The Imperative of Responsibility

A fundamental thesis in Hans Jonas’ *The Imperative of Responsibility – In Search of an Ethics for the Technological Age* (1974) is that the golden promises of modern technology have turned into a threat, and that technology is inseparably linked with the threat. The thesis is a reminiscence of Heidegger’s diagnosis of the modern in «The Question concerning Technology»: The «Enframing» (Gestell) is a way to uncover the world where not only nature but also human beings are revealed as part of a «standing reserve» (Bestand). Through technique and technology, nature is just a raw material for manipulation. In this technological «Enframing» of the world, human beings sees everything as orderable, as part of a standing-reserve. Even man is seen as a part of a standing-reserve. This kind of uncovering the world is not in itself a threat amongst other threats, but the threat. In light of the concepts of techne and poiesis in ancient philosophy, Heidegger concludes that the arts is a way of uncovering the world which will function as some sort of a counterbalance to the technical-instrumental uncovering of the world.

Like Heidegger, Hans Jonas takes the concept of techne as a starting point in his analysis of technology. But unlike Heidegger he looks at it from an ethical perspective: In antiquity techne had a limited practical function. In modern times technique and technology has becomes the measure of progress. It has become so important that it is to be understood as the driving force for progress, as the principle form of human development. Technology has become the «Calling» of mankind. But we have ourselves become objects of technological manipulation: Research on techniques on how to extend life, to do behaviour control and to do genetic manipulation points to an unknown territory. This carries with it profound ethical implications. Technology must be made into an ethical problem. But the situation requires a totally new contemplation on ethics. Traditional ethical theory is rooted in suppositions that are of a different kind than those we face in a modern technological civilization.
Hans Jonas believes traditional ethical theory has four special characteristics:

I. All dealing with the human world is ethically neutral
II. All traditional ethics is *anthropocentric*.
III. The entity «man» and his conditions is considered constant in essence and cannot itself be object of reshaping *techne*.
IV. Doing good deeds or avoiding doing evil is associated with the act itself, which means that the range of actions is limited in time and space. Traditional ethics is «neighbour» ethics.

The moral field is limited to common presence, and future perspectives are limited to other people’s expected lifetime. But why do these limitations require a completely new contemplation of ethics? The shortcomings of traditional ethics become evident in an analysis of how modern technology affects our actions. The use of advanced technology involves *collective* actions. Actions for which the person acting, the action itself and its effect are no longer identical to those found in the intimacy sphere. And we cannot know the full consequences of the actions, its damaging effects on nature and future people. But this does not mean that we are not responsible. Both nature and future generations is the subject of our collective actions and therefore we have obligations toward them. They constitute a major part of our dimension of responsibility because we can manipulate it by the use of technology, and nature and future people must therefore be included in ethical reflection. The consequences are irreversible and *cumulative*, i.e. they pile up. It is therefore impossible to predict the totality of their effects in an indeterminate future. And what is regarded as «constants» can potentially undergo changes given the new genetic technology. The human condition is the subject of reshaping *techne* today. This makes it problematic to speak of a «constant» and «unchangeable» in human nature. Moreover, it puts the question of moral responsibility towards other people in a new light. Modern technology’s golden promises have turned into a threat because it has caused serious degradation on our ground of existence, i.e. nature. It also has potential to change human nature in itself. A new ethics for the technological civilisation is therefore seen as an urgent necessity.

I will now look at the fundamentals of Hans Jonas’ proposal for a new ethics. Thereafter I shall review how Jonas considers the relationship between ethics, social
order and political ideology. Finally, I will consider the extent to which the theory can be implemented in today’s environmental policy.

A New Ethics of Responsibility
The characteristics of the modern technological civilisation have changed the nature of our moral obligations, according to Hans Jonas. The concept of responsibility has been given a new dimension. He expresses this in a reformulation of Kant’s categorical imperative: «Act so that the effects of your action are compatible with the permanence of genuine human life». We must ensure that the effects of our actions do not destroy future «genuine human life». To ensure «genuine human life» means to protect the future humanity’s autonomy, dignity, integrity and vulnerability.

But this in turn requires the preservation of nature so that future generations can have the best possible living conditions. Man cannot be fully human without nature; the destruction of nature is a threat to man's own «essence». We are part of nature, and therefore we have a responsibility to preserve and protect nature. But this also means that a philosophical confrontation with the concept of freedom takes on a new meaning. Here, the modern occurrence of the biomedical sciences and genetics is essential. As I have mentioned, Hans Jonas believes that man himself has been the subject of techne through biomedicine. This is a serious problem for moral philosophy, because biomedicine is a means of behavioural control. The most important thing for Hans Jonas is what this will mean for our moral awareness. The potential development of behavioural control that is located in biomedicine and biotechnology can devour responsible persons in programmed behaviour systems. The question that becomes inevitable is: What image of man should we feel committed to? Who should decide this image? Based on what type of knowledge should it be determined? And with what moral right can we assume that future generations will require the same kind of choice as us in terms of value preferences? Must we not first ask in what ways modern technologies can transform people so that future generations’ moral awareness might be of an entirely different nature than ours?

Hans Jonas claims that the application of technology should be regulated by norms because it may harm future generations. But what concept of value shall we operate with in such a future-ethics, and what shall its standards be derived from? Jonas has a
difficult starting point: Modern knowledge’s development has been driven forward by a movement, the mathematical science, «which, because of a compulsive complementarity has washed away the foundation that norms can be derived from». This must mean: If the rational is not just determined by the positivist science of measurements, we must recognise the possibility of a form of rational metaphysics. This is a daring way to go at a time when metaphysics is regarded as dead. In modern philosophy there is little room for a jonasian moral realism that is metaphysically oriented. However, Hans Jonas believes we find ourselves in a moral state of emergency, and that metaphysics is again necessary. Before I explain Jonas’ assertion that ethics must be founded in metaphysics, we shall have a closer look on the problem of future generations and morality.

What could be decisive for normative assessments of the relationship between technology use and future generations? We do not know the value preferences of future generations. We do not know if future technological innovations will place the current concepts of resource problems in a completely different light. It is not clear if present actions will be perceived as beneficial in the future. The problem is whether these uncertainties discharge us from paying attention to what we believe will be their preference. Decisions based on uncertainty require that we do not take into account hypothetical phenomena such as the possibility of future unlimited access to clean energy, and that we stick to our own value preferences. Although it is possible that technology can be of a completely different character in the future, it does not mean we cannot assume that future generations will prefer the benefits of fresh air and clean water.

Whatever uncertainties we face, we should make a distinction between epistemological and ontological problems associated with future persons.

Epistemological problems:
- What effect will uncertainty or ignorance have on our assessment of moral responsibility and moral obligations to future people?
- Do we have sufficient knowledge of the near and distant generations’ interests, needs and living conditions that we can include their welfare in our decisions?

Ontological problems:
- Can moral agents have duties to non-existent people?
Can future persons have rights or be holder of rights?

What about future people’s contingencies? Present actions will not only affect future generations’ welfare and living conditions, but also their existence, number and identity.

As mentioned Hans Jonas is of the opinion that traditional ethical theory is not adequate when it comes to the problem of future generations. Let us therefore test the utilitarian principle of maximising general welfare in light of the above distinctions. Although Bentham’s calculations say that distance in time is not ethically relevant, the utilitarian is facing considerable difficulties here. First of all: How far into the future will responsibility for posterity stretch? Shall remote generations and preferences weigh as much as the interests and preferences of our own children and grandchildren? If all future generations should count alike, the equal distribution of benefits will mean that we are left with very small amounts of benefits ourselves. Yet it is difficult for the utilitarian to find a moral justification for a time preference with respect to near or distant generations. Secondly: How shall the utilitarian calculate the welfare of future individuals when she does not know or can know their preferences and needs? What welfare should be maximized? The average welfare for future individuals? Or a total (impersonal) quantity of the welfare for future populations?

Jonas has a somewhat different approach to the problem: “That there should be humanity is [...] the first imperative. [...] We are with this first imperative not responsible for man’s future, but towards the idea of man, who is of such nature that it requires its bodily presence in the world”. What does responsibility towards «the idea of man» mean? Immediately, it can be felt intuitively correct to take into account the welfare of our choice of action towards future generations, but there is something else to argue that such considerations should be a duty (cf. ontological status issues). As we see in the quote above Hans Jonas is not basically concerned with specific questions about how much we should take into account welfare of people in the future, or how much people living now should sacrifice to prevent future loss of welfare (c.f. «here is first the idea of man as it tells us why man should be, also tells us how they should be»). Jonas wants a binding code of conduct based on an ontological imperative. And ethics must be metaphysically based if we are to prove the validity of the imperative. The point is then, presumably, that if policy makers recognise and accept this, they will
adopt a binding code of conduct based on the imperative «there should be humanity in the future». This code of conduct will manifest itself in a norm-regulation of the use of potentially dangerous technology. The argument goes as follows:

First, Hans Jonas starts with a fairly radical assertion. He says that if we are to answer the question «Should there be people?», we must confront Leibniz’ fundamental metaphysical question «Why is there something rather than nothing?». (Jonas 1999: 88) When it comes to ethics and «ought», then, we need to consider what «value» can mean at all, «from whose objectivity alone an objective should-be and thus making a commitment to the being, a responsibility to the being, that could be derived» (Jonas 1999: 91). Such an approach is completely opposite of the dogmas of contemporary philosophy, where terms like «value objectivity» and «objective should-be» will be met with scepticism. In contemporary philosophy, it is strictly forbidden to distract from the current standards, from «is» to «ought» (Hans Jonas thus sets himself against G. E. Moore and his «naturalistic fallacy»). He believes that such a ban is itself an expression of a particular conception of nature which is historically conditioned.

I think Jonas wants to say the following: In the scientific explanations of nature, we use Ockham’s razor to cut away the subject, the interests, the emotions, the purposes and teleology (to show that from the methodological point of view it is enough to refer to causal connections). But this is something else than an understanding of nature. There is a difference between scientific explanation and ontological understanding. This is a well-known distinction in philosophy, and Hans Jonas does not want only scientific methodology to determine what nature is. He argues that there is an ontological «locus» in nature itself, that we can form a bridge between the supposed gap between «is» and «ought» without committing a naturalistic fallacy, that there is a «self-affirmation of being» in all biological life. This self-confirmation of the being is «empathetic to the opposition between life and death. Life is the explicit confrontation of being with not-being». (Jonas 1999: 129) There is, therefore, a primary duty to ensure that there will be life in an indefinite future, and to ensure the existence of the foundation of human life. The possibility of a new ethics depends on being able to give good reasons for an objective «should-be».

Let's say there are three necessary conditions for responsibility. The first and most general is «causal effect», that action has an impact on the world. The second is
that the action is under the moral actor’s control, while the third is that the actor to a
certain extent can predict the consequences of her actions. Under these conditions we
can identify two quite different forms of responsibility. The first is the formal
responsibility, i.e. that the actor is to be held accountable for her actions, whatever they
are. To say that someone is responsible in this way is not to praise or criticise the actor’s
actions, but to say that the actor may be a subject for praise or criticism. Hans Jonas is
more concerned with what he calls «substantial» responsibility: A moral actor has a
responsibility towards specific objects that commit to certain acts. It is this kind of
responsibility Hans Jonas has in mind when he talks about future generations.
Substantial responsibility is a function of knowledge and power, e.g. that we now know
that the use of technology can have future negative effects on nature and people, and
we have the power to do something about it. Because our knowledge in this sense not
long ago was fairly limited, there was also little concern about the future. It was simply
assumed that the conditions for human life, nature, would continue in perpetuity. But
we can no longer assume that the conditions of life will exist in the future, and we have
the knowledge and power act. We have substantial responsibility.

An ethics of responsibility cannot only adhere to something «objectively good»
that categorically should commit us. It must also address the question of the motivation
to act. What emotion can enable us to comply with strict responsibility for future life?
According to Hans Jonas, it is possible to point out a «natural feeling of responsibility», a
sense of responsibility «instituted by nature». This is a type of responsibility where
the immanent «ought-to-be» by the object is a priori, contrasted with a contractual
responsibility conditioned a posteriori. Natural responsibility is original, and all other
responsibilities derive their contingent validity from this. The archetype of such a
responsibility is parental responsibility, which is a non-reciprocal relationship. It will
thus be the archetype of substantial responsibility, discussed above. And here Hans
Jonas makes a strange turn. He compares the parental responsibility with political
responsibility, as a responsibility which is self-chosen where one seeks power in order
to gain responsibility.

It can almost seem like a category mistake to compare parental responsibility
and political responsibility, which, of course, Hans Jonas is aware of. What can be in
common at such an extreme difference and that allows both to run together into an
integral representation of natural responsibility? Hans Jonas summarises the common into three concepts: «Totality», «continuity» and «future». «Totality» means all aspects of the object of both parental responsibility and political responsibility, from «naked existence to the highest interests» from birth through Bildung in the broadest sense. «Continuity» means that the exercise of total responsibility dare not stop. And in «future» the future horizon is included in the various activities of both the parent and the statesman.

In light of the concepts of «totality», «continuity» and «future» we may ask ourselves: Can we be held accountable for future generations, as they do not exist? Hans Jonas’ answer is that responsibility should not be based on reciprocity. It requires a form of non-reciprocal obligation that is not grounded in the idea of compensation or other selfish motives. And the archetype of responsibility (including reciprocal relationships) is how we relate to our children. Nature has implanted in us a capacity to recognise a duty to act unselfish against our children. Children are a kind of paradigmatic «object» we are accountable for. Children awaken our sense of responsibility, but it is their characteristics, their being’s «ought-to-be» which catalyses the sense of responsibility, what motivate us to act responsible. Responsibility is thus based on the actual characteristics of the «objects». But an ethics of responsibility must, like any other ethical theory, relate to the rational reasons of responsibility, i.e. it must justify the principle behind the necessity of a binding «ought». It must also deal with the psychological reasons to its binding. «Ought to» move the will; a moral actor «allows» the «ought to» to decide the direction of her actions. Thus ethics has an objective and a subjective side. One has to do with reason, the other with feeling. The ethical capacity to feel the responsibility is part of what makes us human. When it comes to future generations, Hans Jonas maintains that we have a more general obligation to «procreation»: Existence, or being, makes a moral claim on us. This is obviously a claim that requires more substance.

Hans Jonas’ general idea is that there are objects that make us responsible because of their inherent characteristics. Hence, when it comes to the very existence of mankind, it cannot be future persons that make us accountable. Future persons cannot make us directly responsible as they do not yet exist. We must therefore not be responsible towards future individuals, but towards to «the idea of man» (which is of
such a nature that requires a *verkörperung* in the world). Our responsibility is directed toward the idea of humanity. According to Hans Jonas it is important to find an ontological foundation for human existence because ethics cannot provide a sufficient argument for human existence. It can only prescribe what you should do given that there will be future generations. The jonasian idea of humanity, on the other hand, obliges us to preserve its existence. Hans Jonas provides a metaphysical theory which can form the bridge between «is» and «ought». Such a theory demands a particular concept of value because it presupposes that it is possible to derive «mankind should exist» from the fact that people actually exist. Hans Jonas must also explain why human existence is better than non-human existence. It is this type of query that makes Jonas have to resort to metaphysics.

Hans Jonas’ idea is that there are two types of values. The first is «objective» values, i.e. those that are good in themselves. The second is the «subjective» values, i.e. the individual’s values, the values of someone. The question is: What does an objective value consist of? What is it about it that makes us responsible? If one argues that something is «objectively valuable», one implies that something should exist or continue to exist. But Hans Jonas goes one step further: he claims that the very existence of the value, or the value’s capacity in itself, is valuable. He develops this idea by pointing out a close connection between the «struggle-for-life», pursuit of goals and intentions and values. Hans Jonas maintains that a kind of pursuit of goals exists on a subconscious level in reality, as a part of nature: It is nature’s ultimate goal to maintain life itself. All organisms share a struggle for existence, have a purposive existence.

What has this got to do with ethics? The fundamental reason to accept any value is that struggle-for-life is better than the absence of it. Consequently, it is the capacity to pursue goals that is the good in itself. This idea is represented in Hans Jonas’ biocentrism, which I will not elucidate here. The point is that his biocentrism explain why it is better that something exists rather than not exist. Existence is better than non-being because it is life’s own expressed opposition to death (non-being). There are both conscious and unconscious organisms that have a «struggle-for-life» and consequently have objective value. Human beings of course have a special status in that we are moral beings. In such a perspective humans should stand out by taking responsibility for other living things, i.e. protect their struggle-for-life (because
struggle-for-life is objectively good). The fact that only humans can take responsibility makes other humans the primary goal of this capacity. But this should not be construed as a devaluation of nature because there really is no internal opposition between nature and man. Nature has an objective value because nature is a necessary condition for life.

**Ethics and political responsibility**

The question «who is responsible, and for what?» is answered in the above. But we should still clarify upon the relationship between responsibility and political power. Of particular interest is the fact that Jonas identifies various types of responsibilities. They range from formal responsibility and substantial responsibility, from the archetype of parental responsibility to the politician’s self-imposed responsibility. A person is free to take on a position of power and thus achieve the corresponding responsibility to provide for the common good for many. Obviously politicians have more power than ordinary citizens, but does this imply that they have more responsibility than ordinary citizens?

When it comes to protecting «the idea of man» we should all be ready to act in a way to protect it because the *combination* of all our activities threatens future human existence. It seems essential that everyone should be motivated to make sacrifices for the future. This would lead to the conclusion that there is no specific level of responsibility. Individuals, groups and institutions are all responsible. But the statesman’s responsibilities in a higher degree depend on the power of technology. The magnitude of responsibility must conform to the magnitude of our power. This is an explicit refutation of any attempt to discount the negative effects we can have on future prosperity. We and our statesmen are responsible as long as our actions can affect other people. Time does not limit the scope of this responsibility.

Jonas recommends that we develop a «heuristics of fear», i.e. the capacity to take in the possibility that future people may be negatively affected by our actions. If there is a risk that our actions could do harm to future existence, we should treat this hypothetical knowledge as if it is a fact. The slightest possibility of future harm should guide our actions. Our fear for disaster must be a guiding principle: It is through our fear of disasters that we notice what is valuable, and this will in turn affect our moral character.
The use of advanced technology may yield unpredictable consequences in an indeterminate future. Traditional ethical theory is not able to take into account such a problem. It is not adequate in this new situation, something which requires new moral imperatives.

Jonas formulates some general obligations for us which are based on the foregoing:
The consequences of our actions is no longer obvious, we do not see the totality of the consequences. Therefore we must acquire the knowledge about possible long-term effects of our actions. We have a duty to acquire knowledge, a duty to know, to identify the possible outcomes of our actions. This is of special importance for the bond between science and politics: Jonas calls for a «comparative futurology», or a multi-disciplinary risk research.

No matter how much information one can gather through scientific models, natural and social systems will is too complex for the models to take into account all possible outcomes. We must develop a reflective learning between «hard» and «soft» sciences, especially regarding environmental and climate problems. As mentioned, we should treat this possibly hypothetical knowledge of harmful effects as if it is a fact. I interpret this as a variant of the so-called precautionary principle from environmental law and politics. It is morally unacceptable to take risks to achieve benefits if this means that nature and / or other human beings are in danger of being harmed. We no longer have power over nature through technology, the prerequisite for modernity’s scientific and technological revolutions. The technological development runs itself autonomous and unruly and has taken power over us. We must reclaim the power of technology, says Jonas.

**Evaluation**

But how are these new jonasian imperatives to have a central importance in our globalised society? Jonas argues that if individual human action must undergo major changes, the nature of politics must also change. The big question is to what extent Jonas’ ethics are applicable. Is it too generic to be able to break through in a political sphere?

We must bear in mind that Jonas’ arguments are made at a general level, i.e. he argues for some general principles. But at the same time the principles are very basic,
because they commit us in everything we do, not only to some restricted areas. The strength of the theory is that it can force politicians to raise their eyes and think long-term, to think cross-sectional, think about the overall effects decisions and actions can have. Take climate change as an example: There is currently a great debate, at least in the media, about the causes of climate change, whether they are natural or whether they are human induced. From Jonas’ ethics of responsibility, there is no doubt that if there are reasonable grounds to doubt that the changes are caused by natural fluctuations, there is no ethical reason for exclusion of responsibility and failure to act. We must take responsibility for the possibility that the changes are man-made, and we must collectively do something about it. If there is any uncertainty as regards to the causes of climate change, this does not give any ethical reason not to accept responsibility.

The most problematic part of Hans Jonas’ ethics of responsibility is how to generate enthusiasm for the kind of moderation, for the kind of responsible behaviour that Jonas’ theory actually requires from all of us. Hans Jonas sees this problem, and he actually has doubts that democracy is a suitable political system in solving our environmental problems. He does not believe that democracy has an eco-political «usability». And he actually goes so far as to discuss how an environmental dictatorship would look like if only for a while we could put Western classical democratic-liberal values out of play in the purpose of solving the problems. He considers whether it would be a right-wing dictatorship or a left-wing dictatorship that would be most expedient in this respect, and he concludes that a leftist environmental dictatorship would be best: A social’s economic model based on needs is a more efficient economic model than a capitalist’s profit economic model, given the resource scarcity that we face. (Keep in mind that Jonas writes the book during the Cold War).

Whatever right or left dictatorship: Hans Jonas is clear that the interests of future human existence must, above all else, come first. And he says straight out that he would be willing to go in for a temporary green dictatorship if the situation actually requires it. This is strong language. He nonetheless deserves respect for bringing forth the issue of environmental crisis and democracy: It seems that most states agree on what now have become clichés in the environmental debate: The environmental crisis is caused by an imbalance between man and nature. The reasons are complex, but they
can be said to have originated in the development of Western industrial civilisation. This comprises a certain type of lifestyle and a value horizon: Is it not puzzling that democracy largely has been practiced in states that have benefited from human pressure on natural recourses? Does democracy have a shared responsibility for the environmental crisis precisely because of the relation between industry and technology, growth and prosperity, and the threat to the environment? Does political freedom have the flipside that it is closely associated with a human general self-expression that puts a pressure on natural resources in the form of impoverishment? This is where Jonas’ theory of responsibility is particularly interesting. We are facing a very basic value-choice problem. There is a connection between environmental crises and values, and our ability to prioritise, to choose between values are challenged. If we must make a choice, what shall we choose? The point is that in order to express one’s opinion about for example sustainability, one must also have an opinion on what values are the most important. I think everyone would agree that survival has priority over for example income equalisation. But the question is how consumer-related primitive lives are we willing to live.

One can, like Jonas, claim that there is a need for an eco-political revolution. But who would be interested in implementing it? We are left with the reform options. And here lie today’s difficulties with respect to the core characteristics of democracy: just think of the pressure of public opinion and election on a short time-horizons, growth policies and general system slowness. Imagine leading politicians presenting a planned zero growth. One can imagine the level of conflict in such a situation. Perhaps we suffer from a lack of threat awareness, lack of awareness about the disasters we may be facing. The democratic voter is more concerned about the present than by the future, more of their own desires than the needs of distant future generations. It is simply rational for individuals to make choices that in a long term are un-rational. And precisely here is Hans Jonas relevant: We need a threat awareness and responsible statesmen. We can only hope that the «great anxiety» motivates us and is triggered in constructive political action.