On a geometry of Ethics

June 2, 2016

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1 Chapter I.

1.1 Preface

Are there logical structures in ethics? Do we need axioms in ethics? Is there a "geometry of ethics"? These were the questions I was concerned with upon writing this paper. I had this idea for a while, what if a geomtry of ethics is possible? With geometry I mean the mathematical construct of a space of vectors and respective functions between them. Discovering and interpreting ethics as such a system would make deriving conclusions from it about specific events and human relations significantly easier. Or would it? After all the system and foundation I came up with became one to minimalize suffering not to maximalize happines, and such a system inevitably leads to anti-natalism and a certain form of nihilism.

1.2 Ethical value as the second derivative

We could interpret an event as a fluctuation between two or more functions, and not as an intersection or a certain point on one of the timelines, graphs of them. Every event practically needs at least two members to happen (here with happen, I mean for it to be observable) and they can be viewed as changes inflicted upon each of the involved parties. Is there a meaning behind asking about an optimal value for this fluctuation?

If we define an event as a change on another member of the subsystem we specify, then the fluctuation is related to the first derivative of the functions involved. What we consider here is a composite set of functions of two or more members, composed of their differences. This tangent in question describes the changes two members inflict on each other over time. In a dynamic system the derivatives give us a way to measure differences in the viewed functions, but only if we know the proper definition of the involved mappings or functions. This is why in the case of trigonometric or polynomial cases it's usually mathematically trivial to work with such, but in the case of non-linear and generally not well-behaving systems it's resource demanding and quite a difficult work.

What we are really interested in is not the rate of change but the rate of the change of changes. The order of ethicalness is almost exactly the second derivative of the specified system. For this kind of investigation we should be thinking in the terms of systems, and an optimal value of such a derivative would benefit the whole system, not certain subsets like a specific function from the composite. This optimal derivative function is usually not continuous if one of the involved functions are neither themselves, so

if in a biological meaning they show virus-like behavior. Being divergent is a proper example of such a behaviour, favoring only one member of the composite while not being optimal for the whole system.

Let's specify a more exact formulation of a subsystem composed of n number of member functions.

$$f(x) = (-1) * \sum_{k}^{n} g_k(x) + g_{k+1}(x) + ... + g_n(x) \tag{1}$$

The derivatives this way bear less value the more similiar the involved functions are. The order of ethicalness is μ.

$$\mu = f''(x) \tag{2}$$

We specified a way to measure ethicalness as a second derivative. If we include similiar functions into this system of composed functions, then *the value closest to zero means the more ethical system.*

1.3 Common sense of ethics

What probably seems as a simple way to describe a system of similiar functions has real ground in ethics. Considering the mentioned way we can filter out real world events usually viewed unethical. To inflict too much pain, to kill, to lie, to steal - these are not just defined by laws of societies but also filtered out by such a mathematical foundation. If we dissect these acts into the involved parties and actions then we can see how they are already measured and quantized in a meaningful way. There is no fundamental, only quantitative difference between touching someone and murdering them.

What such a system really does, is raising concerns about biodiversity. If we keep to interpret this mathematical background in a biological context, then we are talking about the distribution of natural resources that for example was violated by the introduction of human agriculture in our known history. We can desribe the system we mentioned through this example, with all the members including all living organisms in a certain area. We can see how the resources are getting used by only one function, growing the values of nothing but one of the members of the system, producing higher and higher or lower and lower μ values. The self-regulating system of biosphere is slowly replaced by a closed technological system, that makes us more and more dependent of and vulnerable to technology.

The mentioned definition of ethics has meaning, it's only a matter of perspective that we include the commonly considered members involved in the act we try to classify ethically. The summary of such an ethics system

is though that it's only useful to keep up the status quo. Isn't that what we usually mean by ethics though? This system is well adjusted to the general, most common view of ethics.

1.4 Nullset and anti-natalism

Such a system can produce the most optimal value of μ by having the least amount of members or the least amount of changes involved. Both point to an anti-natalist view of ethics, that is the most ethical stance is not to commit any acts and/or to produce more members of the ethical system by forcing them into existence. Ethics is a human matter, we can talk about such in our case only, as in nature ethics is meaningless because non-human objects either classify members of an ethical system in a way unknown to us, or they don't do it at all. That depends on your interpretation and used system only. Human intelligence is not the optimal way of thinking just as wings are not the optimal way of transport. One of our most dangerous mistakes is imagining evolution as a ladder or staircase leading to humans.

Defining the order of an ethical act could quantify the ethicalness thus providing us with a goal to maximize our actions order of ethicalness. Even though it can provide a positive attitude as well goal-wise, we can sense that the stand of anti-natalism is a much stronger claim than this. We should not include nullsets into our system to avoid such, ethicalness must not be defined without at least two members of a system involved. Lot of times we define x by telling what is *not* x, but giving a set and giving a complementer set are equivalent definitions if we know what set the defined one is a complementer to. There is no reason to include systems with zero members, because there would be no relations and changes to interpret.

1.5 Karma as a feedback loop

Karma is a feedback loop about making a sustainable environment. In a very basic sense, it says that every action shapes the world, so it has a reaction. It is a metaphysical fact, and not ethics in the strictest sense. Even the lack of an action has the reaction of providing space (potential) for other actions to take place. What a karmic interpretation tells us is an almost trivial meaning: actions nurturing environment will result in an environment nurtured. This view only makes an ethical sense if we consider a system wide enough to reflect every actions. If one interprets actions within a universal system, then whatever they do to the world they do to themselves - indeed this is the same mystic interpretation where "all is one". Karma as an ethical stance is not a system itself but scaling and choosing parameters to fit the

universal world view. Including every living or even non-living objects into the same system we described results in the classic karmic world-view where making huge differences is unethical because of the trivial effect of yielding equivalently huge results and deviation from the optimal "togetherness" of the universal system. Such deviance is biologically exemplified in cancer cells within a body.

Biodiversity is really about maximizing the possibilities, this is how nature evolves and not through "selecting" any traits but producing every possible events and beings in the given environment then let the environment filter them into a narrower possible event space.

1.6 "Why" and "what" questions

Which scale is ethical to choose? Should we consider the universe or humans as a reference point? Ethics may be relative, the metaphysics of everything is not useful at all because everything you can state about universally everything is simply their existence. What is really interesting in the presented system is the μ value's dependence on the scaling we choose, the members we include. Ultimately every discussion of ethics is a discussion of the "why" questions of parameters and scaling, but also free will. In case of no free minds, ethics is reduced to cultural atnrhopolgy as all the "why" questions are reduced into "what" questions filtered down in the causal chain. The spirit of ethics is not in the system of judgement ("what") you use but the parameters you choose ("why").

2 Chapter II.

2.1 Parameters and scaling of an ethical system

What really describes an ethical system is not the inner laws and workings but the parameters and scaling (member count and member quality) of it. The "why" questions describe these parts, the "inputs" of these systems. The most problematical part is the following: if you want to decide on the ethicalness of your scaling then you need to apply the same ethical system that also needs scaling and parameters, and so on ad infinitum. This workflow could lead to recursion unless we introduce some meta-language and apply different ethical systems for the different layers of parameters, making more and more embedded systems of ethics.

If we ask ourselves if the scaling and parameters we use for our ethical system is ethical itself, then our answers will result in either recursion or

embedded systems with several layers. The former solution is potentially infinite while the latter one is potentially finite because our meta-systems will only go as deep as we are concerned - what rules out the possibility of an universal ethical system.

We either describe an universal ethical system that has the problem of recursion, or we apply an embedded system with finite layers that only works within certain bounds that are arbitrarily chosen. For any kind of ethical system we want to define it seems that we can't do it without a potential infinite regress that seems like a related problem to epistemological grounds. The question is about reference points. Does ethics has any constant that is bounded by logic to be impossible not to be true in all the possible worlds, therefore setting a limit to the infinite regress in all the layers of ethical systems?

There is really two cases, one with infinite regress and one with a limited scope. In the case of an infinite regress, judging ethical events by the same system, an universal geometry of ethics is possible.

In the case of finite layers of meta-languages, we only have local systems of ethics. We are only concerned with the first case, because a layered solution would not be universal, therefore would belong to the domain of cultural studies. The conclusion is that a general system of ethics is impossible, as measuring everything with the same system leads to infinite regress and recursion. Why is that devastating for such a theory? When applying the same laws of our ethical system over and over again, we need to justify the scaling and our parameters again and again, that leads to the same epistemological issue about the foundation of knowledge.

This really means that a priori ethical laws are not possible. The scaling, scope and domain must be limited and given already in the form of primitve axioms, they can't be included into the domain of our ethical system(s). Such an axiomatic system is not problematic for mathematical geometries for example, because we don't use the same geometrical system to evaluate the axioms themselves. Without justifying the axioms in an ethical manner, our ethical system loses universality.

Ehics seems to be only possible within a limited domain of discussion, through applying different ethical systems for different layers. In other words, *ethics can't be universal, because ethics can't be made ethical*. As a grammatical addition, there may be "what" questions only, because a "why" really denotes an origin or a goal, it doesn't have an idependent meaning on it's own. Describing such ethical systems (belonging to non-universal ones described within case two) is sociological work and the problem of cultural studies.

2.2 Free will of ethical agents

There is a Kantian solution to the freedom of the will, that is very similiar to the mathematical structures called complex numbers, namely expanding the ethical space with another dimension through including the notion of the intelligible character. Is the intelligible character necessary by logical means? Is it impossible for it not to exist?

Lot of authors don't really consider the strong claim of Schopenhauer when he talks about the freedom of the will. This freedom is not a physical but a meta-physical problem and argument. Freedom of the will would mean a break in the causal chain. Every event is bound by the environment producing it (like a vector form of $ax + by$). This is equivalent to the claim that everything has a cause. Is it possible to have an event without any causes? Is it possible for the causal chain to break somewhere?

Why would we feel freedom of our decisions anyway? Minds feel whatever they are conditioned to, either by chemical means or sociological means. Seeing the feedback loops of depressive states or the dissociative states made possible by different mental disorders, showing how fragile our "feelings" of being a contact personality with free will seems quite trivial. Our view of ourselves is most probably not a static consciousness but evolves and changes as human biology and cultural environments change.

2.3 Conclusions

What I really tried to show here, is that a truly universal ethical system is not possible. Because of the dependence of ethical decisions on scaling of the current ethical systems we use have no foundations but cultural and physical causes and judgements. To consider more practical dimension of ethical events, basing juridical systems of our societies on logical foundations is not necessary. In liberal societies we can see the working of the described ethical system as agents try to defend the status quo (see lowering the μ values) that evolves over time anyway. In more conservative societies we can see the finite scope of ethical systems in work as the used ethical systems have theological or pure might (either financial or physical) based axioms in work to provide a limiting scope for the current ethics.