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Friday, March 4th 2016

Meaning in a Mathematised World: Kant and Dostoevsky on Thoedicy (Through the Lens of Ucnik)

The Mathematised World: A Turn Towards Husserl

In this paper, I will be entering into conversation with L'ubica Ucnik's paper titled "The Problem of Morality in a Mathematised Universe: Time and Eternity in Dostoevsky's *The Brothers Karamazov* and the Concept of 'Love' in Patocka's Last Essay." Despite its absence from the title, Kant's essay on theodicy features heavily in this paper and is set in contrast to the response of theodicy given by Dostoevsky in *The Brothers Karamazov*. Both of this accounts, according to Ucnik, are heavily influenced by what she terms the 'mathematised world', in line with Husserl who gives a philosophical-historical analysis of the movement towards conceiving the world as a mathematically constructed and determinable object which undergirds the positive scientific endeavor. Ultimately, the question which Ucnik asks is this: can there be meaning in a mathematised world? She evaluates the answers of Kant and Dostoevsky before turning to the work of the Czech phenomenologist Patocka. In order to enter into conversation, we must have a proper background in what it means for the universe to be mathematised, so we will turn to Husserl's essay "The Crisis of European Sciences and Transcendental Phenomenology."

First Fragments of Universal Positive Science From where does this language of the mathematised universe come? One place in particular is in the work of Husserl, who wonders whether the world, "and human existence in it, truthfully have a meaning if the sciences recognize as true only what is objectively established" in the fashion of the positive sciences which focus merely on the world as fact and treat objective truth as "exclusively a matter of

establishing what the world, the physical as well as the spiritual world, is in fact."[1] Husserl gives a historical account of this transition from a science which was not positivist in nature to one that "rigorously grounded truth"[2] in the objectivity of the positive sciences of mere correlation, where as Kant warns "our use of the concepts of cause and effect cannot be extended beyond nature"[3] and which is really more of a product of the way we think than it is an actual phenomenon in objective reality. The first fragments of a drive for a universally valid positivistic method for investigating the world began in the mathematics of the Greeks in which an "immense change of meaning" took place "whereby *universal* tasks were set, primarily for mathematics . . . tasks of a style which was *new in principle*, unknown to the ancients."[4] Furthermore, with Euclidean geometry arises the important concept of an axiomatic science: "with Euclidean geometry had grown up the highly impressive idea of a systematically coherent deductive theory, aimed at a most broadly and highly conceived ideal goal, resting on 'axiomatic' fundamental concepts and principles, proceeding according to apodictic arguments – a totality formed of pure rationality, a totality whose unconditioned truth is available to insight and which consists exclusively of unconditioned truths recognized through immediate and mediate insight."[5]

The Conquest of the Infinite This was only the beginning, he tells us, for the modern period brings with it "the actual discovery and conquest of the infinite mathematical horizons" which eventually lead to a rationalization of the natural sciences creating the "completely new idea of *mathematical natural science*."[6] This new mathematised natural science finds its first practitioner, Husserl tells us, in Galileo whose mathematical natural science led to *nature itself* being "idealized under the guidance of the new mathematics; [such that] nature itself becomes . . . a mathematical manifold."[7] Husserl asks and answers our own question: "*What*

[1]Husserl, 6.
[2]Husserl, 7.
[3]Ucnik, 74.
[4]Husserl, 21.
[5]Husserl, 21.
[6]Husserl, 22 - 23.
[7]Husserl, 23.

is the meaining of this mathematization of nature?"[8] He tells us that before the dominance of the positivistic, scientific mindset the world was given in "everyday sense-experience" in a "subjectively relative way," such that we have discrepancies in the ways in which we see the world – but, despite this, "we believe in *the* world, whose things only appear to us differently but are the same."[9] Essentially, as a result of pursuing knowledge in this shared world, that is, in pursuing knowledge of the 'true' and objective world, humanity was diverted by the "empirical art of measuring and its empirically, practically objectivizing function, through a change from the practical to theoretical interest" as it went from investigating mathematics for practical purposes to investigating objects in the mathematical realm.[10] In this turn, the empirical art of measuring "was idealized and thus turned into the purely geometrical way of thinking."[11] It is easy to see the appeal of such an approximate science in that it yields some approximation of how things are, but only an approximation "beginning with what is empirically given, to the geometrical ideal shape which functions as a guiding pole."[12]

At this point in the transition, the empirical tool of measuring gives us an approximation of the real world which we know to be held together by a sort of "*universal causal regulation*" such that "*all that is together in the world* has a universal immediate or mediate way of *belonging together*..."[13] We have this knowledge of the world as an "all-encompassing unity, a *whole* (even though it is finite)," in contrast to the world as being merely an aggregation of facts or "mere totality," even in the life of "prescientific knowing."[14] The transformation to 'scientific knowing' is completed (and meaningful) "only if a method can be devised of *constructing*, systematically and in a sense in advance, the world, the infinitude of causalities" from a small set of axiom-like propositions which have been established directly from

[8]Husserl, 23.
[9]Husserl, 23.
[10]Husserl, 28.
[11]Husserl, 28.
[12]Husserl, 28.
[13]Husserl, 28.
[14]Husserl, 31.

experience.[15] On top of this requirement is added that of being able to verify this construction "in spite of the infinitude [of experience]."[16] It is at this point that mathematics leads the way through its creation of ideal objects and principles which have been established in experience – thereby constructing an ideal world in which we have apodictic certainty of "true being-in-itself" because this world has been "apodictically generated."[17]

From Mathematics to Natural Science This turn towards the ideal, constructed realm does not stay contained within the realm of mathematics. Instead, due to Galileo's confidence in the possibility of achieving "an objective science of the world," he pursued an idea of nature "which is construvtively determinable in the same manner in all its *other aspects.*"[18] In so doing, the turn is complete and nature is conceived of as in itself being mathematically constructible. This all-encompassing mathematisation gains its power not just as a descriptive tool; it also has predictive power for "if one has the formulae, one already possesses, in advance, the practically desired prediction of what is to be expected with empirical certainty in the intuitively given world of concretely actual life, in which mathematics is merely a special [form of] praxis."[19] Husserl then asserts that mathematisation, "with its realized formulae, is the achievement which is decisive for life."[20] To spell this out more concretely, Husserl explains how this works:

> In geometrical and natural-scientific mathematization, in the open infinity of possible experiences, we measure the life-wrold - the world ocnstantly given to us as actual in our concrete world-life - for a well-fitting *garb of ideas*, that of the so-called objectively scientific truths. That is, through a method which (as we hope) can be realy carried out in every particular and constantly verified, we first construct numerical indices for the actual and possible sensible plena of the concretely intuited shpaes of the life-world, and in this way we obtain possibilities of predicting concrete occurrences in the intuitively given life-world, occurrences which are not yet or no longer actually given. ...It is through the garb of ideas that we take for *true being* what is actually a *method* - a method which is designed for the purpose of progressively

[15]Husserl, 32.
[16]Husserl, 32.
[17]Husserl, 32.
[18]Husserl, 33.
[19]Husserl, 43.
[20]Husserl, 43.

> improving, *in infinitum* ....[21]

It is precisely this mathematisation which is at work in the background of Kant's project and, as Ucnick suggests, in the project of Dostoevsky with Ivan's Euclidean geometry. That this is so can be seen in the way in which Kant's project takes for granted the dualism of a natural, self-enclosed world and the psychic world.[22] And, furthermore, it led to the rationalization of man's self-understanding in relationship to God for "the philosopher, in correlation with his mathematization of the world and of philosophy, has in a certain sense mathematically idealized himself and, at the same time, God" who has become the "'infinitely distant man'".[23] In a realm in which we are both able to construct and predict reality, and in fact with great success as the positive sciences have shown, the question emerges: what meaning can there be in this world? This problem becomes especially acute in suffering; for who has not been led to ask why in the midst of suffering?

Kant on Theodicy: A Failed Attempt?

Kant gives us his answer to the question of Theodicy in a short essay titled "On the miscarriage of all philosophical trials in theodicy."[24] Theodicy was a problem was *the* problem by which Leibniz chose to represent his work.[25] For this reason, it is significant that Kant had a particular interest in this problem as well. Ann Loades suggests that "Kant's handling of the problem of evil in all its aspects is one element in his life-long preoccupation with the work of Leibniz."[26] She also suggests that as a result of the way in which the scientific study of nature progressed, Kant changed the way in which he thought about theology as

[21] Husserl, 51.
[22] Husserl, 60.
[23] Husserl, 66.
[24] Kant, Immanuel. *Religion within the Boundaries of Mere Reason and Other Writings.* Trans. George Di Giovanni and Allen Wood. Ed. George Di Giovanni and Allen Wood. New York: Cambridge University Press, 2006. 17.
[25] "The *Theodicy* itself was the one major work out of the many papers and books Leibniz produced by which he chose that most of his contemporaries should know him." Ann Loades, 362.
[26] Loades, 361.

it particularly related to theodicy.[27] Ultimately, he "reached the point where he had to refuse to concede to human knowledge of creatures a replication in some sense of the divine knowledge of creatures."[28] In this drastic separation, one gets the sense that Kant is fighting to maintain some semblance of meaning in a mathematised world. Furthermore, we get the sense that Kant would like to maintain the faith of Leibniz in the goodness of God, despite the appearances of the world to the contrary.[29] In order to maintain these claims, in spite of reason's inability to assert that this world 'is the most perfect whole possible', Kant suggests that 'what the study of nature and of man teaches us sufficiently elsewhere may well be true here also; that the unsearchable wisdom by which we exist is not less worthy of admiration in what it has denied than in what it has granted.'"[30] Here we see a space reserved for God and man, apart from the scientific, deterministic, mathematised world which is necessary in order to maintain a kind of faith in an underlying harmony of the world which enables one to have the courage to act morally: "this harmony required by morality 'absolutely cannot as the *Critique* shows, be conceived from the nature of the beings in the universe. Rather, as an agreement which for us at least is accidental, it can only be conceived through an intelligent first cause.'"[31]

Ucnik's Reading of Kant's Theodicy Ucnik suggests that Kant's solution to the problem of meaning in the mathematised world is that "we must *think* of God as the ground of the highest Good, which we ought to strive for if we want to live in a world that is a decent place."[32] This 'God' can only be known as a 'moral being' because we have no need to postulate him in order to explain the physical world and, likewise, we have no ability to postulate him as a necessary being. For this reason, "the proof of the existence of such a being can be none other than a moral proof."[33] We see here again the distinction between the

[27]Loades, 366.
[28]Loades, 366.
[29]Loades, 374 - 375.
[30]Kant quoted in Loades, 369.
[31]Kant quoted in Loades, 371.
[32]Ucnik, 75.
[33]Kant, 18.

moral realm and the physical, natural realm for according to Kant "if we recognise natural laws only — that is, the laws of nature that science reveals — morality is meaningless."[34] Thus, if we want to live in a "decent world" and "to think of moral laws," we must think of God as only a "stipulative idea."[35]

Ucnik suggests that this is the result of a shift in the "domain of knowledge" — we have gone from grounding our knowledge in the Divine to grounding it in the empirically measurable.[36] Any notion of the Divine is replaced by a certain kind of scientific reasoning with a formal and idealized structure such that "nature, with its purposes and *telos*, is transformed into the geometrical manifold of modern science..."[37] Thus, one way of bringing back the (at minimum) stipulative idea of God, we can conceive of morality as being some aspect of divine reason as Kant does in his moral maxim which Ucnik suggests is "a combination of divine law and human *Willkür*."[38] This moral maxim, then, constitutes an intersection between human reason and divine reason in the form of a being able to submit oneself to the unconditional moral maxim which is a representation of the divine law.

The trouble for this concept of submission to the divine law is that it is possible to allow one's own conditional good to take precedence over the unconditionally good: for "Kant, most human sometimes even without realising it, pervert the moral maxim, placing it in the service of self-love."[39] The question, then, is this: how does one come to the point of willingly submitting themselves to the unconditional moral maxim? One answer is to rely on the power of self-interest in the context of an eternal framework in which a last judgment will assure just rewards for one's behavior. Such an account, however, fails to account for love and is not itself worthy of love. Ucnik suggests that Kant is aware of this problem as he asserts that "the Christian reward cannot be understood 'as if it were an offer, through which

[34]Ucnik, 75.
[35]Ucnik, 75.
[36]Ucnik, 75 - 76.
[37]Ucnik, 76.
[38]Ucnik, 77.
[39]Ucnik, 77.

the human being would be *hired*, as it were, to a good course of life; for then Christianity would. . . not be in itself worthy of love.' "[40] At this point, Ucnik touches on what seems to be a self-referencing definition of love at work in Kant's morality. Since love, for Kant, "cannot be directed toward a person" but rather only towards " 'the benefactor's generosity of will' derived from 'what is universally best for the world state,' . . . to love is to love the moral law which is universally best because it is universally valid. . . "[41] In other words, love is a deterministic function whose value is given by the unconditional moral law. It is not an act of will so much as an obedience to the 'function' of the unconditional law.

Thus, with this understanding of love, we can get a better sense of what it would mean for Christianity to be worthy of love: Christianity is only worth of love if it intersects sufficiently with the unconditional moral maxim, or perhaps more accurately, only if it contains the whole unconditional moral maxim. And so the grounds for moral behavior in the context of Christianity goes back to the intersection of the divine law with the human submission to this law which can only be known through moral reasoning. This gives us a better sense of the problem that Kant is trying to answer, namely, how morality can exist within a mathematised world, but it does not give us a sense of the motivating force behind submission to the unconditional law, as envisioned by Kant. Here it should be noted that Ucnik's use of Kant is not intended to investigate this question; rather, Kant's theodicy is a means for framing what Ucnik takes as Dostoevsky's dependence on eternity for motivating moral behavior.

The Motivation for Morality Conceptually, in the Kantian framework, we have a structure in which it would be possible for morality to co-exist with a mechanized, deterministic world. In this framework there is a separate sphere of human action which is guided by the will, the sphere of the noumenal. The question remains, however, as to what force would motivate a person to behave morally — especially in light of the fact that so much suffering is brought

[40]Kant quoted in Ucnik, 79.
[41]Kant quoted in Ucnik, 79.

directly from the malicious behavior. The answer cannot be motivated by love, at least as typically understood, because love is merely a determined product of the unconditional moral maxim, as we have seen. This suggests that the answer, in the Kantian framework, lies in some aspect of reason. In particular, it is the same kind of reason by which we come to know God as a moral being: efficacious practical reason.

We can reframe this question in an important context by taking as given human free will in the noumenal sphere alongside some sort of corruption of that will, which will be articulated hereafter. In this way, the question that we are trying to answer is this: how is it that human beings are capable of doing good in light of the "*radical* innate *evil* in human nature"?[42] To answer this question, we turn to Kant's *Religion within the Boundaries of Mere Reason* where we learn that "the ground of evil cannot lie in any object *determining* the power of choice through inclination, not in any natural impulses, but only in a rule that the power of choice itself produces for the exercise of its freedom, i.e., in a maxim."[43]

This radical innate evil in human nature is, in some sense, just as inscrutable to us as our propensity for good: "One cannot, however, go on asking what, in a human being, might be the subjective ground of the adoption of this maxim [good maxim] rather than its opposite [bad maxim]."[44] Kant is almost forced to this position in order to maintain freedom by the fact that "if this ground were ultimately no longer itself a maxim, but merely a natural impulse, the entire exercise of freedom could be traced back to a determination through natural causes. . . ."[45] In spite of this inscrutability, Kant persists in trying to know what he can about this propensity for evil and how it might be overcome. Ultimately, his answer is shrouded with some sense of mystery. On the one hand is the mystery of the moral imperative for "in spite of that fall, the command that we *ought* to become better human beings still resounds unabated in our souls," and, on the other hand, there is a faith that

[42]Kant Religion, 56.
[43]Kant Religion, 47.
[44]Kant Religion, 47.
[45]Kant Religion, 47.

"we must also be capable of it [becoming better human begins], even if what we can do is of itself insufficient and, by virtue of it, we only make ourselves receptive to a higher assistance inscrutable to us."[46]

This confidence in being able to act morally comes from our only connection to the divine which comes through efficacious practical reason. The intersection between the divine and the human that Ucnik discussed takes place in what Kant calls "authentic interpretation" which we see at work in the question of theodicy. As in the question of the first subjective ground of determining our moral maxim, our ability to determine anything of God's final purposes from the world is severely limited. Despite the fact that the world, as a work of God, can "be considered by us as a divine publication of his will's *purposes*," it is a "closed book" for us "*every time* we look at it to extract from it God's *final aim* (which is always moral)...."[47]

suggesting that in a world without speculative metaphysics and rational religion, "Kant's achievement is to rethink the role of God and the place of humans in this modern, mathematised universe; which ceases to have meaning in itself, turning into a mechanically self-driven machine, oblivious to human ends and hopes, and devoid of any moral precepts."[48] In this mathematised universe, God becomes irrelevant because he is outside the sphere of knowledge knowable by scientific investigation and, therefore, he is superfluous for its investigation: "If nature is mathematical, as science conceives of it, then humans can devise ways to know it. God is superfluous in the scientific ediface."[49]

Before continuing with our analysis, however, let us focus in on the specific problem within Kant's project: theodicy, by which Kant understands "the defense of the highest wisdom of the creator against the charge which reason brings against it for whatever is counterpur-

[46]Kant, 66.
[47]Kant, 24.
[48]Ucnik, 74.
[49]Ucnik, 74.

posive in the world."[50] In order to argue for the "miscarriage of all philosophical trials in theodicy,"[51] Kant writes a short essay with a peculiar structure: it is structured as a series of 'because' statements: '$A \because B \because C$ '. Due to the fact that we can express the statement '$\alpha \because \beta$' as the statement '$\beta \Rightarrow \alpha$',[52] this logical structure suggests that the most fundamental aspect of the argument is contained in the 'C' section.

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[50] *Ibid.*, 17.

[51] Kant, Immanuel. *Religion within the Boundaries of Mere Reason and Other Writings.* Trans. George Di Giovanni and Allen Wood. Ed. George Di Giovanni and Allen Wood. New York: Cambridge University Press, 2006. 17.

[52] That is, if β then α or β implies α.

Bibliography

Section C: The Authentic-Doctrinal Disjunctive

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