

Desirable Ethics

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Part 1: Inverting the Context

Ethics

This column is concerned with the promotion of cybernetics through an examination of the ethical consequences (implications) of certain cybernetic devices.

This journal is the ideal place to try to do this. Not only does it recognise that less usual arguments can have special value, but also it has a history of concern for the ethical. Indeed, in the very first issue, Heinz von Foerster presented his thesis on “Ethics and Second Order Cybernetics” (von Foerster, 1992) and Ole Thyssen developed his interpretation of von Foerster's notions in his “Ethics as Second Order Morality” (Thyssen, 1992).

I have previously felt a reluctance to enter the arena of ethics, mainly because I could not see that other people's ethics were my business, and because I dislike moralising—the preacher act. But in that paper, where he produces his ethical imperative:

Act always so as to increase the number of choices

von Foerster makes a distinction between morals and ethics (recently restated by the Bishop of Birmingham in a radio debate, and, I am certain, of far older origin), which differentiation deals with my worries.² As a result of von Foerster's distinction,³ I have felt I could write from an essentially liberal position about cybernetics and ethics, and particularly how I understand the ethical implications of (second order) cybernetics.

Desirable Ethics

Let me start with a rider, emphasising that I am not entering into a larger debate of ethics. Our editor reminds me of the developing debate in biology countering the neo-Darwinist view (he points specially to the work of Zygmunt Bauman). However, Darwinism is not my arena, any more than genetics or theology. In my discussion, I shall not refer outside the subject area of cybernetics. What I intend doing is to validate cybernetics by showing how the implications for ethics (in the von Foerster

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2. Essentially, his distinction is between ethics as personally generated and applied by the self to the self to guide behaviour; and morals, as applied to others instructing them how they must behave (thou shalt, or, more often, thou shalt not), often while not being applied to yourself.

3. And also in response to the 2003 *Symposium on Cognitive, Emotive and Ethical Aspects of Decision Making in Humans and in AI* run by Iva Smit and Wendell Wallace at the InterSymp Conference 2003, Baden Baden, organized through the International Institute for Advanced Studies in Systems Research and Cybernetics.

interpretation) of certain cybernetic devices matches how we might like to think about the world, using this approach as a further (and, I believe, novel) way to strengthen arguments in favour of a cybernetic construction of the world. In this respect, I am more interested in the justification of cybernetics than the promulgation of an ethics. This is one reversal on the normal argument.

Reversing the way an argument is formed and constructed may lead to very powerful results. Recently I have developed an argument that shows what I believe are some ethical implications resulting from certain key (second-order) cybernetic concepts. My argument was presented step by step, in a manner similar to that through which I have argued the case for second-order cybernetics in this journal: by examining, for instance, how the thermostat actually works and then looking at the implications of this.⁴

But I began to wonder if this was the most persuasive way of presenting my thesis. There is a much more interesting and, I believe, powerful way of presenting the argument, not as a set of logical consequences, but as a movement towards attaining a number of desirable criteria. Let me explain further by making this *back to front* argument. But first, I had better indicate the context.

Impoverishment: the Context

There are many who argue humans are essentially selfish, mean-spirited. Their image of what we are is impoverished and impoverishing, and it's depressing; terribly depressing and demeaning. I, for one, don't think it matches how we think of ourselves, or, at least, how we like to think of ourselves.

Nevertheless, this very negative view holds, and is very powerful. It finds expression in terms such as *the selfish gene*, or the notion that *there is no such thing as society*. It is demonstrated in the all-pervasive attempts to find simplistic linear causality (Bateson, 1987), where speakers insist "I have made it perfectly clear" and where we scapegoat easily identifiable groups for shared malaises.

These concepts are used to tell us about what is called *our (human) nature*. And the story told is bleak. We are mean, selfish, reductionist (linear, simplistic) causalists. We have every reason to blame others, rather than to accept responsibility for our actions. In communication, the onus is on the speaker to transfer meaning, not on the listener to make meaning by listening well. The world we live in is objective, follows simple laws it is our job to discover, and knowable. And so on.⁵

The bad reading tends to be presumed even when there might be something good to be said about humans and being human. Here are examples from two conferences I recently attended.

I was a member of a panel at a conference on "Reflective Practice." We were asked how to handle *rigour* in reflexive research. The response was shocking: I was

4. My basic position was developed and presented in Glanville, 2003.

5. This view seems to be behind the current dominance of teaching as information passing (which allows the fallacious assertion that a teacher is responsible for a student's learning). I have written about this notion of cause, and its relation to blame in Glanville, 1995.

howled down by the larger part of the audience because, I was told, humans are not honest—which I had suggested was the key. (Whether or not we are honest has little to do with most arguments proposing honesty as a criterion for evaluation.) However, by the end of the session, almost everyone was talking about the need for honesty. Only a few die-hards found they could not see the central importance of honesty, their horizons limited by the overriding obsession that honesty is something humans don't always do very well. In the end my argument had the appealing side-effect that, in winning over the vast majority of the audience, a shift from the knee-jerk reaction that promoted what I think of as the unattractive view of humans-as-bad became possible.

Then, a couple of years ago, I heard a discussion where a speaker reported that there is an incident associated with 1 in every 1,000,000 pedestrian trips. This figure was the cause of much horror, and was used to propose draconian measures to prevent such incidents. In so doing, the speaker showed a willingness to determine life by the down-side. For every *bad* incident, there are 999,999 pedestrian trips that have no incident associated with them. That means that perambulation is incredibly safe, and we can revel in the delightfulness of it. It is not necessary to live by the down-side, the lowest common denominator. If something awful happens, it happens and it's awful. There has to be an extraordinary reason to let 1 event outweigh 999,999 events, permitting the rare possibility to dominate our lives and our lives to be dominated by fear. After all, being alive is both risky and terminal.⁶

A Human Ideal

In Western culture there is, I believe, a commonly held view that, no matter how *base* individual human beings, or individual human acts may be, we can, should and do aspire to a higher ideal of how humans may behave.

If I were to ask you about this human ideal, I do not imagine you would answer in negative terms such as those dominant in the previous section. I was brought up to think of certain qualities as desirable: the epitome of what it might mean to be human. When I talk with people around the world, I am told of not necessarily the same qualities, but at least qualities that I understand to be in the same ball park: and they are positive, optimistic, good. So I would expect to hear words such as *generosity, honesty, mutuality, open-mindedness, respect, responsibility, selflessness, sharing, being trustworthy, and trusting*.

These qualities function with reference firstly to the self,⁷ and secondly to an other. Thus, all (except mutuality and perhaps sharing, words that inherently require at least one other to be exercised) might be prefaced by *self-* and all connect to an other: generosity, honesty, selflessness and open-mindedness towards an other; respect and responsibility for an other; sharing with an other; and trusting an other. The mere

6. I do not mean to deny or belittle the pain and shock of the particular individual and experiences associated with the one in a millionth event.

7. In line with (much) therapeutic maintenance practice, I accept that it's hard to behave well to others unless I behave well to myself: and that if I give myself away without maintaining myself, there is soon either nothing or only wreckage left to give.

positing of these qualities implies not only an other, but the generous and respectful treating of them.⁸

What I call qualities might be thought of as attributes or perhaps shared properties, but not as characteristics. They become part of my experience through my intervention: they are my constructs, maintaining consistency with the notion that I have a choice over which understanding of the world I adopt. See Piaget (1955) and Glaserfeld (1990) for explanation of how we might and why we must construct our worlds. Thus, I am not claiming these qualities are either inherent or come from any other source—including God, genetics and culture—although I do accept that for many of us they are special and have special value.

In this constructivist and/or post-modern era we believe we are free to make choices concerning how we describe our world and our relationship to it. All but the most determined of those who held the view that dominated (in the West) the last, say, 400 years (conventional science) are moving towards a position that their way of looking involves making a choice, and can no longer be seen as having the sort of “truth” it was formerly assumed to have.

So I would like to ask, given the choice, wouldn’t we prefer a way of describing our world that promotes what we hold up as an ideal rather than one that extols our down-side? If the majority of descriptions lead to a belief in the human that is negative, and if there is an account that in contrast implies and supports our positive ideals, would we not prefer to choose this?

Assuming you, like me, prefer the positive, I am left with one task:

Is there a way of looking in which these positive qualities hold sway, appearing implicit. Can I demonstrate an argument that promotes and sustains these qualities?

Part 2: Argument

Cybernetic Devices

You will guess I would not write at such length if I did not have an answer up my sleeve, and—given that it’s my sleeve—you will suspect that what I have is based in second-order cybernetics.

I shall argue that the qualities we most aspire to can be found in the behaviour of certain second-order cybernetic devices,⁹ and so we might look on this way of conceiving and understanding the world with favour because it gives us a view that is better and finer in the sense that it is more in line with our human ideal.

I shall proceed by examining the implicit requirements of merely four devices that are crucial in this cybernetics. The four I examine, briefly characterising each device

8. I.e., involves self-reference, and is thus doubly cybernetic.

9. In the term *device* I include concepts, machines, explanations, etc.

and then exploring the implicit assumptions they place on us, if they are to work as we hope they will, are:

Black Box
Distinction
Autonomy
Conversation

Black Box

The Black Box may seem the least *second-order* of these devices. In the manner in which we understood it initially, that is so. Yet the Black Box is, I have argued, a far subtler device than we had originally thought (Glanville, 1982). It is truly a second-order device, and the outcome of its employment is a description that accounts for observed behaviours that belongs neither to the observer, nor to the same phenomena supposedly contained within the Black Box, but to both together in and through interaction: it is, perhaps, the archetypical second-order cybernetic investigative device. I summarise my understanding of it below: if you want the argument in full, please consult the reference.

In my development of it, the Black Box is a device (a construction) applied by an observer who notices at least one change in a behaviour under observation so that the change may be conceived to occur within the Black Box. The Black Box does not, in this sense (and in this abstraction) exist: it is at best an ephemeron. Nevertheless, by interacting with the Black Box, the observer can arrive at a description that accounts for observed changes in behaviour. The observer cannot look inside the Black Box (whiten it) because it is, literally, not there. Attempts to look inside lead to a proliferation of Black Boxes: “Inside every White Box there are two Black Boxes trying to get out.” This explanation is the outcome of the interaction of the observer and the ephemeral Black Box, and derives from observations of changes in (mutual) behaviours. There is no (conventional) truth in the explanation: it is a rationalisation of observations of these behaviours, not depending on the revelation of a hidden machine but of the construction of explanations, and historical constancy is no guarantee of continuation. Thus, the Black Box is a very good embodiment of a Popperian type of model of scientific knowledge (one based on testing and the assumption of the provisionality of consequent knowledge—see Popper, 1963). It will be rejected, of course, by the hardened realist, who has problems remembering that an explanation, no matter how effective, is not that which is explained.¹⁰

So what does this concept, the Black Box need from us, that we may use it to help us create understanding?

Firstly, by allowing that we know nothing, it allows us to learn. It should go without saying that if we already know, we stop ourselves from learning. It is only by

10. Although many credit this insight to Russell and Whitehead, their statement was preceded by Saussure (1966) taken from lectures given during the 1890s.

admitting that we do not (or at least might not) know that we can leave space for learning. The Black Box is a supreme example of a device that leaves us able to learn.

Learning is based in open-mindedness. Using a device that says we can never know in any absolute, finite sense demands open-mindedness. And learning and open-mindedness imply trust: we trust our results and we trust that they will continue, and we trust ourselves and we trust the Black Box not to deceive us: if you like to call that knowledge, then open-mindedness and learning allow us to develop knowledge we can trust, always remembering that the trust is tentative. We may trust absolutely, but that does not make what we trust in certain. Indeed, many religions insist that we must trust in God precisely because we cannot know in any determined sense: trust is how we conquer the uncertain unknowable.

Finally, the use of the Black Box implicitly demands honesty from us. If we lie to ourselves about the outcome of our interactions with the Black Box (or even about the status of the Black Box) we land ourselves enormous potential difficulties where one lie will lead to another, until we inhabit a fabric of deceit. But that's trust, too.

Distinction

I imagine that the understanding, in one form or another, both that we distinguish one thing from another, and how we might do this, has been a primary concern throughout humanity's conscious and articulate life. Questions of cognition and re-cognition; of where things begin and end; and even whether and how we might all see the same (what is *red*) seem always to have been of interest and concern.

The recent discussion that has been prominent in cybernetics derives from George Spencer Brown's (1969) book *Laws of Form*, although one might argue that Gregory Bateson's definition of information as the difference that makes a difference should take precedence.

Distinction drawing is concerned with boundaries and the logic they imply.¹¹ Apparently it is as simple as making a line that says this far and no farther—in the sense of some distinguished item, be it a thought or a thing, ending here. It is bounded. By drawing the distinction one constructs some thing that the boundary (mark of the distinction) bounds. There then follows a logic deriving from crossing that boundary which many find both profound and immensely powerful.

Two further facets are implicit in this act. Firstly, we draw the distinctions so we are responsible for what we distinguish. Secondly, in drawing a distinction the two

11. I do not wish to explore boundary logics here, any more than I wish to explore the problems associated with the distinction between the mark (line) of the distinction, and the value it is taken to contain. My point is that, in drawing a distinction, I determine a difference: between what is on each side of the boundary, and, indeed, between the *contents* of either side and the line itself. Drawing a distinction thus involves bringing into the observer's (drafter's) experience not one but three items. When distinguishing oneself, one thus also distinguishes, by the same act, the other.

Thus we come to an explanation that allows us to populate our universes with inhabitant-items, which seems to be how we understand the worlds we find ourselves in. And that is why boundary logic, distinction drawing, and creating differences that make a difference is so important, for it admits of our building worlds.

I intend to return to this theme in another column. See Glanville, 1978, 1990. Also Robertson, 1999.

sides that are brought about by this primitive act have, in some sense, a sort of symmetry. The symmetry lies in the potential that we find arising: the potential to attribute qualities to each side. And, since the act of making both was the same singular act, it follows that the potential on each side should be the same—that is, if quality A might (in principle) be attributed to side 1, then it must also be possible that the potential for quality A be attributed to side 2. To insist on this says nothing of the qualities we actually attribute, only of the (logical) possibility (See Glanville, 1990).

In turn, this implies that there is some mutuality between the sides: what might be on one might also be on the other. I have come to call this specification the “Principle of Mutual Reciprocity” (first mentioned in this journal in Glanville, 2001a) and to me it is of enormous ethical importance. If I distinguish between two people and attribute to one the quality good, then it must be possible (in principle) for me to attribute the same quality to the other. Which is not to say that I will make this attribution.¹²

Distinction implies both responsibility, and mutuality.

Autonomy

In my universe, *autonomy* may be seen as the generalisation of *autopoiesis*. Autopoiesis is, I imagine, the best publicised (and possibly understood) device of second order cybernetics. (Varela, Maturana, & Uribe, 1974).

Autopoiesis is a device designed to capture the behaviour of those systems that create and then maintain the organisation that is reproduced in their continuing to be. It is, therefore, a process that leads to an organisation that continues to organise itself through the process of organising itself.¹³

In organising itself, it distinguishes itself—that is, it creates its own boundary which distinguishes it from everything else (its environment)). This is where it attains its autonomy (Varela, 1979).

Being autonomous is being self-contained, apart, different, unique. And so, autonomy implies responsibility. When you are unique and organisationally self-contained, when you define yourself and maintain yourself as separate, there is no one else to blame, or even to rely on (although we may agree to help each other). This responsibility also implies respect; that is, respect in the sense that, knowing that one is responsible, in, of and for oneself, one must accept (by the Law of Mutual Reciprocity, as it happens) the responsibility of others, and respect both the responsibility and he/she who exhibits this responsibility.

12. Thus I may distinguish President George W. Bush from President Saddam Hussein. I might attribute the quality I call *righteous* to Bush. The Law of Mutual Reciprocity means that I should have the possibility to attribute this quality to Saddam, although I do not. He could be righteous, but (in my view) he isn't. Equally, attributing the quality *devious* to Saddam would imply that I might also attribute this quality to Bush. The options I offer here are for purposes of example only, and no implications about my own views concerning either Bush or Saddam should be taken from them.

13. I do not intend to imply an ontology here.

Conversation

The three previous devices are essentially devices to bring our world into being and to maintain it. Or, rather, to account for and develop the experience we have such that we can explain how we might come to believe in, and sustain, such a world.¹⁴

Conversation is different.¹⁵ Conversation is concerned, as might be expected, with communication. And while some cyberneticians have argued that we become conscious of ourselves and maintain that consciousness through communication with others (von Foerster, 1991), I am presenting a different argument.

I take it as given that I have a collection of experiences that I come to describe as communication with others. Through communication, I believe I have learnt that these others believe something that I explain with the similar words. So I take it as given that there are experiences that I call communication: communication with and between myself and others. Given that the communication is with and between myself and others, I take it that I can usefully generalise this understanding, so that I will talk about communication in general and between individuals. I will also use some shortcuts in how I write!

Further, I take it as given that we are all different. This is what autonomy means. Autonomous systems create themselves: each one is different. Therefore, each understanding, that is created by each of us, is different, distinct—even if we believe, quite astonishingly in my opinion, our understandings are of the same item.¹⁶ Our different understandings, the uniqueness of our experiences, mean that not even language can be shared in the sense that words can have fixed and shared meanings—at least at this level.

Given this difference between us all, we cannot expect coded communication to work.¹⁷ Our understandings are different: there would be no point in me communicating mine to you even were it possible, which it is not. Nor can we encode messages and hope to send them unambiguously to another, because that other will have to create their own understanding and, in this way of looking, words do not have meaning.

This might seem like the end of the road for communication. Certainly, given many traditional interpretations, it is. But there is an alternative to the coded message we have for some time taken to be how we communicate, and that is conversation. A conversation allows that (using an aural metaphor) we hear something uttered by an other and from what we hear that we make our own understanding.¹⁸ We can then

14. They thus provide the epistemological basis on which cybernetics is based, as well as being devices for exploring and developing it.

15. As a device, conversation was developed by Gordon Pask. Although there were others working at the same time (e.g. Grice), none of them developed anything like such an extensive and technically implementable device. I have written at length about both conversation and Pask in this journal (e.g. Glanville, 1997a & 1997b).

16. On this occasion, I won't go into the question of whether it can be treated as the same item if we all understand differently.

17. How we get around this, and what makes language useful, is another matter I can't deal with here.

18. The importance of the listener is crucial in conversation theory. The great German artist Joseph Beuys commented to this effect. See Glanville 2001c.

utter sounds that the other can hear and understand in whatever way they will. To confirm that we have understood we repeat the loop until we can construct understandings from different utterances that can be mapped by each participant, one understanding onto another.

This means of communication does not require that we have already decided on meanings etc.: and therefore it seems to precede the more conventional understanding of language as code.

But for this device to work in communication we need certain minimal behaviours.

Generosity, open-mindedness and respect:

A conversation requires that we are open to what the other has to say: no conversation can possibly work unless each participant is generous towards the other—willing to listen and to try to hear what the other is saying (rather than what you want them to say or want to say, yourself). You can't hear if you have a closed mind, or if you are not generous towards the other, for they will not say things as you would. Being open-minded and generous is, in effect, respecting the other.

Sharing, selflessness and trust:

A conversation is essentially an act of sharing, based around negotiation. It is the essential form of interaction. As with all sharing, there has to be an element of selflessness. Both of these imply (and rely on) trust: few will truly share or act selflessly if do not feel they can trust the other or that they are, themselves, trusted. This places a very special load on trust, which I have written about in Glanville (2001b).

Conversation can be considered to be communication as communion.

A certain degree of honesty:

Unless the participants in a conversation are honest, all the above is a sham and there can be no communication.

Conversation, as a mechanism, allows us to communicate while remaining distinct and holding to our own understandings. It operates within the framework of the three earlier devices. It requires from us behaviours that many consider demanding, even impossible. Yet, the great benefit of conversation is that it is built around an error correction mechanism: we do not have to perform perfectly, merely to be willing and to believe in the value of such a view. The behaviours it demands, implicit in it, are most of those I have suggested as the good qualities many would like to see as a human ideal. With the other three devices, all the qualities on my list are covered, as can be seen in the table of occurrences of qualities against the four cybernetic devices they are found in, below.

Table 1: Numbers of Occurrences of Qualities and Devices

	Black Box	Distinction	Autonomy	Conversation	Number of Occurrences
Generosity				x	1
Honesty	x			x	2
Mutuality		x	x		2
Open-mindedness	x			x	2
Respect			x	x	2
Responsibility		x	x		2
Selflessness				x	1
Sharing	x			x	2
Trusting	x			x	2
Number of Occurrences	4	2	3	7	16

Conclusion

My intention has been to show there are implications we can find in the four (second-order) cybernetic devices I have introduced, which require behaviours that match those qualities many would consider desirable, matching what we would think of as our human ideal (in a fairly timeless manner). In this sense, these are ethical qualities, quite in contra-distinction to those, usually rather mean-spirited qualities so popularly argued today by others. But the argumentation I have used is not only the conventional one in which I derive these as a logical consequences of pushing our growing knowledge, but also an argument in terms of the better choice. I am saying that cybernetics gives us devices that imply a world that matches our better aspirations, whereas in the main, other approaches lead towards much worse aspirations.

I would claim this is a good argument: one that supports a view of life which aspires to our better desires.

References

- Bateson, G. (1987). Men are grass: Metaphor and the world of mental process. In W. Thompson (Ed.), *GAIIA: A way of knowing*. Great Barrington, MA: Lindisfarne Press.
- Foerster, H. von (1991). Through the eyes of the other. In F. Steier (Ed.), *Research and reflexivity*. London: Sage.
- Foerster, H. von (1992). Second order cybernetics. *Cybernetics and Human Knowing*, 1 (1).
- Glanville, R. (1979). Beyond the boundaries. In R. Ericson (Ed.), *Proceedings, Society for General Systems Research Silver Jubilee Conference*, London. London: Springer Verlag.
- Glanville, R. (1982). Inside every white box there are two black boxes trying to get out. *Behavioural Science*, 12 (1).

- Glanville, R. (1990). The self and the other: The purpose of distinction. In R. Trappl (Ed.), *Cybernetics and Systems '90: The Proceedings of the European Meeting on Cybernetics and Systems Research*. Singapore: World Scientific.
- Glanville, R. (1995). Chasing the blame. In G. Lasker (Ed.), *Research in progress—Advances in Interdisciplinary Studies on Systems Research and Cybernetics, 11*. Windsor, Ontario: IIASSRC.
- Glanville, R. (1997a). A (cybernetic) musing: Communication—Conversation 1. *Cybernetics and Human Knowing*, 4 (1).
- Glanville, R. (1997b). A (cybernetic) musing: Communication—Conversation 2. *Cybernetics and Human Knowing*, 4 (2-3).
- Glanville, R. (2001a). A cybernetic musing: Constructing my cybernetic world. *Cybernetics and Human Knowing*, 8 (1-2).
- Glanville, R. (2001b). The man in the train: Complexity, unmanageability, conversation and trust. In H. Wüthrich, W. Winter, & A. Philipp (Eds.), *Grenzen ökonomischen Denkens*. Wiesbaden, Germany: Gabler.
- Glanville, R. (2003). Behaving well. In I. Smit, W. Wendell, G. Lasker (Eds.), *Cognitive, emotive and ethical aspects of decision making in humans and in AI, Vol. II*, Windsor, Ontario: IIASSRC.
- Popper, K. (1963). *Conjectures and refutations*. London: Routledge and Kegan Paul
- Saussure, F. de (1966). *Course in general linguistics*. New York: McGraw Hill
- Spencer Brown, G. (1969) *Laws of Form*. London: George Allen and Unwin.
- Thyssen, O. (1962). Ethics as second order morality. *Cybernetics and Human Knowing*, 1 (1).
- Varela, F. (1979). *Principles of biological autonomy*. New York: Elsevier North Holland.
- Varela, F., Maturana, H., & Uribe, R. (1974). Autopoiesis. *BioSystems*, 5.

