lenz von exakter Sprache und darin dargestellter Realität letztlich irrelevant, ob der Modus der absoluten Bestimmtheit auf die eine oder auf die andere Seite fällt: beide Momente, das Reale und das Sprachliche, sind gleichermaßen unmittelbar in ihrer Notwendigkeit für Konzeption einer logischen Konstruktion der Welt. Wenn Carnap »den logischen Aufbau der Welt« im Blick hat, dann kann sich in diesem logischen Gerüst keine sprachliche Enklave bilden, in der *a posteriori* andere Gesetzmäßigkeiten gelten könnten, als ihr von logischer Seite *a priori* zugeschrieben werden können. So sind die Elementarerlebnisse zugleich die Grundbausteine wie der Maßstab im sprachlichen System ihrer adäquaten Konstitution. Damit sind auch die möglichen Transpositionen von der konstitutionalen Sprache in die realistische oder umgekehrt – mithin die Anpassung der Deskription von Realität an das Modell von wissenschaftlicher Wahrheit oder deren Umsetzung in die unmittelbare Realitätswahrnehmung – *de facto* für Carnap identisch.[19] Als Grundlegung dieser Position wie auch als deren Konsequenz hieraus fallen die Elementarerlebnisse in den Bereich des maximal Determinierten; anderenfalls wäre keine noch grundlegendere Ebene mehr möglich, an denen die semantische Extension des Elementaren ausgedeutet werden könnte.

19 Ebd., S. 72: »Die (in den Realwissenschaften meist angewandte) realistische Sprache und die konstitutionale Sprache haben im Grunde die gleiche Bedeutung; beide sind neutral gegenüber der Entscheidung des metaphysischen Wirklichkeitsproblems im realistischen oder idealistischen Sinne. [...] Sind realistische und konstitutionale Sprache erkannt als eben nur zwei verschiedene Sprachen, in denen derselbe Tatbestand ausgedrückt wird, so werden manche, vielleicht kann man sagen: die meisten Fälle von Polemik auf erkenntnistheoretischem Gebiet gegenstandslos.«

DAVOR PEĆNJAK

Consequences of Hard Incompatibilism

Incompatibilists in the free will debate are either determinists or libertarians. Both of these positions can have variants. I would like to discuss several claims of the variant which was developed by Derk Pereboom (1995, 2001, 2002, 2005) and which he dubs *hard incompatibilism*. In the light of how Pereboom develops and defends hard incompatibilism (see especially Pereboom 2005) against the objections from the so-called "requirement for robust alternative possibilities" and against compatibilism, (and I almost completely agree with all the main points of Pereboom's defence), I would nevertheless like to show that some points he also defends, could not stand as he expresses them.

Let me begin with a citation from the beginning of his article "Living Without Free Will: The Case for Hard Incompatibilism" which will be my main target. Pereboom (2002, p. 477) summarizes his view thus:

> The central thesis of the position I defend (Pereboom 1995, 2001) is that we do not have the sort of free will required for moral responsibility. My argument for this claim has the following structure: An agent's moral responsibility for an action depends primarily on its actual causal history, and not on the existence of alternative possibilities. Absent agent causation, indeterministic causal histories pose no less of a threat to moral responsibility than do deterministic histories, and a generalization argument from manipulation cases shows that deterministic histories indeed undermine moral responsibility. Agent causation is a coherent possibility, but it is not credible given our best physical theories. Consequently, no position that affirms the sort of free will required for moral responsibility is left standing. I also contend that a conception of life without this sort of free will would not be devastating to our sense of meaning and purpose, and in certain respects it may even be beneficial. Although this position is clearly similar to hard determinism, it does not endorse determinism itself, and thus I call it *hard incompatibilism*.

First, I would like to say something about the claim which refers to our best physical theories. Two things can be said. First, it is true that the great majority of the best physical theories are such that they are deterministic. But not all of them are such. Let me point to what Earman (2004, pp. 34–40) says about classical general relativistic physics, which surely is one of the best physical theories. However, this theory

admits indeterminism in an interpretation. Regarding the initial value problem for source-free Einstein gravitational field equations, Earman (2004, pp. 35–36) says that "specifying the metric field and its normal derivative on some space-like slice – does not suffice to determine ... the values of the field at points of four-dimensional manifold to the future or the past of". Indeed, specifying Lorentz signature metric on – and the entire causal past of – does not suffice to determine Lorentz signature metric at points to the future." This means that we can have completely the same past of the metric field and the same causality in it, but that, from some point, the future is *not uniquely* determined in an evolution of the manifold.

The standard example of indeterminism is, of course, indeterminism in quantum theories. Though in fact rare, there are cases of genuine indeterministic events in the quantum world. One of these events is, for example, the decay of a neutron in a free state. It decays into a proton, electron and neutrino, and we can only have a probability of that event; there is not any determined causal process which governs it. It is a genuinely random event. Of course, it seems that quantum indeterminacy could not help libertarian theories. Pure chance or randomness is not freedom, at least not by itself. Libertarian theories say that it has to be within an agent's power to do or to refrain from some action. If something happens randomly or by pure chance, then it is not within the power of an agent to do it or to refrain from it. Perhaps if libertarianism is true, then libertarian theory should incorporate, in its complete description, some elements which *could be* similar to quantum indeterminacy, but that theory should be supplemented as well by some parts that enable it to avoid randomness. So, quantum indeterminacy (or sometnig like that if it would be incorporated in libertarianism) would need to be *qualified*, if quantum indeterminacy is ever to play a part in libertarian theory.

Second, it seems to me that we can draw another lesson from our best physical theories. Physical theories include equations and systems of equations. However, sometimes these equations and systems of equations are such that they do not have solutions or they have multiple solutions (more than one solution). Let me cite Edward Lorenz (1993, p.13): "Very often, when the flow is defined by a set of differential equations, we lack suitable means for solving them – some differential equations are intrinsically unsolvable. In this event, even though the difference equations of the associated mapping must exist as relationships, we cannot find out what they look like. For some real-world systems we even lack the knowledge needed to formulate the differential equations; can we honestly expect to write any equations that realistically describe surging waves, with all their bubbles and spray, being driven by a gusty wind agains a rocky shore?"

If we could interpret these different (numerical) solutions to refer to different contents of the will or to different actions, then it could mean that different actions are compatible with the same situation which obtains before taking a certain action. So, an agent would be in a situation with open possibilities, though it could be a restricted range of possibilities. For example, the equation $X^3-8=0$ has three solutions. These are 2, $-1+i\sqrt{3}$ and $-1-i\sqrt{3}$. If these solutions can be interpreted as referring to different actions, such that the form of the equation is a representation of a situation up to some time t when action will be undertaken, then it is up to an agent what will he undertake; it is up to an agent to cause on his own into which solution the equation will "collapse" (I discuss these matters at a greater length in Pećnjak (2009)). So, in this way agent-causation could be saved regarding our best physical theories.

Pereboom (2002, p.479) says also the following: "Accepting hard incompatibilism demands giving up our ordinary view of ourselves as blameworthy for immoral actions and praiseworthy for those that are morally exemplary."

This is true of almost all theories which are deterministic and so for hard incompatibilism also. But this claim could be pressed even further. We can ask whether there are any actions which are immoral or morally exemplary if hard incompatibilism or hard determinism is the case. If morality is a system of values with *normative* constraints that such-and-such actions ought to be done and such-and-such actions ought not to be done, then it seems that there are no *moral* and *immoral* actions, because neither action is done beacause of this normative constraint and for the sake of the specific "content" what this ethical system of values would prescribe what to do in a certain situation; any action done is just the result of full determination which springs from initial conditions of

the universe and the laws of nature; and both obtained long before any "agent" has come into existence. So, there would not be morally right and morally wrong actions as there are no right or wrong swinging of the trees in the wood under heavy winds. They are as they are, completely determined by initial conditions and the laws of nature.

One half-way paradoxical result may also come to the surface. If there are no immoral actions and morally exemplary actions, in other words, if there are neither moral nor immoral actions, then treating people as blameworthy (or praiseworthy) even if they are not as such, would itself not be morally wrong or immoral.

It seems to me that considering *what attitudes we should take if hard incompatibilism is the case* (as well as if hard determinism is the case – and *even more* for hard determinism) is just useless lamenting, because our attitudes and actions we then take, are determined in advance, even before we came into existence. There is no *should* then – there is no we should take this or that attitude – our attitude, whatever it will be, will be a product of initial states and laws of nature. There will be no elbow room before taking an attitude or just before taking an action, to reconsider and take something else instead that what is already determined.

It is certain that the causal path which will lead to forming an intention, forming will and taking an action is very complicated, but complexity does not refute determination. Also what does not refute determination is that perhaps we, as human beings, will never be in a position to grasp all the relevant facts and minute points of laws of nature so that we shall never be in position to predict what an agent is determined to do. Perhaps even our abilities are not enough to grasp and to comprehend all the facts what determine the will and an action if hard incompatibilism (as well as hard determinism) is the case.

Suffice it to point to chaos theory. Chaos theory is a deterministic theory, and still we cannot predict what will happen in real chaotic systems. We cannot predict how such systems will behave because of the so-called *sensitive dependence*. For example, a certain system could be sensitive on the eighth decimal point, and if we have measurement devices which are sensitive to only seventh, or less, decimal point, then after just a few steps in the time evolution of the system, differences between what is calculated and where the real system is will be huge. We shall have to

measure again and again for corrections. But it *does not mean* that the behaviour of the system *is not* completely determined (by initial conditions and laws of nature). *It is completely determined* but just our abilities and our equipment do not allow us to grasp this determination in full. If we could measure real systems with enough precision, if we could measure them completely, then we shall make completely accurate predictions.

So, complete determination is not refuted by our lack of knowledge of what will happen.

Also, complexity and the fact that we do not know what will be the result of deliberating and that we do not know what action will be the result (of previous initial conditions and operating laws of nature), do not refute the possibility of full determination (if determinism is the case) and do not confer responsibility for what is done.

Another thing what Pereboom says is: "One might argue that giving up our belief in moral responsibility would have very harmful cosequences, or even that they would be so damaging that thinking and acting as if hard incompatibilism is true is not a practical possibility for us." (Pereboom 2002, p. 479) But, there would be no question as to what would be a practical possibility for us, *if* hard incompatibilism is true! If hard incompatibilism is true, then in its proclaimed similarity to hard determinism, it follows that, someone's thinking and acting as if hard incompatibilism is true is a true possibility (only) if it is determined in advance as all other events and actions are determined in such a system! So, someone's actions could be determined by initial states and laws of nature to think and act as if hard incompatibilism is true when in fact it *is* true (when hard incompatibilism is the case)! I do not say that it would be inevitable that in all possible worlds where hard incompatibilism (or hard determinism) is the case, that at least one "agent" would think and act as if it is the case, but that this is a logical possibility of the structure of hard incompatibilistic universe that "agents" may think and do according to its truth. So, it *is* a possibility!

"If an agent hopes for success in some endeavor, and if she accomplishes what she hoped for, intuitively this outcome can be her achievement even if she is not praiseworthy for it – although the sense in which it is her achievement may be diminished. If an agent hopes that her efforts as a teacher will result in well-educated children, and they do, it

seems clear that she achieved what she hoped for, even if, according to the truth of hard incompatibilism, she is not praiseworthy for her efforts." says Pereboom (2002, p.481). I would not say that the sense of the word "achievement" according to which it is agent's achievement is thereby diminished. Not only is it certainly diminished, it vanishes altogether! If it is determined that there will be "educational" success long before teacher had come into existence, how is that "success" her success? True, the teacher is involved in the process, but nothing what she has done is something that originates *from* her; all her doings are being determined in advance together with the "result". Describing hard incompatibilistic worlds, as well as hard deterministic worlds, we can dispense with terms like "achievement". If we do not have sort of freedom that is required for moral responsibility in such worlds, as Pereboom argues, we also do not have freedom for what the word "achievement" signifies. It only looks from the subjective perspective of the teacher as if it is "her" achievement.

What about, then, "achieving our life hopes", under hard incompatibilism? Life hopes are those things we aspire to and try to achieve that make us fulfilled, happy, satisfactory and realized. Pereboom (2002, pp. 481–482), accepting Honderich's (1988) claims, still thinks that determinism and so, hard incompatibilism, leave them mostly intact and that we can aspire to achievement as we would do under the supposition that we have free will and freedom of action.

So, now, we can say something generally, then, about achieving what is called our life hopes. I would say that under hard incompatibilism, what is described as life hopes, is, in fact, like gambling. It is like a roulette. We can hope that the ball will stop on our preferred colour or preferred number. But nothing about the landing of the ball is under our control. Everything can, in principle, be predicted, including where the ball will land. Mechanically, everything is determined in the game of roulette, but it is too complicated or even impossible to measure precisely the throw from the hand, friction of the surface, and other forces and factors which have influence on the ball (air resistance, humidity etc.!). So, the players cannot not know where the ball will land though it is determined in advance. True, in real life, these life hopes become fulfilled more often than your roulette hopes if you play on numbers.

Still, fulfilment of life hopes is beyond our control given hard incompatibilism. It is also true that determined processes which lead to fulfilment, or not to fulfilling, life hopes go through our minds, our brains and our bodies, but if these are just the outcomes of the states and processes which determined them and their each and every process, before they had become assembled in our world, then they do not contribute by themselves to fulfilling life hopes. We just stand passively like in the game of roulette, waiting to see whether that which we hope for will be fulfilled, even though mind, brain and body "actively" participate in that process of fulfilling life hopes.

So, let me lead things to a conclusion.

If someone acts in a way which we would describe as moral, for the goodness of others and himself, we should say, under hard incompatibilism, that we are lucky, and we should be thankful to initial conditions and laws of nature for that (because there would be no moral or immoral actions).

If hard incompatibilism is the case, then, in fact as well as according to hard determinism, everything will happen as it is determined and not otherwise, e. g., there could not be an otherwise. There could not be an otherwise even if someone reads about what we should do if hard incompatibilism is the case. This reading is also determined then previously, and even the reaction of this reading is a result of full determination from initial states and laws of nature from the time a reader had not existed.

So, what to say for or instead of a conclusion? I think that there is only one thing we can say and that thing also is just conditional. If hard incompatibilism is at work, then we are not in a position that we can do otherwise than what we do and think. If everything is determined, then no one is responsible for what he does and no one achieves anything, and no one deserves praise or blame, not only in moral terms, but also generally for whatever one does. I think that most of what Pereboom claims that still holds or what attitudes we should have if hard incompatibilism is at work, in fact does not hold in light of what is said here. I think that there is perhaps only one thing we can say. That is, if we do not deserve praise or blame etc. for what we do and, moreover, if we are determined to do and to think as we do, then the only thing which (per-

haps) remains is that we must enjoy what we do in the very process of doing it. Enjoyment in the very process of doing something is the only thing left; and, if it is not determined by initial states and laws of nature, I don't see how can we even do that.

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HANS-PETER GROSSHANS

Sinn und Grenze der theologischen Rede von der Vorherbestimmung des Menschen

Die Idee der Vorbestimmung, der Prädestination des Menschen erfreut sich heutzutage keiner Beliebtheit. Eigentlich gilt dies schon lange. Bereits Conrad Ferdinand Meyer hat von ihr gesagt, sie sei »zu schrecklich, um wahr zu sein«.[1] Die Vorstellung, dass mein Leben vorherbestimmt sei – sei es von einem Gott oder dem Schicksal oder auch der Natur –, gilt als grässlich, denn dann erscheint das ganze Leben festgelegt, unfrei und insofern ausweglos.

Allerdings existiert die gemeinhin religiöse Vorstellung der Prädestination durchaus fort in säkularisierter Form – und dies nicht nur in allen Varianten der Schicksalsvorstellung. So schrieb schon Friedrich Engels in seinem Nachtrag zum 3. Buch des *Kapitals* (1895) rückblickend über die Börse zum Zeitpunkt 1865, als sie noch ein sekundäres Element im kapitalistischen System war, sie sei »eine Bestätigung des kalvinistischen Satzes« gewesen, »daß die Gnadenwahl alias der Zufall schon in diesem Leben über Seligkeit und Verdammnis, über Reichtum, d.h. über Genuß und Macht, und über Armut, d.h. Entbehrung und Knechtschaft, entscheidet«.[2] Nach Engels war Calvins »Gnadenwahl [...] der religiöse Ausdruck der Tatsache, daß in der Handelswelt der Konkurrenz Erfolg oder Bankrott nicht abhängt von der Tätigkeit oder dem Geschick des Einzelnen, sondern von Umständen, die von ihm unabhängig sind. 'So liegt es nicht an jemandes Wollen oder Laufen, sondern am Erbarmen' überlegner, aber unbekannter ökonomischer Mächte.«[3] Weitere Beispiele für das Fortbestehen der Idee einer Vorherbestimmung ließen sich auch aus der Moderne zu Hauf anführen.

1 C.F. Meyer, »Das Amulett«, in: ders., *Sämtliche Werke*. Historisch-kristische Ausgabe. Bd. 11, Bern 1959, S. 21.

2 F. Engels, »Ergänzung und Nachtrag zum III. Buche des 'Kapital'. II. Die Börse«, in: Karl Marx und Friedrich engels, *Werke*, Bd. 25, Berlin 1964, S. 917.

3 F. Engels, »Einleitung zur englischen Ausgabe (1892) von *Die Entwicklung des Sozialismus von der Utopie zur Wissenschaft*«, in: Marx und Engels, *Werke*, Bd. 19, Berlin 1962, S. 534.