

## NATURE AND VALUE – SOME HISTORICAL AND CONTEMPORARY REFLECTIONS

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### Intrinsic and instrumental values

Before we discuss the topic of nature and value, it is useful to consider what we mean by value. Philosophers generally make a very basic distinction between instrumental values and intrinsic values. Some philosophers make more subtle distinctions between at least five kinds of values in the narrow sense considered here, but the basic distinction will serve the purposes of this paper quite well.<sup>1</sup> Things which have instrumental value are good because they can be used to obtain something else. Things which have intrinsic value are good for their own sake, and as intrinsically valuable, they are not exchangeable for something else. Hence the famous Aristotelian maxim about war for peace, peace for leisure and leisure for contemplation of the Good<sup>2</sup> is a series of instrumental values culminating in an intrinsic value – we value war because it yields peace, we value peace because it brings leisure, and we value leisure because it permits the contemplation of the good, which Aristotle identifies with the intrinsic value of eUdaimon...a.<sup>3</sup> Intrinsic and instrumental values need not be placed in a teleological hierarchy, of course. At the end of Book I of the *Republic*, Socrates claims that Justice, is both good in itself – intrinsically valuable – and for its consequences – instrumentally valuable.<sup>4</sup>

In the history of western thought, nature has been primarily appreciated as instrumentally valuable. In Genesis, we see that God gives humankind "dominion over the earth," that is that natural things were created for the use and employment of man's happiness. In Platonic philosophy, from Plato to Plotinus, the created world is seen as instrumentally valuable for approaching an understanding of the formal good, and ultimately the Good, or the Neoplatonic One.<sup>5</sup>

Platonic philosophy generally treads a fine line regarding the goodness or badness of nature; on the one hand the created world is a deceptive, mutable and restrictive place – the body as the prison-house of the soul in Plato's *Phaedon*,<sup>6</sup> matter as the temptress of false love and the cause of falling away from divinity in Plotinus.<sup>7</sup> One might tend to think that nature was regarded as instrumentally good, but intrinsically bad by Platonic philosophers. However, there is a tendency in Platonism and Neoplatonism, one which has a profound influence on subsequent western philosophy, to regard nature as intrinsically good. Of course we understand such an idea under the rubric of providence. We see inklings of this in Plato's *Timaeus*,<sup>8</sup> and explicit expressions of it in Plotinus' *Enneads*.<sup>9</sup> This concept of providence holds a powerful sway over the thinking of all subsequent western philosophy up to and especially including the Enlightenment.

To hold a belief in providence is to believe that the world is fundamentally good, that, being created by a good and benevolent deity, it could not possibly be bad. Hence the theodical attempts to show that while natural events might be instrumentally bad for a given individual, in the context of the world as a whole, the natural order is intrinsically good. Hence we see Leibniz, in the 17th Century maintaining that this is "the best of all possible worlds." Despite the ire caused by Leibniz's impersonal God, his belief in a providential world order is characteristic of that period of intellectual development we refer to as the Enlightenment.

### Nature and market value

The significance of the Enlightenment faith in providence for the problem of nature and value cannot be overstated. I want to suggest that a third type of value emerges in the context of Enlightenment providence. This third type of value is what we call a market value. Enlightenment convictions about providence or "bienfaisance" extended beyond its incipient form as a statement of the world's intrinsic value as the creation of a munificent deity, and embraced, paradoxically, the idea that the world, because good, was good for man. This means that providence, initially seen as expressing the world's intrinsic value came to signify a pervasive optimism – the world being intrinsically good meant that it provided the instrumental means to man's happiness.

Consider the following interpretation of scientific data from Clement de Boissy in 1782: "The heavenly body that gives us light varies its course to provide us with the advantages of the changing seasons...the distance between the sun and the earth is also calculated in accordance with our needs...all the metals are placed at convenient distances...the most useful are those nearest to the surface of the earth."<sup>10</sup>

One suspects that this kind of confusion is a latent tension in Platonism; however, I want to suggest that it reaches an explicitly absurd pitch in the theory of laissez-faire economics. Who can read Voltaire without recognising a touch of the absurd in the adventures of Zadig and Candide? I will return to *Candide* later in this paper; for now I merely point out that in the earlier work *Zadig*, Voltaire has the main character and his wife blessing providence or bienfaisance at the end of a long series of cruel slapstick misadventures.<sup>11</sup> Incidentally, it is Voltaire who introduced Newton to the French. Newtonian physics, given a lack of precision, also embraced a providential God who made the universe "self-correcting" so as to

accommodate Newtonian cosmology. What is interesting about this is how Voltaire uses Newton in the service of providence. In 1764 he wrote: "it is very probable that a powerful hand, superior to...continual changes arrests all the species within the bounds which it has prescribed for them. So the philosopher who recognises a God has on his side a mass of probabilities which are equivalent to certainty and the atheist has only doubts."<sup>13</sup>

This concept of an invisible hand guaranteeing uniformity and system correction was, in twelve short years, in 1776, to recommend itself to another Enlightenment thinker, Adam Smith. The new providence can be seen to take shape in the theories of the French physiocrats, who identified a providential "natural order" where the creation of wealth was accounted for by a divine miracle, whereby nature yielded a surplus of food and raw materials for man.<sup>14</sup> Before the Enlightenment postulation of a natural, providential market value, a market value was something artificial, a *nomos* – not a *physis* – not a *physis* – *flusij*.

Since Adam Smith, we have come to view it as natural. Smith's *Wealth of Nations*, a secularisation of the ideas of the Physiocrats, has given us the invisible hand to which we entrust our quality of life. It was last reported being seen somewhere over Southeast Asia, but was asked to leave by the IMF. Word has it that it is pointing towards Brazil.

Laissez-faire economics, letting the market decide, with the mechanism of an invisible hand, is to the core a providential economic theory that, at the time, raised eyebrows in France; it is grounded in an Enlightenment conception of providence that nobody seriously endorses anymore. In the 18th Century, the French Minister Necker put his quite visible finger on the nub of the problem. In addressing Turgot about his support of a laissez-faire policy in the face of acute poverty in France, the Minister said, "I simply cannot understand this cold intellectual compassion for future generations, which is supposed to harden our hearts against the cries of ten thousand unfortunates who surround us now."<sup>15</sup> Remarks historian Norman Hamson, "once abstract a faith in a benevolent providence, the rule of nature meant the enslavement of man to the laws of matter."<sup>16</sup>

It was said, although it has been disputed, that Voltaire's doubts about providence came on the heels of the Lisbon earthquake in 1755.<sup>17</sup> When Voltaire writes *Candide* four years later, Dr. Pangloss' Leibnizian expression of compossibility – the best of all possible worlds – is doubted by the hero of *Candide*, and this set of cruel slapstick misadventures is concluded not with a homily to providence, but rather with intimations of what was to be its eulogy, and an anticipation of Romanticism's reaction to the Enlightenment. *Candide* concludes, "we must cultivate our garden."<sup>18</sup> For it is precisely the complacency fostered by a belief in a fixed and eternal world, the complacency bolstered by a belief that everything must work out for the best in a providential world that allowed a laissez-faire approach to economics to take root. Romanticism, by contrast, sought individuality and proactive creativity, embracing, in a novel way, that other profoundly influential concept of Platonism, known in the Western philosophical tradition as the Principle of Plenitude. Plenitude suggests that a benevolent God must "fill out being" by creating as various and full a cosmos as possible. Voltaire's cultivation of the garden implies that in order to reap the benefits of our existence, we must contribute to what nature has provided. We cannot be the passive recipients of Zarathustra's light – we must take the burden from Nietzsche's hero and strive to be individuals.

It is perhaps worth believing that natural catastrophe shook Voltaire's belief in providence. I tend to think that in our own time, we no longer believe nature to be infallible, we certainly do not regard it as looking after our interests, and we are worried that our existence is depreciating its value, both instrumental and intrinsic. Nature may not yield enough oxygen for us to breathe or water to drink in the future; we have certainly made it less intrinsically beautiful. If one returns to a pure notion of intrinsic providence – the world being intrinsically valuable because made by a benevolent God, we are tempted to say that as a whole, the world would be better off without us humans, that self-correction will take the form of eradicating the disease of humanity from the living cosmos.

### The conceptual implications of market values

I would now like to discuss the development of a third kind of value, the development of market values. The market value of something is generally defined as a non-normative assessment of what an agent is willing to sacrifice to obtain a given good. A market value, then, has the ability to grade instrumental values. We define the instrumental value of a good in terms of its propensity to procure other goods. But we grade, or say just how instrumentally valuable things are in terms of their market value. In other words, market values put price tags on everything: how instrumentally valuable land is, how instrumentally valuable labour is, how instrumentally valuable any commodity is.

The great objection to market values has always been that it is incapable of grading intrinsic values. I suggest that nature is regarded as intrinsically valuable as a whole, but instrumentally valuable as partitioned. In other words, parts of nature are instrumentally helpful or harmful, but only holistically have we ever regarded nature as intrinsically valuable. We realise from this that the reason market values cannot grade nature, that is, put a value on nature, is because it is the nature of nature to be an integral whole. It is Parmenides of Elea who first tried to articulate this, in suggesting that the right way to regard the cosmos – the 'Alhqe...a<sup>19</sup> – was as a whole, and the wrong way was by opinion about the inventory of its parts – *DOxa*.<sup>20</sup> This is my great fear about market economies.

We have shown great prowess at recognising the market value of partitioned things, but the more we commit ourselves to an ideology that sees value only in instrumental parts, the further we lose sight of the intrinsic value of wholes. The most obvious suggestion is that we are using the wrong paradigm of valuation. However, it is important to see the reason why the paradigm is wrong, so that *ü* la Parmenides "j oU m" pots t...j se brotin gnehm parel£ssh" – so that the thoughts of no mortal may outstrip thee.<sup>21</sup>

It is not the inability of the paradigm to account for some things – no paradigm is all-encompassing. Rather, we are using the wrong paradigm of valuation because the intrinsic value of wholes is (a) still considered most important – all market valuation is ultimately premised on *eUdaimon*...a, (b) in this context more importantly – intrinsic value affects instrumentality. In other words, if the integral structure that makes nature valuable is disrupted, it will cease to provide the instrumentally valuable basics, such as fresh water and clean

air necessary for eUdaimon...a. I suggest that a theory of value that cannot discuss the primary value of humanity – happiness – and cannot assess the mechanism which generates basic instrumental values is a paradigm that lacks some of the fundamental components of value. It needs to be tempered with a strong appreciation for those holistic and intrinsic values which make life worth living.

### Nature and prescriptive value

It is also true that philosophers have seen in nature prescriptive value. That is, we have used nature to derive certain ethical precepts. Indeed, Plato's defence of nOmoj in the nOmoj/fUsij debate, Aristotelian teleology, Thomistic Natural Law theory, Hobbes' contract theory, Spinoza's adequation of the passions, and Kant's categorical imperative are just a few of the many examples of attempts to derive ethical prescriptions for man, that is, to define ethical values for man from Nature. Hume's caveat, that it is a naturalistic fallacy to "derive an ought from an is" was already recognised by Aquinas' distinction between natural and normal.<sup>22</sup> Everything in nature is by definition natural, says Aquinas, but not everything is normal, where normal implies normative standards. Consequently, while we recognise the value of Hume's contribution to the debate, we see that there are ways of dealing with his concern.

The fact that nature has been employed as a prescriptor of values is significant for contemporary environmental concerns because it grants insight into why we value what we value. In Enlightenment philosophies that stress the providential aspect of nature, universality and uniformity are natural prescriptions for mankind. The Enlightenment has been characterised as a time when universalism and uniformitarianism were the guiding ideals. The dominance of form, of an underlying commonality of morality and value among diverse cultures and races, was stressed above local differences.<sup>23</sup> It is no surprise that in this period Diderot produced much of the *Encyclopedia*,<sup>24</sup> and the Swedish botanist Linnaeus became famous for his classification system and the phrase "Deus creavit, Linnaeus deponit" – God creates and Linnaeus classifies. Nature governed by universal laws and supplied all creatures with a normative ideal to which they ought to aspire. Innovation and originality were considered unnecessary, and even shunned as failing to recognise the importance of the permanence of form and universality of truth.

Arthur Lovejoy, in the *Great Chain of Being*, characterises the Enlightenment in the following manner: "for two centuries the efforts made for improvement and correction in beliefs, in institutions, and in art had been, in the main, controlled by the assumption that, in each phase of his activity, man should conform as nearly as possible to a standard conceived as universal, uncomplicated, immutable, uniform for every rational being."<sup>25</sup> This devotion to paradigm perhaps reached its most absurd pitch in the remarks of Samuel Johnson that Shakespeare's Romans weren't very Roman, and that his kings were not very king-like.<sup>26</sup> Johnson is expressing a lack of interest in local diversity; what he is critiquing is the lack of universal application in so particular a set of circumstances about which Shakespeare writes.

On the positive side, one might suggest that the universalisability formulation of Kant's categorical imperative is conceptually grounded in a faith in the uniformity and universality of natural processes.<sup>27</sup> In addition, the idea that nature is providential also gives rise, as I have attempted to suggest, to laissez-faire economics. If nature is self-correcting then its systems are self-correcting, and we ought to do very little; we ought to "let nature take its course" so to speak. However, nature taking its course, if we do very little, may very well mean the eradication of our species. Once we remove egocentrism from our conception of providence, there is no reason to think that nature may tire of us as it did of the dinosaurs.

In contradistinction to a providential world-view, many philosophers of a Romantic bent stress plenitude in nature and generally prescribe individuality and eccentricity as key values. John Stuart Mill's praise and defence of the eccentric in *On Liberty*<sup>28</sup> and his construction of a utilitarian ethic that would nonetheless guard against the tyranny of the majority is a case in point. Mill was fed on a steady intellectual diet of the Romanticism that is implicit in the prescription of *Candide* to cultivate our garden. For the principle of plenitude suggests that human activity can contribute to the variety that is seen as an implicit goal of nature, of Plato's munificent and un-jealous *Demiurgos*, Plotinus' One, or Bonaventure's God.

Those who stress the importance of plenitude see in nature an exhortation to celebrate individuality, eccentricity, creativity. It is significant that in such a prescription is the latent idea that nature, in some ways, may need our help. Whereas the permanence of providential nature prescribes complacency, the multifaceted prescription of nature as a plenum is to increase the plenitude. My fear is that in so doing, in increasing the plenitude, we have pursued individualistic goals without context or limit. The marriage of free market values with individualistic values, that marriage which the new political right called democracy, has yielded a plenitude of pursuits that are not guided by any one dominant value, by any one dominant definition of eUdaimon...a.

This of course has a felicitous ring – we value our freedom and individuality. However, lack of limit, dearth of moderation, absence of constraint is implicit in an individualism that increasingly places the task of valuation solely in the hands of the market, or rather, solely in the invisible hand of the market. We have, I fear, abrogated our ethical responsibilities, and our excuse is that we will simply let the market decide. I know of no definition of self-determination, or freedom that involves letting someone else decide our condition for us. The implication of such an abrogation for the environment, I suggest, is over-development, plenitude to the point of entropy – to a point where productivity becomes, to borrow a phrase from Ivan Illich, paradoxically counter-productive, where it restricts our freedom and ũ la Illich, our conviviality. Plato's critique of a democracy<sup>29</sup> without limit calls to us from the past.

### The ethical treatment of nature

Again, a reliance on the free market results in a sectioning of nature – the market being capable of valuing only sections or parts, but not wholes. But when we come to the most basic approaches to ethical respect, that is, to intrinsic valuation, it is the whole that counts. Kant's formulation of the categorical imperative in terms of autonomy, suggests that we must treat each other only as ends in themselves, and never as means.<sup>30</sup> We must treat autonomous beings as intrinsically valuable, lest we impede their autonomy. As it is for a

deontological approach like Kant's, the same can be said of a consequentialist theory like Mill's. Those who believe that utilitarianism impinges on human freedom fail, to recognise that the mechanism of determining utility is only a last resort, a means of dispute resolution, and not a proactive procedure.<sup>31</sup> The most basic presupposition of Mill's ethics is that each individual has an intrinsic value, a holistic value that cannot be imposed upon by anyone. Mill is adamant that to protect the dignity and intrinsic value of each and every human being, we must respect a clear line of demarcation between individual and society.

One significant approach in environmental ethics is to treat nature as a whole. We know intuitively that nature as a whole is not gradable in terms of market values, however much of its parts its "natural resources" may be. If we do not trust those intuitions, my above argument about holism and market values convinces me, at least. We should not miss the fact that ethical holism is grounded in a respect for autonomy. What does it mean to grant Nature the conceptual status of an autonomous entity? First, it carries with it the very ominous denial of egocentric providence, that Enlightenment providence. Nature's goals may be radically incommensurate with our own. Second, it means that we must respect Nature's autonomy, whether we subscribe to consequentialism – Mill, or deontology – Kant. This means that we must value Nature as a whole as an end in itself – an intrinsic value – and never as a means. This does not mean that we cannot use parts of nature instrumentally, but it does mean that our instrumental use of parts of nature must not impinge upon nature as a whole. A valuation of nature in this way suggests approaches to environmental ethics that stress sustainability, or sustainable development.

The last point I want to make about valuing nature as autonomous is that we are not on a level playing field with nature. It seems obvious that while we may treat nature as autonomous, while we may treat it as an end in itself, it is not clear, in the absence of a providential theory, that nature reciprocates. That is, while we may respect the autonomy of nature, it is a category mistake to complain that nature does not respect our autonomy. We enter a kind of Hobbesian fear of the sovereign – we obey the sovereign – in this case nature – not because we like the sovereign, but because we can obtain limited protection under the sovereignty.<sup>32</sup> The great irony in all of this is that Hobbes sees the social contract as an escape from the "state of nature." Note that in *Leviathan*, the citizens make a contract with each other, but not with the sovereign.<sup>33</sup> On this model, we might follow suit and contract with each other to respect the sovereignty of nature, or reap the whirlwind of non-membership. In other words, the non-reciprocal relationship we have with nature, while it may require that we treat nature as autonomous, does not allow us to contract with nature. We may contract with each other about nature – we may make agreements about environmental policy, for example, for the sole reason that without such contracts, the war of every man against every man, may result in the undermining of nature's sovereignty, and consequently our self-preservation.

In sum, I suggest that, with regard to the value of nature as a whole, nature, as intrinsically valuable implies an ethical approach to nature that treats it as autonomous. With regard to the value of nature as it affects us, we may like to think of it as a kind of sovereign, requiring contracts amongst ourselves to obey the sovereignty of nature and to ensure its continuance. The continued sovereignty of nature ensures our survival.

## Conclusions

The method and approach of this paper has been historical, and this is for a certain reason. I believe that the first step towards any ethical problem, applied or theoretical, is to attempt to appreciate the conceptual foundations of our ideals and to investigate their implications for our thinking. This paper, then, is more an example of methodology than a prescriptive treatise. Its method is to suggest by example a method of thinking about environmental problems. I have suggested elsewhere<sup>34</sup> that education, by which I mean liberal education, in contrast to information, by which I mean facts and figures, is vital if we are to approach environmental ethics intelligently. It was Plato's contention that education entails a radical reconceptualisation of the individual's relationship to himself, society and the cosmos,<sup>35</sup> and this is our intellectual inheritance. I do not believe that an "environmentally informed" citizenry can have the potency required to effect meaningful or effective change in environmental policy, without being "environmentally educated." In short, an education based approach to environmental issues has a fighting chance at changing the nature and scope of political and ethical discourse, and I think that only by re-conceiving political and ethical discourse can we hope to find a firm and coherent framework for prescriptions regarding nature and value.

## References

1. C.I. Lewis identifies: a) utility for some purpose, b) extrinsic or instrumental value – a means for something else, c) inherent values, such as aesthetic values in art or music, d) intrinsic values – things good in themselves, e) contributory values – good as apart of a whole. The *Encyclopedia of philosophy* gives the following example ("Value" pp. 230): "A stick of wood may be useful in making a violin, a violin may be extrinsically good by being a means to get good music, the music may be inherently good if hearing it is enjoyable, the experience of hearing it may be intrinsically good or valuable if it is enjoyable for its own sake, and it may be contributively good if it is part of a good evening or weekend."
2. *Eth. Nic. X*, 1177b5ff
3. *Eth. Nic. X*, 1177a16-20
4. Justice is declared to be "τις τι κἀ...σὺ ὁ καὶ δι' αὐτοῦ καὶ δι' ἑαυτοῦ γιγνόμενα ἢ π' αὐτοῦ γαπῆσον τὴν μὴ ἰσότητάν τε καὶ τὴν ἀδικίαν." *Rep.* 358a
5. *Republic* 510b, *Symposium* 210a-b

6. 81a-82e; cp. *Cratylus* 400c, *Gorgias* 493a
7. cp. esp. *Enneads* IV, 8
8. *Tim.* 29d-30c: "we may say that the world came into being, a living creature truly endowed with soul and intelligence by the providence of god." (30c); cp. *Epis.* VII, 337e
9. *Enneads* III 2 and III 3 are the two treatises which Porphyry entitled "on Providence"
10. Hamson N. (1982) *The Enlightenment*. Penguin, New York, pp. 82
11. Voltaire F.M.A. *Candide, Zadig and selected stories*. ed./trans. Frame, Signet, New York, 1961: "The queen and he worshipped Providence," pp. 172
12. Shapere D. (1967) *Newton*. In: *Encyclopedia of philosophy*. MacMillan, New York, pp. 489-491. "God's functions in Newtonian physics were to keep the stars from collapsing into one mass under the influence of gravitation, and to maintain the stability of the solar system in the face of perturbations of planetary motions by other planets."
13. cited in Hamson, *op. cit.*, pp. 87
14. Hamson, *op. cit.*, pp. 118
15. cited in Hamson, *op. cit.*, pp. 119
16. *ibid.*
17. On this, see Voltaire *op. cit.*, pp. 25, n 1 where Frame suggests that the earthquake "led Voltaire to make strong attacks on philosophical optimism." Hamson, *op. cit.*, pp. 92, calls this a "gratuitous over-simplification." However, Hamson's argument stresses the fact that *Candide* was published 12 years after the earthquake. The frontispiece of the Signet Voltaire *op. cit.* (pp. 15) gives the date of *Candide*'s composition as 1759, and the date of the earthquake as 1755 (pp. 25, n 1)
18. Voltaire, *Candide, op. cit.*, pp. 101
19. Kirk and Raven (1962) *The presocratic philosophers*. Cambridge Univ. Press, London [Parmenides fragment 347 ff., pp. 273 ff.]
20. *ibid.*, fragments 354-6, pp. 278 ff.
21. KR 8:61
22. Gilson E. (1993) *The philosophy of St. Thomas Aquinas*. Barnes and Noble, New York, pp. 316 ff.
23. Lovejoy A. (1960) *The great chain of being*. Harper, New York, pp. 291
24. Suggests Hamson, *op. cit.*, pp. 86, "The Encyclopedia is often regarded as typifying the attitude of the Enlightenment."
25. Lovejoy, *op. cit.*, pp. 292
26. Johnson S. *Lives of the poets: life of Dryden*. I, 433
27. "Act only according to that maxim which you can at the same time will that it should become a universal law." (First formulation). *Groundwork of the metaphysics of morals*, II, 422 ed./trans. Beck, Liberal Arts Press, New York, 1959, pp. 39
28. esp. Chapter III
29. esp. *Republic* VIII, 557b ff.
30. "Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only." (Second formulation). *Groundwork op. cit.*, II, 429, pp. 47
31. Says Mill, "there is no difficulty in proving any ethical standard whatever to work ill, if we suppose universal idiocy to be conjoined with it; but on any hypothesis short of that, mankind must, by this time have acquired positive beliefs as to the effects of some actions on their happiness...the endeavour to test each individual action by [the principle of utility] is [wrongheaded]." *Utilitarianism*, II, 23
32. The second law of nature in *Leviathan* states, "that a man be willing, when others are so too, as far-forth, as for peace, and defence of himself he shall thin it necessary, to lay down his right to all things; and be contented with so much liberty...as he would allow...against himself."
33. "because the right of bearing the person of them all, is given to him they make sovereign, by covenant only of one to another, and not of him to any of them, there can happen no breach of covenant on the part of the sovereign; and consequently none of his subjects, by any pretence or forfeiture, can be freed from his subjection." *Leviathan* II, 18, 2
34. Bowe G.S. (1999) *A Platonic approach to environmental education*. In: *Philosophy and ecology*. K.J. Boudouris (ed.). Ionia Publications, Athens
35. "education is not in reality what some people proclaim it to be in their professions. What they aver is that they can put true knowledge into a soul that does not possess it, as if they were inserting vision into blind eyes...But our present argument indicated...that the true analogy for this indwelling power in the soul and the instrument whereby each of us apprehends is that of an eye that could not be converted to the light from darkness except by turning the whole body." *Rep* 518c

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