

Veronika Szántó

Radical Politics, Natural Philosophy and Religion in Seventeenth-Century England

— Thesis Summary —

Budapest, 2011

1. Aim and Subject

It is an almost self-evident truth in intellectual history that in the 17th and 18th-century the relationship between natural philosophy and political philosophy was more intricate than what we can detect between present day scientific and political discourse. Indeed, notions concerning the structure and operation of the natural world had inevitable social implications as well, due to the common theological dimension shared by nature and society. Such problems as the relation between God and the created world, the laws governing the cosmos, or the autonomy or dependency bequeathed to the creatures emerged inescapably where the domains of natural philosophy, political thinking and theology overlapped.

Some historians of the 17th and early 18th-century proposed, however, an even stronger thesis according to which *particular* natural philosophies and *particular* political theories had stood in an even tighter, almost necessary relationship. According to them, the image of an inherently passive material world advocated by mechanical natural philosophy was in perfect concordance with the notion of politically totally powerless and passive individuals. As the particles of matter need external, immaterial forces for their movement and organization, so all social changes and political organizations likewise are unimaginable without external, top-down governance. Thus, the theory of organization forwarded by the mechanical philosophy proved excellent ideological support to a hierarchical, authoritarian political constellation where self-organizational movements are impossible. This analogy between the natural and the social world has been sealed by theological voluntarism, which stripped the creation even of its slightest degree of autonomy and subjected it to the Creator's irresistible omnipotence. Hence both the established church and political power found a natural ally in mechanical philosophy, probably the most important theoretical achievement of the scientific revolution. Therefore, modern science is claimed to have served oppressive, anti-liberal powers from its very inception.

Contrary to this, vitalistic natural philosophy held that matter is inherently active and autonomous, possessing the principle of its own movement and organization. This active, self-sufficient matter is able to construct the world according to its own laws, without the need of external intervention. The political counterpart of vitalism was liberal individualism broadly conceived, which regards political organization as

resulting from the bottom-up agency of the individuals. The theological stance most compatible with vitalism was pantheism.

Historians advocating the mechanical philosophy/authoritarian politics *versus* vitalism/liberalism scheme point out that vitalism reached its peak of popularity during the mid-century revolution. With its defeat vitalism declined too, thereby having allowed mechanical philosophy to occupy its role as the official ideology of the *status quo*.

According to some intellectual historians with an eco-feminist bent, mechanical philosophy justified yet another aspect of oppression. The passivity and inertness of nature (traditionally endowed with feminine attributes) entitled humankind to its exploitation without any moral constraint. Thus, the general oppression of mankind and the particular subjugation of women as well as the exploitation of nature and our fellow creatures, all receiving ideological support from mechanical philosophy, stemmed from the self-same source. This interpretation of mechanical philosophy fits well into the broader context of Enlightenment criticism.

In my dissertation I set out to show that the general association of mechanical natural philosophy with authoritarian ideologies is partial and flawed; nor is it true that the logic of vitalism is necessarily favourable to liberalism and an ecological conscious stance. I do not cast aspersions on the existence of allusions and interrelations between political and natural philosophical narratives, yet I contend that these correspondences are far from being so simple, unambiguous and straightforward as the authors I criticize claim. The image suggested by them oversimplifies and distorts the complexity of the thought of the age, because it lumps together thinkers who in fact widely differ by categorizing them into one camp or another in a solely bipartite system. Instead of conceiving of the attempts aiming to solve the age's most pressing questions as a quarrel between oppressors and revolutionaries, it is more fruitful to regard them as an intellectual endeavour whose participants searched for the possible synthesis of freedom and order, which could provide space for both political agency and natural organization while avoiding dissolution into anarchy. Further, we should take into account that, while acknowledging the legitimacy of ecological criticism, in the final analysis ecology itself is a late product of the often condemned scientific revolution.

2. Literary Background

I reconstruct the criticized opinions following the works of John Rogers (*The Matter of Revolution*, 1996), Margaret C. Jacob (chiefly her *The Newtonians and the English Revolution*, 1976), and Carolyn Merchant (*The Death of Nature*, 1980), because these still widely read and appreciated books provide the best explications of them. My criticism is based first and foremost on the original seventeenth-century works on mechanical philosophy (primarily the works of Henry More, Robert Boyle, Thomas Burnet and other early members of the Royal Society). The vitalist literature is harder to identify because it is scattered along a wide variety of philosophical treatises, religious pamphlets (most notably Ranter and Digger tracts) and literary works (one of the notable exceptions to this is Margaret Cavendish). Because the links between the realms of philosophy, politics and theology is ideological and political in nature rather than purely philosophical, and because the period under scrutiny overlaps with the great age of English philosophical verse, I also used literary works as my sources. Of course, the extensive use of the rich and effectively inexhaustible secondary literature on the 16-18th-centuries is indispensable.

3. Methodology

As my intention is the correction of generalizing propositions rather than their refutation strictly speaking, my strategy mainly consists in pointing out counter-examples and relevant, potentially decisive but often overlooked aspects of the problems, in the following ways:

- Pointing out the potentials in natural philosophy and scientific practice that are favourable to human creativity and agency;
- Pointing out such systems of philosophy where natural philosophy and political philosophy are linked in different ways from the predictions based on the contentions I criticize;
- Demonstrating the unique contribution of early modern natural philosophy and natural history to the ecological world view;
- Correcting factual errors and misrepresentations committed mostly by eco-feminist critics.

4. Results

Textual analysis shows that the thesis that mechanical natural philosophy served as ideological support for a centralised, top-down governed society needs serious reconsideration. Even within the terrain of natural philosophy tendencies favourable to self-organizing processes are easily detectable. Cartesian and Newtonian natural philosophy both have the potential to endow nature with the resources necessary to its emancipation from supernatural guidance. In seventeenth-century debates on spontaneous generation the possibility of self-organization of living beings was clearly articulated, which in turn caused serious theological anxiety, in the wake of which different solutions were proposed whereby restriction of nature's autonomy might have been effected. The increasingly vehement denial of the possibility of equivocal generation indicated that the new natural philosophy superseding Aristotelianism had raised novel kinds of questions which could have proved threatening even to religious orthodoxy.

The assertion of the human soul's materiality, a view that often was expressed in the form of the mortalist heresy, has been another possible aspect of the liberation of the material world from the rule of immaterial principles. Mortalism can be identified in some radical revolutionaries' thought (e.g. John Milton, Richard Overton). Despite this, it would be misleading to represent mortalism as a "progressive," secularizing, proto-deist stance, given that the denial of natural immortality of created things could equally serve the reassertion of God's omnipotence and the justification of the created world's extreme dependency, perfectly in line with the spirit of radical Reformation.

Scanning the seventeenth-century philosophical literature it is not particularly difficult to come across authors who made use of the vitalistic natural philosophy in ways that contradict the predictions of the thesis under criticism. In the case of Margaret Cavendish the interplay of political and natural philosophy is perfectly clear, yet this author saw no difficulty in building a hierarchical cosmos and a no less hierarchical society (in fact reminiscent of the monarchy freshly overthrown) on vitalistic premises. Moreover, the earliest works of Cavendish might lead us to conclude that she dropped the mechanistic-atomistic philosophy precisely because it allowed too much freedom, which thus could not guarantee order and stability. The example of the revolutionary

James Harrington falsifies the thesis under scrutiny in another way, as he was a radical thinker who possessed the vitalist natural philosophy's complete arsenal, yet he failed to take advantage of its decentralizing, liberal connotations. Surprisingly, he was content with as slight modifications of the most popular centralising metaphors that were just sufficient to make them compatible with his republican democratic principles. Since democracy tended to induce the horrifying perspective of chaos and anarchy in the minds of his contemporaries, he applied images suggestive of stability and predictability (sometimes even of mechanistic operation) in his description of his ideal, revolutionary republic. For Harrington, as for Cavendish who otherwise subscribed to totally divergent views, the problem to be solved was to create synthesis between the desirable level of freedom and stability, not merely to provide ideological support for bottom-up political activity.

When Margaret Jacob and the other authors here criticized study the development of modern science solely from the perspective of mechanical natural philosophy, they lose sight of those features of the scientific revolution that encouraged activism and awareness of the history-shaping potential of mankind. In Europe and primarily in England, permeated as they were by the spirit of radical Reformation, the promise of the Millennium, a future Christian utopia proved an effective driving force in many ways and it could facilitate virtually any kind of revolutionary efforts. Scientific endeavours of the early modern era have been positioned in the framework of sacred history, and the advancement of learning has been regarded as an indispensable element in the establishment of the Millennium. The scientific societies envisioned by Samuel Hartlib and others, the chief agents in obtaining and spreading knowledge, tried to live up to the millennial expectations. After the defeat of the revolution those who promoted the case of science adapted to the new circumstances with remarkable ease, yet the millenarian elements did not vanish entirely: science preserved its ameliorating aspirations in the increasingly secular Enlightenment's progressivist view of history.

Early modern science had an affinity to reinforce human creativity and agency in yet another way, and in this mechanical philosophy played an important role, notwithstanding its alleged tendency to promote subjugation of both nature and humanity to superior powers. Besides an optimistic future in which development could take place, development also required space. The concept of the decline of nature was

still wide-spread in the early seventeenth century; and concordant as it was with the doctrine of the Fall of mankind, it gained novel impetus from the anthropological pessimism of Calvinism. This thesis promulgated the idea of the imminent dissolution of the natural and social world, so it proved necessarily discouraging to any secular, earthly activism; while it favoured contemplative behaviour and passive acceptance of the existing circumstances, an attitude suitable to a mankind that depends on its Creator's sole mercy. The Goodman-Hakewill debate was an important turning point in this polemic that took place in the wider context of the debate between the ancients and moderns. Hakewill made a grandiose attempt to discredit the doctrine of decline, and in his argumentation the affirmation of humanity's scientific and moral progress was intimately linked to the denial of any inherent degenerative tendency in nature. The new generation of natural philosophers who inherited Hakewill's legacy soon replaced his Aristotelian notions by the image of the law-governed, clockwork universe, thereby providing a stable, reliable milieu where human activity could unfold, one in which the impending menace of imminent dissolution could no longer frustrate these strivings.

Early modernity's ecological criticism claims that Christianity's inherent anthropocentrism and contempt for nature was further exacerbated by mechanical natural philosophy, which regarded nature as dead, inert and thus freely manageable. Hence it encouraged the exploitation of our environment and our fellow creatures without moral restraints, thereby sanctioning purely instrumental attitudes to nature. According to Carolyn Merchant this conception of nature is an evident drawback from Renaissance's organicist-vitalist, holistic natural philosophy that still regarded nature as inherently alive, active and respectable, whose relative autonomy demanded a certain degree of self-restraint from humanity.

This contrasting of Renaissance and early modern attitudes is imprecise, and it is undeniable that modern natural philosophy in fact brought with it positive developments with regard to the recognition of nature's autonomy. On the one hand, Renaissance natural magic and philosophy, which Merchant treats so favourably was no less anthropocentric, manipulative and instrumentalist than the bogeyman of eco-feminism, Francis Bacon. Bacon himself was a creative successor of the traditions of Renaissance natural magic and vitalistic natural philosophy. It is also true that the aesthetic qualities of nature, most notably the category of the sublime, were discovered during the

scientific revolution as a result of the heated excitement accompanying the study of nature, the realization of the vastness of the universe and the concomitant recognition of human insignificance.

Although in the seventeenth century the study of nature did not cease to be natural theology at the same time, the observation of nature began to be justified by other purposes than the wonder we feel at the sight of the beauty, harmony and expediency of the surrounding world. All natural objects from galaxies down to the tiniest insect proclaim the greatness of God in their special, idiosyncratic way; thus the study of nature does not yield general awe, rather it leads to ever more sophisticated and detailed inquiry into the creation. Although late seventeenth-century physico-theology (which was at the same time natural history as well) retained human superiority, it tended to focus on studying the created world for its own sake.

In fact, the ecological world view itself stems from this physico-theological tradition. The increasingly more precise mapping of the interrelations between living beings, the more and more detailed study of adaptations and functions has flown not only from the imperative that prescribes knowledge of the Creator, but from a thoroughgoing intellectual change. This change pointed toward the appreciation and investigation of nature for its own sake. In the history of Western thought up until the Reformation natural objects functioned as signs carrying meanings that transcended them, thus they served as hieroglyphics allowing insight into the secrets of the divine mind. This entailed that before early modernity nature in fact referred to some deeper essence beyond itself, it was not significant on its own merits. This view of nature reached its most perfect expression the Renaissance doctrine of signatures. The semantic dimension gradually faded away, perhaps in the wake Reformation's literal exegetical practice; but the question concerning the meaning and purpose of nature which thus became incomprehensible and pointless remained, in spite of the breathtaking advances in physics and taxonomy, unanswerable until the apogee of physico-theology. The abrupt growth of the popularity of this genre can be explained by its ability to give reassuring answers to a disquieting, far-reaching problem. It turned out that even the most insignificant creature has an important role in nature's economy. And although the adaptations and expediency of nature still remained inexplicable without reference to God's masterful creativity for a long time, it became clear that human

beings are but a part of the inextricable web of living beings, where each member has its own particular contribution to the stability of the whole. The birth of the ecological view of nature is one of scientific revolution's crucial achievements.

5. Conclusion

Although it is tempting to conceive of the great debates in history as the struggle of two opposing parties, reality is much more complex and to this the problems of seventeenth-century natural and political philosophy are no exceptions. If we do not look at the participants of the debate as the heroes of freedom on the one side and the agents of oppression on the other, there is good hope that as late successors of early modernity we will be able to treat our present problems in their real complexity and thus with more success. It does not need particular demonstration that the dilemmas of organization and stability, freedom and order are far from settled once and for all, whether in the domain of politics, ecology or, for that matter, genetics.

6. Bibliography

Publications related to the dissertation

- „Harvey, Harrington és a politikai test vérkeringése,” *Világosság*, 2009/4. 49-60.
- “The Death of Nature and the Birth of Ecology: Natural History and the Preconditions of Ecology in Early Modernity,” *Philobiblon*, Vol. XIV., 2009, 36-47.
- “»Straight Toward Heaven«: Natural Theology and Politics in Milton's *Paradise Lost*,” in: Michael Funk Deckard – Péter Losonczi (eds.): *Philosophy Begins in Wonder*, Wipf and Stock, Eugene OR, 2010, 143-157.

Other publications

Journal articles:

- „Úrhajós az eperföldön: Bioetika és science fiction,” *Kellék*, 2008, 38. 27-35.
- “Ethics, Evolution and the Animal-Human Boundary,” *Philobiblon*, Vol. VIII., 2008, 91-108.

- „Darwini etika a 20. században: Az etika evolúciója és az evolúció etikája,” *Korunk*, 2007/5. 11-16.
- „John Toland és a locke-i örökség,” *Világosság*, 2005/5. 69-87.
- „Toleráns eretnekség – eretnek tolerancia. Viták John Locke *The Reasonableness of Christianity* című műve körül,” *Világosság*, 2004/1. 103-120.

Book chapters:

- „Természetjog és üldöztetés: Leo Strauss Locke értelmezéséről,” in: Pogonyi Szabolcs – Bodnár M. István – Borbély Gábor (szerk.): *A Politikum filozófiája: Bence György- emlékkönyv*, Gondolat, Budapest, 2010, 218-241.
- „Harvey, Harrington és a politikai test vérkeringése,” in: Gábor György – Vajda Mihály (szerk.): *A lét hangoltsága*, Typotex, Budapest, 2010, 109-123. [másodközlés]
- „John Milton égi és földi politikája,” in: Borbély Gábor – Gábor György – Geréby György – Szántó Veronika (szerk.): „*Királyrá lett a te Istened*”: *Fejezetek a politikai teológia történetéből*, Akadémiai Kiadó, Budapest, 2008, 118-134.
- „David Hume és a természetes teológia kritikája: A tervezési argumentum Newton után, Darwin előtt” in: Ludassy Mária (szerk.): *A Felvilágosodás álmai és árnyai*, Áron Kiadó, Budapest, 2007, 116-141.
- „John Toland és a locke-i örökség,” in Boros Gábor (szerk.): *Politikai teológia történeti perspektívában*, Tudástársadalom Alapítvány, Budapest, 2006 [másodközlés]

Reviews:

- „Utak és tévutak az öko-filozófiához,” BUKSZ, 2011. tavasz, 31-36.

Other:

- „Teológia és személyes azonosság. Egy filozófiai probléma teológiai konzekvenciái John Locke életművében,” in: Bárány Tibor (szerk.): *A tarkaság dicsérete: Az Erasmus Kollégium diákjainak tanulmányai*, Erasmus Kollégium Alapítvány, Budapest, 2005, 13-25.