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Luciano Floridi’s Metaphysical Theory of Information Ethics: A Critical Appraisal and an Alternative Neo-Gewirthian Information Ethics

Edward Spence, University of Twente, The Netherlands

ABSTRACT

This paper falls into two main parts. Part one, offers a critical analysis and evaluation of Luciano Floridi’s metaphysical theory of information ethics (IE). Drawing on part one, part two provides a discussion of what I consider to be the main conceptual and practical difficulties facing Floridi’s IE theory. Although in agreement with the overall motivation and objectives that inform Floridi’s IE position, namely, that all entities, qua informational objects, have an intrinsic moral value... and that “there seems to be no good reason not to adopt a higher and more inclusive, ontocentric [moral] perspective” (Floridi, 2007, p.10), part three of the paper proposes an alternative New-Gewirthian approach to Information Ethics that avoids some (if not all of the) difficulties facing Floridi’s own position. Part four then examines the implications for Floridi's metaphysical theory of information ethics and finally, offers a conclusion in part five.

Keywords: Alan Gewirth, Areteism, Arthur Schopenhauer, Christina Korsgaard, Deigned-In-Purposive-Agency, Information Ethics, Instrumental Value, Intrinsic Value, Luciano Floridi, Metaphysics of Information, Principle of Generic Consistency, Purposive Agency, Universal Rights

FLORIDI’S INFORMATION ETHICS

Information Ethics is an ontocentric, patient-oriented, ecological macroethics. (Floridi, 2007a, p.11)

Being beyond the scope of this paper and un-avoidably constrained by space, I can but offer the briefest of expositions of Floridi’s rich and complex theory, but hopefully I can at least provide in a summarised form the direction and main rationale of that theory and importantly not misconstrue it in the process. In addition, I shall offer some well intentioned and hopefully helpful critical observations and then proceed to offer an alternative approach to IE based on Alan Gewirth’s rationalist ethical theory; specifically his argument for the foundational moral principle of morality, the Principle of Generic Consistency (PGC), extended and adapted for that purpose.

Beginning with the uncontroversial empirical observation that our society is evolving, both

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Floridi (2007) goes on to claim that this informational shift from the semantic to the ontic, is resulting in the re-ontologization of the world, that "transforms its intrinsic nature (p. 4) so that the world can now be ontologically re-conceived according to Floridi as being fundamentally constituted by the infosphere and not merely the biosphere, as was previously thought. As an example he cites nanotechnologies and biotechnologies that "are not merely changing (re-engineering) the world in a very significant way (as did the invention of gunpowder, for example, but actually reshaping (re-ontologizing) it" (p. 4).

As a result of this ontologization, information is becoming our ecosystem, the one in which we, together with all artificial agents, are evolving into informationally integrated inorganic or non-organic informational organisms (Floridi, 2007, pp. 5-6). Floridi (2007) predicts that "in such an environment, the moral status and accountability of artificial agents will become an ever more challenging issue" (p. 5).

From this initial ontological thesis, namely, the ontologization of the infosphere or the metaphysics of information it is easy to anticipate Floridi’s next theoretical move. On the basis of his metaphysics of information Floridi (2007) posits a “new environmental ethic” when information ethics ceases to be merely “micro-ethics (a practical, field-dependent, applied, and professional ethics)” and becomes instead “a patient-oriented, ontocentric (as opposed to merely bio-centric), ecological macroethics”. (pp. 7-8). Importantly he goes on to say that “information ethics is an ecological ethics that replaces biocentrism with ontocentrism, a substitution in the concept of biocentrism of the term “life” with that of “existence” (p. 8). According to Floridi (2007a), the substitution of “existence” for “life”, [...] suggests that there is something even more elemental than life, namely being – that is, the existence and flourishing of all entities and their global environment - and something more fundamental than suffering, namely, entropy. The latter is most emphatically not the physicists’ concept of thermodynamic entropy. Entropy here refers to any kind of destruction or corruption of entities understood as informational objects (not as same sort of information, take note), that is, any form of impoverishment of being, including nothingness, to phrase it more metaphysically. (p. 12).

This substitution of existence for life, as we shall see below, is both crucial and problematic in Floridi’s overall thesis of Information Ethics.

The claim that information ethics can be conceived and ought to be conceived as an environmental macroethics is Floridi’s most interesting, ambitious and challenging claim. His theory and constitutes the crux of his whole controversial argument that rightly or wrongly is conducive to raising many incredulous voices. For the claim amounts to nothing less than the clear implication, as expressed openly by Floridi himself, that existence not life is the mark of morality; that which determines the moral status of not only humans and other sentient beings, including their natural environment – the whole biosphere, but moreover, at the most ultimate level of inclusiveness ever conceived in moral philosophy before, the moral status of the whole caboodle, everything that exists, has existed and ever will exist in the Universe as informational objects. Which essentially insofar as anything can be conceived as an informational object, means practically everything, including artefacts, works of art, gardening tools, coffee mugs, tea-cups, carpets, beads, rocks, clari nets, and if I am not mistaken, kitchen utensils such as knives, for example. This is an ethics of being on a grand scale that considers the destruction, corruption, pollution and depletion of informational objects as a form of entropy whose increase constitutes an instance of evil that should, all things being equal, be ethically avoided (Floridi 2007, p.9).

In IE, the Ethical discourse concerns any entity, understood informationally, that is, not only all persons, their cultivation, well being, and social interactions, not only animals, plants, and their proper natural life, but also anything that exists, from paintings and books to stars and stones; anything that may or will exist, like future generations; and anything that was but is no more, like our ancestors or old civilizations. Information Ethics is impartial and universal because it brings to ultimate civilization the process of enlargement of the concept of what may count as a centre of a (no matter how minimal) moral claim, which now includes every instance of being understood informationally, no matter whether physically implemented or not. In this respect, IE holds that every entity, as an expression of being, has a dignity, possessed by its mode of existence and essence... (Floridi 2007, p. 9).

The above evocative passage encapsulates the essential characteristics of Floridi’s Information Ethics and illustrates its extensive scope. It is, as Floridi states, a universal ethics that applies equally to all informational objects in the Universe. I will go as far as saying that it seems to offer a kind of Stoic Pantheistic Ethics (my phrase) that endows everything in the Universe with a moral significance and status through a pre-determined divine rational order in which everything is ontologically inter-connected and of which everything forms an ontic part, no matter how big or small. Although Floridi’s view is not beholden to any particular religious or deterministic theory of the Universe (Floridi, in press, p.16) he freely acknowledges that “in terms of metaphysics and ethics there is an overarching similarity between the history of philosophy, a similar view can be found advocated by Stoic and Neoplatonic philosophers, and by Spinoza (Floridi 2007a, footnote 10, p. 17). Concerning the latter, Soren Kierkegaard draws an insightful and interesting connection between Floridi’s and Spinoza’s ethics (Hondsladorn, 2008, pp. 178-79).

SOMETHING SCEPTICAL OBSERVATIONS

It seems that according to Floridi (2007), the basis of having a moral status is the informational state possessed by an entity (p. 10). Insofar as all entities whether sentient or non-sentient can be conceived as having this informational state, then they are entitled to a moral status.

The result is that all entities, qua informational objects, have an intrinsic moral value, although possibly quite minimal and ineradicable, and hence they can count as moral patients, subject to some equally minimal degree of moral respect understood as a disinterested, appreciative, and careful attention... There seems to be no good reason not to adopt a higher and more inclusive, ontocentric perspective. (Floridi, 2007, p. 10).

I agree with Floridi that there would be no good reason not to adopt such a higher and more inclusive moral perspective if there were in fact a god that objectively and independently grounded reasons for adopting such a perspective. This would in fact be a welcome extension to the moral fabric of the world. But merely declaring such a moral status for all informational objects on the basis of their informational state alone does not constitute such justified reasons. This is to say, the informational status of the informational objects cannot of itself provide them with a moral status any more than the human status of people can of itself provide them with a moral status. So what are Floridi’s reasons for
attributing a moral status to all informational entities, both sentient and non-sentient.

From his various writings and in several responses to his critics (see list of references) Floridi appears to have at least two distinct but inter-related arguments in support of his IE. The first I shall refer to as the Argument from the Goodness of Being (Floridi, 2007a, p. 7; in press, pp. 3-14 and p.17) and the second the Argument for Ontic Trust (Floridi, 2007a, pp. 17-18; 2008a, p.192; and in press, pp. 17-19).

The Argument from the Goodness of Being

Drawing inspiration from the work of Plato, Aristotle, Plotinus, Augustine, Aquinas and Spinoza, as well as such eastern traditions as Buddhism and Hinduism, Floridi’s focal idea is that “Goodness and Being (capitals meant) might be two sides of the same concept, as Evil and Non-being might be” (Floridi, in press, p. 12). His Argument from the Goodness of Being is thus essentially based on the initial pre-supposition, the basis of which he attributes to Plato, that “Goodness and Being are intimately connected” (Floridi, in press, p.13). According to Floridi (in press),

By and large, IE proposes the same line of reasoning [as Plato], by updating it in terms of an informational ontology, whereby Being is understood informationally and Non-being in terms of entrophy. Note that this is not a defence of IE but an explanation [emphasis added]. Although being in the company of Plato or Spinoza, for example, might be reassuring, it is not an insurance against being mistaken. But it is a rectification of the incorrect remark that IE stands rather alone in its defence of what might be called axiological ecumenism. (p. 13)

In a nutshell, Floridi’s Argument from the Goodness of Being can roughly be outlined as follows: Given the pre-supposition that Goodness and Being are intimately connected and the Universe in its entirety qua Being is intrinsically and fundamentally good, then everything within it is also good and has intrinsic value deserving of moral consideration. Thus all entities within the Universe conceived as informational objects at the appropriate level of abstraction (LoA) have intrinsic value and are therefore deserving of moral consideration. In the case of non-sentient entities, that moral consideration is minimal and overridable. Floridi’s argument as I have roughly constructed it here but which is, I believe, faithful to his actual position as described in his various writings, supports his thesis of Axiological Ecumenism (Floridi, in press, p. 13); that is, the idea that everything in the universe has intrinsic value and therefore deserving of moral consideration.

According to Floridi (in press),

The actual argument [the argument for axiological ecumenism] seeks to establish that entities deserve respect because they have intrinsic value. It requires a mental frame rather different from the one any anthropocentric ethic has trained us to adopt. It consists in shifting the burden of proof (a sort of Gestalt shift) by asking, from an antipodal-oriented perspective, not “why should I care, in principle?” but “what should be taken care of, in principle?”, that is, whether there is anything that is intrinsically worthless ethically, and hence rightly excluded from the moral consideration; (c) given that other contemporary ethical theories cannot at present address nor explain the moral significance of issues pertaining to the relationship between us and non-sentient entities such as artificial agents (for example, robots, softbots, cyborgs, virtual communities, among many others); (b) given the initial pre-supposition (supported in the past by many eminent philosophers like Plato and Spinoza) that Goodness and Being are closely connected and therefore everything existing within the Universe has intrinsic value deserving of some moral consideration; (d) given that other contemporary ethical theories cannot at present address nor explain the moral significance of issues pertaining to the relationship between us and non-sentient entities such as artificial agents, as those entities are not and cannot be included within the narrow anthropocentric moral perspectives of those theories and finally (d) given the absence of any other good reasons for not adopting a higher ethical perspective at an appropriate level of Abstraction (LoA) that expands the moral realm to include non-sentient entities that by default deserve some minimal but overridable moral status; then (e) Floridi’s axiological ecumenism with regard to Information Ethics seems, at least initially, a plausible and reasonable theoretical model to adopt.

It consists in reminding historically and showing logically that we have nothing to fear from a holistic attitude towards the value of Being in all its aspects; that it is fine to start from the presupposition that no entity deserves moral disrespect in itself (emphasis added); that anything less than a holistic attitude towards the value of Being would be prima facie unjustified. (p. 17)

What are we to make of Floridi’s Argument from The Goodness of Being? I think in its favour we can say this much: as a negative argument that claims a “default position until proven guilty” (Floridi, in press, p. 17) his argument in support of a model of IE seems initially plausible and reasonable. For (a) given the need for expanding the moral realm to include non-sentient entities so as to be better able to understand and explain certain moral phenomena involving the relationship between human beings and non-sentient entities such as artificial agents (for example, robots, softbots, cyborgs, virtual communities, among many others); (b) given the initial pre-supposition (supported in the past by many eminent philosophers like Plato and Spinoza) that Goodness and Being are closely connected and therefore everything existing within the Universe has intrinsic value deserving of some moral consideration; (c) given that other contemporary ethical theories cannot at present address nor explain the moral significance of issues pertaining to the relationship between us and non-sentient entities such as artificial agents, as those entities are not and cannot be included within the narrow anthropocentric moral perspectives of those theories and finally (d) given the absence of any other good reasons for not adopting a higher ethical perspective at an appropriate level of Abstraction (LoA) that expands the moral realm to include non-sentient entities that by default deserve some minimal but overridable moral status; then (e) Floridi’s axiological ecumenism with regard to Information Ethics seems, at least initially, a plausible and reasonable theoretical model to adopt. I say initially, because I can see two main difficulties for adopting Floridi’s model of IE as it stands at present. The first (see (b) above) concerns the pre-supposition that Being and Existence are closely inter-connected and that the Universe and everything within it is essentially and fundamentally good; the second (see (c) above) concerns Floridi’s claim and to some extent justified complain that there is not at present a viable alternative theory for supporting the main thesis of IE, namely, that all entities including non-sentient entities deserve moral consideration, a thesis, which I support.

The first difficulty concerns the lack of any objective evidence or conclusive arguments in favour of the pre-supposition that Being and Goodness are intimately connected and hence everything that exists, be it sentient or non-sentient, has an intrinsic value deserving of some degree of moral respect. The pre-supposition of the Goodness of Being can be seen either at best as an article of rational (but not blind) faith or hope or alternatively a useful methodological hypothesis or conjecture for generating and supporting Floridi’s axiological ecumenism. Floridi’s writings seem to suggest the latter. In the absence of any arguments or theories against the Goodness of Being, that conjecture would be a reasonable starting point for reaching the conclusions of axiological ecumenism. For as Floridi says (in press) “one line of reasoning in favour of IE’s position is that, because we lack arguments against the intrinsic value of Being in all its manifestations [emphasis added], we are led to expand an environmental approach to all sentient beings”. (p. 14)

The problem for Floridi, however, is that we don’t lack arguments against the intrinsic value of Being in all its manifestations. Arthur Schopenhauer, for example, in his major work, The World as Will and Representation, provided a series of challenging arguments based on empirical observation designed to show that Being is not only not Good but positively Evil. Schopenhauer is led to conclude on the basis of those arguments that the “world is not worth a candle” and it would have been far better it...
had never existed; for then there would be no Evil in the world.

Interestingly, by arguing that it would have been better had the world not existed, Schopen-
hauser is turning Florid’s notion of entropy on its head. For contrary to Florid, he sees Being
and existence not as essentially Good but as essentially Evil. Of course Schopenhauer’s ar-
guments for the essential Evil of the World are not conclusive and perhaps not even convincing.
But neither are the arguments for the essential Goodness of Being. Voltaire is another phi-
losopher who lauded Leibniz’s optimistic claim that this is the best of all possible worlds in
his satirical novella Candide. He does so by describing a series of terrible things that befall
the protagonist of his story as he travels around the world. The Manicheans of course also saw
the Universe as being essentially ruled by Good and Evil in equal parts.

This I think suffices to show that contrary to Florid’s claim we do not lack arguments
against the intrinsic value of Being in all its manifestations. Ultimately those arguments
might not be conclusive or convincing but one could say the same about arguments for the
intrinsic value of Being. At best, arguments for and against the intrinsic value of Being lead
to a theoretical impasse and hence the pre-
supposition of the intrinsic value of Being cannot
be relied upon to generate the central thesis of
Florida’s IE: namely, that given the intrinsic
Goodness of Being all entities in the Universe
deserve some degree of moral consideration.
Such an uncertain and unreliable reliance on
the pre-supposition of the Goodness of Being
as a basis for IE would render IE unstable.
And for that reason, Florid’s reliance on that
pre-supposition renders his IE theoretically
unreliable and unstable notwithstanding the
desirability and worthiness of the conclusion
he wishes to reach; namely, that all entities,
both sentient and non-sentient, deserve some
minimal moral consideration.

In the absence of any other ethical theory
fit for the job, however, we might be prepared
to wear that metaphysical cost (in terms of
the theoretical unreliability and instability in
Florida’s IE) for the sake of being able to ex-
plain certain moral phenomena pertaining to
the relationship between non-sentient and
sentient entities such as artificial agents. But fortunately there is an alternative, which fulfills the ethical
deridates of Florida’s IE and reaches the same
desired conclusion but without the theoretical
instability caused by reliance on the uncertain and
unproven pre-supposition of the intrinsic
goodness and value of Being. This alternative
is provided by what I refer to in this paper as
a Neo-Gewirthian Information Ethics based on
an expansion and adaptation of Alan Gewirth’s
Principle of Generic Consistency

Alan Gewirth’s Principle of Generic Consis-
tency (PGC) that was briefly cited above can
be used and applied to argue that the natural
property of purposive agency that acts as the
sufficient condition for having rights to freedom and
wellbeing can be extended to purposive agents
and patients other than human beings, for
example, to animals and androids. Insofar
as animals and other sentient beings can be said
to possess some degree of purpose and goal
orientated behaviour that requires them to possess
some minimal degree of freedom and wellbeing,
they too are entitled to rights to freedom and
wellbeing as patients if not as agents. For insofar
as one recognizes that animals and other sentient
beings possess purposive agency, minimal as
that may be, and that this alone is a sufficient
condition for granting them a moral status, one
must at least ratificationally acknowledge that
they too have rights to freedom and wellbeing, at least
as patients, on path of self-contradiction. Some
similar argument is also required for extending
the moral status to non-sentient informational
objects and infons. I will present and demon-
strate such an argument in section 3 below.
Before doing so, however, I will briefly examine
Florida’s second argument for his IE thesis, that
of the Argument of Ontic Trust.

The Argument from Ontic Trust

Being constrained by space I can only offer an
outline of that argument. Briefly, the argument
is an expansion and reconstruction of a Hob-
besian social contract argument, the central
idea of which is that our moral obligations
towards each other are based on a pre-existing
hypothetical social contract, one which we
should uphold because it is in the interest
of all of us to do so. The Argument from Ontic
Trust extends that hypothetical contract to
include everything that exists in the Universe,
sentient entities as agents and non-sentient be-
ings as patients. Unlike the Hobbesian social
contract, which is essentially anthropocentric,
the contract proposed by the Argument from
Ontic Trust is not as it encompasses all entities
that exist on the basis of their intrinsic value.
According to Florid,

In the case of the ontic trust, (the theory of
the social contract) is transformed into a primum,
entirely hypothetical pact... The sort of pact in
question can be understood more precisely in
terms of an actual trust... By coming into being,
an agent is made possible thanks to the existence
of other entities. It is therefore bound to all that
already is (the infrastructured) both unwillingly
and inescapably. It should be so also curiously... the
ontic trust is what is postulated by the approach
supported by IE... The acceptance of the ontic
trust requires a disinterested judgement of the
moral situation from an objective perspective
(or Level of Abstraction), i.e., a perspective
which is as non-antropocentric as possible.

The position advocated by the Argument
from Ontic Trust is a reasonable one to adopt
once you have accepted, on the basis of the
Argument from the Goodness of Being, that
all entities have an intrinsic value and hence
worth of moral consideration. However, the
Argument from Ontic Trust although separate
from Florid’s Argument from the Goodness
of Being is theoretically based on that prior
argument and hence dependent upon it. For it
is the prior acceptance of the pre-supposition
in that argument that Goodness and Being are
closely inter-related, which renders the ac-
ceptance of the idea of ontic trust reasonable,
within Florid’s theory of IE. I emphasized the
relevance of the re-definition of the non-sentient
hypothetical social contract, one which we
should uphold because it is in the interest of
all of us to do so. The Argument from Ontic
Trust extends that hypothetical contract to
include everything that exists in the Universe,
sentient entities as agents and non-sentient be-
ings as patients. Unlike the Hobbesian social
contract, which is essentially anthropocentric,
the contract proposed by the Argument from
Ontic Trust is not as it encompasses all entities
that exist on the basis of their intrinsic value.

In short, the Argument of Ontic Trust,
within Florid’s theory of IE, only goes through
if his Argument from the Goodness of Being
does. But we have seen that the Argument from
the Goodness of Being cannot support Florid’s IE
and hence neither can his Argument from
Ontic Trust, since the theoretical credence of
that argument relies essentially on the prior
correction of the Argument from the Goodness
of Being. In conclusion of this section, neither
the Argument from the Goodness of Being nor
the Argument from Ontic Trust which needs the
prior support of the former, suffice to support
Florida’s IE. Something else is required, which I
now propose to provide in the following section
by way of an alternative neo-Gewirthian Theory
of Information Ethics.

INFORMATION ETHICS
WITOUT METAPHYSICS

By contrast to existence, purposive or goal-ori-
entated behaviour can confer value in the manner
demonstrated by Alan Gewirth’s argument for
the PGC (Gewirth, 1978). Namely, the neces-
sary conditions for purposive agency, freedom
and wellbeing, which are also necessary for a
meaningful and worthwhile life, provide the
basis for having rights to freedom and wellbeing
and hence provide the universal foundation for
the moral status of all purposive agents or
patients, be they human or non-human.

One way to extend the moral status to
non-sentient informational objects can be
accomplished by showing how non-sentient
informational objects possess in some sense and
to some degree a form of purposive agency or
some other teleological property that is value

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conferring. Insofar as information can be said to be goal-orientated or teleological in some relevant sense, this might not prove impossible, difficult though as it might seem at present. Consider this argument. I will refer to it as the Argument from Designed—in-Purpose Agency (A-DIPA). Artefacts and other non-sentient informational objects have a functional instrumentality. They are designed to perform a certain specific functional and instrumental role. Take a knife, for example. The functional role of a knife is to cut materials of a certain kind. It has been designed with that functional purpose in mind. This functional role or purpose is inherently designed in the knife and as such inheres in the knife unless removed. All things being equal, the knife when used as intended will cut perfectly well according to the purpose for which it was designed—its designed-in-purpose. Now let us suppose that someone for no good reason and merely on a whim destroys the teleological (its designed-in-purpose) and functional capacity of the knife to cut. Let us also assume that this someone, call him Mack, is the owner of the knife. The knife is now blunt and has lost its functional purpose of cutting. No doubt the knife has been damaged (harmed) instrumentally as it can no longer fulfill the instrumental role or the purpose for which it was designed and created. But has any moral harm been committed and if so to whom and by whom?

To answer this question let us first ask a different question: Would it have been better if Mack had not and for no good reason, destroyed the capacity of a perfectly good knife to cut? If the answer to that question is yes, as it is likely to be, we can then proceed and ask what kind of damage or harm has been committed. I think we can allow that an instrumental harm has taken place which would have been better had it not occurred. What about a moral harm? Has the knife suffered a moral harm by it being made blunt? Clearly not an agent, since the knife lacks the capacity for agency. However, even if the knife lacks the capacity for agency in the full-blooded and traditional sense, could we not argue that the knife because of its inherent or designed-in-purposiveness or designed-in-teleology has some other type of dispossession-agency thwarted? For instance, (p. 351) or contributive agency (Korsgaard, 1983, p. 172) which affords it some minimal moral role? After all, a knife can be used to murder, a typical immoral action. Let us assume that the murderer had possessed a knife they would not have been able to commit the murder and thus an immoral act would not have taken place. Under this assumption, the knife can be said to have contributed to the murder in virtue of its inherent teleology or designed-in-purposive-agency (DIPA), or that the immoral act of the murder can be defined as morally distributed across a moral-leaf or moral-network that at least includes the murderer (the prime moral agent), the teleological instrument (the knife as a morally contributing and instrumental agent) and the victim (the moral patient).

Following Floridi and Sanders (2004, pp. 366-369) I will argue that although the knife can of course not be held in anyway morally responsible for the murder it can nevertheless be held accountable in virtue of its contributed role to the murder via its designed-in-purposive-agency or DIPA. There is, as Floridi and Sanders rightly claim a conceptual difference between moral responsibility and moral accountability. Although an earthquake can be held accountable for the moral harm of its victims as the primary cause of that harm it cannot, because it lacks the relevant full-blooded agency, be held morally responsible. Adapting and extending Gewirth’s argument from the Principle of Generic Consistency on the basis of which it is shown that purposive agents have rights to freedom and well-being for the sufficient reason that they are purposive agents (that is, they possess the natural property of purposive agency) we can reasonably say that artefacts such as knives with a designed-in-purposive-agency (the designed-in-goal or purpose to do x, in the case of the knife, x= to cut) have to some minimal degree prima facie rights to (Art)freedom (artificial freedom) and (Art)wellbeing (artificial wellbeing) as patients if not as agents? That is to say, can we not reasonably say that such artefacts have the right not to have their (Art)freedom in exercising their (Art)wellbeing interfered with for no good reason, or their (Art)wellbeing being violated by having their DIPA, within which their (Art)well-being can be defined and understood in terms of what they are good for (their designed-in—functional goodness) or “designed-in-capacity” to do x) reduced or eliminated for no good reason?

Can we or should we go further? I am thinking of thinking that Mack’s knife that was rendered useless by being made blunt for no good reason had its (Art)freedom and (Art)wellbeing unjustifiably violated and thus suffered not only an instrumental harm by having its instrumental functional role damaged, but also a moral harm qua artefact worthy of some minimal respect owed to it by virtue of its DIPA? Although the instrumental role of the knife can be replaced by the replacement of the damaged knife by a new one, the knife itself that was made blunt for no good reason has not only lost its replaceable instrumental functionality but also its replaceable particular inherent capacity to do what it was designed to best, namely, cut well. That inherent capacity is something that the knife possessed as a thing-in-itself and as such it is something that can be valued for its own sake and not merely instrumentally for the sake of being able to cut well for some human agent. Following Christine Korsgaard’s (1983) distinction between objective intrinsic and unconditional value on the one hand and objective but extrinsic conditional value on the other, I will argue that the knife has suffered moral harm by being damaged: that is, by having its DIPA to be cut well, rendered useless.

According to Korsgaard (1983) something X has an objective extrinsic but conditional value if X meets the relevant conditions under which it is held to be valuable and X is also something that is valued for its own sake or as an end, and in addition its instrumental value as a means (p. 840). Going along with Korsgaard we can then say that a knife or other relevant informational object is valued or can be valued partly for its own sake as an end in addition to its instrumental use as a means for human ends, provided certain relevant conditions are met. Having this dual value, both instrumental as a means and extrinsic or Inherent value as an end, the instrumental disvalue of a knife or other object that is being used to commit a moral wrong, overrides its inherent value as an end. This follows from the fact that the knife and other objects of this ontological type, only have conditional value so that it would be justifiable to destroy a perfectly good knife if that were the only way to prevent a murder, for example.

In the case of Mack’s knife, by contrast, both the extrinsic and instrumental value of the knife have been diminished, eliminated in fact, for no good reason; that is to say, the relevant conditions under which the knife is considered or can be considered valuable have been violated by the blunting of the knife, for no good reason. The qualification for no good reason is crucial and seems to point in the opposite direction in which Floridi’s argument for assigning moral value to informational objects seems to go. For I am partly in agreement with Korsgaard although for Gewirthian reasons rather than Kantian as in her case, that the objective and inherent value (or for Korsgaard extrinsic value) of an object, or informational object as in Floridi’s case, is not just a matter of the ontological status of the object qua informational object but of practical reason as well (Korsgaard, 1983, pp. 183-84).

I said I am only partly in agreement with Korsgaard because her claim is that the extrinsic value or in my case, inherent value, of an object is only a matter of practical reason and not one of ontology. Orienting my own position somewhere between that of Korsgaard and Floridi, I want to argue that the value of an object and in particular an informational object is determined partly by its ontology by virtue of its designed-in-purposive-agency (DIPA) the artificial equivalent of the natural property of purposive agency inherent in human beings and some other animals — and partly by the reasons we have for holding that artefact valuable, principally, in virtue of the reasons for which we hold artefacts of a certain kind to be good.
for doing x; that is, by virtue of possessing the capacity to fulfill certain designed-in goals or purposes for doing x.

What drives us to attribute objective but conditional value to an informational object? That is, what makes a tape, the sound on its surface, or the message recorded therein possess value for us? For example, it might seem to us that the value of playing music on a tape is conditioned on the tape’s being used as a musical instrument. If we have a piano, we may find a tape that contains music for piano to be valuable in the sense that it is more valuable when we have the means to play it. However, if we have no piano, the same tape may lose much of its value or even become worthless.

Mack’s knife it is diminished both instrumental and inherent value as the knife in its prime condition is no longer used. It has the instrumental value of being used as a perfectly good knife to cut, an apple for example, but it also possesses an inherent designed-in-purpose-capacity to cut whether or not it is ever used in that way. A good knife that lay dormant and was not used to cut would retain that inherent value regardless of whether its designed-in-purpose-capacity was put to instrumental use or not. And in it this conceptual distinction just made between the knife’s in-use-instrumental-value exercised in cutting things and its inherent value, which it has by virtue of its designed-in-purpose-value (that affords it the capacity to cut) which allows us to ascribe to the knife and other objects or artifacts of the type that possess a designed-in-purpose-agency (DIPA), two inter-related values: one instrumental and one inherent.

**IMPLICATIONS FOR FLORIDI’S ONTOLOGICAL THESIS FOR THE MORAL VALUE OF INFORMATIONAL OBJECTS**

In his paper “On the intrinsic value of information objects and the infosphere” (2002a) Floridi postulates the two theses that comprise his Information Ethics (IE) theory:

1. The first thesis states that information objects qua information objects can be moral agents.
2. The second thesis states that information objects qua information objects can have an intrinsic moral value, although quite minimal, and hence that they can be moral patients, subject to some equally minimal degree of moral respect.

However justified his motivation for extending the moral sphere to include not only the hypertext but also the infosphere, the exclusive ontocentric orientation of his approach in seeking to confer moral value to informational objects merely on the basis of their existence is misconceived because the pre-supposition that supports both of Floridi’s two theses of IE but without the metaphysical cost of having to postulate two extra metaphysical claims to the effect that (a) anything that exists in the infosphere as an informational object has moral value just by virtue of its ontic existence and (b) the unjustified damage or destruction of informational objects due to a lack of respect for their minimal moral worth causes information entropy which is overall a bad outcome and one that ought to be avoided.

I have argued above that existence per se qua information objects cannot of itself confer moral value. Floridi’s motivation for choosing the primary ontological route to the moral worth of informational objects is that he thinks that existing ethical theories which are either predominantly anthropocentric such as Kant’s theory or various other bio-centric theories which are more inclusive than Kant’s theory but not sufficiently so, cannot account for the moral worth of non-sentient objects such as artificial systems like software agents in cyberspace (2002a, 299), for example. If my analysis above is correct, Floridi’s motivation is justified but misconceived. Justified because he is right in arguing that there is a theoretical need to extend the moral sphere to include not only all sentient and other living organisms in the biosphere but also all entities that qualify as information objects including non-sentient beings such as coffee mugs, knives and software agents or webbots (Floridi and Sanders, 2004, 370) in the infosphere. As he states (2002a), showing that both an anthropocentric and bio-centric axiology are unsatisfactory is a crucial step. (p. 291)
If there was a lack of counter arguments to the Goodness of Being, as Floridi seems to think, this would not be critical for his position for in the absence of any such argument it would be reasonable to pre-suppose that Being is Good as a valuable theoretical starting point for explaining why all entities are intrinsically valuable and hence deserving of some moral consideration. However, as I have shown above, there are counter arguments to the Goodness of Being, most notably the arguments from Schopenhauer. At best, what this amounts to is a theoretical impasse between those who side with Plato and Spinoza on the one hand and those who side with Schopenhauer on the other, or those who along with the Manicheans believe that the axiological state of the Universe comprises a bit of both: partly good and partly bad. This theoretical impasse, however, should caution scepticism rather than any degree of certainty concerning the Goodness of Being. For Floridi also acknowledges (in press) that his pre-supposition of the Goodness of Being is not a defence of IE but an explanation [emphasis added]. Although being in the company of Plato or Spinoza, for example, might be reassuring, it is not an insurance against being mistaken [emphasis added] (p. 13)!

My proposed Neo-Gewirthian approach, by contrast, which locates the inherent moral worth and value of all informational objects, including human beings, animals and inanimate objects such as artefacts, the whole of Floridi’s infosphere in fact, in the natural property of purposive agency, provides, I believe, adequate justification at no additional ontological cost for a reasonable alternative theory of Information Ethics. Contrary to Floridi whose profound insights into the metatheoretical need for attributing moral value to all informational objects qua informational objects I share, I have argued that we do not require the unproven metaphysical pre-supposition of the Goodness of Being for doing so. The capacity for purposive agency alone, which is the natural property on the basis of which human beings and other sentient beings such as animals have inherent moral worth, can be adapted and extended as I have shown above, to include other non-sentient information objects, such as knives and software-agents, for example. Whereas sentient beings possess purposive agency naturally and inherently by varying degrees from very high in the case of human beings and perhaps high in the case of dolphins and whales to very low in the case of anemones, non-sentient beings such as artificial agents on the higher scale and thermostats and knives on a lower scale, possess an artificial purposive agency by design and teleological implication that inheres in those objects and renders them inherently but conditionally morally valuable as I have argued above.

Finally, I am in agreement with Floridi’s claim that,

It is unreasonable to assume that different entities may have different degrees of evaluative value that can constrain a safe (the agent’s)’s behaviour without necessarily having an instrumental value, i.e., a value relative to human feelings, intuitions or inclinations, as Kant would phrase it. (2002a, p. 293)

Although the capacity for purposive agency both naturally in the case of sentient entities and artificially in the case of non-sentient entities creates a continuum of moral worthiness and moral consideration across a wide network of informational objects, that continuum is separated by qualitative divisions between those entities that affords them various differentiated degrees of moral value in terms of the capacity for purposive agency. Using the metaphor of canal or river locks we can say that because the moral continuum of informational objects is porous, the capacity of purposive agency slips through the various qualitative moral divisions like water through the locks in a canal or river. However, the transitions from one qualitative moral division to another requires, as in the case of the raising of the water level in a lock to allow a ship to transit from one level of the canal to another, the raising of the level of complexity of an entity’s capacity for purposive agency so as to enable its transition from a lower to a higher qualitative moral division. Thus, a software agent’s capacity for purposive agency would have to be raised to that of an intelligent agent that meets Floridi’s and Sanders’ conditions of full agency discussed above, before it can proceed to a higher moral division close to that of human beings.

The conceptual distinctions between on the one hand responsibility and agenthood and on the other accountability and patienthood help explain the relative moral value of different entities. Thus although we could only hold a software agent accountable but not responsible for the destruction of valuable information, we could by contrast hold an android or human agent both accountable and responsible due largely to their higher moral status. Similarly, although we ought to morally avoid killing a tiger unless in self-defence we cannot reasonably expect a tiger to morally reciprocate in the same moral way. This is because although a moral patient worthy of moral respect the tiger does not possess sufficient moral agency to warrant us holding the tiger bound to reciprocate moral obligations with regard to human agents. Thus the four conceptual distinctions of responsibility/accountability and agenthood/patienthood go some way in explaining the relative moral value of different informational objects in relation to the moral relevance and significance of those conceptual categories in specific contexts.

CONCLUSION

My close reading of Floridi suggests that according to him, ontic existence alone qua informational object suffices to establish the moral status of the informational object. In support of this thesis he provides at least two distinct but inter-related arguments, the Argument from the Goodness of Being and the Argument from Ontic Trust. I have shown that neither argument separately or together is sufficient for supporting Floridi’s thesis, especially if the difficulties associated with the former argument can be avoided through the postulation of an alternative theory that achieves the same conclusion as Floridi’s IE, but without the troublesome and unproven pre-supposition that Being in all its manifestations is intrinsically Good. That alternative theory is my Neo-Gewirthian Information Ethics as argued for in this paper.

REFERENCES


Due to constraints of space, I will not be able to provide a justification for Alan Gewirth’s argument for the Principle of Generic Constancy (PGC) on which his derivation of rights to freedom and wellbeing is based, as this is well beyond the scope and limits of this paper. For a detailed analysis, justification and defense of Gewirth’s argument for the PGC see: Spence (2006, Chapters 1-3); Beyleveld (1991); and Gewirth (1978).

Following Floridi and Sanders (2004, 349) the knife can be said to lack agency because it lacks its three essential features of interactivity (response to stimulus by change of state), autonomy (ability to change state without stimulus) and adaptability (ability to change the transitions rules by which state is changed).

I prefer to use the term inhere rather than Korngard’s extrinsic term because the value an artefact has by virtue of its DPA inheres in the artefact and so it is not exclusively determined by the external reasons for which human beings hold it to be valuable. I should add, however, and perhaps this is in keeping with Korngard’s position, that in the event that an artefact was no longer held to be valuable its inherent value by virtue of its DPA could be revoked. For what can be designed in can also be designed out. This is in keeping with the correct thought that values are to a large degree determined by the underlying reasons for considering those values “valuable”.

I owe this statute observation to one of the reviewer’s of this paper.

ENDNOTES

1 The term “sacredness status” here refers to the expression used by David Lewis in his book On the Four-Forths of Worlds (1986, 133-135) to describe a particular response to his theory of possible worlds. It seems both theories elicit bold responses.

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Enhance Students’ Computing Skills via Web-Mediated Self-Regulated Learning with Feedback in Blended Environment

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ABSTRACT

The vocational colleges in Taiwan regard professional certifications as a badge of skills achievement. To enhance student learning in this specific context, the authors conducted a quasi-experiment to explore effects of web-mediated self-regulated learning (SRL) with feedback, blended learning (BL) and their combinations on enhancing students’ skills of using Microsoft Word. Four classes in successive years, with a total of 190 freshmen, were divided into 2 SRL with Feedback vs. SRL without Feedback + 2 (Instructor vs. Traditional) experimental groups. Results were generally positive. The results showed that students in the group of BL and SRL with feedback had better skills and higher peak rate on certification exams than those in the control group. It is hoped that the lesson learned is also useful for those teachers engaged in e-learning, specifically, in vocational colleges.

Keywords: Blended Learning, Computing Education, E-Learning, Feedback, Web-Mediated SRL

INTRODUCTION

In Taiwan’s vocational schools, students’ technical skills and the proportion of students awarded professional certificates before they graduate are the main criteria when evaluating teachers’ teaching performance and students’ learning outcomes. Students in these schools have low interest and negative attitude toward their learning, and tend to have lower levels of academic achievement (Chen & Tien, 2005). They spend more time on part-time jobs, do not adequately get involved in their schoolwork, and do not care so much about their grades.