PERSONS, CAUSES AND FREE WILL: LIBET'S TOPSY-TURVY IDEA OF THE ORDER OF CAUSES AND "FORGETFULNESS OF THE PERSON"

Josef Seifert*

Abstract: Libet's attempt to explain positive free acts (which he denies) in terms of physiological brain causes fails: Efficient causality has an inherent relation to persons; personal wills are primary/superior forms of efficient causes and the only efficient causes properly speaking instead of mere transmitters of causality; personal causation stands at the beginning of non-personal efficient causes; it is conscious; immediately experienced, known with evidence. Libet's recognition of free veto power logically entails recognition of positive free will; Libet overlooks the natural connection between efficient and final causality and personal causes irreducible to efficient and final causes. Supposing his theory: the causes of knowledge would degenerate into irrational contents of consciousness caused by efficient causes in the brain deprived of rational justification; free actions intentionally directed at, and motivated by, the importance of states of affairs to be realized would be impossible. Libet's test results and interpretations in no way prove the truth of the conclusion of his attempted "disproof of positive free will" but, when freed from his inadequate philosophy of persons and other equivocations and mistakes in the design of the tests confirm it. Libet's is a topsy-turvy reversal of the true order and hierarchy of causes.

I. Subject and Purpose of This Paper

One of the biggest challenges to the ordinary man's belief that he possesses free will came from a famous brain scientist, and paradoxically from one who had started out with the intention of defending the common sense view of free will, namely that we do indeed possess it: Benjamin Libet. The conviction that we do possess free will, and therefore are responsible for our actions, corresponds to the deepest human experience and underlies all our morality, penal law and many other spheres of human life. This deep-seated experience and conviction of free will and responsibility which all awakened human persons capable of thinking and acting share, regardless of their theoretical beliefs, had been defended forcefully by Libet's mentor, Nobel Laureate and pioneering brain researcher Sir John Eccles.

^{*}Dr. JOSEF SEIFERT, Founding Rector and Full Professor of Philosophy at The International Academy of Philosophy in the Principality of Liechtenstein, at the Pontificia Universidad Católica de Chile, and at the IAP-IFES Spain.

¹The following paper has been made possible through a research project of two years duration supported by Fondecyt, the Chilean National Endowment for Science and Humanities. I have directed this research project which examined critically certain theses of Benjamin Libet and some other brain scientists.

Building on Kornhuber and others' research, Libet studied the relationship between free will and the so-called Readiness Potential (RP): a series of markedly different and more intense electrical and chemical brain activity that stands in clear relation to voluntary movement. Examining their temporal sequence, he found that the RP comes first, the decision to move second. Therefore, he concluded that what comes later cannot be the cause of what comes earlier and therefore the feeling to possess positive free will must be an illusion. According to Libet, the assumption of "positive free will" to act contradicts what empirical brain science has proven. He espouses, with respect to "positive free will," a purely determinist view, thinking that mere brain events cause these decisions which we mistakenly believe and feel to be free

Nonetheless, Libet holds, or is at least inclined to believe, that the assumption of the existence of the freedom to "say no" (to veto acts) does not contradict the hard facts established by science. Thus he does not defend a complete determinism and even believes that negative Veto-freedom is more or less firmly established by a series of empirical tests he has designed, administered and interpreted for many years.

Of course, to confirm or refute free will cannot be a mere matter of empirical science but requires philosophical reflections. That his views on free will are not due to pure empirical tests, but rather result from his philosophical interpretation of these, which I will show to be gravely deficient, is suggested already by the fact that his interpretations of his test results differ greatly from those of other distinguished scientists such as the Nobel laureate Sir John Eccles, who interpreted the same test-results, in the monumental work 1977/1981 that he has co-authored with Karl Popper and in other works, (far more convincingly, I believe) as evidence of positive free will as well as of veto power.

Libet, who passed a few years under Eccles's guidance in the latter's first rate research laboratory in Australia, wanted to test Eccles' hypothesis that the conscious decision to act (carry out a voluntary move) must precede not only the voluntary movement but also the formation of the RP. It was then that he found the temporal antecedence of the formation of the RP and the delay of the conscious decision to move that seemed to him incompatible with "positive free will." Eccles and Popper, however, continued to interpret these same test results as evidences in favor of positive free will, even without having presented, and thereafter applied to new

²For a detailed autobiographical account of Libet's work with Eccles and the history of the experiments see: "Benjamin Libet," in: L. A. Squire 1996 pp. 433 ff. Libet also describes elsewhere a lot of the discussions and differences he had with Eccles. See for example B. Libet 2006, 322–326. In this article Libet remarks that Eccles advances body-mind theories and theories about the interaction between brain and soul that are not empirically testable, without noticing that his own (Libet's theory which is philosophical in nature) is not more "testable" and that questions about consciousness, free will, soul, etc. are never purely empirical scientific questions the answers to which can be tested empirically but rely on another and higher intelligibility accessible to philosophical insights, or – when we deal with mysterious questions such as the exact way of mind-brain contact – allow only speculations that can be more or less consistent with empirical facts but neither empirical testing not philosophical intuitions. See also Karl R. Popper/ John C. Eccles 1977/1981, pp. 364, 257-362.

empirical tests, a detailed study of the many other conscious and free acts that antedate the kind of "last decision to act," the only conscious act besides voluntarily moving itself taken into account by Libet. Such a philosophical study would have corroborated their interpretation and entirely removed Libet's difficulty of temporal sequence because even if the last decision to act is preceded by RP (a claim that has been called into question by more subtle tests done by Trevena et al. 2002), there are plenty of other free acts that clearly precede the formation of RP in time and thus could easily cause the latter.³

Prescinding for the moment from the manifold criticisms put forward against Libet's claims against positive free will, one has to appreciate Libet's recognition that his experimental results provide a clear proof or rather a clear empirical confirmation of a prior experiential evidence open to philosophical insights: that we possess free will, at least the kind of free will Libet admits and calls free veto power. To confirm this universal experience of free 'No's" by his tests, and to admit unambiguously the freedom to say "no", Libet had to break out of the general philosophical framework of most brain scientists and to open his mind to facts which clearly contradict the deterministic neurophilosophy and general philosophy of causality so widespread and virtually universally accepted by his colleagues.

This general framework of the philosophy of causality implicit in much of brain science, from which Libet dared to distance himself – taking, however, unlike Eccles who broke with it entirely, only a few baby-steps away from it – is that causality exists only in physical nature, such that mental events and realities are effects of physical causes, brain causes and others that took, if we trace them back to their first beginnings, their start in some purely physical event of the alleged "big Bang" and developed consecutively in evolutionary processes, after many refinements, into the development of organisms and a human brain which then causes all human actions and decisions which we experience as being free. Viewed from this materialist and

³See Josef Seifert 2012 argues that Wegner's critique of Eccles's enthusiastic reaction to these experiments as an empirical "verification of the power of the will over the brain" are quite unfounded and not justified by the history of these experiments. See D.M. Wegner 2002, pp. 52 ff. The same response applies even more to the objections which Honderich raises against Eccles' claims of an empirical confirmation of free will. See T. Honderich 1988/2007, pp. 301-304. His critique basically amounts to nothing than to a mere assertion made without any intelligible reason whatsoever that the fact that neither in the environment nor in preceding brain activity, nor in the strict dependence of the RP on free decisions there is no "conflict whatever between the Correlation Hypothesis and what is said to be true of electrical activity in the cortex." Honderich's objections are based on 3 determinist and materialist hypotheses (the "hypothesis of psychoneural nomic correlation": ibid., pp. 106 ff.), which is an unclear version and mixture of a brain/mind/identity/theory and a Spinozean parallelism), the "hypothesis on the causation of psychoneural pairs" (ibid., pp. 163 ff.), and the "hypothesis on the causation of actions" (ibid., pp. 244), and a unitary theory of the mind in relation to neural events, which he regards as an improved successor-theory to mind-brain identity theories. See Honderich, ibid., pp. 89 ff. On other critics of Libet's, Wegner's, Hondrich's and other determinists' conclusions see W. Sinnott-Armstrong and Nadel, L, (Ed.) 2011.

evolutionist perspective, brain processes, i.e., purely physical causes of the most complex kind we know, would have produced and keep producing what we call "persons" and mental events that happen in human consciousness.

As is well known, Libet deviates from this dogmatic and yet widely reigning neurophilosophy, if we may call it so, by holding, at least hypothetically, that free veto power exists. Hence he is one of the very few neuroscientists who grant some existence to human free will (against what most neurologists, brain- and other scientists hold).

Nevertheless, as mentioned already, he moves away only very little from the generally deterministic philosophy held by many brain scientists, still keeping the faith, to put it so, to his and the large majority of his colleagues' deterministic creed. According to him therefore, if freedom exists at all in a causally completely or well-nigh completely closed physical universe, it can do so only in a tiny corner of the universe, and in a restricted, almost unnoticeable, secondary and purely "negative" way. None of our voluntary movements and actions can be free, according to Libet, but only our *not* acting, *our vetoing* movements and other actions.

There are many lines along which one can attack this position and I have developed several of them in a series of different papers. One possible way to criticize Libet's challenge to free will is to show that it contains what I would call a topsyturvy philosophy of causality, a complete reversal of the true order of causality, and that it suffers from a "forgetfulness of the person" and of her primary rank in the order of causes. To develop this route of criticism of his partially determinist view is the purpose of the present paper.⁴

But before criticizing Libet's philosophical interpretation of his experiments, I wish to expound briefly the very different interpretation Sir John Eccles made of these same experiments. Eccles, following his master and Nobel Laureate in Physiology or Medicine (1932), Lord Charles Scott Sherrington, 5 not only rejected mind-brain identity theories but went on to reject also any form of epiphenomenalism, supervenience theory of the mind or parallelism that, while acknowledging the distinction between brain and consciousness, considers consciousness as an immaterial effect of matter. Thus Eccles rejects the view that the "soul", at least our free acts, in contrast to, for example, purely physiologically caused pain such as tooth-ache that does in fact causally depend on the body, stands in a totally passive relationship to the brain, without being able to exert any active influence on brain events.

⁴We left it up to other papers to show that Libet commits many other mistakes, for example studying of the rich and manifold realm of free acts that precede the voluntary movements only the last one, the decision to perform a voluntary movement at a certain point in time. Had he taken into account the multitude of other volitional acts that precede voluntary movement, he had encountered a great number of potential candidates for being the cause of the RP that occurs before the decision to act. But this particular paper is dedicated to a critique of Libet's reversal of the true order of causes.

⁵Sherrington inspired and preceded Sir John Eccles in the energetic defense of the irreducibility of the human soul to the brain. See C. S. Sherrington 1941.

Eccles proceeds from our immediate experience that we can influence and in fact engender our bodily action through our conscious activity, for example when we speak or when we perform other voluntary bodily activities. Upon acting voluntarily – and msec. before voluntary action and before the person is aware of his conscious intention to move - are built up observable and completely new modular brainpatterns of excitation and motion, "which proceed slowly from the so-called "readiness potential." When these motion patterns reach a certain measure of coordination and neural excitation, the bodily motion actually takes place. Now, even the most careful screening of the brain of persons who allowed such experiments to be conducted could not discover any preceding modular patterns of motion and excitation which could have explained the modular "readiness potential" and especially those excitatory patterns which preceded and accompanied voluntary bodily movements. Thus all empirical evidences appeared to Eccles to corroborate the opinion that these modular patterns of motion occur in form of a sudden appearance, quite independently of any preceding brain-state and precisely, only if, and exactly when the person on whom the experiment is performed wants to become active. If the person chooses freely not to move, this RP and the voluntary movement do not take place. The findings of Libet that a person can always veto and interrupt voluntary movements, upon which veto a complete cessation of RP follows, confirms this view. In other words, these experiments confirm, Eccles sees, in a fascinating manner that on the level of the brain exactly that happens which we should expect from the experience and philosophical understanding of conscious life: namely that on the occasion of each volitional motion an objectively existing and also experientially noticeable "breaking in" of the order of the mind and volition into the world of the body takes place and that the source of such bodily and physical-physiological changes does not lie in the brain itself but in the will of the person, in the spontaneous innervation of the free center of the person. Similar evidences were presented when persons were observed when they spoke or when they solved mathematical or chess problems. Further evidences for this can be obtained from experiments with active memory-retrieval or "playing the brain", an expression for the quasi-instrumental role of the brain suggested before by Henri Bergson.⁸

Such an "irruption" of the power and freedom of the mind into the world of the brain is not present, for example, in the case of experiencing pain because of having one's finger cut and other experiences that are mere consequences of preceding nerveand brain events.

Thus the truth of our inner experience of really initiating bodily movements, and thereby the truth of "causality through freedom", can be verified or at least

⁶See Eccles 1979, pp. 214-217. See also Popper-Eccles 1977/1981, pp. 283-285, 291, 293, 364, 365, particularly the phenomenological grasp of the phenomenon of the freedom of will, p. 275 ff., 472 ff.

See Popper-Eccles, 1977/1981, ch. E 4, E 8.

See H. Bergson 1896. On the newest state of scientific research and theory, regarding the problem of memory, see Eccles 1979, pp. 176ff.

corroborated through empirical brain research. With Eccles and Popper we have then to assume that, as they express themselves, there exists a fundamental openness of WORLD 1 (matter, brain) for WORLD 2 (mind, soul). The brain is open with respect to receiving input and influences from the mind and thereby the matter of the brain is open to communicate with a reality that is distinct from the brain. This reconfirms the words Socrates spoke in Plato's *Phaedo* about the reasons why his limbs and nerves (and brain) remained in jail: because of his knowledge and free decision not to commit any injustice and therefore to remain in prison and to accept death, although unjustly condemned, and not for physiological causes (*Phaedo*, 98b ff.).

This whole concept of the soul or the "conscious mind," as Eccles puts it, having a causal effect on the body, is obviously only revolutionary if you see it in the light of modern science and its deterministic philosophical foundation. For Plato, Augustine, ¹⁰ and many others this concept evidently corresponds to the truth and is therefore accepted by them and the long tradition until and including René Descartes ¹¹ and G. W. Leibniz.

Eccles stands in the same line and addresses some more modern objections to free will in the cosmos. With Popper and Wigner, a Nobel-laureate of physics, he faced the potential objection taken from the law of the preservation of energy that troubled Hans Jonas considerably, ¹² by calling for a new and simultaneously classical

PRINCICIPLE XLII. How, although we do not will to err, we yet err by our will. But inasmuch as we how that all our errors depend on our will, and as no one desires to deceive himself we may wonder that we err at all. We must, however, observe that there is a great deal of difference between willing to be deceived and willing to give one's assent to opinions in which error is sometimes found. For although there is no one who expressly desires to err, there is hardly one who is not willing to give his assent to things in which unsuspected error is to be found. And it will frequently happen that it is the very desire for bowing the truth which causes those who are not fully aware of the order in which it should be sought for, to give judgment on things of which they have no real knowledge and thereby to fall into error.

¹²See Hans Jonas 1981; see also a critique of this interpretation of this law in Josef Seifert 1989 b, ch. 3.

⁹Of course, such a "verification" always presupposes certain philosophical insights and cannot be gained entirely without their help, for example not without various insights which refer to the essence of freedom, of causality, of their mutual relationship and of the subject of freedom. ¹⁰See Augustine, 1961, V, 9 ff.

¹¹See for example, René Descartes 1973, pp. 235-236:PRINCICIPLE XLI. How the freedom of the will may be reconciled with Divine pre-ordination. Instead of this, we shall have no trouble at all at all if we recollect that our thought is finite, and that the omnipotence of God, whereby He has not only known from all eternity that which is or can be, but also willed and pre-ordained it, is infinite. In this way we may have intelligence enough to come clearly and distinctly to know that this power is in God, but not enough to comprehend how He leaves the free action of man indeterminate; and, on the other hand, we are so conscious of the liberty and indifference which exist in us, that there is nothing that we comprehend more clearly and perfectly. For it would be absurd to doubt that of which we inwardly experience and perceive as existing within ourselves, just because we do not comprehend a matter which from its nature we know to be incomprehensible.

physics (which recognizes objective empirical and also a priori evident laws of "pure physics" regarding time, motion, space, etc.) that does not contradict the laws of physics but recognizes that these laws strictly and in their full extent refer only to the limited sphere of the material (non-living) universe *inasmuch as is closed off from life* (with its anti-entropic structure and dynamism) *and from persons*. If the order of a closed network of purely physical causes and laws is already reversed by the anti-entropy of any living organism, this must be much more so in the case of free agency. ¹³ Thus Eccles points out that the empirical findings on RP refute the idea of a deterministically closed material universe in which any causal influence, force or energy from a source distinct from the material world would be excluded.

Eccles also sees some possibilities to use the concept of randomness and chance in modern microphysics in order to cope with those who object to free will, which he so strongly defends. The apparent "openness" of the material universe according to the modern conception of physics, however, according to which all natural laws are only statistic laws and allow the possibility of chance and exception, is in no way a sufficient correction of earlier "deterministic physics" with its rigid and exception less laws, or rather (since strict Newtonian laws of physics have nothing to do with determinism) with the deterministic philosophy of nature espoused by many scientists. For the "openness" of the material universe of the brain to chance events is completely different from the "openness" of matter to reason and free will of persons. This openness that is decisive for the existence of free will in the world does not find any real support in the mere fact that the laws of the micro-physical world are only statistical and not absolutely exception less. For a statistical gambling with chances is no less far removed from free will and from the openness of matter with respect to mind in freedom than a strictly deterministically closed material universe.

Thus many great classical, medieval, and modern thinkers as well as Eccles and Popper gained the important insight that those parts of the brain that are open to receiving input from free persons and their free wills are not themselves the primary causes of human actions or voluntary movements but are physiological and brain causes that are *themselves effects caused by the will*, such that they stand only in the service of free agents and merely *transmit* a causality that has its origin in human free volitions. The privileged place and significance personal wills within the order of efficient causes is most obvious when we think of morality and the entirety of culture and history, rather than nature: moral acts, artistic creation, legal systems and activities, historical events, scientific research and experiments, the writing of philosophical works, educating the young, etc., all of these and innumerably more things are effects of free and rational agents and their decisions. A vision of man that counts free wills among the most important efficient causes in the universe contrasts radically with Libet's conception of causality and of the order of causes. A According

¹³See Erwin Schrödinger 1944; see also Josef Seifert 1997, ch. 1.

Also Kant recognizes this fact of a "causality through freedom" in the thesis of the third antinomy in the Critique of Pure Reason and elsewhere. In Kant, however, we find the recognition of this fact only as something lying beyond the experience and beyond any objectivizing thinking, in the alleged sphere of purely intelligible objects and things in

to the classical view (defended in new ways, based on brain science, by Eccles with the support of Popper), neither any one of the physical and physiological efficient causes which are caused by preceding causes, nor the totality of a potentially infinite sequence of such causes can be explained from inside such causes. An infinite series of such causes would be absurd because none of them would constitute the beginning any series of causes requires. Neither any single member of such a series nor the series as a whole can be explained without there being at some point a cause that acts without being determined by a previous cause to act. In other words, as any cause that acts only because it is acted upon by a preceding cause fails to explain its own operation, there must at some point enter a primary efficient cause from which efficient causes take their beginning: and while also life, particularly animal life, causes more than it is acted upon, only the agency of free will proper to a person is a real beginning of a series of causes regarding which we can no longer ask who caused the free agent to act in a certain way; his will and spontaneous initiating a series of causes gives the answer. Thus all unfree causes are in the last analysis only transmitters of causality, rather than being themselves causes properly speaking; they can neither singly nor in their entirety, provide an ultimate explanation of their causal power, as Augustine states more clearly than any other philosopher. 15 This means that, metaphysically speaking and in the last analysis, impersonal efficient causes can only do what the primary efficient causes, namely persons – human, angelic, or divine free wills – do with them or order them to do.

Now let us return from such a glimpse at the ultimate metaphysical relation between persons and causes to the down to earth level of reflection on this topic called for by Libet: while Libet concurs with some free power over the brain in his admitting the existence of the freedom to veto voluntary movements, he does not understand the primacy of free causes over all determined causes nor does he draw from his test-results the obvious logical conclusion drawn by Eccles: that this freedom of veto proves that the brain processes of the RP cannot cause positive will as its necessary effect. For how could I impede and freely veto a voluntary movement if that movement and the will to move were a necessary effect of preceding brain events of the RP? In contrast to this philosophical insight and logical reasoning in the interpretation of Libet's experiments offered by Eccles, who recognizes the strict logical connection between acknowledging free veto power and admitting positive free will, Libet denies that we would be capable of what he calls positive free voluntary acts. Free will could solely exist in the form of 'negative free will' that

themselves in which alone Kant assumes a freedom and causality through freedom to be possible and seeks to save their reality, because he mistakenly regards a realist interpretation of causality through freedom contradictory. See for a critique of this view Josef Seifert 2001.

¹⁵Augustine 1961, 9 ff.

¹⁶Holding this view, Libet seems to imply an incompatibilist or libertarian view of freedom which, as I believe to be evident, defends a notion of free will that is quite incompatible with any theory that believes that psychological, moral and legal free will can be upheld even in a body-mind identity theory that believes that all conscious acts are effects and emerging events

vetoes voluntary movements. Positive volitional acts would have efficient causes in the brain that would determine these acts. Libet believes that he has disproven positive free will experimentally:

I have taken an experimental approach to the question of whether we have free will. Freely voluntary acts are preceded by a specific electrical change in the brain (the 'readiness potential', RP) that begins 550 msec. before the act. Human subjects became aware of intention to act 350-400 msec. after RP starts, but 200 msec. before the motor act. The volitional process is therefore initiated unconsciously. But the conscious function could still control the outcome; it can veto the act. Free will is therefore not excluded.¹⁷

In spite of his 'experimental approach' to the question, Libet's theses are primarily philosophical in nature: the notion of free will itself, the distinction of causal effects through 'positive voluntary actions' from the effects of a vetoing or controlling power of free will, and many others cannot be known by empirical tests per se but only by philosophical reflection on their outcome and by properly philosophical methods of knowledge. ¹⁸

Given their fundamentally philosophical character, there are many ways in which philosophy can tackle and critique the claims Libet raises in his denial that we possess positive free will and in his philosophy of mind in general.

I will in the following develop one of these ways that consists in showing the extremely limited and fundamentally wrong conception Libet has of the relationship between persons and causes. I will address in this paper specifically Libet's regarding virtually all conscious acts (besides acts of "vetoing"), such as knowledge and volitions, as mere effects of efficient causes in the brain. What I want to show is that this theory entirely misconstrues the real relation between persons, brains, and causes and on top of this is self-contradictory. ²⁰

In order to expound this issue, I will first present a broad analysis of the relationship between persons and causes that cannot take its starting point in Libet's meager remarks on this theme but will rather be developed from the riches of human experience of causes and persons and from the classical Aristotelian philosophy of causes, forgetting as it were Libet's arguments, in order to return to them at the end and show them seriously flawed. In the history of a philosophy of causality Aristotle has enlarged the concept of causality, showing that all thinkers that preceded him referred only to one or two, not to the entirety of four quite distinct causes that account for the being and becoming of things. Aristotle gives an equally simple and beautiful illustration of these four different causes, of which Libet, like most

caused by brain events. Such a view is held for example by Searle 1994: 94; O'Connor 2002: 94-125.

¹⁷Libet 2002 a: 551; 2011: 1; 1983: 623; Libet et al. (Ed.) 2004a; Libet 2004 b; 2002; 2000: 1-12; 2002 b; 2003: 321-31;2002 b. For a solid philosophical critique of Libet's ideas about timing see Mele 2009: 57-59. See also Libet 1985; 1989.

¹⁸See on this Hildebrand 1991; Seifert 2009.

¹⁹See Libet, 1985; 1996.

²⁰The same holds for many philosophical works, for example O'Connor 2002.

scientists, considers solely the third one. Think of a sculptor who creates a statue: the artist (a) uses a certain matter, for example bronze; (b) he gives it a certain form, for example that of Apollo as Homer describes him; (c) the sculptor engages in activities through which the form is given to matter, using all kinds of tools for this purpose, while his free will and actions remain the principal cause; (d) he pursues an end, has a purpose in mind for the sake of which he makes the statue (for example to stand on the Agora or in a temple, or he creates it simply for the sake of its aesthetic beauty or to delight its spectators).

In order to confront Libet's implicit philosophy of causality, shared with him by most scientists, we have not only to learn from the much broader Aristotelian theory of the relation between causality and persons, but must also show that even the far vaster Aristotelian account of causality is incomplete and needs to be substantially improved on in order to do far more justice to the overwhelming role of persons in the order of causes. An adequate critique of Libet's and countless other brain scientist's more radical claims against free will requires therefore not only to criticize Libet's interpretation of his test results but also to rethink and substantially expand the classical conception of the relations between persons and causes, because the Aristotelian distinction of the four causes and his elaborations of a theory of efficient causality based on these four causes, profound as they are, 21 are quite insufficient when it comes to the explanation of causality in the world of persons. Appropriating in our own minds and seeing what Aristotle has seen, but also developing it further in relation to persons as causes, will show the kind of radical reversal of the order of causes and of the relationship between physiological causes and personal free agents in Libet and other scientists who, because brain activity is a condition of all empirically given mental activity, confuse this tremendous role of the brain for conscious life with that of a cause, a confusion so clearly seen and overcome in Plato's *Phaedo*, particularly but not only in the above mentioned passage.

The Aristotelian concept of four fundamentally different sorts of causes of being and becoming is far more extensive than the modern one, which Libet and most scientists use and which tends to reduce the complexity of causes and conditions to efficient causality alone and to a small part thereof. Libet, however, considers solely the third of the four Aristotelian causes, I will not unfold in this paper a personalist critical examination of all four causes Aristotle distinguishes, leaving such a more extended investigation to another paper. Instead, I will here attempt to show initially the essential connection of the efficient cause to persons, taking into account, however, another one of the four causes neglected by Libet, but without which efficient cause cannot be understood at all: final cause.

Above and beyond this, I intend to show in a second part of this paper that in the world of human consciousness and of volitional acts there are a variety of other causes that cannot be reduced to the four and least of all to efficient causality exerted by brain events, in terms of which Libet interprets the question of the causes of

²¹See Reale 1976: 23 ff., where one finds a brief but important summary presentation of this theme in Aristotelian metaphysics.

²²Reale 1976: 31 ff.

positive volitions. To spell out these two goals of the paper a bit more, let me say a few more words to explain these two goals and the two parts of the present paper:

- 1) Libet, instead of overcoming the insufficiency of Aristotle's realization of the essential connections between efficient causality and persons, like most other scientists, quasi completely loses the classical and medieval philosophical understanding of the will of persons as an important and primary cause of events in the physical world and above all fails to see the complete inexplicability of efficient causality in the universe without recognizing the close relation between persons and causes. In particular human agency can so little be explained as causal effect of different causes in the brain that, on the contrary, the whole order of efficient causality in nature, in the RP, and in human affairs can solely be appropriately understood if we recognize that the primary source and form of all efficient causality lies in personal agency, and therefore cannot be understood without understanding the various relationships of efficient causality to, and ultimate dependence on, persons.
- 2) Libet's explanation of volitional acts in terms of cerebral efficient causality is mistaken on the further ground that specifically personal acts, in particular free actions, cannot only not be explained through cerebral physical causes because personal efficient causality in free acts is superior, primary, and wholly different from mere psycho-physical causal relations between brain events and conscious acts, but also because on the level of persons we find many other and fundamentally different kinds of causes which are totally irreducible to efficient causality, let alone to the fraction of efficient causality to which Libet wants to reduce them. Demonstrating this discloses a number of further philosophical errors that lie in Libet's and any other attempt at a reduction of the causes of specifically personal voluntary acts to efficient causes in the brain. To explain these new kinds of causes of personal acts, causes that are not only higher forms of efficient causality but are entirely irreducible to efficient causality, will also reveal that Libet's theory of cognition in general and of scientific knowledge in terms of mere efficient brain causes is self-defeating because neither Libet's scientific knowledge nor his logical reasoning can be defended on this assumption and would sink down to an irrational product of physiological causes that have nothing to do with the nature of the things he wants to explain and pretends to know, etc., and therefore are quite unable to explain what "causes" knowledge. All of Libet's rational claims will be seen to collapse on the assumption that his understanding of brain causality is correct. Moreover, neither the free veto he recognizes, nor the positive free will which he overlooks (though it is clearly logically implied by the free veto power he admits), can be explained in terms of mere efficient causality, and least of all in terms of efficient causes in the brain.

Let us explain and substantiate these claims of the paper that have just been sketched in the following two main sections of the paper:

II. Efficient Causes and Persons

A) EFFICIENT CAUSES, THE PRINCIPLE OF CAUSALITY, AND FINAL CAUSES

Aristotle distinguishes for the first time clearly the efficient cause, *through* the power and efficacy of which something happens, from the formal, final, and the material causes. With this, he has certainly discovered a central and originary kind of causality (the only one recognized by most authors today including Libet). He also gives one of the first and perhaps the clearest formulation of the so-called "principle of causality," formulating it simultaneously in relation to efficient, formal and material causes: 'Everything that comes to be, comes to be through something, from (out of) something, and as a certain something'. (*Metaphysics* VII 7, 1032a). Only the first and third one of these three propositions contained in Aristotle's formulation of the principle of causality have universal validity and express part of the 'eternal truth' of the principle of causality that also underlies all natural sciences (besides being the ground of many other explanations of human, moral, spiritual, or any other contingent things, events, and states of affairs): "Everything that comes to be, comes to be through something;' and; 'Everything that comes to be, comes to be ... as a certain something."²³

While Aristotle admits at times the absolute efficient causality of free agents and even assigns to it a primary paradigmatic character, ²⁴ Aristotle attempts frequently to reduce the efficient cause to the material world and thereby is not innocent of what will turn out to be an immense error about efficient causality in relation to persons, an error which deeply shapes Libet's entire interpretation of his tests.

At this point, we cannot entirely pass over in silence another type of cause which Aristotle discovered and which is both necessary for meaningful efficient causality and irreducible to it. It is this cause, the fourth Aristotelian one (*final causality*), without which human freedom cannot be understood at all and which Libet's tests entirely leave out of consideration to the detriment of both his empirical tests and his

²³The second proposition, "Everything that comes to be, comes to be ... from (out of) something" relates only to the causation of material things. For only these are made out of something by a (human or divine) agent, namely out of some material. If Aristotle's phrase were understood still more narrowly, the formulation of the principle of causality, as formulated by Aristotle, would solely be true of the production of things through finite agents who can never create anything 'from nothing" – which would be the most radical form of efficient causality –, who cannot create spiritual substances at all, and can make material things only "out of *preexisting* matter", as the sculptor or craftsman have to use wood, stone, or bronze, etc. for their works.

²⁴Aristotle *Eudemian Ethics*, 2.6.8-9; 1223 a 3 ff., describes free will powerfully, attributing to it that we are lords over the being or non-being of our acts: "Therefore it is clear that all the actions of which a man is the first principle and controller may either happen or not happen, and that it depends on himself for them to happen or not, as he is lord over their being and of their non-being." Aristotle, *Eudemian Ethics*, 2.6.8–9; 1223a3 ff. (transl. mine). In other texts Aristotle calls free will also "the first principle', "the cause' and "the lord of action'. See Aristotle, *Magna Moralia*, 87 b 31 ff., especially 89 b 6 ff.; *Nichomachean Ethics*, III; and *Magna Moralia*, 87 b 31 ff., especially 89 b 6 ff. The moments of self-dominion, self-governance, and self-determination have also been investigated in fine analyses by K. Wojtyla 1979.

interpretation of their results. The final cause is defined by Aristotle as the end of a thing or of an action, as that *for the sake of which* something is or happens. This end, which Libet wholly leaves out of consideration in his experiments which study wholly unmotivated and sense-less, purely arbitrary movements, is closely connected with the good and is the ultimately moving and most important cause in the universe and in human actions. In living things, which are an *en-tel-echy*, a being that has its end in itself as the form it is called to actualize and does actualize in a dynamic development that is the fruit of the nature, tendencies, drives and ordinations of living beings, the final cause plays a decisive role, but still more in personal action, where "finality" assumes an essentially different form that exists solely in relation to rational human actions.²⁵

B) PERSONS AS PRINCIPLES OF EXPLANATION OF EFFICIENT AND FINAL CAUSALITY

Particularly efficient and final causes can be understood in their ultimate specificity and efficacy only if metaphysics is not limited to being merely a metaphysics of substance and nature, but also is, or becomes, comprehended as a metaphysics of the person qua person.

To show this with respect to efficient and final causality will reveal some shortcomings of Aristotle's and major shortcomings of Libet's theory:

a) Efficient causality, which Libet analyses almost exclusively in relation to physical and physiological causality, can in reality only be understood through seeing personal agency as primary form of it

This can be seen through the following reasons: ²⁶

(1) We find the most authentic embodiment of efficient causality exclusively in personal free will. Every other efficient cause, as Augustine states in $De\ Civitate\ Dei^{27}$, receives its efficacy from without, and operates only to the extent to which it itself is the effect of other causes (actions, processes or events). Therefore only persons who act freely can be properly speaking efficient causes because they act more than being acted upon.

Even plants and animals, despite their spontaneity and activity of their own, cannot properly be considered as authentic efficient causes because their being causes is not wholly but largely determined by preceding causes of their instincts and nature, and by extrinsic causes to which they react. Therefore, such causes that are determined by other causes and consequently rather are mere "transmitters" of the force of other causes than being causes in their own right clearly never suffice to explain human action.

Free will alone can be considered an efficient cause that is essentially more efficient cause than a causally produced effect, because only free will as the "principle par excellence" embodies the ratio of the efficient cause in the fullest sense, being truly the origin of that which happens through it. Free will alone can in

²⁵See Reale *1976*: 23 ff.

²⁶In the following 2 or 3 pages I will be using, with only few changes, a text I have included in another paper submitted to a professional philosophical journal.

²⁷Augustine, De Civitate Dei, V.

an authentic sense be that *through which* something is, insofar as the origin of its efficacy lies in the free agent himself, wherefore it is not by chance that Aristotle chooses a free agent, the sculptor and his activities, to illustrate efficient causality. Free will is the only cause in the fullest sense of efficient causality, since it alone truly originates and exerts efficient causality rather than merely passing it on. The free act constitutes either an absolute beginning (in divine freedom) or (in human persons) 'acts more than it is acted upon' and thereby constitutes a true, and in a limited sense as well an "absolute" beginning of efficient causality that is not caused from outside the free agent. Therefore, as Augustine says in sharpest contrast to the discussion of causality in most of contemporary brain science and philosophy, non-personal beings and impersonal things and events cannot even properly be considered as efficient causes at all; the existence of such causes that are themselves determined by other causes can therefore never be the whole story about efficient causality because, in the last analysis, they do only what free wills do with them.²⁸

Thus the primary efficient cause is the person; in fact, she alone is properly speaking a cause rather than being a mere transmitter of the causal impact of other causes through which she would be determined like other beings.

(2) We touch thereby a second moment. All other efficient causality, with the exception of causality in and through free will, leads us back to a principle of its efficacy distinct from itself. Solely the free and simple initiating and setting into motion of a chain of causes is a true beginning of a chain of efficient causes.

In fact, without free agents there would be an infinite chain of causes none of which would explain itself or any other one, but in the realm of causality there cannot be an infinite chain of causes none of which is an original cause not dependent on other causes. Only free will, as Kant has pointed out in the proofs of the thesis of the third antinomy of pure reason, is such a cause. Therefore, only free will is the ultimate and first principle of explanation of a chain of efficient causes each of which depends on a previous cause that determines it. Only in a free will the unsatisfactory type of

²⁸The necessarily limited sphere of their operation, which always begins in causality through freedom, does not contradict free actions but on the contrary, these presuppose the - limited realm and dominion of - "determined causes" under laws of nature, which is never the principal cause of human actions but is used by them. See R. Ingarden 1970. D. von Wachter 2011 argues that necessary and universal laws of nature do not exist at all and that never one event follows upon another event according to a (necessary) rule. He argues for this position, although it seems at first sight to contradict the tremendous network of universal laws of nature and their kind of "necessity" and clear dominion over all things and events that fall under them. But at closer examination of his stance, Wachter seems to hold this position (which interprets laws of nature as mere "tendencies"), for two good reasons: because on the one hand, personal free agents can interfere at any time with the occurrence of what would happen without their intervention according to the laws of nature. On the other hand, he argues for his position in view of the possibility that always events determined by other natural causes can interfere with the given outcome of a preceding cause or event.28 Even if one does not agree with his reduction to laws of nature to tendencies, his two main points that entail a keen consciousness of the non-closedness of the physical world to free agents and of the contingency of the laws of nature are no doubt correct.

other-dependent causes stops and meets with a true beginning, as we find it in any free human act. But as the described inexplicability through itself characterizes all unfree efficient causality in the contingent world, most of which does not find a halt and beginning in human free acts, and as free human agents themselves do neither exist necessarily nor by themselves, nor therefore can be the ultimate beginning of efficient causes, there must exist a superior and more absolute kind of beginning of the series of caused causes, and a first cause of the contingently existing human persons endowed with freedom. Therefore, the universe and the entire series of causes in it, whose existence and dependence on other causes require a first efficient cause, which is not solely the first cause of unfree causes but also of free contingent human agents, a cause that is mysteriously both causing the being and freedom of will of finite persons and powerful enough to bestow free will on them, which implies that the first cause of human free persons does not determine their wills. ²⁹ If this absolute beginning of all chains of efficient causes were not free but were produced by a preceding cause, it could not be a beginning, first cause and ultimate origin of the contingent world and of all chains of efficient causes in the contingent world which cannot have a cause which operates by necessity; otherwise the world would have to exist necessarily and eternally as well, as Parmenides stated. Without such a first personal and free cause the infinite chain of causes determined by other causes would lead to an absurd and impossible regress. Therefore not only the first efficient cause of all chains of causes initiated by free human agents, but also the absolute beginning of all causal chains in the universe can only be a free cause.³⁰

- (3) We can thirdly ascertain that free will is not only the most authentic embodiment and the only true beginning of efficient causality. Rather, in the personal form of efficient causality there lies a radically other and higher type of efficient causality than that which is thinkable within the sphere of apersonal beings. What are these new elements efficient causality takes on solely in free will?
- (a) In free self-determination and in free acting lies a unique form of efficient causality for the reason that we are dealing here with a conscious causality, in which the effect proceeds from a conscious act such that the consciousness is a mode of personal free agency and causation, which we therefore do not call just causing but acting or making (creating). Because a personal being, broadly speaking, possesses his being in a fully new sense in comparison to impersonal beings, because he is conscious of himself and consciously enacts his own being, he therefore also possesses himself in a unique manner through free auto-determination and through the free and creative production and constitution of things and states of affairs in making and acting.

²⁹Augustine expresses this calling the first cause, God, "dator omnium potestatum, non omnium voluntatum." See Augustine , *De civitate Dei*, V, 9.

³⁰Plato has understood this far more clearly, particularly in his *Timaios*. Also Kant, if we prescind from his skeptical and subjectivist understanding of freedom as postulate, has seen this much more clearly – for example, in the *Third Antinomy* in his *Critique of Pure Reason*. See Kant 1968. See also Seifert 2001.

- (b) To free causality not only belongs consciousness but also the specifically personal and rational consciousness as a moment inseparable from it, without which this form of causality would be completely impossible; only the spontaneity of an irrational animal could exist. In personal acting and making, however, new states of affairs are not simply engendered or changed in an unconscious, mechanistic manner and not even just in an instinctual, or in the less irrational and in some sense conscious way in which a dog may save his master's life, but still without possessing rational knowledge of his life's value. Instead, in the intentional, object-directed acts of making and acting the person directs herself consciously and meaningfully to that which he or she realizes, aims at the realization of things or of states of affairs, deliberates about them and calls them freely into being, all of which elements are lacking in the animal's behavior. This relation of the person to that which is real outside of herself includes thus wholly distinct forms of relation and of efficient causality that are found only on the level of the person. The words acting, making (prattein and poiein) and creating express these uniquely personal and rational modes of causing something. To comprehend them is necessary in order to complete the philosophical grasp of efficient causality. Also for this reason, efficient causality can be properly understood only on the basis of a personalist philosophy. Libet's tests reduce voluntary movements that are part of meaningful human actions to mere urges or, if they are free intentions based on nothing but suddenly felt urges to move, to totally irrational, arbitrary, senseless causations of movements which lack almost entirely the described new rational structure of causation through persons except for the element of "wanting to obey Libet's orders to carry out arbitrary movements when I feel an urge," which still requires a rational person as subject, wherefore Libet could not do his tests with animals.
- (4) Free will as an immediate experience of efficient causality: Moreover, as we carry out the conscious act of causation, of engendering our own acts, or of realizing states of affairs through acting or things through making them, the causal power is itself immediately and consciously given in this free causality. We are ourselves identical with the subject of this power; we experience the flowing out of effects from the cause, at least in the engendering of free acts as such, which exist as soon as we will them and only because we will them, and which would not be if we did not want them. This being the lord over the being and non-being of our acts, of which Aristotle speaks in a most powerful statement on free will, is an immediately given, experienced and amazing form of efficient causality. "For he [man] is lord over their (his actions') being and non-being"³¹ Aristotle could hardly have expressed free will more powerfully than in this text but calls free will in other passages also "the first principle (cause)", "the cause" und "the lord of action," In a less strong sense than in engendering the act of willing itself, we experience efficient causality also immediately in doing and making things through mental acts and bodily actions, which have many intrinsic and extrinsic conditions in the agent and in the world. For

³¹Aristotle, Eudemian Ethics, II.vi.8-9; 1223 a 3 ff.: "hoon ge kurios esti tou einai kai tou mee einai."

³²Cf. Aristotle, *Nicomachean Ethics*, III; and *Magna Moralia*, 87 b 31 ff., especially 89 b 6 ff.

whereas we possess perfect power over our willing itself, we have no perfect control over the objects of our will in the world. In these acts, most of all in the engendering of free acts, we do not just understand or infer that causal relations must exist, but experience them most intimately and immediately.

(5) Indubitable evidence of efficacy and efficient causality in engendering (causing) free acts: The causal influence and efficacy proper to free will of bringing into existence acting, research, and in particular willing itself, also represent the classic instances in which efficient causality is given with evidence in the immediate experience of causing acts from our own will which would not exist if we did not want them. With Augustine we add that the causation of a voluntary act through the person herself is, in a certain sense, even more evident than our existence because even if we could, per impossible, be in doubt whether we truly exist or merely think so erroneously, we would still know that we do not want to be in error. Such an indubitable evidence is absent in efficient causality in nature and in the whole physical world, as well as in our causing changes in the world. Therefore theories according to which all there is evident regarding causality in nature is a temporal succession and according to which we believe in causal relations in nature only in virtue of habits of observing similar temporal sequences all the time, as Hume thought, or the theory that some invisible divine agency causes all physical changes because the human mind cannot have power over physical things, as occasionalists, and Leibniz with his ingenious theory of pre-established harmony, thought, are not entirely refutable through experience or immediate evidence. While we find such theories ingenious and understandable but believe they do unreasonable violence to our experience and are, compared with the sobriety and trustworthiness of our experience artificial and far-fetched and while they obviously contradict sound commonsense, they cannot be rejected or refuted through an immediate indubitable evidence but only through a very complex and profound metaphysical speculative reflection on the origin and explanation of our experience of being free agents in the world.

In contrast to the lack of absolute evidence regarding efficient causal relations in nature, we possess immediate and indubitable evidence regarding personal causation through free will. This applies also, though more weakly, to the causality found in bodily action that is mediated by all kinds of unconscious physiological processes, but it applies absolutely to the mode in which persons cause and engender their own free acts since nothing lies so much in their power of causation as willing itself. And nothing could be more evidently given in knowledge. For even if we could doubt our very being, believing that we might be deceived in this, we could not doubt our free will of not wanting to be deceived. And indeed we know of our freedom with the same type of immediate and reflective evidence with which we know of our own existence.³³ The awareness of our own free will – a knowledge which is so evident

³³Investigating this matter more closely, we could distinguish between the evident givenness of freedom on different levels, a) in the immediate inner conscious living of our acts, b) in what Karol Wojtyìa calls "reflective consciousness" (which precedes the fully conscious self-knowledge), and c) in explicit reflection and self-knowledge properly speaking in which we

that it cannot be deception – is part of the evidence of the Cogito as unfolded by Augustine.³⁴ And the existence of free will in us is so evident that its evidence in a certain sense is more primary and indubitable than that of all other evident truths given in the *Cogito*.³⁵ For even if we could be in error about all things, which is impossible, as Augustine sees, it would still remain true that we do not want to be in error and of this free will we can have certain knowledge:

Likewise if someone were to say, "I do not will to err", will it not be true that whether he errs or does not err, yet he does not will to err? Would it not be the height of impudence of anyone to say to this man, 'Perhaps you are deceived', since no matter in what he may be deceived, he is certainly not deceived in not willing to be deceived? And if he says that he knows this, he adds as many known things as he pleases, and perceives it to be an infinite number. For he who says, "I do not will to be deceived, and I know that I do not will this, and I know that I know this", can also continue from here towards an infinite only number, however awkward this manner of expressing it may be. 37

On the other hand who would doubt that he ... wills...? For even if he doubts, he ... wills to be certain; ... Whoever then doubts about anything else ought never to doubt about all of these; for if they were not, he would be unable to doubt about anything at all.³⁸

The evidence of this knowledge cannot even be refuted by any and all possible forms of doubts and cases of self-deception because these imply or presuppose already the evidence of free will, for example the will to be certain, the will to avoid deception and error, the will not to believe too uncritically, etc. ³⁹ And in this indubitable evidence of free will also the causality in *engendering free acts* is given.

make our personal freedom the explicit object of reflection, d) in the insight into the nature of freedom, an insight which grasps the necessary and intelligible essence of personhood, which is realized in each and every person, and e) in the clear and indubitable recognition of our personal individual freedom, an evident knowledge which depends, on the one hand, on the immediate and reflective experience of our being and freedom, and, on the other hand, on the essential insight into the eternal and evident truth of the connection between freedom and personhood.

³⁴See Hölscher 1986. See also Seifert 1987: ch. 4-5. See also Seifert 1998: 145-185.

³⁵Of course, this priority is not to be understood absolutely, for without the evidence of our existence and thinking activity also our freedom and will could not be given.

³⁶McKenna translates the *infinitum numerum* (wrongly, I believe) by ,indefinite number'. ³⁷Augustine 1970: 480-2.

³⁸Augustine, *De Trinitate*, X, 10, 14. See also, Augustine, *Contra Academicos*, II, xiii, 29, *ibid.*, III, 23; *De Vera Religione*, XXXIX, 73, 205-7; *De Trinitate* XIV, vi, 8; *ibid.*, XV, xii, 21; *De Civitate Dei* XI, xxvi.

³⁹The indubitable knowledge we can gain regarding our freedom refutes also the theory of Hume (of the non-givenness of causality), which considers almost exclusively forms of causality given within the material, sensible world, being also wrong about them. Cf. Hildebrand 1994: 2- 27. Seifert 1987: ch. 4-5.

With the free causality of our engendering our own free acts and causing them, with the causality of free will, also another dimension of efficient causality, linked to free will itself, becomes accessible to us: namely the way in which we freely perform bodily actions and through them cause changes in the world, i.e., the causality of realizing states of affairs (through acting) or things (through making) in the external world through our free initiative. Thus with this absolutely evident givenness of our engendering our free acts themselves, also a less absolute (as mentioned above in the comments about Occasionalism and Leibniz), but still very clear, evidence of us being efficient causes of works, books, buildings and other objects and events is accessible to us. Therefore, besides the 'causality of free will itself' also 'causality through free will', mediated through the brain and body, the freedom to act and to change the world by our actions, is unambiguously given to us, though it is not given with equally indubitable certainty as the causing of our willing itself.⁴⁰

We find in the ability freely to intervene in the world, and thereby to realize things and states of affairs outside of the person, the three aforementioned specifically personal and originary types of causality, namely (in the order of the depth of their causal power) acting, making, and creating. In acting, the person realizes states of affairs in relation to already existing things. In making and creating, the person brings some things into existence, in various degrees that range from producing mere toys, tools, or technical products to creating intellectual or artistic works of the highest meaning and value, to divine creation from nothing that likewise is a personal act, which even the atheist can recognize by merely reflecting on the "idea" or "essence" of creating.

In all these cases, the person also realizes acts in herself and determines herself, whether through the unique and direct causality by which she calls her free acts into existence, or through the human and moral effects of these acts on herself as person. And this allows us to see a sixth way in which efficient causality requires the understanding of personal beings in order to be properly understood.

(6) The free subject as a self-determining efficient cause: We see in the light of the preceding reflections that the person herself, and thereby a spiritual being, i.e., the human person as such in her spiritual aspects, is and can be an efficient cause and agent of free interior acts as well as an object of efficient causality, in that the exercise of free will, with essential necessity, does not merely bring into existence external objects and processes, but also inner acts. Indeed free will has, above and beyond acts performed by the person and directed to things outside her, the person herself as primary object: even though normally turning in the first intention to other persons and values outside the person, free will acts at the same time upon the person of the free agent himself in a peculiar form of reflexivity which is inseparable from the exercise of free will.⁴¹ This unique case of auto-determination and auto-causation

⁴⁰Therefore the positions of occasionalism or of a pre-established harmony between our will and external bodily actions (Geulinex and Leibniz), according to which our bodies are moved "on the occasion" of our wills and harmony with them, is not a senseless, although a wrong theory.

⁴¹See on this Wojtyìa 1979.

of free agents does not happen only in the obvious manner, such as in free decisions, for example, or in the free act of calling into existence thinking itself, or research, and other acts and activities, but also in the sense in which the person, on the basis of that which she does in her conscious actions and of that at which she aims, also determines herself in a far deeper and farther-reaching sense than the one in which the person can change any material being or animal, let alone the one in which animals can cause changes in the material world or the world of plants and animals.

Self-determination is an effect of the use of free will, and thereby an absolutely unique form of causality, in which, as the philosophers Kierkegaard and Wojtyìa profoundly explain 42, not only objects and states of affairs outside of the person are the objects of action, but the person herself, who in her free acting gets hold of her own self, becomes good or evil, and determines herself in a completely unique manner. In the self-determination of the free subject himself lies therefore a unique form of causality, which is unthinkable within the sphere of impersonal being and even in the outward-directed efficient causality of the person.

The actualization of the deepest potentialities of the person cannot happen without the free will of the person. The distance, which metaphysically speaking separates the good person from the evil one, also gives witness to the efficacy of free will upon its own proper subject, and this effectively contradicts any limitation of efficient causality to the sensible-material or physiological world of brain processes investigated by Libet. In fact, it becomes clear that efficient causality is not only also possible with spiritual substances, but lies rather – in its fullest sense – exclusively in their sphere.

When we think of the unique form of causality found in personal acting, through which events, processes, states of affairs and causes (which for their part involve further ends of acting) outside of the person or at least outside of the free acts themselves, are freely intended and realized by the subject, we understand that if these acts either were a mere outflow of our nature, or products of brain events, they would precisely not be what they are, namely free. Nor would they possess the nature of human causation and acting which they obviously do possess and by which they precisely differ from activities which are caused by brain events, like headaches caused by brain tumors, or which follow from the organic or instinctual nature of an animal. Thus it becomes clear in this case of free external action that free will as efficient cause is essentially distinct from all effects and states of affairs that are realized simply through our having a given nature or as effects of some brain events. The same holds for the free creation or making of artifacts, and above all of works of art, scientific or philosophical works, etc.

Even those effects within the moral sphere in our own person, such as the goodness or wickedness of the person herself, effects that are far more intimately linked with free acts than the objects produced by us, are distinct from the cause which brings them into existence. This is shown clearly from the fact that the acts and the actions through which someone becomes good or evil have long passed away or can at least lie in the past, while their effects continue to remain in the person. In

⁴²See S. Kierkegaard 1983; Wojtyìa 1979: Part I, ch. ii; Part II, ch. iii.

addition to this, the permanent personal characteristics of evilness or goodness possess an ontic character wholly different from the individual acts or actions, from which virtues or vices, goodness or evilness of the person, and their effects of guilt or merit arise.

Without a personalist understanding of final causality positive free will and veto power cannot be understood: A critique of Libet's consideration of free will as pure efficient cause isolated from ends. In the case of the final cause it is even more immediately evident and more easily seen than in the case of efficient causality that a final cause "for the sake of which" something is or is made must remain entirely impossible without the relation to persons that is essential to final causality. Therefore finality in nature, although so evident that no single step in biology and zoology can be taken without recognizing it, is thoroughly incomprehensible for atheists and therefore frequently rejected by them if it is not explained naturalistically in wholly inadequate ways by such principles of the theory of evolution as "survival of the fittest" or "adaptation" to the surroundings, which, if they have anything to do with finality, already presuppose its existence, instead of explaining it; also in the human world of culture and art as well as in technology final causality obviously exists and here its relation to persons who make and do things for certain ends is obvious. Again, we can find at least two reasons for this dependency of all operation of final causality on personal beings,

(a) If the end must in the first place be identified with a good (even though the two notions are distinct and human persons can have evil purposes for their actions), it becomes evident that the final cause cannot at all be a cause in itself, since the goodness and value of a being are not of themselves capable of bringing anything extrinsic to them, such as acts of persons, into existence, or of being per se the explanatory principles of a thing or becoming. The value is itself a "consequential property" of things, as Ross says⁴³, and this makes it impossible to classify it among

⁴³The most astounding text of Kierkegaard on this matter is the following: ... The greatest good, after all, which can be done for a being, greater than anything else that one can do for it, is to make it free. In order to do just that, omnipotence is required. This seems strange, since it is precisely omnipotence that supposedly would make [a being] dependent. But if one will reflect on omnipotence, he will see that it also must contain the unique qualification of being able to withdraw itself again in a manifestation of omnipotence in such a way that precisely for this reason that which has been originated through omnipotence can be independent. ... Only omnipotence can withdraw itself at the same time it gives itself away, and this relationship is the very independence of the receiver. God's omnipotence is therefore his goodness. For goodness is to give oneself away completely, but in such a way that by omnipotently taking oneself back one makes the recipient independent. All finite power makes [a being] dependent; only omnipotence can make [a being] independent, can form from nothing something which has its continuity in itself through the continual withdrawing of omnipotence....It is incomprehensible that omnipotence is not only able to create the most impressive of all thingsthe whole visible world-but is able to create the most fragile of all things-a being independent of that very omnipotence. Omnipotence, which can handle the world so toughly and with such a heavy hand, can also make itself so light that what it has brought into existence receives independence. Only a wretched and mundane conception of the dialectic of power holds that it

the efficient causes. Rather, the only manner in which the good and values can work as causes and have effects on things, is by the mediation of knowledge and personal acting. Only through the sphere of conscious personal knowledge and of the free acts motivated by this knowledge can the good become a cause.

Therefore, it is also no linguistic accident that the end and similar concepts can be used for both the objective finality which we find in nature or technology as well as for the goal of personal acts. To speak of the purpose of events in lifeless nature, such as of the obviously existing finality of organs in organisms, means always to assume an efficacy of meaning and of the good which, as becomes evident through deeper reflection, can only happen through the mediation of personal knowledge and freedom. And therefore an atheistic metaphysics has no justification in admitting finality and meaning in nature, wherefore atheists like Richard Dawkins and others fight so fiercely against any admission of a purpose and plan and final causality in nature, though few things could be more evident than the presence of final causality in nature and no biologist could possibly understand the function of any organ without recognizing its purpose and function for the organism.⁴⁴

is greater and greater in proportion to its ability to compel and to make dependent. No, Socrates had a sounder understanding; he knew that the art of power lies precisely in making another free. But in the relationship between man and man this can never be done, even though it needs to be emphasized again and again that this is the highest; only omnipotence can truly succeed in this. Therefore if man had the slightest independent existence over against God (with regard to materia), then God could not make him free. Creation out of nothing is once again the Almighty's expression for being able to make [a being] independent. He to whom I owe absolutely everything, although he still absolutely controls everything, has in fact made me independent. If in creating man God himself lost a little of his power, then precisely what he could not do would be to make man independent. (VII A 181 184.) See also the German translation by Ross 1960, pp. 49-50. "Das Höchste, das überhaupt für ein Wesen getan werden kann, das Höchste, wozu es gebracht werden kann, ist, es frei zu machen. Ebendazu gehört Allmacht, um das tun zu können. Dies scheint sonderbar, da gerade Allmacht abhängig zu machen scheint. Aber wenn man Allmacht denken will, wird man sehen, daß gerade in ihr die Bestimmung liegt, sich selber in der Äußerung der Allmacht wieder so zurücknehmen zu können, daß gerade dadurch das durch die Allmacht Gewordene unabhängig wird. ... alle endliche Macht macht abhängig; nur die Allmacht kann unabhängig machen, aus Nichts hervorbringen, was in sich Bestand hat dadurch, daß die Allmacht sich immerfort 'selbst zurücknimmt' ... ohne doch das Mindeste ihrer Macht aufzugeben ... Dies ist das Unbegreifliche, daß die Allmacht nicht bloß das Imposanteste von allem hervorbringen kann, der Welt sichtbare Totalität, sondern das Gebrechlichste von allem erzeugen kann, ein gegenüber der Allmacht unabhängiges Wesen. Daß also die Allmacht, die mit ihrer gewaltigen Hand so schwer auf der Welt liegen kann, sich zugleich so leicht machen kann, daß das Gewordene Unabhängigkeit erhält. Es ist nur eine erbärmliche und weltliche Vorstellung von der ... Macht, daß sie desto größer wird, desto mehr sie unterjochen und abhängig machen kann. "See also ibid., 280 ff. ⁴⁴See on this Spaemann and Löw 1981.

To remain within human experience, we not only know from experience of making things and seeing others make them that the purpose or value for the sake of which they are made is preceded by a person's understanding and acting for an end, but we also immediately recognize when we find a work of art or other beautiful manmade things or artifacts, or a machine, none of which occur in nature, that a personal agent has been at work and has acted as efficient cause for the sake of an end.

Of course, also in non-personal beings certain things can objectively be means, and others ends. There is no essential necessity whatsoever that would forbid that final causality, a relation in which one thing serves another and exists "for the sake of the other", actually exists in impersonal machines, natural objects or irrational living beings. On the contrary, in nature and in machines we obviously find countless means-ends relations, which, however, precisely must be designed by an intelligent person because neither water nor stars, neither a plant nor an animal possess any intelligence of their own, nor does man possess sufficient intelligence to understand or explain the countless forms of meaning and finality in his body and mind. Therefore the extremely intelligent order found in them allows us to infer that they have an intelligent maker. The operation towards ends, be it in nature, in technology, in science, history or in art, can only be explained by an intelligent and free efficient cause, a person endowed with intellect who orders the means towards values and ends, or who makes certain things for the sake of their intrinsic value or for achieving other ends or goods.

(b) But personal beings not only are causes and conditions necessary for the operation of any final causality in nature or in artifacts; they also embody final causality in an entirely new and higher form which is far more intimately connected with, and inseparable from, personhood. For we find in the personal realization of a goal itself, in personal acting which is related to a final *telos*, the most perfect and a principally different form of final causality, which is radically distinct from the finality that is instilled by a person upon a machine or exists in an organism. The ends we find in the sphere of persons have a fundamentally different meaning. This is particularly evident in the sphere of ethics, where the essential distinction within finality, between the free desire to realize an end in actions through which the person becomes good or evil, and mere natural causality and objective finality, which as such could never ground moral values, is obvious.

Within the sphere of personal finality, we must further distinguish the objective *finis operis*, the essential goal inscribed in a certain kind of action such as life-saving or murder, from the subjective *finis operantis*, the extrinsic purpose, goal or motive of accomplishing an act. Both objective essential ends and subjective purposes of acting are specifically personal forms of finality that are by this very fact radically distinct from any finality possible in nature or art. We can ponder the ethical relevance of both the essentially objective personal end of an act and of the subjective end of the acting subject. This distinction regards fundamentally distinct forms of specifically personal goal-directedness and finality. Only a philosophy of causality in relation to persons sees the dependence of final causality on persons and recognizes at the same time the fully new way in which finality is realized in the various forms of a free and conscious turning of the person to various ends. The personal value of this turning

towards these ends can never be measured morally speaking only in relation to consequences of acts, which to do is the grave error of ethical consequentialism. 45 Inasmuch as our reflections on the specific personal forms of final and of efficient causality showed us the entirely new elements they are characterized by compared with efficient and final causality as it exists in nature or in the brain, new elements that are closely interwoven with the essence of the person and personal consciousness, these reflections lead us already up to the second important topic of our reflections: the entirely new kinds of causes which we find on the level of persons and their irreducibility to efficient and final causality. These causes are not only, as in the case of final and efficient causality, entirely new forms of two of the causes Aristotle investigated and which exist also outside of persons, but they are entirely irreducible to any one of them and require an even more substantial rethinking of the classical theory of causality than did our personalist understanding of efficient and final causes. It is in turning to these specifically and exclusively personal forms of causes that we will recognize the complete untenability of Libet's claim that volitional acts are causal effects of brain events that could be efficient causes of free acts.

III. The irreducibility of the Explanatory Principles of Reality to the Four Causes, the Specifically Personal Causes, and Libet's Untenable Reduction of Them to Efficient Brain-causality

I now wish to investigate more profoundly and more in detail the mentioned question of whether a transcending of the whole level of the discussion of free will in Libet is necessary for another reason, namely that on the level of the spirit and of the person we encounter entirely new types of causes which do not exist in nature and which cannot be reduced to efficient or final causality at all.⁴⁶

Personal causal relations, at least most of them, presuppose, with absolute necessity, consciousness in its specifically personal rational form. This is also true of the specifically personal and new forms of efficient and final causality we have just studied. However, now we will turn to what are not only higher personal and essentially conscious forms of a type of causes that can exist also in impersonal nature (such as efficient and final causes) but to entirely new types of causes which, already as type of causes, cannot exist in any being besides persons. That these personal causal relations are not at all conceivable within the mere material or the physiological world of brain events, while efficient and final causes can be realized in non-personal nature, is sufficient to show that the causal ground of human acts is of a nature sui generis, and that the causes and reasons of human acts do not allow their

⁴⁵See Seifert 1985.

⁴⁶With regard to the reduction of all *aitiai* and *cause* to the four distinguished by Aristotle, see his *Metaphysics*, A 3, 983 a 25 ff. See also Reale 1967: 25. See also Schwengler 1960, in particular vol. II: 26.

being reduced to efficient causality, let alone to mere physical efficient causality, along the lines of which Libet attempts to explain them⁴⁷.

A) THE INTENTIONAL SUBJECT-OBJECT RELATION AS A RELATION IRREDUCIBLE TO EFFICIENT CAUSALITY AND AS ANOTHER REASON WHY LIBET'S AND OTHER BRAIN SCIENTISTS' EXPLANATION OF VOLUNTARY ACTS IN TERMS OF EFFICIENT CAUSES IN THE BRAIN IS UNTENABLE

We must first of all take into consideration that relation and that dependence which we find between object and subject in intentional acts discovered and explored, after the scholastics, by Franz Brentano, Edmund Husserl and many phenomenologists. 48 This relation, which is further differentiated into still more specific relations which nevertheless all share the common moment of a subject consciously directing himself to an object, is already insofar fully sui generis as it is necessarily conscious. Moreover, it is impossible to characterize the object of an intentional act or the dependence which an intentional act can have on its object, through which it is to a certain extent 'formed', as a case of efficient causality. The decisive point lies precisely in that the personal subject reaches out beyond his own act and takes spiritual possession of the object of consciousness which is not part of the act but stands, in an immaterial, mental form in front of it. Perhaps it is better not to treat of this fundamental intentional relation in the abstract, but rather to treat of it as it is modified in the concrete forms of dependence between intentional objects and various intentional acts. Such an investigation will better illuminate the fact that also generally speaking, the dependence between intentional object and intentional act is of a fully unique character, and is neither reducible to efficient nor to final causality.

B) THE IRREDUCIBLE TRANSCENDENT RELATION AND THE METAPHYSICAL RELATIONSHIP OF DEPENDENCE BETWEEN THE ACT OF COGNITION AND THE OBJECT OF COGNITION

Let us first think of the *cognitive relation*. When a spiritual subject knows that a particular state of affairs in fact obtains, we find necessarily in this cognitive relation a transcendent conscious reaching of something, for example of the state of affairs that the circumference of a circle is $2r\pi$. This state of affairs is not an immanent content of the cognitive act in the subject. Rather, the *knowing* subject really and intentionally reaches beyond himself and grasps that state of affairs that is wholly different from the cognizing subject as that which it is. Libet no doubt presupposes this. When he holds that Eccles' theory of the body-mind-relation is not scientific because it cannot be demonstrated by empirical tests and experiments, he presupposes that he understands what science is, what are its admissible methods, what is the theory of Eccles, what an empirical test and what the foundation of its cognitive value are, etc. All of these things are wholly different entities from the acts of Libet's understanding them.

⁴⁷In the *Phaedo*, precisely in the context of a metaphysics of the person, Plato has clearly pointed to the distinction between efficient causes and conditions, a distinction which is of fundamental importance for the discussion of the body-soul problem, as has been demonstrated in other works. See Plato, *Phaedo*, 99 b. See also 1973, 1989 b: 143 ff.

⁴⁸See F. Brentano 1955; 1973.; see also Edmund Husserl 1900/1901; 1975,1984; 1970; V.

It is necessary to stress that in this relation there also lies a real relation of dependence, in which the personal subject, or his really existing act, really depends on the being that is known. Since Libet does not try to explain this dependence in terms of formal causality, as the Aristotelian-scholastic philosophy did, I leave it up to another work to show the untenability of this assumption and turn instead to another "Libetian" attempt of reductionist explanation of this dependence. One could be tempted to consider this relation as a case of efficient causality. But this is in no way satisfactory. On the contrary, if the act of knowledge were merely the effect of the object known, let alone of brain events as Libet believes, which would have the role of efficient causes of knowledge, then the specific cognitional relation as such would thereby be dissolved. In fact, if the act of knowledge is merely determined by an object through which it is causally evoked, then knowledge as such is in no way explained. This is even more clearly true if not the object but brain processes were the efficient cause of Libet's knowledge. Indeed, if the act of knowledge is causally produced by an object, by a material thing for example, through material processes in the body which then have this act as a result of their efficient causal force, then the subject could never know whether this purely natural causal chain in fact results in a content of consciousness which corresponds or does not correspond to the real nature of things. "Knowing" would then lose its cognitive character and its object would be just an immanent content of consciousness which has an external cause in the material world. Moreover, its content would not be dependent on the nature of the things that are the object of knowledge but on blind chemical and physical causes which as such have nothing to do with the nature of the objects known, such as a chain of chemical causes in the body bear no resemblance to the headache they cause. A dependence of "knowledge" on a pure series of physiological or physical natural causes could not explain knowledge at all. Just as a computer hardware and software or archive does not allow the computer the slightest knowledge of whether the product of the physical causes that produce its output, corresponds to reality or not, it would be with all human cognition; there would not exist any act of knowledge whatsoever. (Besides, the meaning of the computer output does not consist in the physical signs but in their conceptual meaning which is not produced by physical causes at all). In this way, by a materialist causal theory of brain causation of knowledge - instead of assigning to brain events a decisive but subordinate and merely mediating and serving role for knowledge – knowledge would not be explained, but abolished, and Libet's theory, not only when he seeks to explain free actions but also when he seeks to explain his own knowledge by mere physical causes, would destroy the entire basis of his own rational scientific knowledge which, instead of knowledge, would be nothing but an accidental by-product of physical causes which could not ground any correspondence or adequacy in relation to reality.⁴⁹

The authentic cognitive relation and its unique form of dependence on the object of cognition presuppose that the reality cognized discloses itself to the knowing spirit in a manner that is not a mere case of efficient causality, but rather a real-intentional participation in the being itself as it is. For example, Libet presupposes to understand

⁴⁹See Seifert 1972: 62 ff., 67 ff., 69 ff.

logical laws, epistemological and scientific requirements, the thoughts expressed by Eccles, the reason for their unscientific nature, etc. None of these objects of his knowledge, which form the content of his knowledge, but are entirely independent of his brain and mind, can be explained as effect of efficient brain causes. Moreover, the knowledge-causing role of the object of cognition can also not be interpreted as a case of efficient causality between object and act of knowledge. Rather, the logical or mathematical, the anthropological, epistemological, or ontological states of affairs, by being received by his mind in the intentional cognitive act, are not only the reason why he thinks the way he does and not otherwise, but cause the content of knowledge precisely by being understood, by being known, and not as efficient causes. This spiritual act is certainly really dependent on its object, but in a specifically transcendent kind of relation and spiritual participation, which precisely constitutes the cognitive relation as such and excludes that cognition can ever be a mere effect of the object known, but rather is a real-intentional participation in, and an intentional being-determined-by, the object. Brain causes and changes in our sense organs and nerves can play no other role than a subservient and mediating one.⁵⁰

That this relation cannot be one of efficient causality already follows from the fact that many objects of knowledge are not material entities at all, are indeed often not at all real beings, but either abstract universal essences or purely ideal images and relations, or even consist merely in a lack or privation of being, as in the case of the knowledge of the different meanings of the term "nothing" or of certain kinds of negative states of affairs and evils that are mere privations of being such as total ignorance, which obviously could not be the efficient causes of real acts such as those of knowing.⁵¹ We can add that also really obtaining states of affairs, which are a chief object of knowledge, never are efficient causes because states of affairs do not at all have the character of things or events which would make them capable of being efficient causes and exert causal operations.⁵²

We find then in the way in which the act of knowledge is determined by its object a wholly unique relation, which includes a clear metaphysical dependency of the act on its object and which therefore must be taken into account, if the metaphysician wishes to investigate all the forms of *causes of real acts*, but which cannot be classified as efficient or as final cause of the cognitive act.⁵³

C) MOTIVATION AS A SPECIFICALLY PERSONAL GROUND OF EXPLANATION SUI GENERIS OF VOLITIONAL ACTS AND THE

⁵⁰In the difference between physiological causes of mental evens and this mediating role see J. Seifert 1979.

⁵¹See Millán-Puelles 1990/1996.

⁵²See Adolf Reinach 1989 d.

⁵³Despite any relationships of finality which may obtain between the object and the act of cognition, we cannot conclude that the fundamental nature of the cognitive relation and of the form in which a real being, namely the act of cognition, is dependent on another ideal, real, or any other kind of object, is a relation of finality. It would certainly never seriously enter into anyone's mind to assert for instance that mathematical knowledge is a means to the realization of mathematical laws (something which is excluded already by their eternity and necessity), or to analogously interpret the cognitive relation as a relation of finality.

UNTENABILITY OF INTERPRETING IT IN TERMS OF EFFICIENT CAUSALITY.

Something similar also holds for the relation of motivation to motivated volitional acts, which brings us back to Libet's claims that positive voluntary acts would be mere causal effects of brain events. In the sphere of motivation, a real being, namely a free act, is in a certain way called into existence by something else, namely, the motivating object or its value and other forms of importance, but our acts are not only not caused by brain events that have nothing to do with the motivating objects but they are also not caused by these motivating objects alone but as well by the will of the subject who has to allow something – that in virtue of its value or attraction appeals to him, invites him, obliges him, or tends to seduce him - to become motive of his free act. The specific uniqueness of this relation lies in the fact that the object known does not from itself engender the intentional act related to it, as may to some extent (i.e., inasmuch as not also in knowledge moral attitudes and free acts play a crucial role)⁵⁴ happen in the case of knowledge. Rather in a motivated free act the act is engendered both through the motivating object and through the mediation of the free spontaneity and self-determination of the subject. In fact, the motive becomes motive and co-cause of the free act only if the subject freely opens himself to the motivating power of the object. Moreover, besides the object, the free person herself remains a decisive cause of the act.

It is one of the reductionist tendencies in ethics and in philosophical anthropology, and a reductionist trap into which countless psychologists and brain scientists fall, to interpret the relation of motivation to voluntary acts in the light of efficient causality and in terms of the different motives being forces in a parallelogram of forces. Thus, it is maintained that the motivating object brings the motivated act causally into existence, via mere efficient cerebral or psychological causes. Such causal determinism does not do justice to *any* of the specifically personal causes: neither to the datum and cause of knowledge, nor to motivation, nor to the evident datum of free will, nor to any one of many others.

On the other hand, those philosophers and scientists who reject determinism cede easily to the opposite temptation and try to explain the free act purely in terms of an unmotivated arbitrary and senseless "pure spontaneity" of the subject. This is also the only (and an extremely impoverished) notion of free will I can detect in Libet, who studies purely arbitrary and unmotivated voluntary acts in which neither a motivating object, nor its importance have any foundational influence on the subject or provide reasons for his act. Libet's "tests with free will" and his demand that his test persons perform entirely unplanned, unmotivated, spontaneous and hence entirely irrational movements and actions is no doubt based on a notion of free will that is divorced from any purpose, end, motive, etc. Thus, apparently Libet believes that any planning, and any motivating role of an object chosen for its meaning or value, would not be compatible with a truly free act. The whole design and order of his tests suggest that he recognizes as free only wholly unmotivated, unplanned, arbitrary, senseless and

⁵⁴On the role of free will for knowledge and intellectual or value-blindness see Dietrich von Hildebrand 1982; see also Paola Premoli De Marchi 2002; see likewise Ciril Rütsche 2011.

purposeless volitional acts, the real existence of which (except in the case of the negative free will of vetoing) he denies. Libet investigates in his famous "empirical tests of free will" only this kind of acts, besides urges that have nothing to do with free acts,⁵⁵ confusing wholly arbitrary free acts with the feeling an urge to move, which the persons in his tests are told to observe and thereupon to move. He thus combines with this caricature of a free act that he investigates the position of a determinism that traces human actions back to their alleged purely physiological causes. On an incomparably higher intellectual level also Kant assumes in his ethics, in order to avoid determinism and eudemonism, that the free act must not in any way be motivated by the object, because he interprets any motivating object outside the person as if it were a cause of human actions extrinsic to the free will and therefore incompatible with free will. He acknowledge, however, a decisive source of the meaning of human free acts which Libet wholly ignores: moral duty, the categorical imperative which in at least one of its formulations recognizes implicitly the high value and dignity of the person and thus, whatever one thinks of Kant's separating the categorical imperative from any content and value, differs definitely and radically from the totally arbitrary free acts Libet investigates.⁵⁶

In reality, however, the motivating object or its motivating importance is certainly a decisive ground that brings about our acts, but those things that motivate our free acts cannot in any way on their own force alone be the *cause* of a free act. They can perhaps become causes and reasons of our intentional affective experiences by their own power, motivating these emotions of joy or of mourning in a way we cannot resist and that does not stand within our own power. But objects that motivate free acts can become causes or reasons for our free acts' existence exclusively

⁵⁵See — (and Haggard, P.) 2001: 58; and Mele 2009; and Habermas 2004a: 27; Habermas 2004b: 871-890; and Habermas 2005: 155–186.

⁵⁶See especially the ne of thfourth oe following eight versions of the "categorical imperative" in Kant 1968b, II:

^{1. &}quot;Act only according to that maxim by which you can at the same time will that it should become a moral law" (1. Form).

^{2. &}quot;Act as though the maxim of your action were by your will to become a universal law of nature" (2. Form., *ibid.*, p. 45)

^{3.} In the third formulation of the principle, Kant expresses the idea of "the will of every rational being as a will giving universal law" (ibid., p. 57): "Handle so, daß die Maxime deines Willens Grundlage jederzeit zugleich als Prinzip einer allgemeinen Gesetzgebung gelten könne." Kant, 1968 a, § 7.

^{4.} Formulation: "Act so that you treat humanity, whether in your own person or in another, always as an end and never as means only" (*Foundation*, cit., p. 54).

^{5. &}quot;The principle of every human will as giving universal laws in all its maxims" (ibid., 57)

^{6. &}quot;Act with reference to every rational being (whether yourself or another) so that it is an end in itself in your maxim" (ibid, p. 64)

^{7. &}quot;Act by a maxim which involves its own universal validity for every rational being" (ibid., p. 64).

through the mediation of the spontaneity of the free subject who can choose to let himself be motivated by entirely different kinds of potential motives: by objective goods that call upon him to do the good or to commit heroic deeds, or by subjective pleasures that seduce him to commit evil deeds, by the promise of harmless amusements or by highest goods in virtue of their sublime intrinsic value. ⁵⁷ Even less can the volitional act be explained, with Libet, through pure physiological efficient causes but must be instead take into account objects that possess some kind of attraction or promise pleasure, or by objective goods endowed with values that call for an appropriate value response. Thus, the motivating object is in an entirely new sense the cause or reason to act, which does not contradict, but presuppose freedom of the will. On the other hand, examining a free act entirely divorced from any reasons or motivating objects does not examine properly free will but sheer arbitrariness.

Only an understanding of the irreducibly new phenomenon of motivation can overcome these two opposite errors which have the same root: a complete misunderstanding of the kind of specifically personal form of reason and cause a motive is for human actions. The completely new relationship of the motivating object being the reason for a free act, a relation that defies any interpretation in terms of efficient causality, is possible only on the level of the person, because the object does not bring the act into existence by its own power alone but only through its being known and additionally only through the free acceptance and cooperation of the free spontaneity of the subject with the potentially motivating power of the object in its importance and value, to which the person has to speak an inner free "yes" in order that the potential motive be allowed to become an actual one and to co-cause her free act.

By investigating only arbitrary voluntary movements – carried out on the basis of feeling an undoubtedly brain-caused "urge" – Libet in the first place does not investigate properly speaking free acts and secondly entirely fails to understand the way in which a motivating object co-causes a free act and why this kind of reason for a free act is totally irreducible to, and incompatible with, brain causes producing the act. On these two grounds alone not only his interpretations of his tests turn out to be false, but these tests themselves turn out to be entirely inadequate to the scientific task they should perform, namely to study free acts in relation to brain events.

One could name many other relations, reasons and causes which play a role solely in the sphere of the person and are irreducible to efficient causes, and especially to efficient causes in the brain, but what has been said on the topic is enough for our purposes⁵⁸.

⁵⁷Compare the extraordinary analysis of three categories of importance, three fundamentally different points of view or "goods" which can motivate the Human will in Dietrich von Hildebrand 1978, ch.1=3; 17=18.

⁵⁸Among the other causal relationships which are not reducible to the four causes we find also the specifically personal relation of dependence and foundation which lies in reflection, where the act which is reflected upon and its dependence on its subject and its rational nature are the explanatory grounds for the possibility of reflection. There are many further specifically personal causes, not only causes of personal acts but also causality exerted by them. Think for

Conclusion

In the light of the preceding analyses we can comprehend the whole philosophical misery of Libet's attempt to explain, or better to "explain away," positive free acts in terms of mere physiological efficient causes in the brain. This attempt fails for many reasons:

- I. Efficient causality cannot be properly understood without seeing its inherent relation to persons.
- 1. Personal wills are a primary and superior form of efficient causes which entails the insight that they are essentially and not merely by degrees higher efficient causes than those encountered in nature or in the brain and therefore cannot be explained in terms of them.
- 2. Only efficient causality exerted by the will of persons is properly speaking efficient causality instead of being a mere transmitter of causal efficacy derived from a preceding cause. Also for this reason it is efficient cause in a primary sense and to believe it caused by brain events caused by preceding ones reverses the actual order and hierarchy of causes.
- 3. Persons as agents and as efficient causes are also necessarily presupposed and stand at the beginning of all non-personal efficient causes in the world of human science, culture, history etc. Other causes of art or culture or history, etc., besides persons, are only intermediary and go back to the free decisions, actions, and creativity of persons as their principal causes.
- 4. Also in nature the innumerable efficient impersonal causes always relate us to preceding causes and thus form a series of causes that cannot go back infinitely, by way of an infinite regress, into an absurd and utterly inexplicably chain of non-personal and non-self-explicable efficient causes, but presuppose a beginning in a first cause that must be free: if that first cause did not act freely, the world would exist necessarily, which it does not; if it were to depend on a prior efficient cause, it would require the same ulterior explanation which a contingent world of causes requires and therefore not be the absolute beginning of efficient causality.
- 5. Personal agency viz. free efficient causality alone is an inherently conscious form of causation.
 - 6. It alone is immediately experienced in its causal role.
 - 7. It alone can be known with indubitable evidence.
- 8. By studying mere arbitrary voluntary movements, and these only inasmuch as they follow upon the sensation of urges to act, Libet ignores entirely the essential connection between efficient and final causality and the manifold connections between ends and persons as well as the uniquely personal forms of acting for the

example of the specifically personal causal relations, in virtue of which the inner structure and logic of acts such as that of promising, brings into existence other beings, such as obligations and rights which proceed from promises. See Reinach 1953; 1989c; see also the English translation and commentary on this book in Reinach 1983: xxxiii-xxxv; 1-142. See also Adolf Reinach 2012. Or think of the complex kinds of constitution of purely intentional objects and aspects in literary works of art, explored by R. Ingarden 1973.

sake of ends without which human action and free will cannot be understood at all. Thus he studies a construct or shadow of free acts and not authentic free actions aimed at goods and ends.

9. Besides, his convincing defense of freely vetoing acts, as Eccles and Popper have clearly seen, logically entails positive free will and hence implicates Libet's theory in a flagrant contradiction.

In the second part of this essay we explained why any such reductionist misunderstanding of rational knowledge and (according to Libet merely apparent) positive free will as mere effects of causes in the brain entirely fails to understand the essentially new causes and reasons which we encounter when confronted with the conscious and rational life of knowledge and will, or with the higher spiritual forms of human affectivity.

- 1. These causes and reasons of rational human acts that are situated within the realm of conscious intentional acts turned out to be entirely inexplicable in terms of efficient causes, and especially in terms of efficient causes in the brain. None of them admits being explained just in terms of those kinds of causes which we also encounter in nature (efficient and final, material and formal ones). They all are based on a meaningful conscious relation to intentional objects over against our conscious life and acts.
- 2. To explain the receptively transcendent cognitive acts, instead of recognizing their dependence on the reality and nature of the object known that is the intentional object of knowledge and engenders the content of knowledge, in terms of mere efficient causality constitutes a complete failure of understanding them; they would degenerate into irrational contents of consciousness caused by efficient causes in the brain that could not provide any explanation of their rationality and justification.
- 3. Therefore, Libet's attempt to explain all human consciousness as effects of brain events destroys the whole basis of his own scientific pretentions to knowledge and to truth, claims which would be entirely invalidated if the results of his scientific investigations were nothing but effects of brain causes. In that case he could not know more than a computer whether the information fed into it and the software installed on it possessed any objective correspondence to reality, which alone, even if present, would in no way explain knowledge.
- 4. Free volitions, being intentionally directed at, and motivated by, the importance of states of affairs to be realized, are wholly different from urges to move which certainly allow being caused by some brain events.
- 5. Arbitrary volitions based on observing urges to act are deprived not only of ends and final causes but also lack meaningful motivation by objects which possess some kind of importance and value. These motivating objects are again causes of free acts in an entirely different manner, addressing themselves to the person and becoming motives and reasons for free acts only upon being freely accepted by the will. To explain them in terms of brain causes falsifies entirely the nature of this kind of exclusively personal causes and reasons.
 - 6. The same holds true for many other specifically personal forms of causality.

Hence both Libet's test results and interpretations of them and his tests themselves, which are not even based on a minimal understanding of what free will is,

how it differs from urges, how motivated free acts differ from arbitrary ones, how many free acts precede voluntary movement besides the only one of them considered by Libet, the decision to act, in no way prove the truth of the conclusion of his attempted but failing "disproof of positive free will," which, quite apart from failing in the achievement Libet designed it for, reveals a profound misunderstanding and topsy-turvy conception of the order of causes and of the place causality exerted by persons occupies in it.

It would be a further task to explain the immense consequences which the result of this investigation possesses for ethics, philosophy of the person, penal law, religion etc. To have shown that Libet in no way has disproven that human persons can indeed act freely and, in so acting, truly initiate a chain of causal processes that are not caused by preceding brain events, allows us to face and to overcome fully the huge challenge Libet poses to free will: the results of his experiments do not disprove free will or justify only the free will of vetoing, but instead both his own test results, when interpreted in the light of logic and a more adequate philosophy of persons and causes, and their liberation from the many philosophical equivocations, limitations, and errors he associates with their interpretation confirm that we are endowed with free will and that any determinist theory that denies free will, whether compatibilist or incompatibilist, soft or hard, is wrong.

References

Altherton, M., Zhuang, J., Bart, W. M., Hu, X. & He 2003, 'A Functional MRI Study of High-level Cognition I, The Game of Chess', *Cognitive Brain Research* 16: 26-31.

Aristoteles, Eudemian Ethics 1884, ed. F. Susemihl (Leipzig: Teubner). Greek online editions in Perseus:

- ----. Magna Moralia.
- ---. Metaphysics.
- ----. Nichomachean Ethics.

Augustine 1961, *De diversis quaestionibus* LXXXIII, Qu. 46, *De ideias*, in, Eligius Dekkers, ed., *Clavis patrum latinorum* (C. Beyaert, Brugis- M. Nijhoff, Hagae Comitis), PL XL.

- ——. *De Civitate Dei* 1961, in: Eligius Dekkers, ed., Clavis patrum latinorum (C. Beyaert, Brugis M. Nijhoff, Hagae Comitis) CC XLVII XLVIII.

Batthyany, Alexander 2009, 'Mental Causation and Free Will after Libet and Soon, Reclaiming Conscious Agency'. In, Batthyany und Avshalom Elitzur, *Irreducibly Conscious*. Selected Papers on Consciousness, Heidelberg: Winter, 135ff.

Henri Bergson 1896, *Matière et mémoire. Essai sur la relation du corps à l'esprit*, Bibliothèque de philosophie contemporaine, (Paris: Alcan).

Brentano, Franz 1955, *Psychologie vom empirischen Standpunkt*, Bd. 1-2, ed. O. Kraus, unveränderter Nachdruck der Ausgabe von 1924 (first edition 1874), Hamburg: F. Meiner.

——. 1995, *Psychology from an Empirical Standpoint* Ed. Oskar Kraus and Linda L. McAlister). New York: Routledge.

Crosby, John F. 1996, *The Selfhood of the Human Person*, Washington, D.C., The Catholic University of America Press.

Dennett, Daniel C. 2003, Freedom Evolves, London: Penguin Books.

Eccles, John C./Popper, Karl R. 1977/1981, The Self and Its Brain,

Berlin/Heidelberg/London/New York: Springer International.

Eccles, Sir John C. /Popper, Sir Karl R. 1985, Das Ich und sein Gehirn, München/Zürich.

Eccles, Sir John C. 1979, *The Human Mystery. The Gifford Lectures University of Edinburgh 1977-1978*, Berlin-Heidelberg-New York: Springer International.

Habermas, Jürgen 2004a, "Die Freiheit, die wir meinen." Wie die Philosophie auf die Herausforderungen der Hirnforschung antworten kann. Gekürzte Version der 2004 anläßlich der Verleihung des Kyoto-Preises gehaltenen Rede, in, *Der Tagesspiegel*, Berlin, 14. November 2004, S. 27. Online, http://www.tagesspiegel.de/kultur/die-freiheit-die-wir-meinen/562620.html.

Habermas, Jürgen 2004b, "Freiheit und Determinismus", DZPhil, 52/6: 871-890.

Habermas, Jürgen 2005, "Freiheit und Determinismus", in, Zwischen Naturalismus und Religion. Philosophische Aufsätze, 155–186, Frankfurt a.M.: Suhrkamp.

Hartmann, Dirk 2004, "Neurophysiology and freedom of the will", Poiesis Prax 2: 275-284.

Heisenberg, Werner 1962, *Physics and Philosophy. The Revolution in Modern Science*, New York. *Physics and Philosophy*. New York: Harper and Row.

Hidenari, Negishi; Hongo, Bunkyo-ku, Kazuhiro; Ueda, Mitsugu; Kuriyama, Komaba; Meguro-ku, Masaharu; Kato, Kawada-cho; Shinjuku-ku, Hideo, Kawaguchi Hirokazu, Atsumori, Akanuma, Hatoyama, Saitama 2005, 'Change of Mental Representation with the Expertise of Mental Abacus'. Japan.

Hildebrand, D. von 1982, Sittlichkeit und ethische Werterkenntnis. Eine Untersuchung über ethische Strukturprobleme. Habilitationsschrift. (1918), 3, durchgesehene Auflage. Vallendar Schönstatt: Patris Verlag.

- ——. 1978, Ethics, 2nd ed. Chicago: Franciscan Herald Press.
- ——. 1991, What is Philosophy? 3rd ed, with a New Introductory Essay by Josef Seifert (London: Routledge, 1991).
- . 1994, "Das Cogito und die Erkenntnis der realen Welt", Teilveröffentlichung der Salzburger Vorlesungen Hildebrands, "Wesen und Wert menschlicher Erkenntnis", *Aletheia* 6/1993-1994: 2- 27.
- ——. 2001, Che cos'è la filosofia? /What Is Philosophy? English-Italian. Milano: Bompiani.
- ——. 2002, 'The Idea of the Good as the Sum-total of Pure Perfections. A New Personalistic Reading of Republic VI and VII', in, Giovanni Reale and Samuel Scolnikov (Ed.), *New Images of Plato. Dialogues on the Idea of the Good*, (Sankt Augustin, Academia Verlag: 407-424.
- ——. 2009, *The Nature of Love*, Preface by Kenneth Smith, Transl. and introd. By John Crosby with John Henry Crosby. South Bend, Ind.: St. Augustine Press.

Honderich, T. 1988/2007, *Mind and Brain. A Theory of Determinism*, vol. I, (Oxford: Clarendon Press).

Husserl, E. 1900/1901; 1975; 1984, Logische Untersuchungen. Text der ersten und zweiten Auflage, Bd I: Prolegomena zu einer reinen Logik, hrsg.v. E. Holenstein, Husserliana, Bd. xviii (Den Haag: M. Nijhoff, 1975); Bd. II, 1: Untersuchungen zur Phänomenologie und Theorie der Erkenntnis, 1. Teil, Bd. II, 2: Untersuchungen zur Phänomenologie und Erkenntnis, 2. Teil, hrsg.v. U. Panzer, Husserliana, Bd. xix, 1 und Bd. xix, 2, Den Haag: Nijhoff.

- ——. 1969, Zur Phänomenologie des inneren Zeitbewußtseins (1893-1917), Husserliana 10, Boehm, Rudolf (Hg.), Den Haag: Nijhoff.
- ——. 1971, *The Phenomenology of Internal Time Consciousness*, ed. Martin Heidegger, transl. James S. Churchill, intro. Calvin O. Schrag, 4th printing, Bloomington and London.

Hölscher, L. 1986, *The Reality of the Mind. St. Augustine's Arguments for the Human Soul as Spiritual Substance*. London: Routledge and Kegan Paul.

- Ingarden, R. 1970, Von der Verantwortung. Ihre ontischen Fundamente. Stuttgart: Philipp Reclam Jun.
- —. 1973, *The Literary Work of Art*, transl. by George G. Grabowicz. Evanston: Northwestern University Press.
- Jonas, H. 1981, Macht oder Ohnmacht der Subjektivität? Das Leib-Seele-Problem im Vorfeld des Prinzips Verantwortung. Frankfurt a.M.: Suhrkamp.
- Kant, I. 1781/1968, Kritik der reinen Vernunft, in: Kants Werke, Akademie-Textausgabe, vol III. Berlin, Walter de Gruyter & Co.
- ——. 1929, 1965, *Critique of Pure Reason*, translated by Norman K. Smith (Toronto, New York: Macmillan and St Martin's Press).
- . 1968a Kritik der praktischen Vernunft (1788), in: Kants Werke, Akademie-Textausgabe. Berlin: Walter de Gruyter & Co. IV.
- —. 1968b, *Grundlegung zur Metaphysik der Sitten*, in: Kants Werke, Akademie-Textausgabe (Berlin: Walter de Gruyter & Co., 1968), Bd. IV.
- Kawohl, W./Habermeyer, E. 2007, "Free Will, Reconciling German Civil Law with Libet's Neurophysiological Studies on the Readiness Potential", *Behav. Sci. Law* 25: 309–320.
- Kierkegaard, Soeren 1986, *Die Krankheit zum Tode*, übers. und komm. v. L. Richter, 2nd ed., Frankfurt a.M.
- --- 1983 *The Sickness unto Death. A Christian Psychological Exposition for Upbuilding and Awakening.* Ed. Trans by Howard V. Hong and Edna H. Hong. Kierkegaard's Writings vol. 19. Princeton: University of Princeton Press.
- ——. 1967, Papirer VII, I, 141, übers. v. Roos in: *Kierkegaard nachkonziliar*. (Einsiedeln: Johannes Verlag).
- Libet, B. 1983, "Time of Conscious Intention to Act in Relation Onset of Cerebral Activity (Readiness Potential)", *Brain*, 106, 623-642.
- ——. 1985, "Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action", *Behavioral & Brain Sci*, 8, 529.
- ——. 1986, "Commentary on Free Will in the Light of Neuropsychiatry", *Philosophy, Psychiatry*, & *Psychology*, 3, No. 2 (June 1996), 95-96.
- ——. 1989, "The Timing of Subjective Experience", *Behavioral & Brain Sci.*, 12, 183.
- ——. 1990, "Neural Destiny", *Natural Science* 2, 32-35.
- ——. 1996, "Commentary on 'Free Will in the Light of Neuropsychiatry", *Philosophy, Psychiatry*, & *Psychology*, 3: 2.
- ——. 1999, Anthony Freeman and Keith Sutherland (eds.), *The Volitional Brain. Towards a Neuroscience of Free Will*, Thorverton.
- ——. 1999b, "Do we Have Free Will?", *Journal of Consciousness Studies*, 6, No. 8–9: 47–57.
 ——. 2000, 'Time Factors in Conscious Processes, Reply to Gilberto Gomes', *Consciousness and Cognition*, 9: 1-12.
- —. (and Haggard, P.) 2001, "Conscious Intention and Brain Activity", *Journal of Consciousness Studies*, 8, No. 11: 47–63.
- ——. 2002a, "Do We Have Free Will?", in R. Kane (ed.), *The Oxford Handbook of Free Will*, 551-564, Oxford: Oxford University Press.
- ——. 2002b, "The Timing of Mental Events, Libet's Experimental Findings and Their Implications", Consciousness and Cognition 11: 291-99.
- _____. 2003a, "Timing of Conscious Experience, Reply to the 2002 Commentaries on Libet's Findings", *Consciousness and Cognition*, 12: 321-31.
- ——. 2003 b, "Can Conscious Experience Affect Brain Activity?", *Journal of Consciousness Studies*, 10, 12: 24–28.
- ——. 2004a, (VB), Freeman, Anthony and Sutherland, Keith (ed.), *The Volitional Brain: Towards a Neuroscience of Free Will*. Cambridge, MA: Harvard University Press.

- ——. 2004b, *Mind Time, The Temporal Factor in Consciousness*. Boston, Mass.: Harvard University Press.
- ——. 2006a, "The timing of brain events, Reply to the 'Special Section' in this journal of September 2004," edited by Susan Pockett', *Consciousness and Cognition*, 15: 540–547.
- —. 2006b, "Reflections on the interaction of the mind and brain", *Progress in Neurobiology*, 78: 322–326.`
- ——. 2011, "Do we Have Free Will?" in Sinnott-Armstrong, Walter and Nadel, Lynn (eds.), *Conscious Will and Responsibility*, 1-10. New York/Oxford: Oxford University Press.
- Marcel, Gabriel 1970, *The Mystery of Being*, Rene Hague (übers.)⁶, Chicago: University of Harvard Press.
- Maritain, J. 1962, Art and Scholasticism and the Frontiers of Poetry, trans. J.W. Evans. New York: Charles Scribner's Sons.
- Mele, Alfred 2003, Motivation and Agency. Oxford: Oxford University Press.
- Mele, Alfred 2009, Effective Intentions, The Power of Conscious Will, Oxford: University of Oxford Press.
- Millán-Puelles, A. 1990, *Teoría del objeto puro*. Colecciónes Cuestiones Fundamentales. Madrid: Ediciones RIALP.
- ——. 1996, *The Theory of the Pure Object*, English translation by Jorge García-Gómez. Heidelberg: Universitätsverlag C. Winter.
- Newman, John Henry Cardinal 1973, An Essay in Aid of A Grammar of Assent. Westminster, Md.: Christian Classics Inc.
- Pockett, Susan 2004, "Hypnosis and the death of subjective backward referral", *Conscious. Cogn.* 13: 621–625.
- Pollen, D. 2004, "Brain stimulation and conscious experience", *Conscious. Cogn.* 13: 626–645. O'Connor, Timothy 2002, *Persons and Causes. The Metaphysics of Free Will*, Oxford: University of Oxford Press.
- Plato, Phaidon.
- Popper, Sir Karl R./Eccles, Sir John C. 1985, *Das Ich und sein Gehirn*, 5^e München/Zürich: Springer.
- Premoli De Marchi, P. 2002, Etica dell'assenso, Milano: Franco Angeli.
- Reale, G. 1967, Concetto di Filosofia Prima e l'Unita della Metafisica di Aristotle, 3rd ed. Milano: Vita e Pensiero.
- ——. 1980, The Concept of First Philosophy and the Unity of Metaphysics of Aristotle, ed. and trans. John R. Catan. Albany: State University of New York Press.
- ——. 1993, Zu einer neuen Interpretation Platons. Eine Auslegung der Metaphysik der großen Dialoge im Lichte der "ungeschriebenen Lehren", transl. Hölscher, L. mit einer Einleitung von H. Krämer, ed. and Postface Seifert, J. Paderborn: Schöningh, 1993.
- ——. 1997, Verso una nuova interpretazione di Platone, 20th ed. Milano: Jaca Book.
- Reinach, Adolf 1983, 'The Apriori Foundations of the Civil Law', trans. by J. F. Crosby, in: *Aletheia III:* xxxiii-xxxv; 1-142.
- . 1989a, "Die Überlegung, ihre ethische und rechtliche Bedeutung (1912/13)", in, Adolf Reinach, Sämtliche Werke. Kritische Ausgabe mit Kommentar, Bd. I, Die Werke, Teil I, Kritische Neuausgabe (1905-1914), Teil II, Nachgelassene Texte (1906-1917), 279-311, München und Wien: Philosophia.
- ——. 1989b, "Über das Wesen der Bewegung", in, Schuhmann, Karl und Smith, Barry (Hg.), Adolf Reinach, *Sämtliche Werke. Texkritische Ausgabe in zwei Bänden*, Bd. I, *Die Werke*, Teil I, Kritische Neuausgabe (1905-1914), Teil II, Nachgelassene Texte (1906-1917), 551-588, München und Wien: Philosophia.
- —. 1989c, "Die apriorischen Grundlagen des bürgerlichen Rechtes", in, Reinach, Adolf, Sämtliche Werke. Texkritische Ausgabe in zwei Bänden, Bd. I, Die Werke, Teil I, Kritische

- Neuausgabe (1905-1914), Teil II, Nachgelassene Texte (1906-1917); hrsg.v. Karl Schuhmann Barry Smith (München und Wien, Philosophia Verlag, 1989), 141-278.
- . 1989 d, "Zur Theorie des negativen Urteils", in: *Sämtliche Werke*. Texktritische Ausgabe in zwei Bänden, Bd. I: *Die Werke*, Teil I: *Kritische Neuausgabe (1905-1914)*, Teil II: *Nachgelassene Texte* (1906-1917), pp. 95-140.
- Ross, W. D. 1960, Foundations of Ethics, 4th ed., Oxford: Oxford University Press.
- Roth, Gerhard 1994, Das Gehirn und seine Wirklichkeit, Frankfurt a.M.: Suhrkamp.
- Rütsche, Ciril 2011, Die ethischen Bedingungen des philosophischen Erkennens. Zur Begründung des Dissenses in der Philosophie bei Platon, Augustinus und Dietrich von Hildebrand. Epistemata Philosophie Bd. 510. Würzburg: Königshausen und Neumann.
- Ryle, Gilbert 1949, The Concept of Mind, London.
- Scheler, M. 1966, *Der Formalismus in der Ethik und die materiale Wertethik, Neuer Versuch der Grundlegung eines ethischen Personalismus*, hrsg. v. Maria Scheler, 5th ed., Gesammelte Werke, vol. 2. Bern: A. Francke.
- Erwin Schrödinger 1944, What is Life? Cambridge, London, New York, Melbourne.
- Schwarz, B. 1992, "Der Dank als Gesinnung und Tat". In, Seifert, J. (Hg.) Danken und Dankbarkeit. Eine universale Dimension des Menschseins. Heidelberg: Winter.
- Schwengler, A. 1847-1848; 1960, *Die Metaphysik des Aristoteles*, volume 4. Tübingen: L.F. Fues, reprinted Frankfurt a.M.: Minerva.
- Searle, J. R. 2007, Freedom & Neurobiology. Reflections on Free Will, Language, and Political Power, New York/Oxford: Oxford University Press.
- -----. 1984, Minds, Brains, and Science, Cambridge, Mass: University of Harvard Press.
- Seifert, J. 1973, Leib und Seele. Ein Beitrag zur philosophischen Anthropologie, Salzburg: A. Pustet.
- . 1976a, Erkenntnis objektiver Wahrheit. Die Transzendenz des Menschen in der Erkenntnis. 2nd ed. Salzburg: A. Pustet.
- ——. 1976b *Was ist und was motiviert eine sittliche Handlung?* (What is and what Motivates a Moral Action?). Salzburg: A. Pustet.
- ——. 1981, "Karol Cardinal Karol Wojtyìa (Pope John Paul II) as Philosopher and the Cracow/Lublin School of Philosophy", *Aletheia*, 2: 130-199.
- . 1983,"Verdad, Libertad y Amor en el Pensiamento Antropologico y Etico de Karol Wojtyla" in *Persona y Derecho*: 177-193.
- ——. 1985, "Absolute Moral Obligations towards Finite Goods as Foundation of Intrinsically Right and Wrong Actions. A Critique of Consequentialist Teleological Ethics: Destruction of Ethics through Moral Theology?", *Anthropos* 1 (1985), pp. 57-94.
- ——. 1987, Back to Things in Themselves. A Phenomenological Foundation for Classical Realism, London: Routledge.
- --- 1989a, Essere e persona. Verso una fofndazione fenomenologica di una metafisica classica e personalistica, Milano: Vita e Pensiero.
- . 1989b, Das Leib-Seele Problem und die gegenwärtige philosophische Diskussion. Eine kritisch-systematische Analyse, 2nd ed., Darmstadt: Wissenschaftliche Buchgesellschaft.
- . 1992, "Phänomenologie der Dankbarkeit als Zugang zu einer personalistischen Metaphysik", in, J. Seifert (Ed.), *Danken und Dankbarkeit. Eine universale Dimension des Menschseins*. Heidelberg: Winter.
- . 1994, "Essere Persona Come Perfezione Pura. Il Beato Duns Scoto e una nuova metafisica personalistica", *De Homine, Dialogo di Filosofia* 11. Rome, Herder/Università Lateranense: 57-75.

- ——. 1996, *Sein und Wesen*. Philosophie und Realistische Phänomenologie/ Philosophy and Realist Phenomenology. Studien der Internationalen Akademie für Philosophie im Fürstentum Liechtenstein/Studies of the International Academy of Philosophy in the Principality Liechtenstein, (Ed.), R. Buttiglione and J. Seifert, Vol. 3. Heidelberg: Winter.
- ——. 1997, What is Life? On the Originality, Irreducibility and Value of Life. Value Inquiry Book Series (VIBS), ed. by Robert Ginsberg, Vol. 51/Central European Value Studies (CEVS), ed. by H.G. Callaway. Amsterdam: Rodopi.
- ——. 1998, "To Be a Person To Be Free", in, Zofia J. Zdybicka, et al. (Ed.), *Freedom in Contemporary Culture*. Acts of the V World Congress of Christian Philosophy. Catholic University of Lublin 20-25 August 1996, Vol. I, 145-185. Lublin: Catholic University of Lublin Press.
- . 2000, Ritornare a Platone. Im Anhang eine unveröffentlichte Schrift Adolf Reinachs, hrsg., Vorwort und übers. Von Giuseppe Girgenti. Collana Temi metafisici e problemi del pensiero antico. Studi e testi, Vol. 81, Milano: Vita e Pensiero.
- ———. 2001, Überwindung des Skandals der reinen Vernunft. Die Widerspruchsfreiheit der Wirklichkeit trotz Kant. Freiburg/München: Karl Alber.
- ——. 2004, "El amor como perfección pura, una metafísica del amor como himno filosófico del amor", in, *Humanitas*, Universidad autónoma del Nuevo León, Anuario del Centro de Estudios Humanísticos: 65-82.
- ——. 2007 a, "Natural Law, Persons Are United through Ends, Seven Different Relations between Persons and Ends and Their Relation to Natural Law and Community of Persons", *Revista Española de Teología* Vol. 67, cuad. 2-3, Facultad de Teología "San Damaso", 67: 149-163.
- ——. 2007 b, xxx
- ——. 2009, Discours des Méthodes. The Methods of Philosophy and Realist Phenomenology. Frankfurt/Paris /Ebikon / Lancaster / New Brunswick: Ontos.
- ——. 2011, "In Defense of Free Will: A Critique of Benjamin Libet," *Review of Metaphysics*, Volume LXV, Nr. 2, December, pp. 377-407.
- ——. 2012, "Can Neurological Evidence Refute Free Will? The Failure of a Phenomenological Analysis of Acts in Libet's Denial of 'Positive Free Will'" to be published in *Pensamiento.xxx*

Sherrington, Charles S. 1941, *Man on his Nature*. The Gifford Lectures, Edinburgh, 1937–1938. (New York: The Macmillan Co.!Cambridge: The University Press, 1941).

Sinnott-Armstrong, Walter and Nadel, Lynn (Ed.) 2011, Conscious Will and Responsibility, (New York: Oxford University Press.)

Spaemann, Robert and Löw, Reinhard (1981), Die Frage Wozu? Geschichte und Wiederentdeckung des teleologischen Denkens. München: Kösel.

Stein, Edith 1962; 1986, Endliches und Ewiges Sein, Versuch eines Aufstiegs zum Sinne des Seins. Edith Steins Werke, Bd. II, Hrsg. L.Gerber, 2. Aufl. Wien: 1962; 3. unver. Aufl. Freiburg: Herder.

Squire, Larry A. (Ed.) 1996, *The History of Neuroscience in Autobiography*, volume I, (Washington D.C.: Society of Neuroscience).

Styczeî, Tadeusz 1979, "Zur Frage einer unabhängigen Ethik", in: Wojtyìa, K., Szostek, A., Styczeî, T., *Der Streit um den Menschen. Personaler Anspruch des Sittlichen.* Kevelaer: Butzon und Bercker: 111-175.

Trevena, Judy Arnel and Miller, Jeff 2002, "Cortical Movement Preparation before and after a Conscious Decision to Move", Consciousness and Cognition 11: 162–190.

Troisfontaines, Roger S.J. 1953/1968, De L'Existence à l'Être. La Philosophie de Gabriel Marcel, Lettre Préface de Gabriel Marcel, 2 Vol. Louvain: Nauwelaerts; Paris: J. Vrin.

Vaughan, H. G., Costa, L. D., Ritter, W., 1967, "Topography of the Human Motor Potential", in, *Electroencephalography and Clinical Neurophysiology*, 25: 1-10.

Velmans, M. 2002, "How could conscious experience affect brains?," in, *Journal of Consciousness Studies*, 9 (11): 3–29.

Wachter, Daniel von 2009, Die kausale Struktur der Welt: Eine philosophische Untersuchung über Verursachung, Naturgesetze, freie Handlungen, Möglichkeit und Gottes kausale Rolle in der Welt. Freiburg, (München: Karl Alber)

Wegner, Daniel M., *The Illusion of Conscious Free Will*, (Cambridge, Mass./London, England: MIT Press, 2002)

Wenisch, Fritz 1976, Die Philosophie und ihre Methode. Salzburg: A. Pustet.

——. "Insight and Objective Necessity - A Demonstration of the Existence of Propositions Which Are Simultaneously Informative and Necessarily True?", *Aletheia* 4 (1988): 107-197. Wojtyìa, K. 1979, *The Acting Person*. Boston: Reidel.

— . Szostek, A., Styczeî, T. 1979b, *Der Streit um den Menschen. Personaler Anspruch des Sittlichen.* Kevelaer: Butzon und Bercker.

— . 1981, *Person und Tat*, mit einem Nachwort zur deutschen Ausgabe von Andrzej Poìtawski, Freiburg-Basel-Wien: Herder.

Wegner, Daniel M. 2002, *The Illusion of Conscious Free Will*. Cambridge, MA./London, England: MIT Press.

Wolter, Allan 1946, *The Transcendentals and their Function in the Metaphysics of Duns Scotus*. St. Bonaventure, New York: Franciscan Institute Publications.