

The ethical transformation of risk

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Abstract

Risk is conventionally construed as the likelihood of harm, damage or undesirable consequences as a result of the interaction between natural phenomena and human activities. It thus unites two widely heterogeneous spheres, the one governed by the laws of nature, the other by moral consciousness, reason and affective life. Typically, the management of risk consists in translating the logic of technological and organizational governance into the logic of human contingency, and vice versa. The concept of risk is in this sense the meeting place of nature and the human life-world. Methodologically, the analysis of risk thus implies a need for both technical and ethical tools. Risk research has long recognized that risk is dependent upon the social systems in which it is situated, but little research has explored the ethics of risk, the meaning of accepting potential harm or loss and the ethos involved in human insecurity. Central to the evaluation of risk is the question of *value*. The potential for loss as a result of any given policy decision is weighed in correlation to the *cost* of what that loss would be. While a wide variety of models has been proposed in order to optimize the precision of such calculation, the translation of loss estimates into human costs rests upon the assessment of gain and loss at the meeting place of two different spheres of value, characterized by two different foundations all together. Are technical and ethical values commensurate at all? And, if so, what is the scope and extent of their commensurability? What are the actual mechanisms by which technological assessment of risks can be translated into human consequences? Can the ethical transformation of risk be modeled and standardized? The proposed paper will explore the meeting place of human and technical value and underscore the modes and limits for the transmission of ethical values between natural scientific evaluation human consequences.

Introduction

In the summer of 1754 the Swiss-born philosopher Jean-Jacques Rousseau responded to an essay competition launched by the learned Academy of Dijon. His response to the question “What is the origin of the inequality among humans”, published later under the same title became one of the classics of philosophical anthropology. The treatise, which essentially criticizes social convention and the institutions of private property as the source of inequality, builds upon a fundamental distinction between two types of living beings: humans and animals [1] In a remarkably eloquent defence of the humanity of human beings that earned him the ire of the nobility and the suspicion of the Church Rousseau signals five essential differences between humans and animals.

First, humans, in contrast to animals are free while animals are slaves to their nature. (A pigeon would die of hunger standing beside a plate of the best meats). Second, humans differ from animals by their perfectibility, their ability to improve, to learn. Third, humans possess passions that animals cannot know; fourth, in their relation to death human and animals are distinct: where the former orient life itself relative to the perspective of death, animals live their natural programmes unaffected by horizon of the end. By the same token, suicide, death as a self-chosen alternative to life, is unthinkable in the animal world. Finally, according to Rousseau humans are distinct from animals by their uncanny ability to do harm to each other: the varieties of torture and other forms suffering we are capable of inflicting on each other is unique in the world.

To this list of characteristic differences between humans and animals can be add one more: *risk*. Unlike humans the animals that Rousseau so famously analyzes have no metaphysical relation to their own existence, to the dangers of their surroundings and thus no relationship to the contingency of their own being. Nature simply holds no risks, since there is no sense in which natural beings could ever think of themselves differently. As

there is no risk in nature, there is no risk in the lives of animals. Yet I will argue, in what follows, that risk is not only a physical necessity, that it derives from the reality of what we commonly call the “laws” of nature. I assume in the following risk is an *ethical necessity*, that risk, both the concept of risk and the experience of risk as ethical is an unavoidable part of human self-understanding.

In advancing this argument I clearly link up with the long-standing debate about “objective” and “subjective” risk, about the role of culture and society in the determination and experience of risk. I will take account of these perspectives in what follows, and attempt go somewhat farther. The increasingly elaborate history and theory of risk tells nearly as much about the ethics of history and theory as it does about risk.

Few concepts encapsulate the depth and breadth of human experience like *risk*. The concept of risk plots a vast array of dimension in human experience: it reflects our experience of the past and our aspirations for the future, draws upon our own individual experience as well as the experience of others, it reflects what we know and necessarily delves into the unknown, it revolves around certainty uncertainty, and the very frontier between faith and reason. Risk is profoundly involved in the metaphysics of the unknown, in concern for the other-worldly. This can be clearly illustrated by a historical reconstruction of risk. From its first traces risk seems inseparable from religion, from Ancient Greece to the superstition of the Middle Ages, to the Enlightenment philosophers, and onward [2]. Moreover, risk is inseparable from a certain question of power, of mastery and submission. The sciences of risk, from frivolousness of the pre-modern science, to the challenge of probability and statistical uncertainty, to the new sciences of risk management, all conceptualize risk as something to overcome, an experience whose time can and should be put to an end.

The study of risk has thus changed profoundly throughout time, distinctly following the historical evolution of our physical understanding of the world. The most insistently recurring theme in this history of risk is the history of an attempt to eliminate it, and by a vast array of means, from pragmatic to theological. Yet if the efforts to eliminate risk have varied, the need to take a human, and thus ethical, attitude toward it has been unchanging.

The purpose of this paper is to argue that the fundamental, and fundamentally neglected, characteristic of risk is its *ethics*. By the *ethos* of risk I mean its function as a meeting place for the expression, incorporation and negotiation of human values. I mean to say that risk is a site of *decision* about human identity, about who we are and what we want, what is dispensable and what is indispensable.

The tacit assumption of this paper is that ethics and risk share the same pathos, the same logic or discourse of humanity, in all its fears and frailties. They are both profoundly metaphysical. They are both discourses of the unknown the invisible but meaningful reference to which human life makes. They are both related to the deep, abiding philosophical problem of contingency, that is, the question of whether the here and now is somehow necessary, could have been otherwise, or maybe, even not at all.

In what follows I will set out the very basics of the five predominant notions of risk in order to tease out their silent ethical underpinnings: rationalist, system theoretical, cultural, reflexive, and governmentality. The ultimate aim of the essay will be to make a concluding approach to the notion of “managing risk”. Think what one may about the instrumentality of the concept of risk, its management is unavoidable human.

Rationalist theory

Historically the *rationalist* conception of risk grows out of the need to financial determine and redistribute uncertainty. To put it simply, risk is assigned a cost. Once the cost is paid, the risk is absorbed into the transaction and disappears. If the “worst” should happen, “nothing” is lost. Or, rather, “what is lost” has already compensated for. Its *value* has been transcribed into financial terms as the product of the cost of loss and the likelihood of loss. The transaction is then carried out in that *lingua franca*. Two purely numerical sciences are brought together to make such a calculation: the science of probability and the science of valuation. This single, unified measure of risk is thus considered the basis of action on an individual or collective basis.

This second valuation is carried out on the basis of yet another presumption of the individual as rational actor along the lines of one or more variations of rational choice theory [3]. The basic presumption here is that individuals consistently and rationally connect intentions with actions and actions with outcomes. For any given physical and social context a fixed set of alternatives for action are compared based on the possible outcomes of their realisation. Variations on the theory abound, but most would agree on the principles that actions are based

on individual choices, that a clear distinction can be made between means and ends, that individuals wish to pursue goals and, moreover, wish to do so in manner that maximizes the utility of such goals.

A number of ethical valuations can be underscored in this process.

The object that is risked lost, the danger that is risked realized is commensurate with the quantitative price. The exchange of values, both symbolic and material is satisfied and repeatable

It is safe to say that the traditional ambition of risk analysis has always been to *eliminate* risk. The modern notion of “risk management” to which we will return is only a variant on this notion, and presupposes it. In early developments of the notion of risk this ambition took the shape of an existential need to master or at least minimize the life-threatening forces of nature. In its early modern development its mastery was construed as a key steering economic processes, and investment and as such has been a key motor for modernization process. More recently it has taken a more ambiguous form.

Classical economics and insurance seek to determine the “objective” or “actual” risk of a phenomenon. The presupposition for such determinations is a mathematical method designed to systematize, quantify, and thereby standardize observations of naturally occurring phenomena. Though conception or another of risk has played a role in human history since ancient times, such a mathematical system did not arise until quite recently, first by way of the statistical methods of Laplace, Fermat and others, then later through the game theoretical analyses of von Neumann and his successors [4].

Both the risk analysis and the rational choice theory on which it depends are based a presumption of the transparency of value. Value has no substance in itself, it is nothing that abides or endures. It is rather what appears at the two ends of a transfer, a transformation from the risk of loss to the cost of that loss, conceived and absorbed, cancelled or extinguished in its own mechanism. is conceived as a pure mode of transfer, or translation of one ontological domain to another, from one form of being to another. Consequently they do not admit ethical perspective as part of their analysis. The built in pre-conception is that such *value* can be exhaustively transcribed into financial value.

At first glance, the rationalist seems immune to human ethos. Or rather, the aim of rationalist risk theory is to bracket the human, eliminate it from the value equation. Or to put it another way again, the ethical dimension is precisely the uncertainty that one seeks to abrogate. The rationalist theory of risk therefore depends entirely on a discrete distinction between monetary or numerical value and ethical value of the kind we are interested in here.

This is by no means to say that the that rational theory is *un-ethical*. It is the very attempt to leave the ethical dimensions of risk aside, to transfer them to a different level of analysis, one that is adjacent to the instrumental action-oriented one.

System theoretical analysis

Simply stated, sociological system theory builds upon the insight that both observation and analysis of social phenomena take place within a social setting, discourse and matrix of pre-established meanings, ways of understanding and methods of evaluation, in short a *social system*. No less is relevant for risk as a social phenomenon. In the words of Luhmann, “the outer world itself knows no risks since it knows neither distinctions nor expectations, nor evaluations, nor probabilities. It is as though it were the creation of observing systems in the universe of systems” [5].

For system theoretical analyses risk is reflexive, it is situated as part of a social reference system. Following Luhmann, Japp underscores three reference axes: the temporal, the subject-area, and the social [6]. To conceptualize risk, then to apply the concept or risk, assess the risk of any given phenomenon, is a reference to take stock of other assessments, to situate the evaluation in relation to previous and foreseen risk-events. It involves an awareness of the different points of view around risk, in particularly the opposition between the “expert” and “layman” perceptions and understandings. It is to make evident the relations between a variety of social domains and perspectives. In this sense, system theory presents a kind of relativism. The essence of any social truth arises from the *differences* between self-referential standpoints along a number of axes. In the words of Japp:

In this sense there is no *a priori* content, but rather always only differences which occasion descriptions from one side or the other (experts or laymen) and thus making these descriptions available for the identification of further content [7].

The concept of risk is thus formed as the description of risk, differentiated, communicated and reflected through different, often opposing, subjective positions, as well as opposing levels of competence and of direct concern with the consequences of risk. The system-referential nature of this understanding of risk is thus deeply inter-subjective. It might be described as a continuous negotiation of perceptions, experiences, competences and interests. The responsibility for risk and for reactions to it is therefore socially bound. The human *ethos* is in this sense immediately present, and subject to negotiation, opposition and reconciliation just as the conceptualization itself. The ethics of risk is in this sense merged with the inter-subjective relations of everyday life, it is the object of both retrospection, critique and adjustment.

The analytic challenge, as for system theory in general, lies in mapping the entire universe of references, or taking account of the system such that reduced or “local” analysis become possible. The ethical universe lies parallel to the knowledge-based universe.

Cultural analysis

If there is to be an ethical substance associated with risk, it is by nature to be associated with the notion of the individual as ethical being. Ethics is an individual experience, some might say the constitutive or existential experience of the individual. Mary Douglas builds her cultural understanding of risk upon a critic of just such an ethical individualism is clearly.

The question for Douglas (and Wildavsky) and cultural risk analysis in general is “how do particular kinds of danger come to be selected for attention” [8]. In her classic work *Purity and Danger* Douglas theorized danger as the key element for the construction of social boundaries between individuals, groups and communities [9]. Danger, taken in its wide meaning, is the fundamental demarcation between us and them. It is important to underscore that Douglas does not go so far as to say that individuals, groups and communities are *constituted* by their boundaries to danger only that such boundaries only take place in association with constituted groups. , and as such a contributor to the constitution of the self and the group. Douglas does not

In later writing Douglas thematizes risk more explicitly, associating it with culturally produced and maintained values. Culture is understood as a certain set of values. Risk to the culture is risk to the values. Notions of risk are filtered through cultural values. Yet despite the constructivist bent of this conception of risk Douglas resists a “strong” constructivism. For her, risks are “real” and the reality of danger comes first in the analysis [10]. At the same time, the risks we take are inseparable from the cultural context in which they are appear:

The choice of risk to worry about depends on the social forms selected. The choice of risks and the choice of how to live are taken together. Each form of social life has its own typical risk portfolio. Common values lead to common fears (and, by implication, to a common agreement not to fear other things). There is no gap between perception and reality and not correct description of the right behaviour, at least not in advance. The real dangers are not known until afterward (there always being alternative hypothesis). In the meantime, acting in the present to ward off future dangers, each social arrangement elevates some risks to a high peak and depresses others below sight. The cultural bias is integral to social organization. Risk taking and risk aversion, shared confidence and shared fear are part of the dialogue on how best to organize social relations [11].

As we will see, the standpoint of Douglas’s analysis is markedly different from alternative perspectives. Moreover, the question of the standpoint is decisive in the comparison of ethical underpinnings of risk in the analytic literature. In are more or less traditional manner, the *ethos* of Douglas’s system appears as the notion of choice, as free will.

Characteristic for a cultural analysis of this type is the intervention of what Douglas and Wildavsky call “reality”, that is, the objective, material dangers either inherent or exceptionally present, in daily life. Both the objective dangers themselves and their prioritization (“elevation”) are guided by an objective social reality. Ethical imperatives are thus derived by a pre-existent ethical subject from a pre-existent danger-reality. An autonomous subject, by and large ethically predisposed thus reacts and embodies moral responsibility in

response to a system by and large pre-determined. The margin of actual liberty, and thus responsibility, is limited in this system.

Reflexive modernity analysis

Sociological risk analysis has developed for nearly 20 years in the shadow of Ulrich Beck's monumental *Risk Society: Towards a New Modernity* [12]. Together with an array of subsequent works, both with and without the collaboration of a number of widely recognized sociologists, he has developed an influential and powerful set of conceptual tools for understanding modernity and the notion of risk with which he so closely associates it [13].

Beck's theory of risk society holds a position between the strong objectivism of the rationalist view and the constructivist position of certain aspects of Douglas's approach. On the one hand, like Douglas in certain aspects, Beck recognizes risk as actual existing danger, true and "irreversible threats" to real existing objects, in particular nature [14]. On the other hand, Beck recognizes the way in which symbolic and cultural processes *produce* risk, or, in his optic, a kind of risk imaginary. This opposition becomes more pronounced in his subsequent writings on environmental risk [15] where it is the natural sciences, the traditional producers of scientific rationality who are the source of experiences of risk. In his analysis of the ecological movement Beck directly suggests that even scientific facts are culturally and socially situated [16].

This return of the need for certitude to the effective origin of risk is characteristic of Beck's notion of "reflexive modernity". Early modern science and technology were not only the privileged producers of goods for societies still optimistic about infinite progress and increase in welfare. The "second modernity" that Beck associates with risk society is characterized by the production of risks and fear by the very institutions that were assumed to be the producers of certitude. One means of this production of risk is straightforward: heavy industry produces environmental dangers as a by-product of its production of other goods. In a more complex way however, technological production of late-modernity produces so much accessible knowledge that laypersons find themselves possessing too much information, too much knowledge and are unable to process or understand it all. A third reason is spatial: in the late modern age of globalisation, the negative effects of industrial production are not localizable. Instead, they affect a variety of locations around the global economy.

Beck's sociology concerns itself, among other things, with the destiny of the individual against the backdrop of social changes. It relates to the ethical question of the responsibility of the individual, the transformation of intentions into action through ethical choice. That relationship has changed radically, according to Beck, through the evolution from the first to the second modern. In the first modern the individual was by and large the subject of risk perception and the danger could be objectified concretely, localized, specified and confronted. Responsibility lies in the more or less direct mediation between individual object and the object of his or her experience. In the second modern, responsibility for risk and handling is shifted away from individual in a number of directions. For reasons of time and space, connectivity, social organization and, not least, inadequate technical competence in an increasingly complex world. The *ethos* of the analysis of risk society thus lies in the weakening of the individual, the disorientation of the lay person in relation to the vastness of knowledge. The individual in the second modern is less clearly the beneficiary of modernity than its casualty. The ethical nature of the second modern is complex, aggregate, and irreducible to the classical categories of the political.

Governmentality analysis

The implications of Foucault's late Collège de France lectures on security and "governmentality" for theories of risk have been increasingly explored in the last years. In such studies the focus turns from the social and cultural dimensions of modernization processes to the

"Risk" itself is not broadly thematized in Foucault's work. However the innovation brought through his use and development of the term governmentality has had decisive effects on a number of fields. That innovation is essentially linked to the way in which Foucault connects two discourses or fields of rationality. The one is the notion of governing, the other history of subjectivity. In traditional political theory it is considered possible to study and understand the nature and function of the politically constituted government of people without asking questions about the subjective nature of power. The individual, object of political power, is considered unproblematic. Foucault's approach considers the subjectivity of the individual as the *effect* of political power, as being historically shaped and determined by changes in power and power structures in society. Thus not only is the individual governed by the state, but also the political subject, the subjectivity of the individual is

“governed” by various forms of power. This “governmentality”, which defies traditional means of analysis, can be studied, according to Foucault, by studying the “discourses” of power, that is the different types of rationality that are deployed by the state and others who have power. Risk is one type of such rationality [17].

The one area of risk studies in which Foucault did make an important intervention is the historical emergence of insurance. As I mentioned earlier, it was the innovation, and followed by it the advances of political economy that

As François Ewald formulates the shift in his extraordinary 1991 essay “Insurance and Risk”:

In everyday language the term ‘risk’ is understood as a synonym for danger or peril, for some unhappy event which may happen to someone; it designates an objective threat. In insurance the term designates neither an event nor a general kind of event occurring in reality (the unfortunate kind), but a specific mode of treatment of certain events capable of happening to a group of individuals—or, more exactly, to values or capitals possessed or represented by a collectivity of individuals: that is to say, population. Nothing is a risk in itself. There is no risk in reality [18].

According to this conception, risk is not an objective reality, nothing which can be empirically identified and, more importantly, empirically countered or eliminated. Risk is a fully imaginary construction. Yet this way of construing risk should not be confused with what is often called “social constructivism”. It is not the collective social imaginary, or at least not the social imaginary alone, which determines the nature of risk networks. It is rather, what Ewald calls the “insurantal imaginary,” that is, “the ways in which, in a given social context, profitable, useful and necessary uses can be found for insurance technology”. Also a political imaginary [19]. It is the technology of insurance that determines the risks to be found in the social sphere, not the social which first delivers the social. By “technology of insurance” we are referring not simply to the formulas according to which compensation or reparation take place through the contractual relations of the insurance industry. It is far more a discourse, a kind of logic or rationality, a formalisation of the social world through probability and statistics.

Where is the ethical moment in this way of thinking through risk? From one point of view Ewald’s Foucauldian analysis demonstrates that that ethical is all but absent of from the conceptualisation of risk through insurance. For, on a general level, the “insurantal imaginary” removes human responsibility from the formula connecting life and the dangers commonly known as risk. The statistical calculations and probabilities of the insurance rationality do not include individual or collective responsibility. Unlike a moral or juridical analysis, the insurance analysis does not concern whether there is fault, or responsibility, or even what the cause or effect of any given event might be, catastrophic or otherwise. The rationality of insurance does not regard the individual but rather constructs a kind of virtual subject. The insured population is statistically reduced to an “average sociological individuality” [20].

Toward a comparison

The essential tension precluding an ordered comparison of the ethical underpinnings is the considerable difference in subject positions they assume. Schematically we have plotted our presentation in an order of growing subjective import. Although ethical responsibility is clearly to be correlated with subjectivity, with a discrete subjective, individual identity, the relation is not clear. The rationalist view

For rationalist theory, subjectivity plays no role. The very definition of risk which serves as a point of departure for analysis sets its default at full, objective transparency.

For the socio-cultural analysis of Mary Douglas, the subject position is that of the observer within the discourse of anthropology. Here subjectively based values are associated with perception of risk, but these perceptions are determined from the scientific standpoint. The *criteria* and definitional guidelines are however *not* subjectively determined, but rather set out as the pre-condition of the scientific observation. This pre-condition is not considered as part of the analysis. This sets it at odds with the governmentality analysis which sees the very criteria for determination of risk—and not forcibly risk itself—as pre-determined, and constantly re-pre-determined by the various dimensions of power which are associated with the state, and the agencies which derive their authority from it.

Thus while Beck problematizes the individual in relation to the social in a way that is an advance in complexity from Douglas’s analysis, the individual remains an unproblematic category in a way that is unacceptable for

governmentality perspective. The ethical substance traditionally concentrated in the individual is preserved. For Beck ethical choice remains both possible and necessarily the basis of social responsibility.

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