They emerge from each individual reflection of one’s own unique experience (therefore, they cannot be ‘transposed’). They are actually the act of making sense of individual experience and they move the transformation within us [26]. According to us, based on the ‘practical’ need for our human life appears the above-mentioned requirement of ‘spiritualisation’ in education at present – the turn to ‘culta animi’ (or psychogogy) [4]. If the requirement is met, then education can lead toward the vitally relevant understanding based on ideas.

One needs to observe that the outlined humanistic education with axiological-ethical dimension cannot be a peremptory ‘regulation’ or ‘forming’ through orders and prohibitions [3, p. 86]. It should not be about a sole proposing and acquisition of given moral norms, values, laws or proposing and acquisition and teaching of ready-made knowledge from sciences. Personal experiences and cognitions should play an important role in it, too; including the ‘culta animi’ itself that concerns the ‘idea’ understanding of life relationships of the man more substantially and whose way is Philosophy. Dialogue has specifically proved to be an effective tool of education. After all, it has long and significantly participated in creation of humanly dignified and value well-founded educational environment, which is our concern, too [8, p. 100].

5. Conclusions

We need to ‘be’ more than to ‘have’ in the intentions of sustainable development, just as it was pointed out by E. Fromm too [27]. That’s why we consider the anthropologically relevant cultivation and (spiritual-) cultural conversion of the human subject itself necessary, which would lead to his new ethos. The new ethos of human practice, considering the future, cannot be expected without the axiological-ethical change of current level of human consciousness. According to us, it should take place in the personalistic and ecological, or eco-social spirit. Therefore, we identify three correlated moments: ‘ethisation’, ‘ecologisation’ and ‘spiritualisation’, which are relevant in the socio-cultural dynamics with respect to the future.

Science in particular and education, too, demonstrate themselves as specifically significant factors in cultural-social dynamics, which could be and truly should be crucially involved in the project of the future world in the
intentions of sustainable development. In this context we observe that the current situation characterised by risks and threats on the sustainable development of human society and culture, places a demand to work on a ‘new science’ and to look for a new paradigm of education with respect to the future. According to us, the above mentioned three moments, are necessarily related to these factors, too. Changes in Science that are based on these moments should be relevantly bound to the fundamental transformation of scientific concepts, methods and interpretations. They also require deeper anchoring and forming of the ‘ethos’ of Science, which substantially touches the personal dimension in science itself, i.e. the autonomous subject of a scientist. This ethos founds the principle of responsibility. And apart from other new principles of the ‘ethics of Science’ as an applied ethics it requires re-contextualisation of ethically-spiritual values into the autonomous moral decision-making of a human subject – the person of a scientist in the practice of Science.

In the philosophy of education, too, we need to take into account the above mentioned three moments and not to forget about the plain transcending the practical-existential determinations of the man. It regards humanistic education, which has, inevitably, an axiological-ethical dimension. This education is capable of mediating relevant eco-social competences. However, its focus is the understanding of human world as a world of values. Ethical imperative heads towards learning human ethics and responsibility and at the same time leads to the pro-natural emancipation of the human kind. Facing ‘infotechnicism’, as well as our practical need of ‘ideas’ for our human life, we discover the need of the ‘turn’ to ‘cultura animi’ – philosophy as a ‘method’ in education (more precisely, in the philosophy of education).

Acknowledgement

This research paper had been supported by a grant VEGA 1/0962/13.

References