

RAFAŁ SZOPA*

IS FREE WILL REALLY FREE? DIFFERENT VIEWS ON FREEDOM AND THE ECONOMIC APPROACH

Abstract. How to defend free will? There is an ongoing debate in science between determinism, libertarianism and compatibilism. This discussion is becoming clearer at the level of neuroscience and economics. Taken together, libertarianism and compatibilism are the most probable answer whether the free will is really free or not. These two approaches to the free will show the complexity of the issue at the same time. On the individual level, it seems to be that the human being is free in the libertarian sense. However, living in a society and benefiting from this fact, freedom begins to be restricted so that the human being to be predictable. In this way, libertarianism becomes to be determined to compatibilism. Libertarianism and compatibilism present the most coherent concept of human freedom. Determinism, on the other hand, can be treated as a factor narrowing libertarianism to compatibilism.

Key words: economic approach, determinism, libertarianism, compatibilism, free will.

In this article I am going to show different views on free will problem and how to solve it using the economic approach of Gary S. Becker. The economic approach will be used as the auxiliary tool. The method used in this study can be described as analytical. First, basic concepts of freedom will be presented and then we will look at human freedom from broader, social point of view and finally the economic approach will help us indicate which option is the best to choose taking into account presented views on freedom.

* Rafał Szopa – doktor nauk teologicznych w zakresie filozofii, pracownik Studium Nauk Humanistycznych i Społecznych Politechniki Wrocławskiej; e-mail: rafal.szopa@pwr.edu.pl.

1. DIFFERENT VIEWS ON HUMAN FREEDOM

What does it really mean that a man is free? Freedom is basically a choice between possibilities. The problem is that coercion of choice and living under duress to choose not necessarily must signify freedom but it may signify necessity of choice and only subjective feeling of being free while in fact it is not true. So, let us see different views on freedom briefly. It is going to be useful when we will analyze freedom in more general scale.

There are three basic conceptions on freedom: determinism, compatibilism and libertarianism. The first one “has been defined as the idea that every event is caused by an antecedent event and governed by the laws of nature”¹. Determinism is different from fatalism, which is “the concept that all events and processes in the nature and society are inevitable because are dependent on *vis maioris* – God, laws of nature, cosmic order and being led and governed by it”². It could be said that fatalism is just universal determinism. Libertarianism is on the other side. It is a form of incompatibilism and indeterminism, accepting that the strong determinism is false and we can affect the future, so to do otherwise than we are doing now³. The initial conditions of our acts do not make our future acts necessary. And compatibilism says that free will is compatible with determinism under some conditions⁴.

Looking at these three conceptions more particularly they get more complex especially if we would like to extend them to social issues. Starting from determinism and trying to apply it to social philosophy, we could say, that at the beginning of any society there are causes having so huge influence on society that every aspect of it is preordained. In such a society we do not have any power to change something because these first causes make a society to be self-propelled toward pre-decided goal. The problem with such approach is – it seems – no place for moral responsibility. Of course, even if we resign from morality from philosophical perspective it does not mean that the concept of moral responsibility would disappear. Probably morality would be still used as a key to sustain public order or to make people to think they are responsible for their acts and can be punished or awarded⁵. Otherwise it would be difficult to justify so important practices to us like blaming or praising:

¹ B.J. NEWELL. *Can Neuroscience Inform the Free Will Debate?* “Indiana Undergraduate Journal of Cognitive Science” 4 (2009) p. 55.

² J. BREMER. *Czy wolna wola jest wolna. Kompatybilizm na tle badań interdyscyplinarnych.* Kraków 2013. p. 44.

³ *Ibidem* p. 54.

⁴ *Ibidem* p. 55.

⁵ D.C. DENNETT. *Elbow Room: The Varieties of Free Will Worth Wanting.* Cambridge 1984 p. 100.

It is hard to imagine how different our praising and blaming practices would be if we really tried to cabin them to situations in which we could think of no causal explanation for a person's behavior. We would always be in doubt as to whether a person really deserved praise or blame⁶.

Another example of necessity of the assumption that free will is possessed by humans is so called "reactive attitudes". P. Strawson claims that free will is responsible for our reactions on other persons' behavior:

The personal reactive attitudes rest on, and reflect, an expectation of, and demand for, the manifestation of a certain degree of goodwill or regard on the part of other human beings towards ourselves⁷.

So, because we expect goodwill from others we assume that a person possesses power to be, up to a point, independent on external causes that – for followers of determinism – are predestinating factors of our future actions. To sum up, from social perspective it is a matter of indifference if determinism is true or not, because it seems that we have to accept in some sense that our personal behavior is based on the free will concept and moral responsibility.

But some authors try to combine casual determinism with punishing people for committing offences. L.E. Chiesa defines casual determinism as

[...] the belief that everything that happens in the universe, including human conduct, is the product of everything that has happened in the past in combination with the operation of natural laws⁸.

Chiesa claims that it is possible to connect determinism with criminal law and at the same time to rule out the concept of free will. He depicts four arguments for determinism:

- 1) scientific evidences for connection between human behaviour and the past and natural laws. Behaviour is causally determined⁹;
- 2) neuroscientific studies show – like Benjamin Libet experiment – that "human conduct is determined by unconscious processes that are not within the control of the actor"¹⁰;
- 3) some human behaviour is determined by genetic makeup according to biological studies¹¹;

⁶ M.S. MOORE. *Causation and the Excuses*. "CALIF. L. REV.", 1091/73 (1985). p. 1144-1145.

⁷ P. STRAWSON. *Freedom and Resentment*. <http://people.brandeis.edu/~teuber/P._F._Strawson_Freedom_&_Resentment.pdf> p. 8 [accessed: 13.09.2018].

⁸ L.E. CHIESA. *Punishing Without Free Will*. "Utah Law Review" 4 (2011) p. 1421.

⁹ *Ibidem* p. 1421.

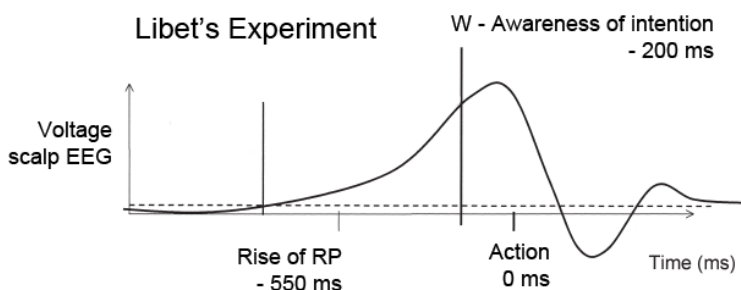
¹⁰ *Ibidem* p. 1422.

¹¹ *Ibidem* p. 1421.

4) psychology shows that there is a possibility that human behaviour is determined by environmental factors¹².

It seems that above arguments entail one-sided view on human behaviour behind which there is an idea that humans are fully rooted-in nature beings that may be explained by natural sciences. Such a statement is being undermined by libertarianism and compatibilism. Essentially objection against determinism is based on moral argumentation. First of all morality and responsibility for acts require “the ability to do otherwise”¹³ but if determinism is true it creates a situation that for libertarians means that a person is unable to do otherwise and because of that if we want to sustain moral responsibility we have to reject determinism¹⁴. One of the best examples is R. Kane, who is representative of libertarianism. He acknowledges that most of our free willed acts we are morally responsible because they are determined “by our character, by the kinds of persons we are”¹⁵. He proposes free will problem to focus on UR – ultimate responsibility¹⁶.

When it comes to Libet and results of Libet’s experiment, they are represented by the following chart (Available at: <http://www.informationphilosopher.com/freedom/libet_experiments.html> 04.11.2018):



¹² *Ibidem*.

¹³ K. TIMPE. *A Critique of Frankfurt-Libertarianism*. “*Philosophia*” 34 (2006) p. 189.

¹⁴ *Ibidem* p. 189.

¹⁵ J. LEMOS. *A Libertarian Response to Dennett and Harris on Free Will*. “*Rivista Internazionale di Filosofia e Psicologia*” 3/8 (2017) p. 238.

¹⁶ R. KANE. *Torn Decisions, Luck and Libertarian Free Will: Comments on Balaguer’s Free Will as an Open Scientific Problem*. “*Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*” 1 (2012) p. 40: “Focusing on UR helps to explain why I believe the tendency in the modern era to reduce the problem of freedom of the will to just a problem of free action is a mistake and oversimplifies the problem. Free will is not just about free action. It is about self-formation, about the formation of our wills (our characters, motives and purposes), or how we got to be the kinds of persons we are, with the wills we now have. Were we ultimately responsible to some degree for having the wills we do have, or can the sources of our wills be completely traced back to something over which we had no control, such as fate or the decrees of God, or heredity or environment, upbringing or social conditioning or hidden controllers, and so on? Therein, believe, lies the core of the traditional problem of free will”.

Readiness potential (RP) appears before awareness of intention. This is probably the most controversial issue. It suggests that our feeling about having free will is an illusion. But there are many interpretations of the experiment. Libet writes:

It might be argued that unconscious initiation applies to the kind of spontaneous but perhaps impulsive voluntary act studied here, but not to acts involving slower conscious deliberation of choices of action. The possible role of unconscious cerebral activities in conscious deliberation is itself a difficult and open question. In any case, after a deliberate course of action has been consciously selected, the specific voluntary execution of that action, i.e., the cerebral activation and implementation of the actual motor deed, may well be related to that for the ad lib kind of act we have studied. Even when a more loosely defined conscious preplanning has appeared a few seconds before a self-initiated act, the usual specific conscious intention to perform the act was consistently reported as having been experienced separately just prior to each act by all subjects¹⁷.

Libet wanted to defend free will's existence. To do that Libet introduces the concept of conscious veto. He claims that the conscious veto is not preceded by the unconscious processes:

[...] that the conscious veto may not require or be the direct result of preceding unconscious processes. The conscious veto is a control function, different from simply becoming aware of the wish to act. There is no logical imperative in any mind-brain theory, even identity theory, that requires specific neural activity to precede and determine the nature of a conscious control function. And, there is no experimental evidence against the possibility that the control process may appear without development by prior unconscious processes¹⁸.

According to Libet's intention he should not be invoked to justify deterministic viewpoint, especially that his experiment has got many interpretations. For instance it was said that free will is not related only to instantaneous actions but it concerns also long-term life and moral decisions¹⁹. There is a problem to connect moments in time measured by EEG with subjective moments in time that were chosen by participants of Libet's experiment to move a finger²⁰. It is also hard to say whether participants were focusing on a moment of spontaneous finger's movement or were looking at oscilloscope clock²¹. Moreover it is disputable if we should identify a conscious person with brain and if conditions of Libet's experiment are adequate to real-life situations²². There are also interpretations showing that Libet's

¹⁷ B. LIBET. *Unconscious cerebral initiative and the role of conscious will in voluntary action*. "The Behavioral and Brain Sciences" 8 (1985) p. 536.

¹⁸ IDEM. *Do We Have Free Will?* "Journal of Consciousness Studies" 6/8-9 (1999) p. 53.

¹⁹ J. BREMER. *Czy wolna wola jest wolna* p. 208.

²⁰ *Ibidem* p. 208.

²¹ *Ibidem* p. 209.

²² *Ibidem* p. 209-210.

experiment has proved no existence of free will²³. In brief, Libet's experiment indicates the problem of free will in neurosciences but did not prejudge the existence or not-existence of free will.

First critiques of Libet's experiment appeared in 1985²⁴, but further experiments in 90. indicated that Libet's results can be shown in another light. P. Haggard and M. Eimer have proved that using LRP (lateralised readiness potential) gives better results and – what is more important – excludes the correlation between RP and movement. How Haggard says:

We found RP onset did not covary with W judgements: trials with early W judgements in fact showed later RP onsets than trials with late judgements. LRP onset, however, did covary with W judgement: trials with earlier W judgements had earlier LRP onsets than trials with later W judgements²⁵

where W is time when volunteers started to prepare to act.

Similar results have been achieved by J. Trevena and J. Miller. In their article from 2010 entitled *Brain preparation before a voluntary action: evidence against unconscious movement initiation* they described two experiments concerning relations between RP and action. Conclusion is so that RP should be rather treated as “[...] an undefined aspect of the task being performed, such as the course of attention processes, cognitive effort or waiting for stimuli”²⁶. Another paper published in 2011²⁷ confirmed that results being got by using Libet's paradigm can be explained partially by processes not being related to making decisions or making them real²⁸.

In a work *An Accumulator Model for Spontaneous Neural Activity Prior to Self-Initiated Movement* A. Schurger, J. Sitt and S. Dehaene proposed stochastic model. This model assumes that

[...] neural activity gradually increases (accumulator). Because making spontaneous decision is special in this sense, it is not based on any specific data coming from the environment, the activity increases randomly, so the model is stochastic²⁹.

²³ G. ROTH. *Fühlen, Denken, Handeln*. Frankfurt am Main 2001 p. 530.

²⁴ P. HAGGARD, B. LIBET. *Conscious Intention and Brain Activity*. “Journal of Consciousness Studies” 11 (2001) p. 49.

²⁵ *Ibidem* p. 51.

²⁶ B. MAJCHROWICZ, J. DOBOSZEWSKI, T. PLACEK. *Droga donikąd? Co pozostało z eksperymentów Libeta nad wolną wolą?* “Filozofia Nauki” 2/94 (2016) p. 65.

²⁷ J. MILLER, P. SHEPHERDSON, J. TREVENA. *Effects of Clock Monitoring on Electroencephalographic Activity: Is Unconscious Movement Initiation an Artifact of the Clock?* “Psychological Science” 22/1 (2011).

²⁸ B. MAJCHROWICZ, J. DOBOSZEWSKI, T. PLACEK. *Droga donikąd?* p. 65.

²⁹ *Ibidem* p. 66.

The author, in comparison their work to Libet's one, say:

Here we present a very different interpretation of mounting neural activity preceding spontaneous movements made in the context of a spontaneous-movement production task. Our model shows that a decision threshold applied to autocorrelated noise – in this case the output of a leaky stochastic accumulator – can account for the specific shape of the RP as well as the distribution of waiting times from subjects performing Libet et al.'s (9, 15) spontaneous-movement task³⁰.

In other words, the authors say that our brains are permanently prepared to make decisions. How it is said in this work.

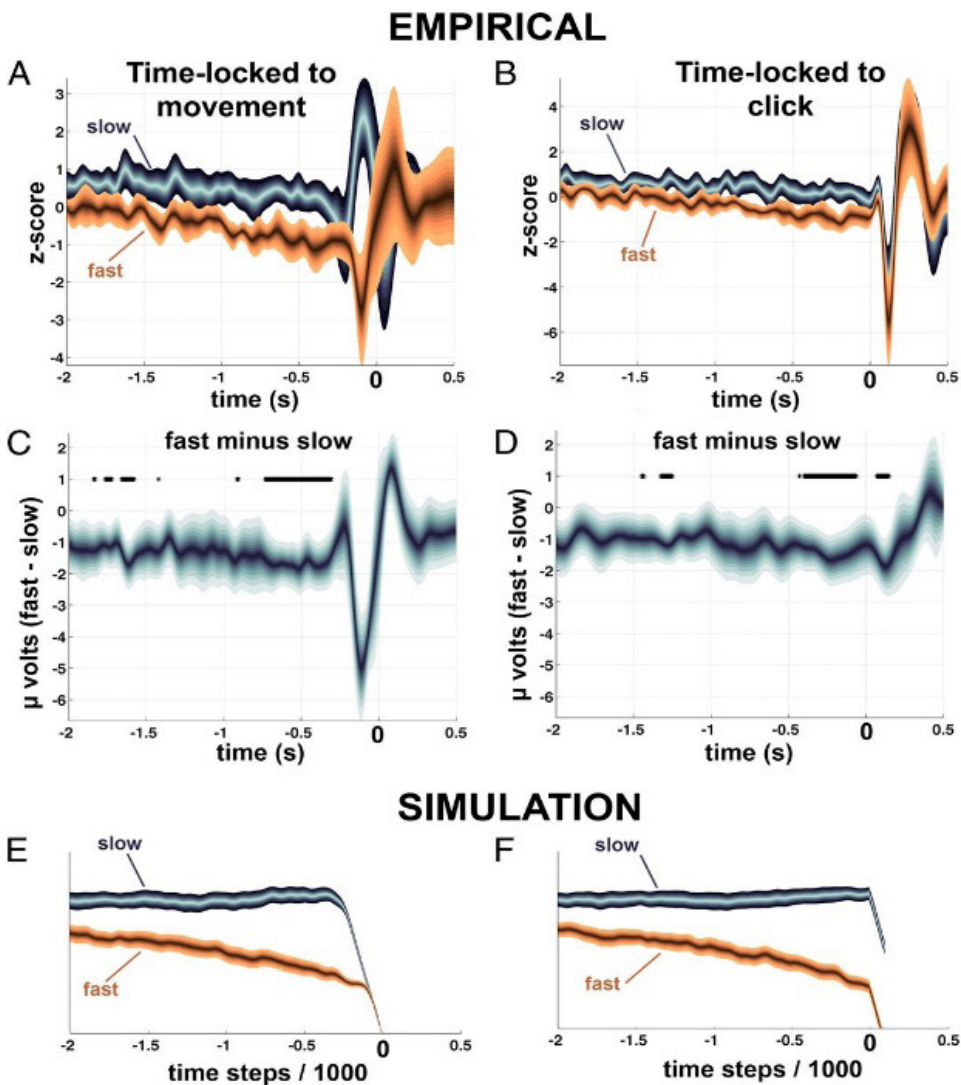
We propose that the neural decision to move corresponds to a commitment to produce a movement now and that this commitment is associated with a threshold crossing of the accumulator underlying the response decision (33), a lateralization of the pre-movement potential (11), and an abrupt increase in excitability in primary motor cortex ~100 ms before the onset of muscle flexion (31) (or ~150 ms before the button press, for the hardware that we used). We propose that the precise time of the «neural decision to move now» is partly determined by spontaneous fluctuations that are temporally autocorrelated³¹.

Summing up, our brains are stochastic accumulators and in this way can influence our decisions, but our actions are not foredoomed by neural activity being cut off our consciousness. Here are the results from experiments³²:

³⁰ A. SCHURGER, J. SITT, S. DEHAENE. *An Accumulator Model for Spontaneous Neural Activity Prior to Self-Initiated Movement*. "Proceedings of the National Academy of Sciences" 109/42 (2012) p. E2904.

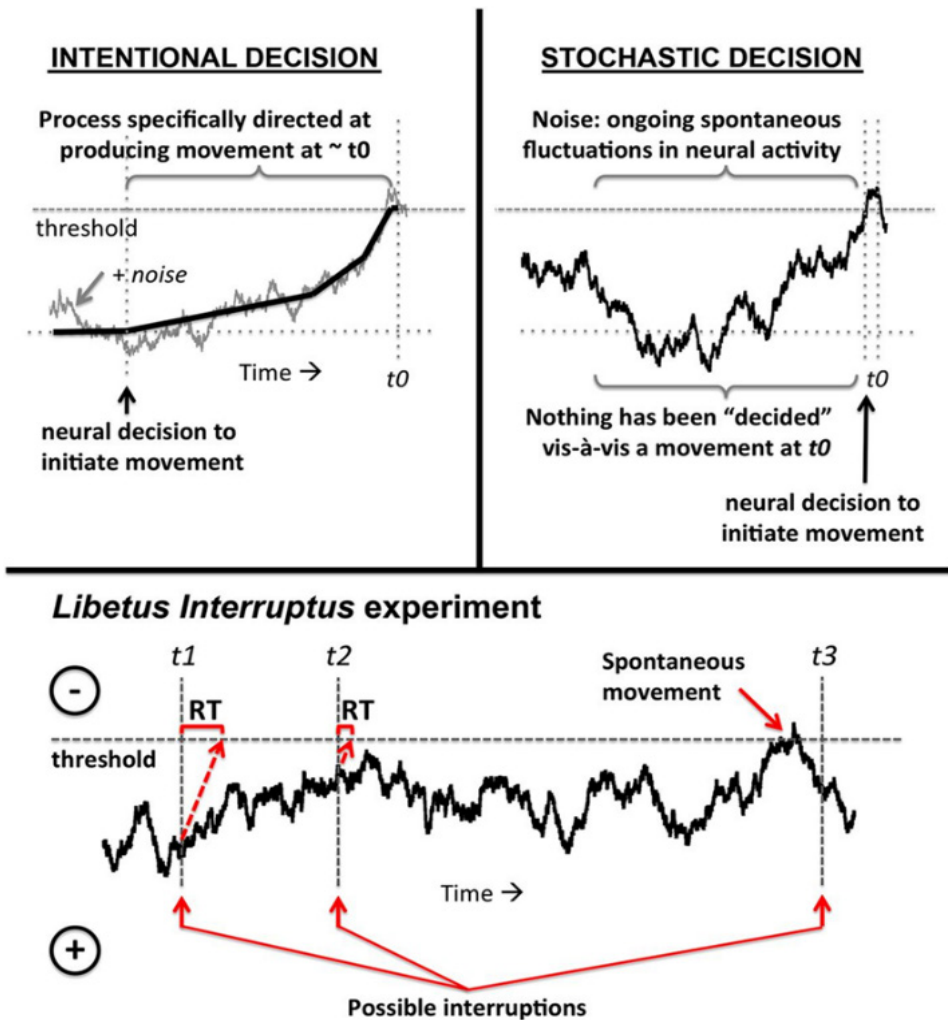
³¹ *Ibidem* p. E2909.

³² *Ibidem* p. E2908.



How we see, Schurger, Sitt and Dehaene's data differ from Libet's results. It can be seen how a brain is being prepared to act depending on slow or fast actions. Here the results are seen even more clear³³:

³³ Graphics available here: <<https://www.pnas.org/content/109/42/E2904/1>> [accessed: 25.07.2019].



As we can see in stochastic model decisions are based above all on spontaneous fluctuations. It does not mean that our activity is chaotic, but rather that a brain is prepared all the time to take action if needed.

Libertarianism assumes that a man has got such ability to do otherwise that his will is absolutely independent on external factors. Here are the most fundamental statements of libertarianism³⁴:

- 1) free will entails that an actor is able to create ultimately his own purposes and sustain them;

³⁴ L. R. BAKER. *Moral Responsibility without Libertarianism*. "Nous" 42 (2006) p. 307-308.

- 2) action in itself is not casually determined by anything that is beyond control of an actor;
- 3) the ultimate sources of actions are reason and will;
- 4) free will enables an actor to do X at time t and to refrain from doing X at the same time;
- 5) there are “no casual laws and antecedent conditions determine either that he will perform the action, or that he will not”;
- 6) an action is free from determination of the outside causes.

Such defined libertarianism tries to make a person an isolated being when it comes to making decisions because only then people can be responsible for their acts. What is important too, some philosophers ascribe to libertarianism the concept of non-material substance that would be responsible for ability to change our decisions against pre-caused events that in normal conditions would have deterministic influence on us³⁵.

In contrary to libertarianism compatibilism tries to combine free will with determinism. Free will allows to have “[...] judgments of moral responsibility regardless of whether it turns out that causal determinism is true”³⁶. Briefly, compatibilism “[...] insists that free will, moral responsibility, and their concomitant notions are compatible with determinism (or with the absence of libertarian free will)”³⁷. D. Dennett is one of the most famous representative of compatibilism. According to him free will evolved from evolutionary process to equip us in voluntary control and free will to be

[...] the adaptive ability to anticipate outcomes and to flexibly exert control over factors in the world according to one's preferences, perceptions and deliberations³⁸.

Dennett defends a thesis that we do not have to choose between free will in indeterministic version and determinism excluding free will (even if in practice does not exclude punishing for crimes).

Among scientist working on body-mind problem and free will problem especially in XIX century deterministic viewpoint was overwhelming. Determinism was strictly connected with materialism. In order to overcome XIX-century

³⁵ G. Keil calls such attribution to libertarianism “myth” – G. KEIL. *Wir können auch anders. Skizze einer libertarischen Konzeption der Willensfreiheit*. “Erwägen – Wissen – Ethik” 19 (2009) p. 9-15. The problem with Keil's argumentation is that he criticizes attributions being ascribed to libertarianism saying that they are not belong to it while most of philosophers see in that “myths” the core of libertarianism.

³⁶ L.E. CHIESA. *Punishing Without Free Will* p. 1426.

³⁷ S. SMILANSKY. *Compatibilism: The Argument from Shallowness*. “Philosophical Studies” 115 (2003) p. 260.

³⁸ M. BRINCKER. *Evolution Beyond Determinism: On Dennett's Compatibilism and the Too Timid Free Will Debate*. “Journal of Cognition and Neuroethics” 3/1 (2015) p. 40.

materialism, in XX century emergentism came into existence. One of the best examples is R.W. Sperry, who wanted to break up with reductionism in psychology:

I find that my own conceptual working model of the brain leads to inferences that are in direct disagreement with many of the foregoing; especially I must take issue with that whole general materialistic-reductionistic conception of human nature and mind that seems to emerge from the currently prevailing objective analytic approach in the brain-behavior sciences. [...] In the brain model proposed here, the causal potency of an idea, or an ideal, becomes just as real as that of a molecule, a cell, or a nerve impulse. Ideas cause ideas and help evolve new ideas. They interact with each other and with other mental forces in the same brain, in neighboring brains, and in distant, foreign brains³⁹.

Above text points out that mind cannot be reduced to brain and brain is not a simple sum of its own particles. Developing system gets the new features that are something more than the system was before⁴⁰. D.T. Campbell introduced a term *downward causation* that is related to emergentism. Campbell says that causation is downward when “[...] substantial extents of time, covering several reproductive generations, are lumped as one instant for purposes of analysis”⁴¹. Campbell description of downward causation refers to biological systems and uses a term “natural selection” saying that downward causation takes place where

[...] a higher level of organisation, the laws of the higher-level selective system determine in part the distribution of lower-level events and substances. Description of an intermediate-level phenomenon is not completed by describing its possibility and implementation in lower-level terms. Its presence, prevalence or distribution (all needed for a complete explanation of biological phenomena) will often require reference to laws at a higher level of organisation as well. [...], all processes at a lower level of a hierarchy are restrained by an act in conformity to the laws of the higher level⁴².

If a society is treated as a biological system or if we apply into society biological way of seeing systems⁴³ we could use the term “downward causation” to explain connections between an single individual and a society in which he or she lives.

³⁹ R.W. SPERRY. *Mind, Brain, and Humanist Values*. Available at: <http://www.informationphilosopher.com/solutions/scientists/sperry/Mind_Brain_and_Humanist_Values.html> [accessed: 02.10.2018].

⁴⁰ Cf. J. BREMER. *Czy wolna wola jest wolna* p. 168.

⁴¹ D.T. CAMPBELL. “Downward Causation” in *Hierarchically Organised Biological Systems*. “E:CO” 3 (2013) p. 145.

⁴² *Ibidem*.

⁴³ V. VOLKOW. *How to integrate biological research into society and exclude errors in biomedical publications? Progress in theoretical and systems biology releases pressure on experimental research*. Available at: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990595/>> [accessed: 10.08.2018]: “It seems reasonable to compare biological and social systems trying to find specific features and peculiarities. Nowadays society seems more organized and complex than simple biological systems”.

Now we can ask which option to choose? Determinism, libertarianism or compatibilism? Let us try to answer this question by using wider context, that is an individual in a society.

2. THE ECONOMIC APPROACH TO FREE WILL

How we can see free will problem is very complex. Standing for one option when wide view is taken into account can be not enough as I am going to show. Let us start from determinism. As it was said above, determinism is being defended by philosophers who claim that it is not a problem to justify punishing for unwanted crimes. It is useful to punish because people believe in their possibility to choose goodness over evil anyway and penalty is socially useful to sustain such belief in a society. However, let us look at economic approach of free will problem.

G.S. Becker had proposed an economic approach to understand human behavior. It means that we can assume, that people behave as if they calculate. Becker shows how his starting point – that humans calculate what pays to do – works in real life. He characterizes the economic approach in this way:

Everyone recognizes that the economic approach assumes maximizing behavior more explicitly and extensively than other approaches do, be it the utility or wealth function of the household, firm, union, or government bureau that is maximized. Moreover, the economic approach assumes the existence of markets that with varying degrees of efficiency coordinate the actions of different participants – individuals, firms, even nations – so that their behavior become mutually consistent⁴⁴.

Becker proves that the economy concerns almost every aspect of our lives. Let us focus on two things: crime (inasmuch it has been mentioned above) and marriage. Becker shows how to combat against crime assuming that we have influence to stop it⁴⁵. Unlike Chiesa Becker conducts a research based on free will concept when it comes to committing crimes. Only then, when we treat free will for real we can try to work out a model of dealing with crimes and to cut the costs in the same time. The model proposed by Becker consists of five categories:

[...] the relations between (1) the number of crimes, called «offenses» in this essay, and the cost of offenses, (2) the number of offenses and the punishments meted out, (3) the number of offenses, arrests, and convictions and the public expenditures on police and courts, (4) the number of convictions and the costs

⁴⁴ G.S. BECKER. *The Economic Approach to Human Behavior*. Available at: <https://www.pauldeng.com/pdf/Becker_the%20economic%20approach%20to%20human%20behavior.pdf> p. 5 [accessed: 09.08.2018].

⁴⁵ G.S. BECKER. *Crime and Punishment: An Economic Approach*. Available at: <<http://www.nber.org/chapters/c3625.pdf>> p. 1 [accessed: 11.10.2018].

of imprisonments or other kinds of punishments, and (5) the number of offenses and the private expenditures on protection and apprehension⁴⁶.

All what makes a person criminal is a calculation if a crime is profitable. Becker explains:

The approach taken here follows the economists' usual analysis of choice and assumes that a person commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities. Some persons become «criminals», therefore, not because their basic motivation differs from that of other persons, but because their benefits and costs differ⁴⁷.

The key words are “choice” and “utility”. So, the economic approach

[...] implies that there is a function relating the number of offenses by any person to his probability of conviction, to his punishment if convicted, and to other variables, such as the income available to him in legal and other illegal activities, the frequency of nuisance arrests, and his willingness to commit an illegal act⁴⁸.

It can be formulated in following equation:

$$O_j = O_j(p_j, f_j, u_j)$$

where O_j is the number of offenses he would commit during a particular period, p_j his probability of conviction per offense, f_j his punishment per offense, and u_j a portnianteau variable representing all these other influences⁴⁹.

Becker analyses also marriage from economical point of view. He says that “[...] marriage is no exception and can be successfully analyzed within the framework provided by modern economics”⁵⁰. If marriage is voluntary it can be seen as something what makes people more gifted than being single. Becker says about the rise of utility level after wedding⁵¹. People who decide to “[...] marry or have children or divorce, they attempt to maximize their utility by comparing benefits and costs”⁵². Divorce is expected also to increase welfare⁵³. It means that marriage and

⁴⁶ *Ibidem* p. 5.

⁴⁷ *Ibidem* p. 9.

⁴⁸ *Ibidem* p. 9.

⁴⁹ *Ibidem* p. 10.

⁵⁰ G.S. BECKER. *A Theory of Marriage*. Available at: <<http://www.nber.org/chapters/c2970.pdf>> p. 300 [accessed: 11.10.2018].

⁵¹ *Ibidem*.

⁵² G.S. BECKER. *The Economic Way of Looking at Life*. “Coase-Sandor Institute for Law & Economics Working Paper” 12 (1993) p. 11.

⁵³ *Ibidem*.

divorce can be treated economically. People make rational choices “[...] approach to marriage and other behavior”⁵⁴ and it is so called “instinctive economics”⁵⁵.

When we connect “choice”, “utility” and above equation together, we can conclude that people act rationally. And what about free will? Let us see some examples that are given by Becker. In *Crime and Punishment: An Economic Approach* Becker formulates equation on “the utility expected from committing an offense”:

$$EU_j = p_j U_j (Y_j - f_j) + (1 - p_j) U_j (Y_j),$$

where Y_j is his income, monetary plus psychic, from an offense; U_j is his utility function; and f_j is to be interpreted as the monetary equivalent of the punishment⁵⁶.

We can make above equation easier:

$$EU(N) = p U_g + (1 - p) UBN^{57}$$

where N is choice of committing an offence, p is subjective probability of punishment, U_p is utility of punishment (negative), UBN is utility of committing of offence.

We can also compute porobability of being respected the law by a person:

$$UBC > pUP + (1 - p) UBN$$

where UBC is utility of benefit without committing of offence⁵⁸.

In the case of man we have to take into account one another factor of respecting the law, that is morality. Only when we assume that a person is moral being we can – I think so – fully understand human behavior. After including morality into behavior we receive the following equation:

$$TU_i = \sum_{j=1}^n U_j + UB + UM$$

where TU_i is total utility of individual, is utility being derived from all other sources of utility, UB is utility of benefit of choice to respect the law or committing the offence, UM is moral enjoyment or unpleasantness resulting from choice to respect the law or committing the offence⁵⁹.

⁵⁴ *Ibidem*.

⁵⁵ *Ibidem*.

⁵⁶ G.S. BECKER. *Crime and Punishment* p. 10.

⁵⁷ K. FIJAŁKOWSKI. *Rola psychologii w ekonomicznej teorii zachowań ludzkich Gary’ego S. Beckera*. “Economics” 4/25 (2013) p. 59. In English translation: *The Role of Psychology in Becker’s Economic Approach to Human Behavior*.

⁵⁸ *Ibidem*.

⁵⁹ *Ibidem* p. 60.

Summing up we receive the ultimate condition to respect the law:

$$UBC + UMC > pUP + (1 - p) UBN + UMN$$

where *UMC* is utility resulting from behavior being in accordance with well-established moral norm, *UMN* is utility resulting from behavior that is not in accordance with well-established moral norm⁶⁰.

We can conclude that people tend to respect the law even if they are sure about being not punished. So, impunity conditions do not affect people to commit the offence if enjoyment of benefits resulting from committing the offence is lower than potential unpleasantness and remorse⁶¹.

Answering the question in the title of this section we can say that free will is the choice between different possibilities. On the basis of above considerations about conditions of respecting the law and committing the offence we can conclude that the choice is equate to rationality. People act rational and choose actions that seem to be more beneficial than the others in the same time when decision must be made. So, rationality is equate to profitability and profitability consists of utility and moral complacency. What is moral complacency? I think that it is respecting of natural law. If so, the following conclusion can drawn: if natural law is not respected there is no rationality. We could also say (to ignore natural law's concept) that if morality is ignored there is no rationality.

Looking at free will problem widely, that is from social point of view, it can be said that utility means *raison d'État*. Free nations choose between possibilities and the best one became *raison d'État*. At some point appears a level beyond which it pays to resign from being a single and to become part of a society. So called common weal is a factor that make that participating in a society is more beneficial than living as an single individual. *Raison d'Etat* and common weal can be treated together as this factors that set the frontier beyond which it pays to trespass to gain more than being a single. It seems that the most principal community that makes people to think about utility of being in it and that creates common weal is marriage⁶² – it mentioned above – whereas the most complex community is nation. Being a part of a community is based on free will and it is related to profit and loss account when it comes to entering into or going out the community. It can be presented like that:

$$Ups > \text{getting rid of some part of personal freedom} = \text{respect for law in a certain society} + \text{paying taxes}$$

where *Ups* is utility of participating in a certain society and utility of participating in its common weal.

⁶⁰ *Ibidem* p. 60-61.

⁶¹ *Ibidem* p. 61.

⁶² We can ask how many people are needed to create a new quality.

From broader, social perspective it seems to be right to say that people act as if they calculate, they act rational and freely choosing between possibilities. People have influence on their future being able to discern good and to choose it because they want to choose it and not because they are forced by external or internal factors to choose good⁶³. So, what is the answer for the question asked in the title of this part of the article? Is free will really free? I think that there is possible to combine libertarianism and compatibilism.

Libertarianism is at the very beginning of decision making process. It is ability to choose and to resign. Using the economic approach to explain human behavior, it can be said, that the only factor being able to influence our choices is profitability. But living in a society puts limits on us. We receive from a society more than we could achieve as individuals but we have to do many things instead. We have to respect the law and rules. We have to pay taxes but first and foremost we have to follow our choice to be part of a society. Our choice determines the way of our behavior, the way of thinking etc. We start to be predictable. If so, participating in a common weal of a society means that personal libertarianism turns into social compatibilism. Compatibilism emerges from libertarianism in a moment when a person decides to take part in a society, when he or she goes beyond the border of personal freedom to gain more from others and to take them something from himself/herself. In other words, a person is unpredictable and has plenty of possibilities to choose and after a choice is made a person's behavior can be described by compatibilism. Because a lot of persons live in a society, the whole society can be described in compatibilistic view. There are lots of examples. Let us see a few ones.

European concept of balance of power outlined European diplomacy for many decades especially since Congress of Vienna. Powers of Europe were trying not to let a particular state to surpass the other states in order to prevent wars. Klemens von Metternich is the best example. To implement the balance of power concept countries were trying to stop the German reunification in fear that united Germany will endanger peace in Europe. Politics and diplomacy started to be predictable, that is we could foresee what is going to happen in European political landscape knowing premises standing behind. It is compatibilism. Another example is the president Woodrow Wilson and his attitude to American engagement in international affairs based on "[...] grave moral judgments"⁶⁴. Wilson believed in people's self-determination⁶⁵. The League of Nations was based on this Wilson's

⁶³ We know that some people do not choose good but evil that seems to be inexplicable. In ethics it is *mysterium iniquitatis*.

⁶⁴ P. GOTTFRIED. *Wilsonianism: The Legacy That Won't Die*. "The Journal of Libertarian Studies" 2 (1990) p. 124.

⁶⁵ M. MANELA. *The Wilsonian Moment: Self-Determination and the International Origins of Anticolonial Nationalism*. New York 2007 p. 41.

assumption. It can be said, that the League of Nations was implementations of the president's idea and its way of working was determined.

Such determinism appears implementig social system. Depending on whether we have democracy or – for instance – comunism, it can be predicted in which direction society will go. One of the best examples is Poland before and afer 1989 year. During communist period (1945-1989) Poland did not developed so fast (if at all) in comparsion to countries of Western Europe. It was to predict at the very beginning of the advent of communism. Since 1989 Poland entered into new social system – capitalism – and its developement started to change the country making it much more richer than ever. Similar situation can be observed between North and South Korea. Developement of countries can be easily predicted knowing premises standing behind, that is which social system rules a country.

As we can see, people belonging to a society can choose a path of developement of thier country at the very beginning – it is libertarianism. But after choice is made possibility to do otherwise is limited and sometimes impossible – it is determinism, but not strong determinism because we had possible to choose, so it is so called soft determinism, that is compatibilism.

A dispute between libertarianism, compatibilism and determinism demand from us to choose one option. But, it seems that looking at that dispute from broader (social) perspective we are not forced to choose but we can combine at least two views on freedom: libertarianism and compatibilism. The first one is related to choice between possibilieties. We assume that there is no external coercion and choice is made because we want it, however we could change our decision independently whether the change is beneficial or not although most of our choices are made due to profitability (economic approach). Compatibilism, on the other hand, is the result of our free choices and it is – as if – implementation these choices into real life. It means that free choice implemented is limited when it comes to our next choices that are not so free as this first one but they are based on our fundamental choice outlining everything that happen after.

Similar situation appears if the point is an induvidual and a society. An individual is free⁶⁶, i.e. can choose between many possibilieties but being a part of

⁶⁶ I think it is worth to look at free will problem from another viewpoint than only that being accepted by empirical sciences. According to the thomistic metaphysics a man is contingent being consisting of soul and body – this doctrine of contingency of created beings is based on the doctrine of real distinction between essence and existence. Let us refer to the Thomistic axiom *agere sequitur esse* – Cf. D.L. SCHINDLER. *Agere sequitur esse: What Does It Mean? A Reply to Father Austriaco*. "Communio" 32 (2005) p. 795-823. Every being acts in accordance with its nature. If the point is human being and freedom, thomistic view indicates the soul as the source of freedom. The soul is not determined by matter if it is separated but being connected soul is determined. This is because the soul is body's form (Thomistic metaphysics referes here to Aristotelilan doctrine of four causes: the material cause, the form, the efficient cause, the final cause. The material cause is the cause "from which, as immanent material, a thing comes into being, e.g. the bronze is the cause of the statue

a society makes his/her possibilities limited. So, libertarianism and compatibilism are not the correct answer whether we are free or not when we take them separately. They both fit to different situations and describe human being from both sides: as an individual and as a social being living in communities. At some moment libertarianism changes into compatibilism and compatibilism emerges from libertarianism. Wanting to indicate the breaking point we could say that the transition presumably starts from marriage. G. Becker has shown that the economic approach can be applied to marriage, so we confine possibilities of choice due to being part of the most principal community consisting of only two persons.

To answer the question if free will is really free I tend to answer – taking into account the economic approach, results of experiments on making decisions, our ability of making choices and to change them in favour of more beneficial possibilities, doing evil things that can be called *mysterium iniquitatis* – yes. We are free but our freedom cannot be described by only one option but at least libertarianism and compatibilism together (depending on situation one of them) are able to describe the complexity of human freedom.

CONCLUSION

The article's goal was to examine the problem of free will from different views taking into account the economic approach. Conclusion is that there is no simple answer which option to choose. It seems that the most reasonable is to accept at least libertarianism and compatibilism depending on whether we consider a single individual or society. When it comes to societies it seems that compatibilism

and the silver of the saucer, and so are the classes which include these” – ARISTOTLE. *Metaphysics* V 2. <<http://classics.mit.edu/Aristotle/metaphysics.5.v.html>> [accessed: 29.10.2018]. “The form or pattern, i.e. the definition of the essence, and the classes which include this and the parts included in the definition” – *ibidem*. Aristotle identifies the form with shape – ARISTOTLE. *Metaphysics* V 2. <<http://classics.mit.edu/Aristotle/metaphysics.5.v.html>> [accessed: 29.10.2018]) and shapes it (Aristotle identifies the form with shape – ARISTOTLE. *Metaphysics* V 4. <<http://classics.mit.edu/Aristotle/metaphysics.5.v.html>> [accessed: 29.10.2018]). Not connected with body soul is free and not determined by materia. Thomas Aquinas says that “all the powers of the soul belong to the soul alone as their principle. But some powers belong to the soul alone as their subject; as the intelligence and the will. These powers must remain in the soul, after the destruction of the body” – T. AQUINAS. *Summa theologiae* I q. 77 a. 8. <http://www.documentacatholicaomnia.eu/03d/1225-1274,_Thomas_Aquinas,_Summa_Theologiae_%5B1%5D,_EN.pdf> [accessed: 25.07.2019]. It means that the will belongs to the soul and because the soul is independent on body when it comes to existence, the soul is free, i.e. human being is free in the libertarian way in the soul. But when the soul connects with the body it starts to be confined by body. The soul as the spiritual being does not come under material world but if it is connected with material body it is also narrowed down to the body's possibility to act.

gradually emerges from libertarianism, that is libertarianism narrows down to compatibilism when a man chooses to be part of a certain group.

BIBLIOGRAPHY

- AQUINAS T., *Summa theologiae*. <http://www.documentacatholicaomnia.eu/03d/1225-1274,_Thomas_Aquinas,_Summa_Theologiae_%5B1%5D,_EN.pdf> [accessed: 25.07.2019].
- ARISTOTLE, *Metaphysics*. <<http://classics.mit.edu/Aristotle/metaphysics.5.v.html>> [accessed: 29.10.2018].
- BAKER L.R., *Moral Responsibility without Libertarianism*. "Nous" 42 (2006) p. 307-330.
- BECKER G.S., *A Theory of Marriage*. <<http://www.nber.org/chapters/c2970.pdf>> [accessed: 11.10.2018].
- BECKER G.S., *Crime and Punishment: An Economic Approach*. <<http://www.nber.org/chapters/c3625.pdf>> [accessed: 11.10.2018].
- BECKER G.S., *The Economic Approach to Human Behavior*. <https://www.pauldeng.com/pdf/Becker_the%20economic%20approach%20to%20human%20behavior.pdf> [accessed: 9.10.2018].
- BECKER G.S., *The Economic Way of Looking at Life*. "Coase-Sandor Institute for Law & Economics Working Paper" 12 (1993) p. 1-31.
- BOETIUS, *De hebdomadibus*. <<http://www.logicmuseum.com/authors/boethius/dehebdomadibus.htm>> [accessed: 18.07.2015].
- BREMER J., *Czy wolna wola jest wolna. Kompatybilizm na tle badań interdyscyplinarnych*. Kraków 2013.
- CAMPBELL D.T., "Downward Causation" in *Hierarchically Organised Biological Systems*. "E:CO" 3 (2013). p. 139-151.
- CASEY G., *An Explication of the De hebdomadibus of Boethius in the Light of St. Thomas's Commentary*. <<https://www.ucd.ie/philosophy/staff/gerardcasey/casey/DeHebdo.pdf>> [accessed: 17.07.2015].
- CHIESA E.L., *Punishing Without Free Will*. "Utah Law Review" 4 (2011) p. 1403-1460.
- DENNETT D.C., *Elbow Room: The Varieties of Free Will Worth Wanting*. Cambridge 1984.
- FIJAŁKOWSKI G., *Rola psychologii w ekonomicznej teorii zachowań ludzkich Gary'ego S. Beckera*. "Economics" 4/25 (2013) p. 54-63.
- GOTTFRIED P., *Wilsonianism: The Legacy That Won't Die*. "The Journal of Libertarian Studies" 2 (1990) p. 117-126.
- HAGGARD P., LIBET B., *Conscious Intention and Brain Activity*. "Journal of Consciousness Studies" 2001 p. 47-63.
- KANE R., *Torn Decisions, Luck and Libertarian Free Will: Comments on Balaguer's Free Will as an Open Scientific Problem*. "Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition" 1 (2001) p. 51-58.
- KEIL G., *Wir können auch anders. Skizze einer libertarischen Konzeption der Willensfreiheit*. "Erwägen – Wissen – Ethik" 19 (2009).
- LEMONS J., *A Libertarian Response to Dennett and Haris on Free Will*. "Rivista Internazionale di Filosofia e Psicologia" 3/8 (2017) p. 231-246.

- LIBET B., *Do We Have Free Will?* "Journal of Consciousness Studies" 6/8-9 (1999) p. 47-57.
- LIBET B., *Unconscious cerebral initiative and the role of conscious will in voluntary action.* "The Behavioral and Brain Sciences" 8 (1985) p. 529-566.
- MAJCHROWICZ B., DOBOSZEWSKI J., PLACEK T., *Droga donikąd? Co pozostało z eksperymentów Libeta nad wolną wolą?* "Filozofia Nauki" 2/94 (2016) p. 51-75.
- MANELA E., *The Wilsonian Moemnt: Self-Determination and the International Origins of Anticolonial Nationalism.* New York 2007.
- MILLER J., SHEPHERDSON P., TREVENA J., *Effects of Clock Monitoring on Electroencephalographic Activity: Is Unconscious Movement Initiation an Artifact of the Clock?* "Psychological Science" 22/1 (2011) p. 103-109.
- MOORE M.S., *Causation and the Excuses.* "CALIF. L.REV." 73 (1985) p. 1091-1149.
- Newell B.J., *Can Neuroscience Inform the Free Will Debate?* "Indiana Undergraduate Journal of Cognitive Science" 4 (2009) p. 54-64.
- PLATO, *Timaios.* In: *Timajos, Kritias albo Atlantyki.* Trans. P. Siwek. Warszawa 1986.
- ROTH G., *Fühlen, Denken, Handeln.* Frankfurt am Main 2001.
- SCHINDLER D.L., *Agere sequitur esse: What Does It Mean? A Reply to Father Austriaco.* "Communio" 32 (2005) p. 795-823.
- SCHURGER A., SITT J., DEHAENE S., *An Accumulator Model for Spontaneous Neural Activity Prior to Self-Initiated Movement.* „Proceedings of the National Academy of Sciences" 109/42 (2012) p. E2904-E2913.
- SMILANSKY S., *Compatibilism: The Argument from Shallowness.* "Philosophical Studies" 115 (2003) p. 257-282.
- SPERRY R., *Mind, Brain, and Humanist Values.* <http://www.informationphilosopher.com/solutions/scientists/sperry/Mind_Brain_and_Humanist_Values.html> [accessed: 2.10.2018].
- STRAWSON P., *Freedom and Resentment.* <http://people.brandeis.edu/~teuber/P._F._Strawson_Freedom_&_Resentment.pdf> [accessed: 13.09.2018].
- TIMPE K., *A Critique of Frankfurt-Libertarianism.* "Philosophia" 34 (2006) p.189-202.
- VOLKOW V., *How to integrate biological research into society and exclude errors in biomedical publications?* „Progress in theoretical and systems biology releases pressure on experimental research". <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990595>> [accessed: 10.08.2018].

CZY WOLNA WOLA JEST NAPRAWDĘ WOLNA?

RÓŻNE POGŁĄDY NA TEMAT WOLNOŚCI I PODEJŚCIE EKONOMICZNE

Streszczenie. Dyskusja pomiędzy determinizmem, libertarianizmem i kompatybilizmem została przedstawiona w świetle neuronauki i ekonomii. Eksperyment Libeta spowodował długo trwający spór o ludzką wolność. Rezultaty jego badań sugerowały, że działanie jest zdeterminowane przez pojawiający się potencjał gotowości na długo przed świadomością działającego. Chcąc obronić koncepcję wolnej woli, Libet wprowadził tzw. świadome weto – zdolność do zaprzestania czynu. Badania przeprowadzone w następnych latach po eksperymencie Libeta pokazały, że funkcjonowaniu mózgu lepiej odpowiada model stochastyczny, co oznacza, że mózg jest nieustannie w potencjale gotowości do działania, lecz

w dużej mierze od nas zależy, kiedy do niego przystąpimy. Ekonomiczne podejście Gary'ego S. Beckera zostało wykorzystane w pracy w celu naświetlenia przebiegu procesu podejmowania decyzji. Badania Beckera pokazują, że ludzie zachowują się tak, jakby kierowali się rachunkiem użyteczności. Oznacza to, że jesteśmy zdeterminowani przez przewidywane przyszłe korzyści, lecz możemy wybrać w sposób wolny, co chcemy zrobić, aby korzyści te osiągnąć. Dlatego wydaje się, że libertarianizm i kompatybilizm wzięte razem są najbardziej prawdopodobną odpowiedzią, czy wolna wola jest naprawdę wolna, czy też nie. Te dwa podejścia do wolnej woli pokazują złożoność zagadnienia, bowiem na poziomie indywidualnym wydaje się, że człowiek jest wolny w sensie libertariańskim. Jednak żyjąc w społeczeństwie i czerpiąc z tego faktu korzyści, wolność zaczyna być ograniczana tak, aby człowiek był przewidywalny. W ten sposób libertarianizm zaczyna być zdeterminowany do kompatybilizmu. Dlatego też, na podstawie badań neuronaukowców, jak i podejścia ekonomicznego Beckera do zachowania człowieka, libertarianizm i kompatybilizm prezentują najbardziej spójną koncepcję ludzkiej wolności. Determinizm zaś można traktować jako czynnik zawężający libertarianizm do kompatybilizmu. Innymi słowy, wolna wola w sensie libertariańskim tkwi w człowieku potencjalnie zawsze, lecz ze względu na społeczną naturę człowieka kompatybilizm emerguje z libertarianizmu.

Słowa kluczowe: podejście ekonomiczne, determinizm, libertarianizm, kompatybilizm, wolna wola.