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Sergei Sokolovskiy

Anthropology of the Living and the Dead: The Case of the Human Body and Technics (An Afterword to the Discussion)

This paper summarizes the discussion on anthropological approaches to the study of the interface of human body and technologies. Employing the concept of 'hypocognition' suggested by Robert Levy, the author describes the search for the conceptual tools necessary to create interdisciplinary dialogue in this new research field. In addition to a brief overview of this search and the resulting discussion, the paper argues with the traditional approach to the human body and technologies as separate phenomena. As new technologies interact with the human body in new and intricate ways, and influence human beings, societies, and cultures across the world, their study must become part and parcel of anthropology, which has so far focused on tradition and paid less attention to innovations.

Keywords: technology research in anthropology, body studies, hypocognition, interdisciplinary dialogue.

Discussions in interdisciplinary areas of research may be likened to a conversation which, in Merleau-Ponty's words, is only genuine when it allows the people conversing access to ideas which were not only unfamiliar to them previously, but even to ideas of which they would not even have been capable [Merleau-Ponty 1964: 29]. This, as far as I can understand, happens because any discipline has its own conceptual toolkit which is designed only for solving its own problems and which creates a particular viewpoint of the subject, or a vision which is as unique and idiosyncratic as the individual manners of perceiving things. Our professional vision, in any case, is that of Western man from the time of the invention of conceptual thought, and is realised not so much through the eyes as through the operation of the intellect. For this reason the words for *seeing*, *understanding* and *recognising* are contextual synonyms in many European languages. The obverse to this *visualisation* is a blindness caused by the lack of suitable concepts, which has been called hypocognition (a term invented by the American anthropologist Robert Levy, who worked on Tahiti [Levy 1973: 285, 324]). The bearers of any disciplinary knowledge, though practically clairvoyant in 'their own field', are doomed to hypocognition when they encounter new areas of knowledge or unaccustomed views of a subject that they

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know. People are incapable of assimilating even a thousandth of the sum of concepts available to humanity nowadays, since during their entire lives they do not encounter many of the social, cultural, scholarly or philosophical discourses. It is on account of these circumstances that interdisciplinary areas of research, as sites for meeting and exchanging unique knowledge and vocabularies, are the catalysts of innovation and the motors of scientific evolution. However, the bare fact that the bearers of different vocabularies have met cannot guarantee the success of the exchange. It would be naïve to suppose that reality itself could become the meta-language for that sort of 'conversation'. What is needed is a sort of outer frame, a common vocabulary, a search for metaphors and analogies, and an interdisciplinary translation, so that a conversation between members of different disciplinary communities could be genuine, and the interlocutors have access to new ideas at which they would never have arrived without such an exchange.

This was precisely the task of the discussion in this issue of the *Forum*: a search for a common conceptual framework that would allow representatives of different disciplines (in particular, medical anthropology, the anthropology of catastrophes, the anthropology of the body and techno-anthropology, as well as the sociology, history and philosophy of the body and technology, and, of course, researchers into practices, rituals, skills, habits and habitus) to deepen their own vision and enrich their departmental vocabularies and viewpoints as a result of an exchange of opinions on the proposed topic. This idea has its own prehistory, and a brief acquaintance with it may illuminate certain sides of the discussion presented in this issue.

One of the first publications in the study of contemporary technoculture in Russian anthropology was the thematic issue *New Approaches to the Study of Material Culture*, which included, inter alia, Phillip Vannini's survey of the anthropology and sociology of technology and David Hess's survey of the ethnography of science and technology (*Etnograficeskoe Obozrenie*, 2011, no. 5), and also Natalya Bogatyr's field research on contemporary digital technologies [Bogatyr 2011]. Soon afterwards there was an issue on the anthropology of organisations with important works for our subject on the role of the material infrastructure and technological innovations (*Etnograficeskoe Obozrenie*, 2012, no. 3), and a year later (*Etnograficeskoe Obozrenie*, 2013, no. 3) there was an examination of the ethical problems of post-humanism and new technologies, and all the interested authors on the editorial board were invited to publish their research on such subjects as 'prostheses and the limits of the body, the interrelationship of the living and the inorganic, of the human body and new technologies, neurobiology and the problem of artificial intelligence' [Sokolovskiy 2013: 38]. Among the

thematic issues of the future was the topic of 'The Living and the Inert: Old Mythologies, New Technologies and the Human Body'. Some results of research on the problem of the localisation of technoscholarship [Zemnukhova, Sivkov 2017], with important insights for theory and methodology, were published in 2017 in the thematic issue *The Anthropology of Spaces and Mobilities*. Finally, at the Twelfth Congress of Anthropologists and Ethnologists of Russia (Izhevsk, July 2017) there was a section on 'Technology and Corporeality: New Concepts and Methods of Research', the participants in which made up the majority of the pool of authors of the present 'Forum'. Alongside this, a special issue of *Sotsiologiya vlasti* [Sociology of Power] (2017, no. 3) was published in April 2018 on *The Ontology of the Body and Medical Practice* examining the problems of interaction between the body and technology.

All these works created the conditions for carrying out research on subjects which are quite traditional for our ethnography on the basis of new approaches and methods but, above all, in the framework of a renewed and enriched conceptual context for examining the interaction between the living and the dead, the bodily and the technical. In particular, it became possible to study burial rituals and thanatological practices against the wide background of the interactions of the living-organic-natural and the inert-inorganic-technical, and 2018 saw the beginning of the research project 'The Dead in the World of the Living: Cross-Cultural Research into the Communicative Aspects of Thanatological Practices and Beliefs' (grant RSF no. 18-18-00082), directed towards the study of such practices in a number of European, Asian and African countries. It was in the context of this project that the specific theoretical, methodological and meta-scientific questions that then formed the basis for discussion by participants in the present 'Forum' were formulated.

At first sight the combination of a set of problems so traditional for ethnographers with actor-network methodology and a consideration of previously ignored technological aspects of these practices (and technology is used everywhere here, not only in the course of burial or dealing with the dead body: it mediates the commemorative practices and communication between the living and the dead) seems strained. This sort of scepticism, I am convinced, is the result of those stereotypes of thought which the new methods are trying to do away with. Gregory Bateson, as we know, has called for the fundamental unit of evolution to be regarded, not as the individual organism, but its union with its environment ('the unit of survival is the organism-in-its-environment' [Bateson 1987: 319–20]), which, applied to humanity, might be understood as the individual, the bearer of a particular culture, in union with his / her technical and technological skills, implants, prostheses, extensions and 'capsules' and all

the man-made artificial environment. (I have previously suggested a special term to express this union — *technomorph* [Sokolovskiy 2017].)

Anthropologists have generally ignored the extent to which human behaviour is conditioned by the technical environment, because the essence of this behaviour was being examined in its semiotic, symbolic, mental or cognitive components. This ignorance is one of the stereotypes of the modern mentality, already implanted by the Cartesian opposition between *cogito* and the body. Contemporary neurophysical, psychological and cognitive sciences eliminate this opposition with the concept of the *embodied mind* or the *mindful body* (Irina Sirotkina also mentions this; see this issue). Furthermore, in order to eliminate the opposition between human beings and their environment, the concepts of the cyborg, hybrid, artificial corporeality, etc. have been put forward. Peter Sloterdijk, the German philosopher, and author of an original conception of the morphology of human living-spaces in the era of media-technological globalisation, starting from Heidegger's conception of *Dasein* ('being in [the world]'), bases his approach to the description of socio-cultural processes ('spherology') on a specific understanding of human corporeality. He also pays attention to the circumstance that the use of biotechnologies (in other words, technical transformations of biological material, including the human body) is opening an era of the radical transformation of humanity, and he stresses the significance of genetic engineering and biotechnologies for contemporary theories of culture. In Sloterdijk's view man is not so much *animal rationale* as, above all, an animal with a body: human corporeality is formulated by his / her own cultural practices and is revealed thanks to the development of technology, since his / her skill (τέχνη) and the technogenic effect on the environment that this causes reveal new aspects of human corporeality [Sloterdijk 1998; 1999; 2004]. This dialectic between *the body* and *technology*, already adumbrated by Heidegger and developed by Sloterdijk within his 'post-metaphysical philosophy', expresses their complex interdependency in the process of somatotechnogenesis and highlights in a new way the relationship between the human organism and the techno-environment with which it is connected. Here the body and environment again appear as an evolving unity, as the technique of survival and the condition of life, the boundary of which (death, the transformation of the living into the dead) is to an equal extent defined as bodily dysfunction, disease, infirmity or disadaptation and as the technical breakdown of human subsistence infrastructure or a technogenic catastrophe.

The participants in this discussion, one way or another, touch on all these topics in connection with anthropology and its role in

opening up this thematic area, and many of them note the primitive consistency and original unity of that which is distinguished and counterposed in the 'Forum's questions: the body and technology. So Irina Sirotkina draws our attention to the fact that τέχνη, while it remains a human skill, cannot but be an integral part of the ἄνθρωπος, and for that very reason 'The role of anthropology in studying *technology as the extension of human capabilities*, or, as the methodologists would say, human '*enskilment*', is hard to exaggerate' [*italics mine*. — S.S.]. Victor Krutkin takes a very similar position, sharing the approach of Dan Miller, who treats the relationship between technology and human beings as a process of objectification expressed in the dialectic between subject and object, consisting of 'the subject's becoming its own object and returning to itself at another level, and this continues cyclically, as each objectification brings about a new modification of the subject. <...> People organise the world through their artefacts, and by this very process human beings are organised.' He also reminds us of the sayings of André Leroi-Gourhan, that 'technology is a factor in the biological dimension of humanity,' an evolutionary factor, in the course of the development of which 'tools and bodies are deeply interpenetrative.' Aleksandra Kurlenkova, reproducing Bateson's thesis and taking into account non-Western ways of categorising and drawing boundaries between the living and the inert, also writes of the possibility of 'conceptualisations of the body and technologies which are new in principle,' for example, those 'in which they are not opposed to each other, but presented as something combined, inseparable, as part of a complex interlinked system of "man + environment".' Elena Gudova connects the sources of the critique of the dualism of body and technology with Donna Haraway's well-known 'Cyborg Manifesto' [Haraway 1985]. (It is worth noting that the term was first proposed in 1960 in the article 'Cyborgs and Space' in the September issue of *Astronautics* by the talented Viennese-born pianist, inventor and researcher Manfred Clynes and Nathan S. Kline, the director of the Rockland Research Center and Clinic [Clynes, Kline 1960].)

In his contribution Dmitriy Mikhel does not consider the question of whether the body and technology comprise a single whole or are in opposition to each other, but his example of the technologies of organ transplants, which cross 'the boundaries between the living and the dead, <...> between the natural and the artificial,' testifies to the complex unity of corporeality and technology and their intimate interdependence, thinking about which requires the creation of special concepts. His question of whether our bodies can adapt to the new technological reality provides another viewpoint for the problem of the relation of the body and technology:

harmonious or unharmonious co-existence within the ensembles that they form. Elena Sokolova believes that the body and technology form a whole, since they are parts of a single human experience. Magdalena Kozhevnikova takes a somewhat different position on the question of the correlation between technology and the body. She regards technology as a *means of observing* the 'crossover of life-forms', and in the case of the most recent technology, as a *tool* for crossing the living and the lifeless and creating hybrids and chimaeras. The instrumental treatment of technology has deep historical and philosophical roots, but needs a more profound development and a concretisation of the very category of *instrument* and a clarification of the genesis of *instrumentality*. And if in the first case (technology as a means of observation) technology can be considered as the realisation of 'human adaptation', in the second example (the use of technology for crossing species and creating living-lifeless hybrids) technology functions in a guise previously foreign to it as the source of new forms of life.

The question of the role of anthropology in studying the inter-relationship of the body and technology raises the problem of a justified amplification of its object, in particular the inclusion of new technologies in it. What arguments are there in favour of their inclusion, and what objections could be raised to the broadening of the area of anthropological interests, which is already fragmentary and hard to survey? This is not the first year when anthropologists, Russians included, have been studying modern technologies and their influence on human corporeality, but — with very rare exceptions — hitherto such research has only been conducted in medical anthropology, where integrating the problems of corporeality and the apparatus of biotechnology and reproductive technology has been at the centre of attention. The contributions to this issue include Michele Rivkin-Fish's study of how technology has impacted upon this area, entrenching power hierarchies and gender asymmetries rather than fostering the breakdown of boundaries that is often addressed in studies of biotechnology more broadly. Another area of anthropological research where our field of interest, if not central, inevitably crops up, is the anthropology of professions, since the professional experience of the respondents often concerns subjects which have a direct relation to the interface between body and technology.

It is hardly possible to dispute the legitimacy of including in the subject of the discipline the human body, on the one hand, and technology on the other, since they were being studied in the initial stages of the nascent discipline of anthropology. Towards the end of the nineteenth century material culture became a privileged source for the reconstruction of the history of illiterate peoples. The difference from archaeology expressed itself here in that the objects

under study were not artefacts from excavations, but things that were still being used by people in the cultures that the anthropologists were studying. Physical anthropology, or bio-anthropology, made the human body (which moreover was also studied in the many medical sciences, just as its representation was studied in various disciplines of the humanities) its main subject, finding its own perspective and concentrating at first on its geographical and cultural variation. Doubts as to the justification for including these areas in anthropology as a subject arise not in respect of these long-established and now traditional areas of anthropological interest, but when contemporary technical apparatus and new technologies are added to its sphere. Indeed, material culture, as understood in classical ethnography, excluded from its attention objects of assembly-line or mass production and industrial technologies as not 'ethnographic' enough. As part of the industrial global culture and urban everyday life, mass-produced artefacts caught anthropologists' attention only when they transformed traditions and traditional societies.

The situation today, however, has changed radically, and not only because of the rise of urban and medical anthropology and the anthropology of professions, but also by reason of the growing influence of the technical sciences on all aspects of culture and society. It would, however, be wrong to assert that in other ages the 'new technologies' of the day were less influential in this respect. In the end, change in the technological order was always accompanied by radical changes in culture in general and everyday practices in particular. In the past too introduced novelties have led to the rise and fall of whole civilisations, and they were no less complicated than those of today (cf. [Lansing 1991]). However, the tempo of those changes on the whole corresponded to the tempo of the succession of generations, or lagged behind it, so that they were not so noticeable, and their transforming influence on cultural traditions was not so obtrusive. Nowadays the speed of the technical innovations that are reshaping our everyday life is such that no specialist studying culture and tradition can ignore this factor and is forced to look for new approaches or language that would allow the description and analysis of the kaleidoscope of new practices and the transforming structures of everyday life; moreover the changes induced by these technologies affect the whole of society and culture, effacing the differences between urban and rural localities the world over. Such technologies often enter into fundamentally new relations with human corporeality, not only transforming our habits, skills, practices, dispositions, the scheme and image of the body and the habitus as a whole, but also demonstrating ever newer and more intimate kinds of integration and hybridisation of the somatic and the technical, the organic and the inorganic, the living and the inert.

Technology saturates modern everyday life and is becoming ubiquitous (as many of the participants in the discussion note), and therefore anthropologists studying this everyday life and aiming for a holistic description must include it in the subject of their research, and, moreover, as Liliia Zemnukhova remarks, it is the anthropological approach that ‘makes it possible to collect detailed descriptions of situations, in order to follow the dynamics of micro-alterations.’ Anna Malyar, noting the shortage of anthropological research into ‘the body-as-thing’, calls for ‘the body [to be] grasped by its flesh,’ and writes that ‘this must be done by anthropology as the only one of the social sciences that has a materially orientated methodological apparatus.’ Igor Morozov draws our attention to the multiplication of the perspectives from which corporeality, which is becoming ‘an important subject to be studied by the social sciences, marketing, image-making and political studies,’ may be examined. He also touches on the problem of the anthropomorphisation of technology, which complicates our notions of the ‘human’ and ‘non-human’. At the same time technology (apart from the very specific case of medical anthropology) remains, as Asya Karaseva concludes after examining nearly a score of surveys of the sociology and anthropology of the body, ‘a real blind spot in research on corporeality’.

Since the spread of new technologies is transforming the traditional objects of anthropological research, making us change our methodology and research methods, the ‘Forum’ questionnaire included questions about the promising approaches for studying corporeality, old and new, and the effect of the successes of biotechnologies and cognitive sciences on our discipline. The answer to the question whether there have existed in the history of anthropology concepts that have influenced contemporary approaches to the study of technology and the body assumes a detailed set of ideas about the concept of technology and its evolution in those aspects of corporeality which are involved in interaction with technologies or subject to their influence. The dawn of anthropological research, as such, into traditional technologies came at the end of the nineteenth and beginning of the twentieth centuries [Hutton 1944], after which this field suffered a prolonged crisis, dropping out of sight into museum anthropology, which was not very prestigious at that time (Bronisław Malinowski, for example, thought that in ethnology the study of technology was ‘scientifically sterile’ [Malinowski 1935, I: 460]). Until the formation of new approaches to material culture and technology almost a hundred years later, with the realisation of the highly important role of technology for at least three key areas of anthropological interest — the culture of everyday life, the reproduction of tradition and the ecology and evolution of man — research into technology

remained a peripheral activity for anthropologists. The individual works that appeared during this period could not change the situation [Pfaffenberger 1992]. Nevertheless it was anthropologists who were the originators of several key ideas for the research area that we are interested in. Besides the widely known works of Marcel Mauss on the techniques of the body and André Leroi-Gourhan, who developed the principles of comparative technology, some of the already mentioned ideas of Gregory Bateson, and also Edward Hall, Mary Douglas, David Schneider, Marilyn Strathern and other classical authors of our discipline who prepared the soil for the development of medical anthropology and techno-anthropology and offered a profound interpretation of the influence of new technologies on many social institutions (including the transformation — and the very concept of the category — of kinship, and on customary systems of categorisation, on ecology and on ethics), were important for the study of the interaction between the body and technology in this period of waning interest and still exert a stimulating influence on the corresponding research today.

The participants in the present discussion identified many promising directions of anthropological research into corporeality and technology. In the area of methodology the respondents note a turn towards non-anthropocentric anthropology (Magdalena Kozhevnikova, Aleksandra Kurlenkova), treatments of the body as construction and as media (Irina Sirotkina) and a revision of the boundaries of the body (Anna Malyar), and towards the study of the ethical problems of post- and trans-humanism (Magdalena Kozhevnikova). From a practical point of view they named among such directions the study of the digitisation of the body and its functions, the anthropomorphisation of modern technology (Igor Morozov), and bodily aspects of enhanced and virtual reality (Elena Sokolova). In addition they write about the need to analyse practices that are becoming part of the new everyday life such as biohacking, the influence of biotechnology on the bodily mediation of power (Liliia Zemnukhova, Anna Malyar), hybrid corporeality (Dmitriy Mikhel, Magdalena Kozhevnikova), the culture of movement and working practices (Irina Sirotkina), bodily sensory interaction with technology (Elena Sokolova), the commercialisation of the body (Igor Morozov) and the technology of human 'improvement' (Dmitriy Mikhel).

In respect of the last it must be noted that attempts at such improvement have been observed for as long as humanity has existed: human beings have, over the millennia, used mineral, vegetable and animal resources in their pharmacopoeia. Many of these substances, including those that affect the consciousness, laid the foundations of modern therapeutic medicine. However, traditional medicine did not interfere — at least, did not consciously

and deliberately interfere — in the regulation of the functions of the human organism at the sub-cellular or genetic levels, and did not have the technology to transplant organs or to grow them from stem cells; prostheses and implants were also at a qualitatively different level. Contemporary biotechnologies are carrying out interventions in the human mind and body on a hitherto unprecedented scale. The humanisation of the inorganic (robotisation, artificial intelligence, the emergence of a particular field of ethics concerning relations with machines and the issue of machine rights) on the one hand, and the insertion of synthetic materials and devices, both organic and inorganic, into the human body on the other are apparently forming a new research field, emerging from the interface between the problems of corporeality and technology, for the anthropologist. Human enhancement or technically augmented cognition should not escape interrogation by anthropologists, because, whatever anthropologists may be engaged in, so long as their discipline exists its main focus is human beings and the processes that take place in their consciousness and bodies.

Anthropologists have hitherto played secondary roles in research into these problems: in medicine they acted as consultants on culture, and for technology companies they provided interaction and feedback between the engineers and the users of the companies' products. These are important roles, but they cannot be considered sufficient, since the increasing tempo of innovation and its growing influence on humanity raises the question of a more profound understanding of specific areas of medicine and technology. This task implies a change in the whole system of professional training and teaching, and the mastering of a range of specialities. Without this, anthropology will always be lagging behind both the dynamic of culture and society and the dynamic of changes in human behaviour, including bodily aspects of this behaviour. However, knowledge in this field is becoming more and more interdisciplinary, which makes new demands on the systems for its transmission. Should we maintain the barriers between disciplines and jealously guard the boundaries between them (for this is the principle on which the higher education examination and degree-awarding system is built, as is the business of academic publishing), or do we need to make a radical turn towards universal education on irreductionist and holistic principles? This is the most substantial and serious question, since it concerns the future both of the education system, and of scholarship in general.

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*The answers originally written in Russian
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