

The Advanced Human Condition

Sketching an Interdisciplinary Anthropology*

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Abstract: The central concern of this article is how philosophy and the sciences can contribute to and cooperate in anthropological discourse when different domains are approached by different methods thought to have divergent scopes. It is not the gaps between the fields of application that need to be bridged but rather the gaps in the researchers' understanding for a coherent theory of human being. There is a need for an interdisciplinary anthropology. A complete interdisciplinary anthropology is descriptive, normative, and pragmatic. The descriptive sciences, physics, the neurosciences, and evolutionary anthropology are essential to the integration of the substantial human attributes of free will, consciousness, and cooperativeness.

Keywords: interdisciplinarity, meta-philosophical anthropology, naturalism, free will, consciousness, normativity.

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1 Introduction

The problematic of a naturalistic turn in the conception of man has remained virulent until today.¹ Indeed, this subject has been often and vigorously debated, especially in connection with the defence of free will. The scientific community has so far failed to agree upon a common, shared, and mutual anthropological basis. Due to the absence or inadequacy of interdisciplinarity between philosophy and the individual sciences with regards to the new conception of human condition, we still lack a framework within which a systematic and normative reading of the new knowledge of humans would be possible.

A lifeworldly gulf still persists today between the humanistic image of human being as a free and responsible being and the reductionist or naturalistic image of man held by the sciences. This marks a contemporary incoherence that cannot be accepted. This incoherence is unacceptable because it leads to disorientation in the lived-in world, which can entail negative practical consequences. The general conception of human being implicitly influences our actions and coexistence, and thus incoherence in the selfconception of human being should be clarified and (if possible) resolved, insofar as this is permitted by the status of modern scientific theories. At the very least, the scientific community should reach an agreement on how this incoherence should be approached. To act as if the problem had already been solved or as if it might solve itself goes against scientific integrity. Incoherence in the selfconception of human being should be tackled within the framework of an interdisciplinary and genuinely dialogical anthropological approach. The necessary elements of such a project will be introduced in this article.

2 Consensus problems within philosophical-anthropological discourse

Today, human condition is the most prominent object of investigation. The increase in experiments in the area of neuro- and cognitive sciences gives rise to the impression that, with time, it will be possible to fully describe human condition, together with consciousness, using scientific methods. Even if scientists have become more careful in the public sphere here, the reductionist research paradigm still remains in force. The humanistic-naturalistic incoherence has, over the last two decades, led to a revival of anthropological-philosophical discourse. This discourse was often not objective and was too broad; and the fear remains that this naturalisation will expose free will in particular, and thereby the linked responsibilities, as illusions, in the wake of which our way of

¹Cf. Metzinger (2016).

life as a whole would also collapse. Despite compatibilistic² and perspective-dualistic³ efforts, scientists have thus far failed to universalise the new findings concerning human being to produce a systematic and normatively solidly-founded human self-conception. Evidently, serious problems regarding transfer and consensus are present within this discourse, which are responsible for the fact that the interdisciplinarity required has not yet been attained – and this despite the fact that interdisciplinarity is today signposted as standard practice.

The crucial problem of interdisciplinarity is communication beyond the borders of scientific language, which is determined by domain knowledge and methods, scientific traditions and the *psychological* dispositions of scientists. In the already established *psychology of sciences*, the inclinations, motivations and prejudices of scientists are investigated.⁴ By contrast, there has thus far been little interest in a *psychology of philosophy*⁵, which would, however, be just as crucial in dealing with the misunderstandings between philosophers and scientists.

In addition to this, there is the usual, well-known problem of fundamental methodological differences between philosophy and the sciences. Logical and conceptual-analytical postulates and arguments stand in opposition to the experiments and models that describe the mechanisms of observed phenomena in a reductionist way. It must also be noted that there are many conceptual ambiguities and underdefined explananda, especially in the discourse surrounding the revision of the conception of human condition: consciousness, the mental, the intentional, emergence, causality, mental causation, free will etc. For a truly interdisciplinary dialogue, it is vital, however, to reach agreement regarding common concepts, definitions and unresolved problems, whereby worldviews, pretheoretical assumptions and psychological dispositions, which are implicitly present in the assertions of scientists, must be made explicit⁶. Philosophers and scientists are human and as such can still hold unreflected and unproven views, especially when these are divorced from their areas of research.⁷ For a genuinely interdisciplinary dialogue, this reflection is always required.

²The majority of contemporary philosophers advocate compatibilism. It proceeds on the assumption that determination is irrelevant for responsible authorship. Compatibilism always takes advantage of a tacitly undertaken change of perspectives (the change between the perspectives of the observer and the agent), in order to justify one perspective against the other. Cf. Habermas (2008), p. 157f.

³Habermas was foremost among those who made the case for a perspective-dualism or epistemic dualism, which should be compatible with the ontological monism of mind and nature. He sought the resolution of this opposition in the history of natural evolution. If evolution is to be understood as non –teleological, i.e. purely from the standpoint of evolutionary biology, then human culture and thereby epistemic dualism would have to be principally attributable to nature. If, on the other hand, evolution is understood as teleological, as is the case for Habermas, then this is not a mere notion in Analogy with Darwinian Evolution, but, rather, the problem is shifted into the past and is, therefore, not resolved. Cf. Habermas (2008), p. 166.

⁴Cf. Holbrook (2013).

⁵Cf. Gholson (2011), Proctor, Capaldi (2012).

⁶This may sound trivial, but has still not been put into practice.

⁷Cf. Greenwald (2010).

An example of how scientists and philosophers can talk at cross purposes is supplied by the *language-game argument*. Lutz Wingert claims, for example, that the debate surrounding the naturalistic revision of the image of human being comes up against the borders of self-objectification.⁸ As part of the naturalistic self-objectification we would become completely incomprehensible to ourselves and to our fellow human condition. The borders of self-objectification are the borders of comprehensibility⁹. But what actually constitutes this comprehensibility? According to Wingert, as part of this naturalisation, we would no longer understand the everyday language-game of the antagonism of reasons. “Such an antagonism is something other than a shift of physical conditions. These cannot contradict themselves.”¹⁰ What Wingert and many others involved in this debate are alluding to is the existence of the logical and semantic *space of reasons*¹¹, which becomes incomprehensible in naturalistic language. What is often concealed here by philosophers as advocates of everyday consciousness (*Folk Psychology*) is that from the perspective of a cognitive scientist, for example, the space of reasons also becomes incomprehensible if it is not anchored in cognition, i.e. in the brain or material body, i.e. could be described with the language of cognition’s domain.¹² Cognitive scientists have no problem in describing logical inference cognitively. What they cannot understand is *where* or *what* exactly this space of reasons is.¹³ The following questions come to the fore here: why should philosophers be *only* advocates of everyday consciousness, and not also advocates of human consciousness? That is, why does the required mutual transfer of perspectives not succeed here?

Misunderstandings have and do occur especially in debates surrounding free will. Advocates of free will are often accused of Cartesian dualism by scientists. The accusation is, however, hardly justified, as most philosophers today abstract from ontology as a rule.¹⁴ Ontology is regarded – if at all – from the epistemic perspective.¹⁵ It is, however, worth probing into what actually stands behind pure epistemology. Is there nothing more than man, together with his story, who produces knowledge merely in an instrumental, or normative, way?

The philosophers, on the other hand, often deliver an accusation of scientism: what scientists are able to describe is only a part of that which exists in nature.¹⁶ Scientists can only describe from a third-person perspective, and this is insufficient for a description of human condition. The irreducible first- and second-person perspectives constitute a

⁸Wingert (2006), p. 241 [Cf. Habermas 2008, p. 170].

⁹Ibid., p. 242–243.

¹⁰Ibid., p. 250.

¹¹Habermas (2008), p. 180.

¹²Habermas (2008), p. 9–24.

¹³The frequently-drawn analogies with mathematical objects are also of no use here, because this merely shifts the problem.

¹⁴Habermas (2008), p. 162.

¹⁵Ibid., p. 165f.

¹⁶Ibid.

crucial part of human being *as person*. Habermas is convinced that the sciences, including physics, cannot adequately describe the universe, because the universe is more than just the nature of the sciences. Does this mean that physics, which seeks to describe the universe as a whole, cannot describe it at all? What exactly does Habermas mean with “universe”? To what extent does philosophy know *more* about the “universe”?

Habermas’ criticism of scientism is also hardly convincing where it refers to the methodical fiction of an exclusive *view from Nowhere*. Yet this view cannot be a methodical fiction, because it constitutes an ontological background assumption.¹⁷ Every science presupposes the (onto-)logical notion that here is *something* extant behind a theory that is established with the aid of systematic experimentation, rather than *nothing*. Without this presupposition it would be impossible to understand how precise predictions are possible, above all in physics. To say that only regularities or correlations that *only* exist because someone observes and measures physical phenomena are enumerated in physical theories contradicts the spirit of the sciences.¹⁸ Behind scientific theories and simulations there stands something that is at least sufficiently *similar* to the simulated that predictions are possible. In relation to the ontological background assumptions of the sciences, a Nowhere is not a Nowhere but rather a *Where*, meaning where something is, and that is our universe. The empirical sciences all work on the basis of a general ontological realism, and not on the basis of a merely methodical fiction (not only constructivism). Who, then, if not the scientists, can describe what the universe, or nature, is?

In order to adequately tackle anthropological incoherence, we require a genuinely dialogical interdisciplinary exchange, a sincere striving towards mutual understanding,¹⁹ rather than an *Anthropology as First Philosophy*, for which Ernst Tugendhat advocated.²⁰ For him, the specific key area of the human condition, and therefore also the crux of every philosophical anthropology, is the question of the *structure* of human understanding.²¹ Seen thus, discourse regarding *What Is* and discourse regarding *What Ought To Be* flow into the general structure of human understanding. Evidently Tugendhat has no problems in thinking of *What Is* (or nature) and *What Ought To Be* (or the norm) together. Both ways of speaking have their origin in the anthropological structure of human understanding itself. In this structure, both different cultures (including different language-games) as well as historical epochs are transcended, because the central concern is the question of what we *as humans* (can) understand. Unfortunately, however, Tugendhat constructs a merely imaginary dialogue and even a dialectic.²² He

¹⁷The epistemological turn evidently cannot be completely executed, because Habermas himself searches for a reconciliation of epistemological dualism with *ontological* monism. Cf. Habermas (2008), p. 165–66.

¹⁸Naturally, the reverse is also the case: physical phenomena must not exist because they are perceived, i.e. measured. Something certainly exists, however, that is perceived.

¹⁹Without immediately seeing one’s own hopes dashed.

²⁰Tugendhat (2016), p. 135–142.

²¹Ibid.

²²Ibid.

reserves the conceiving of the structure of this human understanding for philosophers, who lead this imaginary anthropological dialogue. An imaginary dialogue conducted purely within the bounds of philosophy will, however, hardly lead to a general consensus here. Philosophers have thus far struggled to place themselves within the perspective of a scientist, for example, and vice versa. Only a *real* interdisciplinary dialogue would lead to an understanding regarding the general structure of that which constitutes humans.

3 Outline for an interdisciplinary anthropology

The necessity or objective of a new, interdisciplinary anthropology entails reaching a consensus regarding what human being should be, i.e. how we should be as humans (normative anthropology) from a systematic contemplation of the question of what human being is (descriptive anthropology), and how this is to be reached concretely (pragmatic anthropology).

The task of the future, in this regard, will be to achieve a coherent integration of scientific advances of knowledge in relation to normative and pragmatic questions. This integration must, therefore, be compatible with empirical data and open to future research. A descriptive anthropology (of the empirical sciences of human being) thereby forms a necessary but insufficient condition for a normative and pragmatic anthropology (in which philosophers, above all, can play a systematising and clarifying role): a consensus among all dialog partners must be reached, at least in part.

A descriptive anthropology is already, from its own perspective, genuinely interdisciplinary: it encompasses all findings and theories by and concerning human being, and attempts to systematise these. A normative anthropology works logically-conceptually, in that it ascertains normative principles based on the premises of descriptive anthropology, or, in other words, coordinates an understanding on such premises. A pragmatic anthropology works in a practice- and application-orientated manner; it asks which practical consequences result from a normative anthropological understanding. It also pursues the question of how the results can be implemented into the lived-in world, above all in politics, upbringing and education. The *ideal* aspect of a pragmatic anthropology is therefore *implementability*: if (contemporary) human being and the circumstances do not permit the established and agreed *What Ought To Be*, then the normative and pragmatic portion of the problem is once more an object of descriptive anthropology.

4 Core elements of interdisciplinary anthropology

The working hypothesis in the context of an interdisciplinary anthropology is that above all free will, (phenomenal and intentional) consciousness and prosociality (or cooperativeness) belong to the core of the human structure.

The question *Does humans have free will?* cannot be answered without reference to ontology, and ontology cannot be adequately grasped without an exchange with (quantum) physics. The question *What is consciousness, or the mental or intentional?* cannot be understood without an exchange with the neuro- and cognitive-sciences. And the questions *Of what does human sociality consist?* and *What role does co-operation play in the emergence of culture and norms?* cannot be grasped without an exchange with evolutionary anthropology, or developmental psychology. Thus these three dialogues constitute the nucleus of an interdisciplinary anthropology

4.1 Quantum physics: determinacy, indeterminacy and free will

In order to understand the free will, an ontological clarification of the problem of *mental causation* in particular is required. The conceptual structure of mental causation is ontological, if this should have an effect on the course of the world. The restriction of free will to a purely epistemic language-game of practical reason cannot, therefore, work. Only if ontology is taken into account can the free will problematic be discussed in a *non-trivial* manner. That we act more or less freely in the quotidian language-game of responsible authorship is, on the contrary, trivial; because, without the constantly concurrent casual consciousness of freedom, this language-game would be pointless. The non-trivial question here is whether mental causation in the universe can exist in an ontological manner. How are mental causation reconcilable with current physical theories in their deterministic or indeterministic reading? Intensive exchange with the *ontologically reflected* field of quantum physics²³ as a fundamental physical theory must bring light to the debate surrounding the possibility of mental or intentional influence on physical entities.

Here, the concept of *determinacy*, which is often confused with causality, must first of all be clarified. Within philosophy, a wide and very confusing debate surrounds the question of whether causality exists at all within nature. A comparable debate regarding physical determinacy and indeterminacy has, thus far, hardly taken place within philosophy. What is the reason for this? From the outset, it appears to be unproductive. It primarily concerns, then, the legitimacy of the establishment of mathematical, deterministic equations. But what, ontologically viewed, is a mathematical equation? Experiments nonetheless show that future results can be precisely predicted within a certain degree of accuracy. This is, admittedly, a merely mathematical-physical theory, but it is so successful that the question of whether the universe is deterministic must be posed. The determinism-notion is admittedly not a result of empirical research itself, but it is its ontological presupposition, namely, that everything that exists follows on necessarily, i.e. unambiguously, from what is already necessary. Many philosophers dismissively describe this presupposition as a *doctrine* (but does not state that indeterminism, too, would have to be regarded as such a doctrine), according to which there

²³Cf., for example, Esfeld et al. (2014).

is more than one option for the natural course of events under the same conditions, i.e. that not everything that exists results necessarily or unambiguously from what is antecedent.

In light of a new anthropology, which enquires after free will, the problem of how the mental operates in the world of the physical and can depend upon it, becomes crucial. Is the *predictive efficiency* of physical theories meaningful here? Do individual theories allow themselves to be precluded from the debate around free will in their principal relevance? For example, the behaviour of a person cannot be predicted with a deterministic theory due to the sensitivity of the non-linear dynamic of starting-value requirements. But is it here a question of this failure? It precludes physical theories of free will conceptually – the theory would then either be false, or free will would not exist. Even the philosophical indeterminism of the Copenhagen interpretation cannot sustain free will. The effect of free will would certainly not be predictable due to the contingency of the results, but would at the same time also be impossible due to the determinacy of the probability value of certain results. Free will does not subordinate itself to a predetermined probability.

In contemporary physics, and more specifically its (onto-)logical analysis, mental causation (and free will) thus appears to have no place. But due to the incompleteness of modern physics, the possibility of a future physical theory that permits free will or, more precisely, promotes it as a criterion for the accuracy of a physical theory, cannot be excluded. An explicit clarification of this field, which commits itself to interdisciplinary science, is important for our self-conception, for as long as free will is physically precluded, i.e. excluded from contemporary physical research, the question of how we should deal with it normatively is of central importance. According to modern physics, a scientific agnosticism would actually be imperative here. To what extent would the established language-game of responsible authorship then still be justified?

Consideration is already being given as to what consequences human actions could have without the possibility of free will, and whether the consequences would necessarily be inhumanity. Pereboom, for example, maintains that with a renunciation of free will, reactive attitudes, such as anger and recrimination, will no longer be adequate, but that we will nonetheless still *feel* that we have been violated. Recrimination would admittedly be absent, but the feeling of (physical or mental) violation as well as its communication would remain, and appropriate consequences (such as, for example, demanding cessation and preventing repetition, a restoration of good feeling, or, more specifically, atonement) would be the natural consequences.²⁴ But whether these considerations are conclusive must still be accurately tested within the scope of the interdisciplinary project. What would happen, then, if humans began to doubt their free of will in everyday life? Is a lived agnosticism at all possible here? The mainstream today says that we can – yes, we may – not challenge the existence of free will along with personal responsibility, for

²⁴Cf. Pereboom (2006).

our society is based upon it. Even in the sciences, these questions have not yet been tackled in a manner befitting their relevance and urgency, and in a genuinely dialogical way. This must be discussed within the scope of a normative anthropology, and in a manner that is orientated towards reaching a consensus.

4.2 Neuroscience: the brain, consciousness, and the mental

Alongside free will, (phenomenal and intentional) consciousness also belongs to the nucleus of the general structure of human condition. An interdisciplinary dialogue with neuroscientists and research into consciousness should lead to a consensus regarding what constitutes the problem of consciousness, or the mental. A discussion regarding how a fundamental agreement concerning the unresolved or falsely formulated problems could be established must take place.

Substantial discord persists among scientists and philosophers regarding the approach to the phenomenological aspects of consciousness, or the mental (qualia). Purely conceptually, a mentalistic, non-scientific vocabulary must also invariably be used alongside the scientific description of the neural correlate of consciousness (NCC), in order to be able to make an experimental assertion about a qualitative perception of the test-person at all: this particular, neural substrate is necessary for this one particular perception (for example, a laughing face). The situation is already difficult if different attributes (for example, form and colour) should be incorporated to form an object. This problematic is intensely discussed within brain research as the *binding problem*²⁵. The integration and synchronisation of spatial and temporal attributes, either as pure (but also very complex) cognition, i.e. cognition as a mere mechanism *without* subjective portion, or as cognition as a mechanism *with* subjective portion, are forms of *emergence*, which constitutes the main difficulty in the scientifically reformulated *mind-body-problem*. For centuries, this was exclusively an object of philosophy: today it is intensely tackled in research²⁶, but a productive co-operation orientated towards problem-solving between the neurosciences and philosophy still has not materialised here. The empirical sciences rely on reductionist explanatory approaches, without, however, being able to eschew phenomenology – mediated through introspection and the necessary semantic conceptual fields. Philosophers certainly seem to be acknowledging the necessity of empiricism and modelling more and more, but are simultaneously too rooted in the analysis of concept and meaning – traditionally orientated towards linguistic-philosophy.

Thus Bennett and Hacker, for example, emphasise that philosophers should occupy themselves not with facts, but with questions of meaning.²⁷ How, then, is a consensus at all possible, if one group speaks of facts while the other speaks of sense and non-sense of meaning? John Searle offers a different extremum: he appears to cede the solution of the mind-body problem to neuroscientists. He maintains that consciousness is like diges-

²⁵Cf. Singer (2010).

²⁶Cf., for example, Tononi/Koch (2015).

²⁷Cf. Bennett, Hacker (2006), p. 3–49.

tion, and both are system-features that are realised in the human body. Consciousness is certainly causally effective, but not ontologically reducible.²⁸ Unfortunately, Searle has not developed a well-formulated concept for non-reducibility nor for causality.²⁹ He finds that it is better not to stage a conceptual analysis here, and not to establish philosophical definitions. Unlike Bennett and Hacker, he thinks that here we should simply name facts, without using traditional and confusing vocabulary.³⁰ As soon as he speaks of the evolutionary function of the mind and free will,³¹ it becomes clear that even he remains rooted in traditional conceptuality, so that even he appears incapable of conducting a genuinely interdisciplinary dialogue. In evolutionary-biological theories and models, neither consciousness nor free will have thus far featured as causal or functional factors – according to evolutionary biology, mutation and selection have an effect solely on the material substrate, such as the NCC.

The current status of physics does not permit the assumption of the existence of the mental and mental causation as determined through matter. “Consciousness is extra-physical. We would have to define physics anew, if we wished for it to include the mind”³²The mental does not, then, have a place in physics, not even as an epiphenomenon; in the neurosciences it features as phenomenal to the extent that if the scientist intervenes in the brain, he also intervenes in the mental aspects of the test subject: if the brain is altered in a certain way, the test subject (in one way or the other) comments on a new mental experience or a new perception. Only thus is matter-correlated research into consciousness at all possible. Even if the mental cannot directly be measured, it is nonetheless presupposed as something emergent or phenomenal. None of the fundamental theories of contemporary physics, however, permits emergences. If it is assumed that a matter-constellation (brain) is identical with the currently accepted mental, then something emergent would also have to evolve in physics. The identity theory of the brain and the mental is, therefore, from the perspective of modern physics, false. The problem of the mental must clearly be formulated anew. To this end, a dialogical interdisciplinarity, especially between philosophy, (quantum) physics and neuro- or cognitivesciences is vital.

4.3 Evolutionary anthropology: collective intentionality, cooperation, and the natural formation of norms

Evolutionary biology directly asks what it is that makes humans ‘human’. According to the most recent theories human being appear to be an ultra-social being, who co-operates with his fellow through common or collective intentionality (*joint intentionality*).³³ Intentionality, here, is an unclarified key concept. But other animals, such as primates, also

²⁸If the analogy is correct, then digestion must also be irreducible.

²⁹Cf. Searle (2007), p. 1–37, Searle (2009), p. 97–127.

³⁰Ibid.

³¹Cf. Searle (2007), p. 37–79.

³²Detlef Dürr *viva voce*.

³³Cf. Tomasello (2014).

appear to possess intentionality. Tomasello, however, has shown that other animals lack the joint intentionality of humans, and that their co-operation is purely individualistic, i.e. not formed through collective and shared aims. The meaning of the term *intention* requires more precise clarification, however, in order to adequately understand characteristically human cooperation. This term belongs to mentalistic vocabulary. With the delineation and analysis of the neural correlates of consciousness, and with an interdisciplinary consensus regarding the problem of the mental, intentionality can also be better understood, and the problem newly formulated.

According to Tomasello, processes of representation, implication and introspection are what make humans 'human'. These are phylogenetic, human adaptations for dealing with the problems of social coordination, cooperation and communication.³⁴ Evolutionary pressure favoured cooperative behaviour. From the co-operativeness of humans, Tomasello generates human culture together with social realities, such as *norms* in particular. He wishes to show, therefore, how norms form *naturally*. With the aid of his experiments, in which, in the first instance, *only* the behaviour of great apes and small children is observed, described and compared, Tomasello tells an evolutionary story, in which intentionality, or, more specifically, joint intentionality, plays a crucial role in typical human co-operation. He explains how (deontological) norms emerge in the development of Homo Sapiens through cooperation on the basis of joint intentionality. These norms are posited as having regulated the social cooperation of human ancestors, and thus as having led to the emergence of human culture.

How can evolutionary anthropology describe the emergence of norms through the advent of joint intentionality, if it has access only to observable behaviour? It can do this because the anthropologist – as a human – *introspectively* interprets and explains what is observed through mentalistic concepts. In his criticism of teleological judgement, Kant clearly drew the boundaries of the use of intentionality (he called it purposiveness) in the natural science, and thoroughly analysed its purely *heuristic* function. Natural scientists can and indeed must often resort to purposiveness and target-orientation in order to be able to generate new hypotheses. They must, however, reflect this *anthropomorphisation* and attempt to remove heuristic supports in the development of a theory. This is one of the moments that Habermas describes as the “epistemic unavailability”³⁵ as a non-circumventability of complementarily entangled knowledge-perspectives. The thesis of epistemic unavailability is certainly too strong, for we have the possibility of reflecting and analysing the entanglement of two knowledgeperspectives (observer- and agent-perspective) and thus, at least approximately, circumventing it.

Through this reflection, evolutionary anthropologists would be more able to describe the formation of human norms, communication and culture. The fact that evolutionary anthropology attempts to generate norms from nature is one of the reasons why

³⁴Tomasello (2016).

³⁵Habermas (2008), p. 208.

this research has been demonstrably better received by philosophers than fundamental physical research, for example. Nonetheless – at least to our knowledge – a successful and intensive exchange has still not been achieved here. But we are dealing here with nothing less than a complete naturalization of humanity. And Tomasello already shows how nature generates normativity and morality.

5 Outlook

The core problems of the characteristics of human condition cannot be approached without a realization of the idea of human being, that is: not without a genuinely interdisciplinary philosophical anthropology, provided that they should be approached at all. What remains unresolved here is the problem of the embeddedness of free will into nature, in particular. Compatibilism cannot be ultimately achieved consistently. The gap between naturalism (what is) and humanism (what ought to be) is too broad to be bridged with arguments from the philosophy of language-game and the philosophy of *Lebensform*. The exploration of human condition is already very advanced and there is much anthropological knowledge. What is missing, however, is a philosophical anthropological frame theory, which unites this knowledge into a coherent description of human being and embeds humans in the universe. Apart from a scientifically substantiated description of man, the reflection on the practical consequences of the present, postmodern and incoherent idea of human being is existentially important as well as a future coherent conception of it. This new idea of man needs to be formulated in a comprehensive interdisciplinary approach of descriptive, normative and pragmatic anthropology.

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