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Stoic Philosophy and Roman Genealogy in Seneca's View of Scientific Progress*

Fabio Tutrone

1. Decolonizing progress: from Condorcet to Seneca

«The idea of human Progress is a theory which involves a synthesis of the past and a prophecy of the future. It is based on an interpretation of history which regards men as slowly advancing – *pedetemptim progredientes* – in a definite and desirable direction, and infers that this progress will continue indefinitely». At the beginning of his influential reconstruction of the history of the idea of progress, the twentieth-century apostle of positivistic progressivism John Bagnell Bury defined the object of his inquiry in these highly solemn terms. And he went on observing that progress «must be the necessary outcome of the psychic and social nature of man; it must not be at the mercy of any external will; otherwise there would be no guarantee of its continuance and its issue, and the idea of Progress would lapse into the idea of Providence».¹

Until the very recent past, most Western readers – including classical scholars – would have substantially agreed with this apparently “universal” definition, which echoes the faith of many generations of intellectuals – from Condorcet and Comte to Spencer and the so-called classical liberals.² Still in the Nineties, Robert Nisbet started his comprehensive survey by maintaining that «the history of all that is greatest in the West – religion, science, reason, freedom, equality,

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1. BURY 1920, 5.

2. Among the several scholarly works dealing with the history of the notion of progress, those of ALMOND, CHODOROW, and PEARCE 1982, MARX and MAZLICH 1996, and BURGEN, McLAUGHLIN, and MITTELSTRASS 1997 are especially valuable for the critical (and often deconstructive) insights they provide.

justice, philosophy, the arts, and so on – is grounded deeply in the belief that what one does in one's own time is at once tribute to the greatness and indispensability of the past, and confidence in an ever more golden future». Nisbet claimed that man has an intrinsic need for this fundamentally beneficial «dogma of progress», as he called it, and foreshadowed the collapse of the Western world under the pressure of other more “progressive” civilizations: «our problem in this final part of the twentieth century is compounded by the fact that the dogma of progress is today strong in the official philosophies or religions of those nations which are the most formidable threats to Western culture and its historical moral and spiritual values».³ Such an inextricable mixture of ethnocentrism, progressivism and (admittedly phobic) millenarism is indeed representative of what we might call the *socio-cultural embeddedness* of the concept of progress – a factor frequently overlooked by historians of thought. In spite of Nisbet's premonitions, there does not seem to be a concrete danger that Western societies will disintegrate because of a misappropriation of the faith in progress. Rather, there is good reason to think that applying *our* culturally determined and relatively recent view of progress – the post-Enlightenment teleological paradigm summarized by Bury – to significantly different cultures is bound to generate serious misunderstandings.

The problem is especially evident in the case of non-Western societies, most of which have been long regarded (and implicitly blamed) as «societies without history» or *Naturvölker*.⁴ Clearly, in the ethno-

3. NISBET 1994, 8-9.

4. As ZIMMERMAN 2001 pointed out, the traditional distinction of nineteenth-century anthropology between “natural peoples” (*Naturvölker*) and “cultural peoples” (*Kulturvölker*) had a notable impact also on classical scholarship, particularly in the framework of Imperial Germany, where the so-called «science of antiquity» or *Altertumswissenschaft* reached its acme. At that time, «anthropologists expected Africans, indigenous Americans, Pacific Islanders, and marginalized societies in Europe and Asia to be “natural peoples” (*Naturvölker*). Natural peoples supposedly lacked writing, culture, and history and thus contrasted sharply with «cultural peoples» (*Kulturvölker*) such as Europeans» (20). Notably, «Eduard Meyer, the great historian of Near Eastern and classical antiquity, included a section called «Elements of Anthropology» at the beginning of his great *History of Antiquity*, a section he expanded to over 250 pages in the 1907 edition. [...] Very few societies, he argued, reach the point where they have a high culture and an important historical role. Most societies are «history-less» (*geschichtslos*), not only because they themselves do not record history, but also be-

centric assessment of similar cultures, the idea of historical *progress* worked as an allegedly universal criterion of primary importance – and, consequently, as a conceptual barrier to cross-cultural interpretations.⁵ But the question is equally relevant to the work of classical scholars, whose main purpose is – or should be – the comprehension of a chronologically and culturally distant world like the Graeco-Roman civilization.⁶ It is indeed remarkable that almost all the investigations of the ancient view of historical advancement have basically drawn a comparison between the modern ideal of continuous tangible improvement – a process supposed to ensue from the very nature of history – and the Graeco-Roman discussions on the evolution (or *involution*) of human life. As a rule, the explicit aim of similar investigations has been to ascertain whether and to what extent the professions of faith in the value of progress pronounced by classical writers meet the standards of our selective definition. And even if more prudent scholars like Ludwig Edelstein have tried to refine their method of inquiry by adopting a relatively broad definition (specifically, that of Arthur O. Lovejoy),⁷ a kind of modern-oriented teleology has remained central

cause even when they do undergo change it is merely a typical, rather than a unique, development» (43-44).

5. Cf. e.g. MAZRUI 1996, 153: «we need hardly argue [...] that the choice of the West as the role model or ideal society is *ethnocentric*, while the idea that all societies are evolving toward the same destination is *universalist*. *The concept of progress is therefore a dialectic between the universalism of process and the ethnocentrism of destination*» (author's italics).

6. See now BETTINI 2011, XIV: «the Greeks and Romans, though in some respects very similar to us, most often conceived things in a much different way than we do, and are able, therefore, to open our eyes to so many “possibilities” of life that otherwise we might not be able to see. The Greeks and the Romans told exciting – yet different – stories. They elaborated profound – yet different – symbols. Above all, they confronted problems in many ways similar to those we find ourselves confronting today [...] yet with a different approach, because their worldview and the resources of their culture were different than ours». Cf. also SETTIS 1996b, and HARTOG 1996.

7. According to LOVEJOY and BOAS 1935, I, 6, the idea of progress – an idea one might legitimately look for in pre-modern times – is simply that of «a tendency inherent in nature or in man to pass through a regular sequence of stages of development in past, present, and future, the later stages being – with perhaps occasional retardation – superior to the earlier». On the basis of this rather looser definition, EDELSTEIN 1967 (who was himself a member of the famous *History of Ideas Club* founded by Lovejoy) advocated the presence and relevance of the notion of *progress* in classical antiquity – *contra* BURY 1920 and his widely shared Comtian approach. According to Edelstein,

to the approach of classicists.⁸

As part of a post-modern globalized society that has tragically experienced the limits of Western progress and its awkward exportations, we should now be more interested in the meaning of alternative paradigms. To a great degree, the ancients' reflection on cultural development – a reflection wide enough to include ethical, scientific and epistemological matters – must be regarded as pertaining to a different cultural code. And instead of focusing on those elements which possibly “anticipate” a standard positivistic view, we should endeavor to understand the social and intellectual factors underlying textual representations. In the present paper, I shall investigate the representative case of Seneca, the thinker who, in Edelstein's words, «gives a clearer and more comprehensive picture of what the ancients meant by progress than does any other author».⁹ I will devote special attention to the text of the *Natural Questions*, since this is probably the treatise which provides the most striking and revealing evidence on Seneca's view of progress – particularly *scientific* progress, in the proper sense, though, as we shall see, the question intrinsically involves moral and epistemological issues.

I will argue that Seneca devises a broadly conceived spectrum of progress, which reflects both his adherence to Stoic philosophy and his careful assimilation of Roman cultural models. On the one hand, Seneca emphasizes man's vocation to strive for scientific knowledge

«the ancients formulated most of the thoughts and sentiments that later generations down to the nineteenth century were accustomed to associate with the blessed or cursed word – “progress”» (XXXIII).

8. This is true also of the brilliant survey of DODDS 1973. Compared to Edelstein, Dodds further restricts the range of periods and contexts in which it is possible to identify ancient ideas of progress (of course, in the *modern* sense). What is more, even if he highlights «the slippery nature of the concept itself» and warns that «this is a field where generalization is more than commonly hazardous», he basically assimilates the Graeco-Roman world to «history-less», primitive cultures: «in primitive societies, custom-bound as they are and lacking historical records, progress does not readily develop a generalized meaning. Such societies may ascribe particular inventions or discoveries to individual culture-heroes or culture-gods, as popular Greek belief did from the Archaic Age onwards; but they do not think of them as forming a continuous ladder of ascent, and still less do they conceive such a ladder as extending into the present and the future».

9. EDELSTEIN 1967, 169.

and his need to constantly make an inner advance towards wisdom, engaging in a creative exposition of Stoic ethics and natural theology. While so doing, he seems to react against the idealization of primitive times as an age of *true* wisdom (in the “technical” Stoic sense) put forth by other contemporary Stoics such as Chaeremon and Cornutus (and presumably already expressed in the Middle Stoa). On the other hand, Seneca’s insistence on the *communal* and *intergenerational* character of progress – which depends on the view that ethical and physical knowledge are a non-individual heritage to be preserved and improved – echoes a deep-rooted belief of Roman society: the typically aristocratic concept of linear transmission and intergenerational competition, which plays a central role in Latin public and private morality. In addition, the bold claims about future discoveries made in the *Natural Questions* can be organically connected to the tradition of Hellenistic science and its methodological optimism.

Thus, once again, the idea of progress and its literary elaboration appear to be socially and culturally embedded. In order to understand Seneca’s particular standpoint as a Roman Stoic, we need to *decolonize* the (clearly superimposed) notion of positivistic progress and forsake any teleological presumption.¹⁰ Indeed, Seneca and those ancient authors who proclaimed their faith in a beneficial development of knowledge (whatever subject field they referred to) have often been regarded as the *ancestors* of *our* idea of progress – or, by contrast, dismissed from such a privileged position – in an attempt to present antiquity as the “root” of later identities.¹¹ What I shall attempt to

10. The usefulness of post-colonial interpretative approaches to the methodology of classical studies is becoming more and more evident in contemporary debate, especially under the influence of reception theories and as a response to the crisis in traditional humanities: see e.g. HOSE 1999, HARDWICK 2004, HARDWICK and GILLESPIE 2007, and HARDWICK and HARRISON 2013. On the distortions deriving from the (frequently unconscious) adoption of a teleological perspective see the famous warnings of FINLEY 1998, 85: what Finley calls the *teleological fallacy* «consists in assuming the existence from the beginning of time, so to speak, of the writer’s values [...] and in then examining all earlier thought and practice as if they were, or ought to have been, on the road of this realization; as if men in other periods were asking the same questions and facing the same problems as those of the historian and *his* world».

11. On the history of this *identarian* approach to ancient culture, from Renaissance classicism to the *Altertumswissenschaft* and the crisis of the twentieth century, see ROMANO 1997.

do in this paper is to take Seneca's confident assertions on the future possibilities of knowledge as an intellectually daring combination of literary, philosophical and social models: an ideological construct notably different from the "progressive" views conceived since the *Querelle des Anciens et des Modernes*.

While it is extremely interesting to investigate the modern reception of Senecan progressivism as a typical case of classics-based self-legitimation (an effort which, however, is beyond the scope of this survey), one should carefully avoid following the inverse path and starting with an *a posteriori* definition. Differently from what Bury and other scholars are inclined to argue, for instance, progress and providence are not incompatible concepts. Rather, they are strictly and harmoniously connected in Stoic philosophy. Likewise, Seneca's faith in scientific progress is not diminished by his lack of trust in an ineluctable favorable development arising from history itself. To all appearances, even if both Condorcet and Seneca expressed their optimistic belief in the advent of a brighter time and employed a high prophetic tone,¹² they embodied two very different attitudes – two very different *cultures*. It is the duty of conceptual history (or *Begriffsgeschichte*, in Koselleck's terms)¹³ to follow the changing routes of words, paradigms, and expectations.

12. Cf. Seneca, *QNat.* 7.25.4: *Veniet tempus quo ista quae nunc latent in lucem dies extrahat et longioris aevi diligentia* (the emphatic phrasing *veniet tempus* is given further prominence by its anaphoric repetition at the beginning of the next paragraph: *veniet tempus quo posterī nostri tam aperta nos nescisse mirentur*); J.-A.-N. de Caritat Marquis de Condorcet, *Esquisse d'un tableau historique des progrès de l'esprit humain* (1793), 498v: «Il arrivera donc, ce moment où le soleil n'éclairera plus sur la terre que des hommes libres, ne reconnaissant d'autre maître que leur raison» (quoted from the edition of SCHANDELER 2004, 435).

13. On the purposes and methods of *Begriffsgeschichte* see the essays collected in KOSELLECK 2002. The volume includes Reinhart Koselleck's insightful discussion on the notions of *progress* and *decline* (218-235), a discussion highlighting the fundamental changes introduced in the eighteenth and nineteenth centuries: «the subject of progress was expanded to become an agent of the highest generality, or one with a forced claim to generality: it was a question of the progress of humanity. [...] The chosen people of the Judeo-Christian heritage become the hypostasis of progress. Soon one can also speak of the «progress of time» and much later, of «the progress of history»» (230).

2. Back and forth: Stoic approaches to moral and cultural advancement

Among the most revealing peculiarities of Seneca's attitude towards scientific progress is an underlying acknowledgement of man's epistemic limits. The future progress of natural knowledge is envisaged and exalted in response to the admitted obscurity of several phenomena. Other generations, Seneca states, will unveil what is now obscure, in the same way as we have recently uncovered previously unknown matters. There would be no need to wonder at contemporary ignorance (and at the writer's own inability to provide exhaustive explanations), since one should regard physics as a transgenerational effort.

A case in point is the discussion on comets in *Natural Questions* 7 – the passage in which Seneca makes his most perspicuous and celebrated claims about human progress. The author admits that the course of comets is not as clear to us as that of planets, for «there are many things whose existence we allow, but whose character we are still in ignorance of».¹⁴ In order to demonstrate this epistemologically relevant assumption, Seneca shifts the focus to the vexed question of the nature of the soul, that is, from meteorology to psychology. As he puts it, «we shall all admit that we have a mind (*animus*), by whose behest we are urged forward and called back; but what that mind is which directs and rules us, no one can explain any more than he can tell where it resides».¹⁵ Seneca then goes back to the problem of comets

14. QNat. 7.25.1: *multa sunt quae esse concedimus, qualia sint ignoramus*. Translations from the *Natural Questions* are, with minor adjustments, those of CLARKE 1910. The Latin texts printed are based on a comparison between several modern editions (above all, those of OLTRAMARE 1929, HINE 1996, and PARRONI 2002).

15. QNat. 7.25.2: *Habere nos animum, cuius imperio et impellimur et reuocamur, omnes fatebuntur; quid tamen sit animus ille rector dominusque nostri, non magis tibi quisquam expedit quam ubi sit*. Immediately thereafter, Seneca provides a short list of psychological theories which is clearly indebted to the doxographic tradition (see MANSFELD 1990, 3137-3140; and cf. Cicero, *Tusc.* 1.18-24). The use of such doxographic materials, however, is intended to corroborate the author's argument about the limits of human knowledge, a theme central to the entire treatise. See INWOOD 2005, 165: «Seneca's most important concern in the book as a whole is not the overt theme (explanations of traditionally problematic natural phenomena) but the subterranean theme of the relationship between god and man, and most particularly the epistemic limitations of human nature».

and heavenly bodies, and proclaims his faith in a gradual discovery of truth:

Quid ergo miramur cometas, tam rarum mundi spectaculum, nondum teneri legibus certis nec initia illorum finesque notescere, quorum ex ingentibus interuallis recursus est? Nondum sunt anni mille quingenti ex quo Graecia «stellis numeros et nomina fecit»,¹⁶ multaeque hodie sunt gentes quae facie tantum nouerunt caelum, quae nondum sciunt cur luna deficiat, quare obumbretur. Haec apud nos quoque nuper ratio ad certum perduxit. Veniet tempus quo ista quae nunc latent in lucem dies extrahat et longioris aevi diligentia. Ad inquisitionem tantorum aetas una non sufficit, ut tota caelo uacet; quid quod tam paucos annos inter studia ac uitia non aequa portione diuidimus? Itaque per successiones ista longas explicabuntur. Veniet tempus quo posteri nostri tam aperta nos nescisse mirentur. Harum quinque stellarum, quae se ingerunt nobis, quae alio atque alio occurrentes loco curiosos nos esse cogunt, qui matutini uespertinique ortus sint, quae stationes, quando in rectum ferantur, quare agantur retro, modo coepimus scire; utrum mergeretur Iupiter an occideret an retrogradus esset – nam hoc illi nomen imposuere cedenti – ante paucos annos didicimus. [...] Erit qui demonstret aliquando in quibus cometae partibus currant, cur tam seducti a ceteris errent, quanti qualesque sint. Contenti simus inuentis: aliquid ueritati et posteris conferant.

Why should we be surprised, then, that comets, so rare a sight in the universe, are not embraced under definite laws, or that their beginning and end are not known, seeing that their return is at long intervals? It is not yet fifteen hundred years since Greece counted the number of the stars and named them every one. And there are many nations at the present hour who merely know the face of the sky and do not yet understand why the moon is obscured in an eclipse. It is but recently indeed that science brought home to ourselves certain knowledge on the subject. The day will yet come when the progress of research through long ages will reveal to sight the mysteries of nature that are now concealed. A single lifetime, though it were wholly devoted to the study of the sky, does not suffice for the investigation of problems of such complexity. And then we never make a fair division of the few brief years of life as between study and vice. It must, therefore, require long successive ages to unfold all. The day will yet come when posterity will be amazed that we remained ignorant of things that will to them seem so plain. The five

16. Cf. Virgil, *Georg.* 1.137.

planets are constantly thrusting themselves on our notice; they meet us in all the different quarters of the sky with a positive challenge to our curiosity. Yet it is but lately we have begun to understand their motions, to realise what their morning and evening settings mean, what their turnings when they move straight toward us, why they are driven back from us. We have learned but a few years ago whether Jupiter would rise or set, or whether he would retrograde the term that has been applied to his retirement from us. [...] Men will some day be able to demonstrate in what regions comets have their paths, why their course is so far removed from the other stars, what is their size and constitution. Let us be satisfied with what we have discovered, and leave a little truth for our descendants to find out.¹⁷

The same intriguing combination of scientific progressivism (emphasizing both past achievements and future possibilities) and epistemological anti-individualism underlies Seneca's approach to natural theology a few chapters later. We cannot see God, the writer argues, though He is inherent in nature and is «the greater and better part of His work» (*maior pars sui operis ac melior*), in terms of Stoic pantheistic immanentism.¹⁸ So, we should not wonder if we do not have a full understanding of certain heavenly fires:

Quid sit hoc sine quo nihil est scire non possumus, et miramur si quos igniculos parum nouimus, cum maxima pars mundi, deus, lateat! Quam multa animalia hoc primum cognouimus saeculo, quam multa ne hoc quidem! Multa uenientis aevi populus ignota nobis sciet; multa saeculis tunc futuris cum memoria nostri exoleuerit reseruantur. Pusilla res mundus est, nisi in illo quod quaerat omnis mundus habe[a]t. Non semel quaedam sacra traduntur: Eleusin seruat quod ostendat reuisentibus; rerum natura sacra sua non semel tradit. Initiatos nos credimus, in

17. QNat. 7.25.3-7.

18. QNat. 7.30.3. As MAZZOLI 1984, 956-958, pointed out, similar descriptions denote a rhetorically intense elaboration of Stoic pantheism and do not entail any substantial concession to Platonic dualism (pace GAULY 2004, 162-164, who reads Seneca's confidence in future development as part of a general "eschatological" tendency contradicting Stoic materialism). For a sound reassessment of Seneca's relationship to Stoic material cosmology see WILDBERGER 2006, who rightly maintains that even in texts like *Ep.* 65 Seneca's view «traditionelle stoische Position hinstellt, nicht weniger monistisch oder dualistisch als das, was anderswo als Ansicht Zenons oder Chrysipps referiert wird» (5).

uestibulo eius haeremus. Illa arcana non promiscue nec omnibus patent; reducta et interiore sacrario clausa sunt, ex quibus aliud haec aetas, aliud quae post nos subibit aspiciet.

What that is, without which nothing is, we cannot know: and when God, the greatest part of the universe, hides Himself, we are surprised, are we, that there are some specks of fire we do not fully understand? How many animals we have come to know for the first time in our own days, how many are unknown even today! The people of a coming day will know many things that are unknown to us. Many discoveries are reserved for the ages still to be, when our memory shall have perished. The world is a poor affair if it do not contain matter for investigation for the whole world in every age. Some of the sacred rites are not revealed to worshippers all at once. Eleusis retains some of its mysteries to show to votaries on their second visit. Nature does not reveal all her secrets at once. We imagine we are initiated in her mysteries: we are, as yet, but hanging around her outer courts. Those secrets of hers are not opened to all indiscriminately. They are withdrawn and shut up in the inner shrine. Of one of them this age will catch a glimpse, of another, the age that will come after.¹⁹

For the Stoic philosopher, nature is a divine shrine and men are its hesitant initiates – their hesitation deriving from a blameworthy yielding to vice. Most importantly, the path of initiation into the secrets of the cosmos takes more than one lifetime and requires the efforts of numerous generations. If man devotes himself to the edifying investigation of phenomena, however, science will progress and cosmic truths will be disclosed.

Similar optimistic assertions have offered an attractive basis for interpreting Seneca as an «apostle of progress»,²⁰ or even as a pacifist prophet «very close to the scientists of our day».²¹ Edelstein has gone so far as to equate Seneca's views with those of Condorcet and Kant:

19. *QNat.* 7.30.4-6.

20. MOTTO 1993, 22: «certainly a good case can be made for Seneca's vital importance as apostle of progress». However, Motto sensibly argues against a generic assimilation of Seneca to modern progressivism: while the nineteenth century conceived a «naïve credence in the involuntary and irrefragible thrust of progress, together with the idol of perfectibility», the Latin thinker «always recognized that progress was merely a potential, that man had, by an effort of will, to discipline himself to intellect and advancement» (30-31).

21. CAILLEUX 1971, 483: «il s'avère très proche des scientifiques de notre temps». Cailleux recalls Seneca's censure of war in passages like *QNat.* 5.18 and describes

like the eighteenth-century *philosophes*, our author would have insisted «on the indissoluble union between intellectual progress and that of liberty, virtue, and the respect for natural rights, and on the effects of science in the destruction of prejudice»;²² what is more, Seneca would have shared Kant's idea that «all the characteristics of the human species are represented not by any of its members, but only by the species itself».²³ The most interesting aspect of Edelstein's survey on Senecan thought, however, is its attempt to identify the intellectual background of the writer's progressivism – since before undertaking any comprehensive comparative analysis, one should endeavor to understand the meaning of Seneca's statements in light of their own cultural milieu.

No doubt, Edelstein is right in pointing out the decisive influence of the Stoic tradition and its “developmental” approach to human life. Both from the perspective of individual enhancement and that of cosmic history, the Stoics seem to have emphasized the role of *progress*, that is, of those gradual and continuous changes which lead to the achievement of a purpose.²⁴ As usual, the most compelling evidence comes from the field of language and theoretical vocabulary, since the Stoics make a very telling use of the word προκοπή (“advancement”) as well as of the verb προκόπτειν (“to advance”). The term προκοπή appears to be a

him as an enlightened scientist «résolument pacifiste». Similarly, Cailleux interprets the claim that «the people of a coming day (*venientis aevi populus*) will know many things that are unknown to us» as a prophecy of the diffusion of knowledge among ordinary people («la connaissance, d'abord apanage des sages, s'étendra au peuple: vision prophétique», 480).

22. EDELSTEIN 1967, 175. This is Bury's description of Condorcet's theory (cf. BURY 1920, 210), quoted by Edelstein in order to show that Seneca's and Condorcet's views are substantially the same. According to Edelstein, «for Seneca, the ideal of progress was an expression of the highest aspirations of man and mankind, and in explaining it and defining its scope he argued very much in the manner of the thinkers in the eighteenth century who were preoccupied with the same ideal».

23. Edelstein refers to Kant's anthropological discussion in *Anthropologie in pragmatischer Hinsicht* (1798), whose last chapter (II Teil, E) bears the title *Der Charakter der Gattung*.

24. In accordance with the approach elucidated in the first paragraph, I use the word *progress* in a very broad and intuitive sense, chiefly for its direct heuristic value. Even in the case of Stoic philosophy, recourse to a restricted, pre-fixed definition would simply impair our understanding of cross-border issues. For a general discussion of the Stoics' “progressive” reading of human agency, however, see VERBEKE 1964.

Hellenistic coinage which Cicero repeatedly translates as *progressio* or *progressus*, especially with reference to Stoic doctrines.²⁵ And indeed the view of moral progress as a gradual development towards wisdom plays a central role in Stoic philosophy, particularly from Chrysippus onwards.²⁶ As Geert Roskam pointed out, the Old Stoics «were able to valorize the concept of moral progress without abandoning their fundamental and contradictory bifurcation between good and evil, to admit of an intermediate condition within a dichotomy of diametrically opposed poles, to meet the common sense convictions and the generally accepted moral differentiation between men without giving up their paradoxical thesis that all those who are not wise are alike mad».²⁷ Although the attainment of Stoic virtue – and thereby the transition to the blessed category of wise men – consists in a radical (and allegedly unperceived) change in one’s inner status (μεταβολή),²⁸ a laborious

25. Cf. EDELSTEIN 1967, 146-147, DODDS 1973, 1-2, and BURKERT 1997, 19, who also remark on the use of ἐπιδοσις (literally, “increase”) in classical Greek, a term which later coexists with προκοπή. For Cicero’s rendering of προκοπή with *progressio* see e.g. *Acad.* 1.20; *Fin.* 4.17; 37; 66-67; 5.58; *Off.* 3.14; 17. For *progressus* see *Tusc.* 4.44, or *Nat. Deor.* 1.15. Notably, Cicero’s contemporary, the Epicurean Lucretius, uses neither *progressio* nor *progressus*, and employs *progredi* in an epistemological sense only once (cf. 5.1453, the famous finale of Book 5). On Lucretius’ conception of progress and its philosophical premises see STADERINI (this volume).

26. In von Arnim’s collection, most of the fragments dealing with ethical progress are ascribed to Chrysippus (*SVF* 2-3), often on the basis of explicit quotations. However, according to Plutarch, *Prof. Virt.* 82F-83A (= *SVF* 1.234), Zeno of Citium had already provided practical advice on how to perceive one’s moral progress. VERBEKE 1964, 30-31 has cast doubt on Plutarch’s testimony in light of an extremely “rigorist” interpretation of Zeno’s thought, but a good case has been made that «the Old Stoics did admit of progress toward virtue but maintained that happiness, which attaches only to virtue itself, is not achieved until one has reached complete virtue» (RAMELLI 2009, LIII). Ramelli convincingly ascribes this attitude to Zeno himself, referring to the evidence provided by Zeno’s letter to Antigonos Gonatas (Diogenes Laertius, *Vit.* 7.8-9). See also HAHM 2002.

27. ROSKAM 2005, 29. On the well-known Stoic paradox according to which those who are not wise – including those who are progressing toward virtue – belong to the class of “fools” (φῶλοι) see *SVF* 3.524-539. Such a view is, of course, founded on the assumption that all faults are equal, while virtue is a separate and perfect status. This, however, does not contradict Chrysippus’ claim (Plutarch, *Stoic. Rep.* 1038E = *SVF* 3.226) that Stoic virtues can «grow and progress» (αὔξεσθαι τὰς ἀρετὰς καὶ διαβαίνειν).

28. Cf. *SVF* 3.539-542.

process of self-improvement is needed to reach such a final goal. Men in progress (the so-called προκόπτοντες or πελάζοντες) are expected to build on their natural disposition (φύσις) with the help of culture and education (μάθησις).²⁹ This intermediate class of aspiring sages – those who, differently from deeply vicious persons, perceive their faults and blame themselves – are indeed the addressees of Seneca's works, the *proficientes* who can legitimately hope to learn virtue.³⁰

According to Cicero's exposition of Stoic thought, the fact that man's nature progresses further (*ipsam per se naturam longius progredi*), so as to confirm and perfect reason, reflects the providential plan of God – that is to say, of the cosmic reason permeating man himself.³¹ In the Stoic view, progress is one of the expressions of divine providence, and roughly the same process can be observed on an individual and universal level. Cicero clearly states that human history starts at some point in the cosmic cycle when «a sort of ripeness for sowing the human race» emerges. At that point, God «increases» the status of the newly generated mankind through the providential gift of reason.³² In

29. See especially Simplicius, *In Arist. Categ.* 8.242.12-15 (= SVF 3.217); Cicero, *Leg.* 1.27 (= SVF 3.220) and Clement of Alexandria, *Strom.* 1.6 (= SVF 3.225).

30. As attested by Proclus, *In Plat. Alcib.* 3.158 (= SVF 3.543), the προκόπτων differs from the wholly ignorant man (ἀπαίδευτος) precisely because he realizes that the cause of all his faults lies in himself. Of course, Proclus distinguishes the sage from both these kinds of people, as «the perfectly educated man (πεπαιδευμένος) blames neither others nor himself» and stands out as a model of infallible virtue. Thus, even in Proclus' account, the fundamental distinction is a dichotomic one – that between wisdom *sensu proprio* and the various degrees of vice. Seneca, too, maintains that the man in progress belongs to the class of fools (*qui proficit in numero quidem stultorum est*), even if a large gap separates these two kinds of non-sages (*Ep.* 75.8). In the same context (8-18), he proposes a thorough distinction between three types of *proficientes* which eloquently mirrors his deep-rooted interest in the problem of προκοπή (see now WARE 2008). Like Proclus, Seneca highlights the importance of recognizing one's own errors in order to make progress (*Ep.* 50.1-4; 53.5-8). And as a follower of Stoic intellectualism, he decisively proclaims that virtue is a matter of teaching, training, and knowledge (e.g. *Ep.* 31.6-8; 50.7-9; 90.46; 95.55-64). See WILDBERGER 2013, 308-310.

31. Cicero, *Leg.* 1.27 (cf. above, n. 29).

32. *Leg.* 1.24: *Nam cum de natura hominis quaeritur, haec disputari solent – et nimirum ita est, ut disputatur – perpetuis cursibus conuersionibusque caelestibus exstitisse quandam maturitatem serendi generis humani, quod sparsum in terras atque satum diuino auctum sit animorum munere, cumque alia quibus cohaerent homines e mortali genere sumpserint, quae fragilia essent et caduca, animum esse ingeneratum a deo.*

the same way as individual progress consists in the acknowledgement and development of one's rational nature, the historical advancement of mankind descends from the acceptance and use of the divine λόγος.³³ As we shall see, however, the Stoics were not unanimous in determining which of the historical products of human rationality reflect "correct reason" (ὁρθὸς λόγος), and Seneca made a relevant contribution to this debate in his *Epistle* 90. What is in any case worth noticing in view of our present interest is that the Stoic conception of history postulates a progressive development of human knowledge and expertise under the benevolent guidance of cosmic reason.

Remarkably, it is not God that bestows knowledge on men once for all, but it is mankind's reason – being itself a spark of the divine λόγος – which is called to discover the truth in accordance with God's plans. In his Stoic-influenced didactic poem, for instance, Aratus of Soli praises man's achievements in the field of astronomical knowledge and highlights their beneficial effects on the safety of navigation.³⁴ According to Aratus (who starts his work with an emphatic invocation of Zeus, variously resembling Cleanthes), the twelve signs of the Zodiac have been revealed by Zeus for the good of mankind.³⁵ And

33. See VERBEKE 1964, 28: «les Stoïciens reconnaissent dans le développement de l'histoire culturelle, un progrès authentique, comparable à celui qui se réalise dans l'évolution d'une existence individuelle. L'histoire n'est donc pas pour eux, le simple dévoilement d'un contenu implicite, elle se présente au contraire comme un progrès vital, comme une croissance biologique à partir d'un germe initial». In more general terms, the whole Stoic account of cosmic history draws on a biological analogy between macrocosm and microcosm, individual growth and universal evolution: see HAHM 1977, 136-184 (who appropriately defines the Stoic theory as a «cosmobiology»), and Seneca's own analogical approach in passages like *QNat.* 3.23.2-3.

34. *Phaen.* 1.740-764.

35. *Phaen.* 1.1-18. As is well-known, Cleanthes, the author of a solemn *Hymn to Zeus* carefully translated by Seneca (*Ep.* 107.11), was Aratus' near-contemporary. More generally, scholars have long recognized Aratus' debt to Stoic philosophy: see EFFE 1977, 40-56, D. KIDD 1997, 10-12, and GEE 2000, 66-91. Though some interpreters have expressed their skepticism on this matter (see, most recently, VOLK 2010, 201), it is very difficult to deny the close similarity between Aratus' view of Zeus and Stoic natural theology. Neither is it fruitful to investigate the philosophical background of a third-century author like Aratus in light of a supposedly unvarying "Stoic dogma", for, as INWOOD 2005, 25, wisely claimed, «the picture that modern scholars have made for themselves of an orthodox Stoicism teaching internally consistent doctrine» seems rather «an artefact of our reconstructive methodology». This is especially true in

even if some natural phenomena still escape human understanding, one can legitimately expect that they will be gradually penetrated in the future: as the poet puts it, «we men do not yet have knowledge of everything from Zeus, but much still is hidden, whereof Zeus, if he wishes, will give us signs anon; he certainly does benefit the human race openly, showing himself on every side, and everywhere displaying his signs».³⁶ A few decades before Seneca, another astronomical poet, even more indebted to Stoic cosmology than Aratus, Marcus Manilius, draws an analogous picture of the history of science and culture. For Manilius, astronomical knowledge is a divine gift strictly connected with the birth of civilization in the East.³⁷ It was beneficently revealed by Hermes, at the time when nature disclosed herself (*se ipsa reclusit*) and mankind overcame its original beastliness.³⁸ Manilius puts special emphasis on man's intellectual efforts following this divine revelation, and his *Kulturentstehungslehre* appears to combine the tenets of Stoic providentialism with a form of anti-primitivistic progressivism.³⁹ Moreover, when describing the first men's daring achievements in fields like language, agriculture and navigation, the poet puts forth a general principle of cultural history according to which «experience always generates one skill from the other» (*semper enim ex aliis alias*

the case of poets who are not philosophers *sensu stricto*, employ a variety of rhetorical means, and reflect several concurrent influences.

36. *Phaen.* 1.768-772: πάντα γὰρ οὐπω/ ἐκ Διὸς ἀνθρώποι γινώσκομεν, ἀλλ' ἔτι πολλὰ/ κέκρυπται, τῶν αἵ κε θέλη καὶ ἐσαυτίκα δώσει/ Ζεὺς· ὁ γὰρ οὖν γενεὴν ἀνδρῶν ἀναφανδὸν ὀφέλλει/ πάντοθεν εἰδόμενος, πάντα δ' ὃ γε σήματα φαίνων. Transl. D. KIDD 1997.

37. *Astron.* 1.25-112.

38. *Astron.* 1.30-45.

39. *Astron.* 1.66-112. Other possible sources for the author's cosmology include, of course, Hermetism and Pythagorizing Platonism. A thorough discussion of Manilius' intellectual and philosophical background has been recently offered by VOLK 2009, according to whom «the *Astronomica's* world view agrees with Stoic thought to such an extent that it would seem appropriate to label the poet a Stoic and conclude that the teachings of the school present a major – probably the largest – influence on his work» (231). Indeed, «in addition to the close relationship between macrocosm and microcosm, which explains man's innate capability for cosmological research and insight, Manilius maintains that the divine universe is particularly eager to reveal itself to human beings and calls on them – sometimes positively forces them – to enter into some kind of interrelation with it» (222).

proseminat usus).⁴⁰ The verb *proseminare* (literally, “to sow”) recalls the Stoic idea of “seminal” cosmic reason (λόγος σπερματικὸς) acting upon man and the whole of reality from within. At various points in his *Astronomica*, Manilius proudly asserts that human rationality is part of the divine λόγος and is therefore called to investigate nature.⁴¹ And as the use of the adverb *semper* shows, such a process of discovery and investigation does not concern only primitive mankind but stretches indefinitely forward into the future.

The evidence provided by Aratus and Manilius is relevant to our discussion of Seneca’s opinions for two main reasons. First, both these authors deal with astronomy (or, more properly, astrology) and other related scientific subjects, and we have already noticed that Seneca’s most striking assertions about human progress can be found in the framework of astronomical expositions. Indeed, it is generally recognized that, especially since the Hellenistic age, ancient scientific writers developed a strong belief in the continuous progress of knowledge.⁴² A typical example is the second-century BC astronomer and

40. *Astron.* 1.90. The meaning of this *sententia* is even more evident if one considers that it immediately follows a brief recapitulation of the history of primitive progress: *tum belli pacisque artes commenta vetustas* («at that time, primitive mankind discovered the arts of war and peace»). As FERABOLI, FLORES, and SCARCIA 1996, 201, remarked, «oltre ad alcuni aspetti precipi della filosofia stoica, e a larghe tentazioni “sincretistiche”, questa lettura storica del progresso costante dell’umanità applica con docilità il modello interpretativo empirico, secondo cui carattere dominante della cultura è il cumulo crescente delle esperienze organizzate».

41. See e.g. *Astron.* 2.105-135; 4.866-935. According to ROMANO 1979, Manilius’ view of rational knowledge, his emphasis on an original state of need, and his rejection of the golden age myth combine the Stoic (especially Posidonian) account of civilization with Hermetic beliefs which are in turn indebted to Aristotle’s *De Philosophia*. Though the influence of Hermetism on the *Astronomica* is indisputable, however, Stoic theories of cultural history might well have amalgamated the idea of primitive *χρεια* with the praise of man’s divine reason (a case in point is Cicero’s discussion in passages like *Tusc.* 1.62-65, or *Rep.* 3.3, suitably recalled by Romano). And the fact that Manilius does not take up Posidonius’ belief in a golden age could simply be read as proof of his adherence to Stoic, non-Posidonian reconstructions, which were inevitably confronted with Aristotelian theories (see, for instance, the Philonian account cited below, n. 51). Interesting comments on the relationship between Aristotelian, Epicurean and Stoic *Kulturensteherungslehren* can still be found in GRILLI 1953.

42. See EDELSTEIN 1967, 140-155, and DODDS 1973, 18. At the conclusion of his survey, Dodds observes that «at all periods the most explicit statements of the idea (*scil.* of progress) refer to scientific progress and come from working scientists or from

geographer Hipparchus of Nicaea, who is said by Pliny the Elder to have «listed the number of the stars for posterity's sake» (*adnumerare posteris stellas*).⁴³ Hipparchus drew up a catalogue of the fixed stars in the hope that future scientists would use and possibly improve it: in Pliny's words, he «bequeathed the sky as an inheritance for all» (*caelo in hereditate cunctis relicto*), trusting in skilful successors.⁴⁴ As attested by the equally eloquent case of Archimedes,⁴⁵ such an optimistic confidence in the progress of knowledge characterizes the Hellenistic (and post-Hellenistic) tradition of naturalistic research – since it is part of its empiric, non-dogmatic epistemology – and it is quite natural to situate Seneca's enthusiasm in this line of thought.

The second element which makes Aratus' and Manilius' texts relevant to our analysis is, of course, their relation to Stoic thought. To different degrees, they are affected by a progressive and at the same time providential interpretation of cultural history which has been typical of the Stoa since its very beginnings. Cicero's above-mentioned testimony on Stoic cosmogony finds an echo in Censorinus' doxographic report about Zeno: according to the author of *De Die Natali*, the founder of the Stoa «believed that the origin of mankind was established out of a new world, and that the first men were generated from the soil with the assistance of divine fire, that is, of the providence of God».⁴⁶ Both the description of Cicero and that of Censorinus imply a

writers on scientific subjects» (24). Remarkable evidence in this regard can already be found in the fifth-century BC writers of the *Corpus Hippocraticum*: see esp. *Vet. Med.* 2; 12; 14; *de Arte* 1.

43. *HN* 2.95. Interestingly, Pliny mentions Hipparchus' provident work at the end of his long discussion on comets (2.89-94). And, as mentioned earlier, Seneca's most detailed statements on future progress occur in a section dealing with the very same topic.

44. Hipparchus took an analogous attitude towards the domain of cartography, as Strabo, *Geogr.* 2.1.4 (= fr. 12 Dicks) reports that he suggested leaving unchanged the old maps «until we can obtain more trustworthy information about them» (ἕως ἄν τι πιστότερον περὶ αὐτῶν γινώμεν). Cf. Dicks 1960, 65.

45. In the introduction to his *Method* (2), Archimedes famously expresses his faith in posterity: «I am persuaded that it (*scil.* the method) will be of no little service to mathematics; for I apprehend that some, either of my contemporaries or of my successors (τινας ἢ τῶν ὄντων ἢ ἐπιγινομένων) will, by means of the method when once established, be able to discover other theorems in addition, which have not yet occurred to me». Transl. HEATH 2007, 14.

46. *De Die Nat.* 4.10 (= *SVF* 1.124): *Zenon Citieus, Stoicae sectae conditor, princi-*

reference to the Stoic doctrine of cosmic cycles – the well-known belief in a periodical destruction and re-creation of the cosmos due to the endless activity of the *pneuma*/fire (namely, of the immanent God).⁴⁷ Scholars have often regarded the Stoic idea of a cyclical conflagration (ἐκπύρωσις) and regeneration (παλιγγενεσία) of the universe as implicitly contrasting with the notion of progress. And the importance of Seneca's claims on future science has been played down in light of his acceptance of such an idea.⁴⁸ However, as William Guthrie sharply observed, what the ancients looked forward to in their discussions on cosmic catastrophes «corresponds rather in modern terms to a future ice-age or the eventual cooling of the sun; and neither of these does much to curb our enjoyment of life or our zest for progress».⁴⁹ Moreover, even if a cyclic view of natural history and a progressive interpretation of culture may appear conflicting to *our* mentality, it is far from certain that the same difficulty was perceived by ancient authors. Again, as in the case of the concept of providence, the aprioristic application of a standard modern paradigm is bound to undermine our understanding of a peculiarly ancient representation – a representation in which teleology, epistemological optimism, and cosmological cycling coexist.⁵⁰

pium humano generi ex novo mundo constitutum putavit, primosque homines ex solo adminiculo divini ignis, id est dei providentia, genitos (my translation).

47. See now WHITE 2003, 137-138, and SELLARS 2006, 96-99. As Sellars remarks, «rather than conceiving this as an endless *series* of cycles, one might instead conceive it as a *single* cycle, repeated endlessly». For a detailed discussion of the extant sources see HAHM 1977, 185-199.

48. In this respect, too, the position of BURY 1920, 15, is paradigmatic: after a brief examination of Seneca's views, Bury proclaims that «Seneca's belief in the theory of degeneration and the hopeless corruption of the race is uncompromising. [...] For him, as for Plato and the older philosophers, time is the enemy of man».

49. GUTHRIE 1957, 78.

50. As Guthrie claimed, similar apparently opposing components often coexist in modern theories as well. Even a herald of the modern ideal of progress like NISBET 1994, 46, had to concede that there are «intimations of eventual ending of the world in the writings of philosophers and scientists of the nineteenth and twentieth centuries who are unambiguous in declaration of commitment to progress past, present, and future». Nisbet's concession is recalled by MORRO 1993, 26-28, with special reference to Seneca's stand: «Seneca would surely have claimed that vast universal cycles in no way would intrude upon the individual's capacity to make human progress. [...] And he taught again and again that humans could transmit knowledge and train themselves,

Not only did the Stoics maintain that man was called to life and rational knowledge by divine benevolence, but they also made explicit that such a *logical* essence entailed the simultaneous development of the arts. At the end of a long treatment traditionally traced back to Zeno – a treatment intended to prove the cosmos’ perishability – Philo of Alexandria provides relevant information on the Stoic view of human civilization.⁵¹ Of the four different arguments reported by Philo, in fact, the last one concerns the status of man as a recently created animal, endowed with rationality and an innate inclination to technical knowledge:

If the world were eternal then the animals also would be eternal, and much more the human race, in proportion as that is more excellent than the other animals (ὅσω καὶ τῶν ἄλλων ἄμεινον);⁵² but, on the contrary, those who take delight in investigating the mysteries of nature (τοῖς βουλομένοις ἐρευνᾶν τὰ φύσεως) consider that man has only been created in the late ages of the world (ὀψίγονον); for it is likely, or I should rather say it is inevitably true, that the arts co-exist with man, so as to be exactly co-eval with him (ἀνθρώποις συνυπάρξαι τὰς τέχνας ὡς ἂν ἰσηλικας), not only because methodical proceedings are appropriate to a rational nature (λογικῇ φύσει τὸ ἐμμέθοδον οἰκεῖον), but also because it is not possible to live without them (ζῆν ἄνευ τούτων οὐκ ἔστιν).⁵³

A similar picture is entirely consistent with the Old Stoa’s cosmology and anthropology. At the beginning of each cosmic cycle, mankind

that progress was indeed the hallmark and the imperative for *homo sapiens*». See also EDELSTEIN 1967, XXI-XXII, and DODDS 1973, 22.

51. Philo, *Aet. Mund.* 130-131 (= SVF 1.106). The attribution of the Philonian excerpt (117-131) to Zeno was first proposed by ZELLER 1876 on the basis of a highly sophisticated reasoning, and the passage is included among the Zenonian fragments in the collection of Von Arnim as well as in the work of PEARSON 1891, 106-116. Despite the objections of DIELS 1879, 106-108, and WIERSMA 1940, Zeller’s attribution is still accepted by most scholars (see, for instance, GRAESER 1974). For the purposes of the present analysis, it may suffice to remark with RUNIA 1986, 82, that the four arguments discussed «undoubtedly contain Stoic elements», and that the doctrine of the destructibility of the cosmos is typical of the Old Stoa (while it is denied by Panaetius and other later Stoics).

52. Note the inclusion of a typically Stoic (and originally Zenonian) anthropocentric perspective: cf. SEDLEY 2007, 223-238.

53. Transl. YONG 1854-1890.

arises from the earth under the guidance of God, who permeates the earth itself in the form of seminal reasons.⁵⁴ Even more importantly, man participates in divine reason, and his rational nature (λογικὴ φύσις) is teleologically led to fulfil its proper vocation (what is οἰκεῖον to human beings, as Philo says hinting at the process of οἰκεῖωσις).⁵⁵ Such a vocation clearly consists of a *methodical* use of rationality – to preserve the language of the Philonian account – and explains the origin of the arts, which are inherent in mankind and necessary to its life.

To be sure, the practice of technical knowledge primarily depends on the use of those natural resources that, according to the Stoics, exist for man's sake.⁵⁶ Replying to their Academic opponents who protested that many aspects of nature are useless or even noxious to man, the Stoics said that the usefulness of several beings will become clear in the future: as Lactantius put it, the purpose of such beings «shall be discovered over the course of time (*processu temporum*), in the same way as~necessity~and use (*necessitas et usus*) have already discovered many things which were unknown in former ages».⁵⁷ This is the view of cultural history and social epistemology poetically elaborated by Aratus and Manilius – a view remarkably keen to highlight the importance of cognitive progress.

However, in the tradition of Stoic thought (and in the works of

54. Censorinus' above-cited report can be usefully compared to a passage in Origenes, *C. Cels.* 1.37 (= *SVF* 2.739). According to Origenes (who intends to corroborate his Christian view through a reference to the Stoic tradition), the first men were born «from the earth, thanks to the seminal reasons lying in it» (ἀπὸ γῆς, σπερματικῶν λόγων συστάντων ἐν τῇ γῇ)

55. SEDLEY 1998, 333, is surely right in pointing out that «the language of the entire passage is primarily Philo's own». And it seems clear that Philo's exposition also includes post-Zenonian elements (for instance, in the third argument, the «formal extension of *pneuma*, in varying states of tension, beyond living beings to become universal causal agents, is hard to date earlier than Chrysippus»). But this does not contradict the assumption that Philo (who claims to rely on a Theophrastean excerpt) bears witness to genuinely Stoic doctrines.

56. On the radical anthropocentrism of Stoic cosmology and natural philosophy see DIERAUER 1977, 238-245, and SORABJI 1993, 122-133. Cf. also above, n. 52.

57. Lactantius, *Ira Dei* 13 (= *SVF* 2.1172). Lactantius' account is especially reliable, as he reports the Stoic claim in spite of his preference for a different argumentative strategy.

Seneca himself), the notion of *art* (τέχνη) is particularly controversial. First and foremost, it refers to the very practice of philosophy, which the Stoics famously defined as an *art of living* (τέχνη περὶ τὸν βίον).⁵⁸ As John Sellars has shown in great detail, Stoicism advocated «a conception of philosophy as an art (τέχνη) concerned with one's way of life (βίος) and involving two components, philosophical theory (λόγος) and philosophical exercise (ἄσκησις)». ⁵⁹ In his *Epistles*, Seneca reacts against any excess intellectualism (with special reference to Aristo of Chios' denial of the importance of precepts) and claims that «philosophy is both theoretical and practical», as it «contemplates and acts at the same time». ⁶⁰ The Roman writer agrees in qualifying philosophy as an art of living (*ars vitae*)⁶¹ and declares that human beings, who have received the divine gift of reason, should perfect their rational nature by making constant progress on the path to wisdom. As a gradual and contemplative understanding of the divine cosmos (leading to the assimilation of specific skills), physical knowledge is central to this purpose. And the progress envisaged in the *Natural Questions* appears to be at the same time personal and communal, moral and scientific.⁶²

As I hope to have shown so far, the heritage of Stoic physics, ethics and epistemology plays a prominent role in the background of Seneca's assertions on progress. On the whole, the traditional doctrines of the Stoa, going back to the teachings of Zeno, Cleanthes and Chrysip-

58. See e.g. Sextus Empiricus, *Math.* 11.170 (= *SVF* 3.598), and Epictetus, *Diss.* 1.15.2.

59. SELLARS 2003, 78.

60. *Ep.* 95.10: *Philosophia autem et contemplativa est et activa: spectat simul agitque.* The question of the role of general principles (*decreta*) and practical precepts (*praecepta*) is dealt with extensively in *Ep.* 94 and 95. Generally speaking, as SELLARS 2003, 77, remarked, «Seneca argues that precepts are not for the sage who already enjoys secure knowledge, but rather for those who are “making progress” (προκοπή, *proficientes*)». For a thorough discussion of Seneca's standpoint (which has actually originated diverging interpretations) see MITSIS 1993 and INWOOD 2005, 95-131.

61. See esp. *Ep.* 95.7-9 (but cf. also Lactantius, *Div. Inst.* 3.15.1 = fr. 17 Haase).

62. See INWOOD 2005, 200: «the work (*scil.* the *Natural Questions*) offers the reader striking consolation for the fear of death; a sober analysis of the relationship between the cosmic order and human life; challenging epistemological reflections, focusing on the ambivalent nature of human knowledge in a cosmos which is rational but not fully open to our enquiring minds; and a sustained meditation on the relationship of man to a rational god, providential but disinclined to reveal the truth except through his orderly and causally determinate works».

pus, provide solid ground for the author's faith in the development of knowledge, a development affecting both the life of individuals and the course of history. Nevertheless, scholars have sometimes tended to see the roots of Seneca's attitude in the much more problematic legacy of the Middle Stoa. This is, above all, the opinion of Edelstein, according to whom the works of Seneca, Manilius and Pliny the Elder (an author we shall now focus on more carefully) «must reflect the common philosophy of the Middle Stoa». Edelstein refers specifically to the influence of Panaetius and Posidonius, who are said to have put forth «the law of endless advance», thus refashioning their school's thought.⁶³ As in other analogous exercises of *Quellenforschung* carried out by nineteenth- and twentieth-century scholars, special importance is attached to the influence of Posidonius, who is even regarded as «the culmination of the progressivism that characterized the main philosophical systems of the second half of the Hellenistic period».⁶⁴

Despite his confidence in the possibilities of a purely “phylogenetic” reconstruction, however, Edelstein himself admits that «none of the fragments surviving from the Middle Stoa expresses an opinion about the duration of progress in the future». Furthermore, the arguments concerning Posidonius' ascendancy over Manilius and Pliny are notably weak, for Edelstein can only claim that «Manilius depends, if not on Posidonius, then certainly on Stoic writers» and that Pliny mentions Posidonius in Book 2 of his *Natural History*.⁶⁵ As concerns the case of Seneca, Edelstein's thesis is even more unconvincing, especially in light of the present-day orientation of scholarship – so that, generally speaking, the hypothesis of an overwhelming Posidonian progressivism seems rather an echo of that “Panposidonianism” which Edelstein's own edition contributed to discredit.⁶⁶

63. Cf. EDELSTEIN 1967, 168-169: «among later Stoics writing in the early first century after Christ and about the middle of that century and under the influence of Panaetius as well as Posidonius the law of endless advance is common property».

64. EDELSTEIN 1967 177-178.

65. EDELSTEIN 1967 168-169.

66. As is well-known, Edelstein's collection of Posidonius' fragments (carefully completed by I. G. Kidd after Edelstein's death) reacted against the long-standing tendency of philological *Quellenforschung* to ascribe to the Apamean a series of disparate (and often inconsistent) doctrines on the basis of indirect sources. By

In the last decades, it has become increasingly clear that Seneca's stance on issues like progress, wisdom, and technical knowledge differs substantially from that of Posidonius, and it sounds much more reasonable to compare the Latin writer's approach to the traditional outlook of the Stoa. Admittedly, Stoicism was a *fluid* trend, and its many-centuried history led to the emergence of different strains of thought towards which Seneca took a critical and selective attitude.⁶⁷ With regard to the problem of the arts and their historical development, Seneca's disagreement with Posidonius emerges incontrovertibly from the famous *Epistle* 90. This is probably the most unambiguous point in a text which has given rise to several diverging readings,⁶⁸ for after drawing an idyllic picture of the early men's life during the golden age and describing the ruinous rise of avarice (90.4-6), Seneca devotes his argumentative efforts to confute Posidonius' view that the arts originated from philosophy (that is, from true wisdom).⁶⁹ Significantly, a circumstantial criticism of Posidonius' ideas occupies the very centre of the letter (7-35), which thus seems to have a strong polemic character.⁷⁰ Seneca's main purpose is to show that banausic activities like architecture and metallurgy do not reflect "correct reason" (ὁρθὸς λόγος), in the Stoic sense, but a practical and ultimately harmful form of reasoning: as he puts it, «all such arts were found

contrast, EDELSTEIN and I. G. KIDD 1972-1989, XVII-XXI, chose to include in their edition «only those fragments attested by ancient writers», and complained about the «era of extreme Panposidonianism» already criticized by scholars like DOBSON 1918 – an era which now seems to have come to an end.

67. This interpretative perspective underlies, for instance, the stimulating works of INWOOD 2005 (cf. above, n. 35) and WILDBERGER 2006, who both highlight Seneca's engagement with early Stoic philosophy.

68. A complete discussion of the wide-ranging bibliography dealing with Seneca's *Epistle* 90 would be out of place here, since I am only going to focus on a few relevant aspects of the text. It may suffice to recall the analyses of BLANKERT 1940, BERTOLI 1982, PFLIGERSDORFFER 1982, and HINE 1995, to get a sense of the different interpretations proposed by scholars in the past. The most recent discussion of the letter, however, is that of ZAGO 2012, who carries out a careful survey of the writer's sources.

69. *Ep.* 90.7: *Artes quidem a philosophia inventas quibus in cotidiano vita utitur non concesserim, nec illi fabricae adseram gloriam.*

70. On this and other aspects I follow the highly persuasive interpretation of BOYS-STONES 2001, 18-27, which is in turn indebted to the insights of FREDE 1989, 2088-2089 (pace VAN NUFFELEN and VAN HOOFF 2013).

out by human shrewdness, not by wisdom».⁷¹ The only art which is really worth man's endeavors is philosophy, seen as an arduous but extremely rewarding path to virtue – and the definition of virtue as the most admirable product of training and education, in contrast with an innatistic and primitivistic conception, constitutes the second, strictly related purpose of the epistle.⁷²

As George Boys-Stones pointed out, Seneca's refutation of Posidonius' theories concerns not only the status of banausic arts, but also the view of moral perfection (*virtus* or *sapientia*) as a natural and primitive condition.⁷³ In the final section of the letter, Seneca claims that only a soul trained and brought to perfection by unremitting exercise can reach virtue, while in spite of their outward appearance the first men of the golden age were not wise, in the proper sense: they were «innocent on account of their ignorance».⁷⁴ In all likelihood, this sharp theoretical conclusion is aimed at reaffirming the early Stoic conception of moral good against Posidonius' assumption that primitive mankind possessed a true form of wisdom.⁷⁵ As Michael Frede remarked, «Posidonius,

71. Ep. 90.11: *Omnia enim ista sagacitas hominum, non sapientia invenit*. As ROMANO 2005 observed, the author's approach is representative of the wider Roman debate on the role of praxis and theory, science and technology.

72. This emerges quite clearly from the introductive (1-3) and conclusive (34-46) remarks which frame the letter.

73. Cf. BOYS-STONES 2001, 23-24: «the issue in which Seneca is here interested is the question of whether philosophy was responsible for the invention of the arts, and he wants to be able to say that it was not, *whether or not there were any sages at this time anyway*. [...] Of course, the question of whether there were philosophers among early men will become relevant later on in the letter, and when it does, Seneca makes his position perfectly clear».

74. Ep. 90.46: *Ignorantia rerum innocentes erant; multum autem interest utrum peccare aliquis nolit an nesciat. Deerat illis iustitia, deerat prudentia, deerat temperantia ac fortitudo. Omnibus his virtutibus habebat similia quaedam rudis vita: virtus non contingit animo nisi instituto et edocto et ad summum adsidua exercitatione perducto. Ad hoc quidem, sed sine hoc nascimur, et in optimis quoque, antequam erudias, virtutis materia, non virtus est*.

75. Such a claim is explicitly (and somewhat emphatically) presented as Posidonian in the first part of the text (*Illo ergo saeculo quod aureum perhibent penes sapientes fuisse regnum Posidonius iudicat*, 90.5). And the whole description of early human history which concludes the letter (36-46) seems intended to reassess and correct the Posidonian account reported earlier. Indeed, according to Strabo, *Geogr.* 16.2.24, Posidonius believed that even the theory of atoms originated from Eastern wisdom, long before the Trojan war.

unlike his Stoic predecessors, assumed that this original system of beliefs amounted to more than, as we might say, sound and uncorrupted common sense, a firm basis for a philosophical theory that would articulate it; he rather assumed that it amounted to wisdom itself, to what philosophers ultimately are in search of, rather than to a mere stage on the road to wisdom. [...] Posidonius may even have assumed that by a study of the various traditions and their comparison one might be able to reconstruct this original wisdom». ⁷⁶ In recent years, it has been convincingly shown that such an archaeological-reconstructive approach (as it were) to human wisdom had a noticeable impact on the post-Hellenistic debate, and on Roman philosophy in particular. ⁷⁷

In the first century AD, two other Stoic philosophers sharing the same milieu as Seneca, Chaeremon and Cornutus, engaged in a complex exegesis of myths and ancestral traditions in an attempt to recover the treasures of early wisdom. ⁷⁸ While the allegorical interpretation of myth of the Old Stoa apparently relied on the idea that primitive men had a purer cognitive outlook (and thus a more correct understanding

76. FREDE 1994, 5193-5194. This interpretation had already put forth in FREDE 1989, with special regard to Chaeremon's position. See also VAN SIJL 2010, 84-86.

77. See esp. VAN NUFFELEN 2011, who suggests a revision of «the linear development proposed by Boys-Stones, according to which the theory passed from Stoicism to Platonism only in the late first century AD» (28). Interestingly, Van Nuffelen argues that «the basic characteristics of the theory are already found in the *Divine Antiquities* of Varro, a work to be dated to the early 40s BC», in which Stoic elements merge with a predominant Platonic outlook. On Varro's attitude to ethical and social progress see now LEONARDIS (this volume).

78. On Chaeremon's allegorical reading of ancient Egyptian culture and religion see FREDE 1989, 2085-2103. Thorough comments can also be found in the edition by VAN DER HORST 1984. On L. Annaeus Cornutus' *Compendium of Greek Theology* and its theoretical background see now the editions by BUSH and ZANGENBERG 2010 and BERDOZZO, NESSEL RATH, *et al.* 2009 (including several scholarly essays). A useful contextualization of Cornutus' method in the framework of the ancient debate on myth and primitive knowledge is offered by BOYS-STONES 2003 and STRUCK 2009. In Cornutus' opinion (*Theol. Comp.* 76), «the ancients (οἱ παλαιοί) were not common men, but they were able to grasp the nature of the cosmos (συνιέναι τὴν τοῦ κόσμου φύσιν ἱκανοί) and inclined to discuss it philosophically through symbols and riddles (πρὸς τὸ διὰ συμβόλων καὶ αἰνιγμάτων φιλοσοφῆσαι περὶ αὐτῆς εὐεπιφοροί)». Chaeremon's and Cornutus' standpoints are particularly relevant to our analysis, as they both were active in Rome in Seneca's day: the former shared the Latin philosopher's task of lecturing Nero (cf. *Suda*, s.v. «Alexander the Aegean»), while the latter (being himself an *Annaeus*) was a freedman or relative of Seneca.

of divine nature, unfaithfully reported by later poets), both Chaeremon and Cornutus claimed that early mankind possessed philosophical knowledge *sensu proprio*.⁷⁹ By contrast, in all of his works, Seneca advocates a developmental, non-spontaneistic conception of virtue which seems closer to that of the first Stoics. And it is indeed striking that when he deals with the issues of allegoresis and etymology, he displays a scornful and skeptical attitude which has been rightly contrasted with Cornutus' stance.⁸⁰ Actually, Seneca goes so far as to criticize Chrysippus' own exegetical approach for the sake of an ethics-centred, progress-oriented notion of philosophy.⁸¹

This last observation is particularly valuable to our discussion, as it reminds us that, at least in some respects, Seneca is prepared to revise even the tenets of the Old Stoa – to which he is usually true – in view

79. According to Sextus Empiricus, *Math.* 9.28, «some of the later Stoics (τῶν νεωτέρων Στωικῶν τινες) say that the first men, who were born of Earth (γῆγενεῖς), were in intelligence (συνέσει) much superior to the present race, as one may see from a comparison of ourselves with older men and with those heroes who, possessed as they were of an extra organ of sense in their keenness of intellect (τι περιττὸν αἰσθητήριον σχόντας τὴν ὀξύτητα τῆς διανοίας), could apprehend the nature of divinity and conceive of certain of its powers» (transl. HALLIE 1985, who offers a satisfactory solution to the problems arising from a textual gap). While Seneca, *Ep.* 90.44, agrees that early men were «of lofty spirit and, so to speak, fresh from the gods» (*alti spiritus viros et, ut ita dicam, a dis recentes*), he denies that all of them had a perfect intellect (*non erant ingenia omnibus consummata*), since virtue is not a gift of nature but an art (*non enim dat natura virtutem: ars est bonum fieri*).

80. Remarkable evidence on this matter is offered by the author's discussion of the Graces myth in *Ben.* 1.3-4, as well as by his denigration of the so-called liberal arts (including the exegesis of Homer's poems) in *Ep.* 88. Cf. MOST 1989, 2048: «we can discern in Seneca a conviction of the philosophical uselessness of allegoresis which is quite the opposite of Cornutus' view and which coheres well with Seneca's lack of sympathy for the traditional forms of ancient religiosity». Most perceptively points to the concordance of Seneca's philosophical and dramatic writings on this matter. See also TORRE 2003, and RAMELLI and LUCCHETTA 2004, 327-336.

81. See, for instance, the remarks of DAWSON 1992, 58, on *Ben.* 1.3.10: «his (*scil.* Seneca's) comment hides a revolution in Stoic sensibility; while Old Stoic etymology drew upon an ever-present correspondence between word (*logos*), meaning (*lekton*), and nature (*physis*) – a correspondence implied by Cornutus' etymologizing – Seneca's criticism ignores such correspondences, reflecting a loss of interest in the curious mixture of Stoic physics and logic that supported Chrysippus's, Balbus's, and Cornutus's etymological hermeneutic». For the account of Balbus, Cicero's Stoic spokesman, see *Nat. Deor.* 2.60-71.

of his preponderant interest in human progress. While Chrysippus is said to have filled up his books with sillinesses (*ineptiae*) and stories (*fabulae*), the Roman writer states his preference for those arguments which can contribute to the reader's moral enhancement.⁸² In more general terms, Seneca does not hesitate to apply his progressive view of knowledge to the history of Stoicism itself, and he presents his own school as a community of inquirers autonomously advancing on the basis of the teachings received. Such an idea is resolutely stressed in *Epistle* 33, where the hierarchical structure of Epicureanism and its fondness for inspiring maxims are sharply contrasted with the same intergenerational model described in the *Natural Questions*:

«Hoc dixit Zenon, hoc Cleanthes». Aliquid inter te intersit et librum. Quousque discas? Iam et praeci-pe. Quid est quare audiam quod legere possum? «Multum» inquit «viva vox facit». Non quidem haec quae alienis verbis commodatur et actuari vice fungitur. Adice nunc quod isti qui numquam tutelae suae fiunt primum in ea re sequuntur priores in qua nemo non a priore descivit; deinde in ea re sequuntur quae adhuc quaeritur. Numquam autem inveniatur, si contenti fuerimus inventis. Praeterea qui alium sequitur nihil invenit, immo nec quaerit. Quid ergo? non ibo per priorum vestigia? ego vero utar via vetere, sed si propiorem planioremque invenero, hanc muniam. Qui ante nos ista moverunt non domini nostri sed duces sunt. Patet omnibus veritas; nondum est occupata; multum ex illa etiam futuris relictum est.

«Thus said Zeno, thus said Cleanthes, indeed!» Let there be a difference between yourself and your book! How long shall you be a learner? From now on be a teacher as well! “But why”, one asks, «should I have to continue hearing lectures on what I can read?» «The living voice», one replies, «is a great help». Perhaps, but not the voice which merely makes itself the mouthpiece of another's words, and only performs the duty of a reporter. Consider this fact also. Those who have never attained their mental independence begin, in the first place, by following the leader in cases where everyone has deserted the leader; then, in the second place, they follow him in matters where the truth is still being investigated. However, the truth will never be discovered if we rest contented with discoveries already made. Besides, he who follows another not only discovers nothing but is not even investigating. What then? Shall I not follow in the footsteps of my predecessors? I shall indeed use the old road,

82. Cf. *Ben.* 1.3.8-1.4.6.

but if I find one that makes a shorter cut and is smoother to travel, I shall open the new road. Men who have made these discoveries before us are not our masters, but our guides. Truth lies open for all; it has not yet been monopolized. And there is plenty of it left even for posterity to discover.⁸³

For Seneca, Stoicism is not a sect of faithful believers entrusted with the transmission and preservation of immutable doctrines. And even if the picture of an authoritative, dogmatic Epicureanism drawn in the letter may appear excessive,⁸⁴ it is true that the multi-faceted course of the Stoic tradition offered an especially suitable basis for original (and even conflicting) evolution. At the same time, it is difficult to escape the impression that a further ideological component supports the author's conception of truth, autonomy, and research – a component shaping Seneca's original relationship to Stoic philosophy and his openness to the future. In the final section of this paper, I will argue that such a component consists of a conscious (and, in my view, brilliant) elaboration of Roman cultural patterns. Indeed, the traditional aristocratic idea of a *contentio* between generations appears to underly both the writer's representation of the past and his reasoned confidence in posterity.

3. Vying for progress: Roman society and Senecan epistemology

It is perhaps worth making clear that neither in the above-cited passages from the *Natural Questions* nor in any other Senecan text, progress is presented as a spontaneous and inexorable force. On the contrary, the path of decadence and corruption is always perceived as a possible option, depending on man's free choice. In his discussion of the nature of comets, for instance, after foreshadowing the exciting possibilities of physical research, Seneca complains about the shameful inclinations of his contemporaries. Due to this general negligence, only the worst vices are making progress (*in processu sunt*), while science and philoso-

83. *Ep.* 33.9-11. Here and elsewhere I use the translation of GUMMERE 1917-25, with a few minor adaptations.

84. Cf. the "monarchic" description of the Epicurean school at *Ep.* 33.4. For a sound reading and contextualization of Seneca's testimony see CLAY 1998, 56-57.

phy go through a phase of decay.⁸⁵ This is all the more regrettable, the author says, in view of the enormous quantity of phenomena waiting to be explained:

Philosophiae nulla cura est. Itaque adeo nihil inuenitur ex his quae parum inuestigata antiqui reliquerunt ut multa quae inuenta erant obliterentur. At mehercule, si hoc totis membris premeremus, si in hoc iuuentus sobria incumberet, hoc maiores docerent, hoc minores addiscerent, uix ad fundum ueniretur in quo ueritas posita est, quam nunc in summa terra et leui manu quaerimus.

Philosophy gets never a thought. And so it comes to pass that, far from advance being made toward the discovery of what the older generations left insufficiently investigated, many of their discoveries are being lost. But yet, on my soul of honour, if we urged on this task with all our powers, if our youth in sobriety braced themselves to it, if the elder taught it and the younger learned it, even then scarce should we reach the bottom of the well in which truth lies. As it is, we search for her on the surface, and with a slack hand.⁸⁶

The ideal scenario for the progress of human knowledge is, again, a kind of transgenerational chain – and even if a similar situation occurs, the task assigned to mankind remains imposing. In his day, however, Seneca can contemplate the deliberate degeneration of people who are even unable to preserve the heritage received.⁸⁷ In the author's view, man has the freedom to choose between vice and virtue, wisdom and perversion, and the content of this choice is the most important factor in the life of individuals as well as in the history of communities. For the standards of positivistic theorists, such a lack of faith in the "historical necessity" of progress excludes Seneca from the number of *true* progressivists, and the same can be said of his focus on a contemplative, non-technological form of cognitive enhancement – on the lofty realm of *sapientia*, far beyond the practicalities of *sagacitas*.⁸⁸ What is really important to notice, however, and what may lead to

85. QNat. 7.31-32.

86. QNat. 7.32.4.

87. The famous and discussed remarks (7.32.2) about the decadence of glorious philosophical schools (Academics, Skeptics, Pythagoreans, Sextians) are especially eloquent in this respect.

88. Cf. BURY 1920, 14-15. Needless to say, the meteorological investigations of the *Natural Quaestions* embody the kind of rational and theoretical inquiries which a

an intellectually stimulating comparison between our culture and the background of Latin authors, is that Seneca's model of progress relies on a culturally embedded conception of social evolution and personal responsibility. In the same way as the Romantic and positivistic idea of endless advance mirrors the faith of a bourgeois, individualistic society, Seneca's notion of progress reflects (and re-uses) the patterns of Rome's patrilineal tradition.

It is certainly no accident that all the Senecan texts discussed so far appeal to a common representation of the development of knowledge across the ages. As a rule, the writer focuses on the vital relationship between consecutive *generations*, repeatedly resorting to terms like *saeculum*, *aetas*, or *aevum* – the typical Latin vocabulary for the conceptualization of time, deriving from the field of social imagery.⁸⁹ Though magnificent goals are presaged for those who devote themselves to research in the future, a profound consciousness of the insufficiency of individuals lays the foundations of Seneca's statements. Everyone has the exciting responsibility to increase the present state of things, and his/her personal contribution is seen as unique and decisive. But knowledge is not a matter of individual inquiry and single objectives. Rather, it is the shared effort of a community which implicitly entrusts each of its members with the preservation and enlargement of a heritage. Of course, it is everyone's choice to accept or reject this task – to widen or dissipate the patrimony accumulated over the course of generations.

The influence of this socially and symbolically central system of beliefs on Seneca's idea of progress comes out very clearly from *Epistle* 64, where the ethical ideal we have just outlined is explicitly traced back to the prototype of the *bonus pater familiae*:

Veneror itaque inventa sapientiae inventoresque; adire tamquam mul-

wise man is expected to pursue. The Senecan *sapiens* scorns the world of banausic arts, but is eager to emulate the supreme rationality of nature by contemplating and understanding the cosmos. See now WILLIAMS 2012, 17-53.

89. For an illuminating discussion of the Roman representation of time and its socio-anthropological background see BETTINI 1986, 125-202. Throughout his text-based review, Bettini highlights the impact of genealogical imagery on the Latin idea of "vertical time" – a conception emerging from our literary sources, but primarily exemplified by atavistic practices like the genealogical tree and the aristocratic funeral.

torum hereditatem iuvat. Mihi ista adquisita, mihi laborata sunt. Sed agamus bonum patrem familiae, faciamus ampliora quae accepimus; maior ista hereditas a me ad posteros transeat. Multum adhuc restat operis multumque restabit, nec ulli nato post mille saecula praecludetur occasio aliquid adhuc adiciendi. Sed etiam si omnia a veteribus inventa sunt, hoc semper novum erit, usus et inventorum ab aliis scientia ac dispositio. Puta relictis nobis medicamenta quibus sanarentur oculi: non opus est mihi alia quaerere, sed haec tamen morbis et temporibus aptanda sunt. Hoc asperitas oculorum conlevatur; hoc palpebrarum crassitudo tenuatur; hoc vis subita et umor avertitur; hoc acuetur visus: teras ista oportet et eligas tempus, adhibeas singulis modum. Animi remedia inventa sunt ab antiquis; quomodo autem admoveantur aut quando nostri operis est quaerere. Multum egerunt qui ante nos fuerunt, sed non peregerunt. Suspiciendi tamen sunt et ritu deorum colendi. Quidni ego magnorum virorum et imagines habeam incitamenta animi et natales celebrem? Quidni ego illos honoris causa semper appellem? Quam venerationem praeceptoribus meis debeo, eandem illis praeceptoribus generis humani, a quibus tanti boni initia fluxerunt. Si consulem videro aut praetorem, omnia quibus honor haberi honori solet faciam: equo desiliam, caput adaperiam, semita cedam. Quid ergo? Marcum Catonem utrumque et Laelium Sapientem et Socraten cum Platone et Zenonem Cleanthenque in animum meum sine dignatione summa recipiam? Ego vero illos veneror et tantis nominibus semper adsurgo.

Hence I worship the discoveries of wisdom and their discoverers; to enter, as it were, into the inheritance of many predecessors is a delight. It was for me that they laid up this treasure; it was for me that they toiled. But we should play the part of a careful householder; we should increase what we have inherited. This inheritance shall pass from me to my descendants larger than before. Much still remains to do, and much will always remain, and he who shall be born a thousand ages hence will not be barred from his opportunity of adding something further. But even if the old masters have discovered everything, one thing will be always new – the application and the scientific study and classification of the discoveries made by others. Assume that prescriptions have been handed down to us for the healing of the eyes; there is no need of my searching for others in addition; but for all that, these prescriptions must be adapted to the particular disease and to the particular stage of the disease. Use this prescription to relieve granulation of the eyelids, that to reduce the swelling of the lids, this to prevent sudden pain or a rush of tears, that to sharpen the vision. Then compound these several prescriptions, watch for the right time of their application, and supply

the proper treatment in each case. The cures for the spirit also have been discovered by the ancients; but it is our task to learn the method and the time of treatment. Our predecessors have worked much improvement, but have not worked out the problem. They deserve respect, however, and should be worshipped with a divine ritual. Why should I not keep portraits of great men to kindle my enthusiasm, and celebrate their birthdays? Why should I not continually greet them with respect and honour? The reverence which I owe to my own teachers I owe in like measure to those teachers of the human race, the source from which the beginnings of such great blessings have flowed. If I meet a consul or a praetor, I shall pay him all the honour which his post of honour is wont to receive: I shall dismount, uncover, and yield the road. What, then? Shall I admit into my soul with less than the highest marks of respect Marcus Cato, the Elder and the Younger, Laelius the Wise, Socrates and Plato, Zeno and Cleanthes? I worship them in very truth, and always rise to do honour to such noble names.⁹⁰

Veneration of the past and faith in the future perfectly coexist in this intense exhortation to wisdom. In the first section of the letter, Seneca had praised Quintus Sextius' writings for their great paraenetic force, as such writings show that virtue «is on high, but that it is accessible to him who has the will to seek it».⁹¹ Indeed, according to Seneca, the admiration of previous models and the contemplation of wisdom (*contemplatio ipsa sapientiae*) should not be interpreted as a static or paralyzing exercise; rather, they are intended to provoke an active reaction and a fervent desire for emulation. As is well-known, a galvanizing mixture of imitation and emulation, reverence and competition, underlied the official ideology of the Roman elites and played a central role in Rome's public morality. Greek authors were impressed by the Romans' effective and dynamic use of memory, a use originally at-

90. Ep. 64.7-10.

91. Cf. Ep. 5: *Nam hoc quoque egregium Sextius habet, quod et ostendet tibi beatae vitae magnitudinem et desperationem eius non faciet: scies esse illam in excelso, sed volenti penetrabilem*. No doubt, the distinctively Roman firmness of Sextian philosophy, emphasized by Seneca in *QNat.* 7.32.2 (*Sextiana nova et Romani roboris secta*), derives to a great extent from a similar approach. On the doctrines and history of the Sextian school, founded by Quintus Sextius at the end of the Republic, see LANA 1973 and 1992. On Seneca's relationship to Sextian thought see GRIFFIN 1976, 36-41, and INWOOD 2005, 7-22.

tested by the inveterate customs of noble families.⁹² Polybius provides a famous description of the Roman aristocratic funeral and remarks on the strictly related tradition of placing the ancestors' wax masks in the most conspicuous position in the house, enclosed in a wooden shrine.⁹³ While depicting the use of such masks on the occasion of funeral processions, the Greek historian puts special emphasis on the hortatory value of traditional practices as well as on the fruitful intergenerational competition they activate. By this means, Polybius argues, «the fame of those who did good service to their country becomes known to the people and a heritage for future generations (γνώριμος δὲ τοῖς πολλοῖς καὶ παραδόσιμος τοῖς ἐπιγινόμενοις). But the most important result is that young men are thus inspired to endure every suffering for public welfare in the hope of winning the glory that attends on brave men».⁹⁴

Our Latin sources clearly confirm – and substantially extend – such a penetrating picture of Roman social agonism. Pliny the Elder offers a nostalgic and celebrative reconstruction of those aristocratic houses in which ancestor masks (*imagines*) worked as a moral warning: the custom of affixing such realistic portraits in the *armaria* was, according to Pliny, «a great factor of incitement (*stimulatio ingens*), as everyday the house itself reproached an unwarlike owner for walking into the triumph of another».⁹⁵ Even more notably, in the prologue to his *War with Iugurtha*, Sallust reports the extension of this emulative spirit to the entire community. After recalling the *exempla* of Q. Fabius Maximus, P. Cornelius Scipio and other eminent men, who used to say that «their hearts were powerfully inflamed for the pursuit of virtue whenever they looked at the masks of their ancestors» (so that their ardor «could not be calmed until they had equalled the fame and glory

92. The importance of memory and memorial strategies to the history of Roman culture has been properly highlighted by several studies. Regarding the early imperial age (and Seneca's own time), see e.g. GOWING 2005 and LI CAUSI 2012.

93. *Hist.* 6.53-54. On these customs and their remarkable symbolic relevance see BETTINI 1986, 186-193, and PICONE 2012, IX-XII. A specific study of Roman ancestor masks and their sociopolitical meaning (from the time of the Republic through late antiquity) has been offered by FLOWER 1996.

94. *Hist.* 54.2. Transl. PATON 1922-27. On Polybius' account and its deliberate emphasis on the specificity of Roman culture see CHAMPION 2004, 94-95, with further references. See also DAVIES (this volume).

95. *HN* 35.7 (my translation).

of their forefathers»),⁹⁶ Sallust maintains that an analogous strategy of *imitatio/aemulatio* was adopted by men of humble origin aspiring to social ascent (the so-called *homines novi*). Such men were in fact «accustomed to surpass nobility through virtue» (*per virtutem soliti erant nobilitatem antevenire*) – and the Latin historian complains about the paradoxical degradation of this competition in his own day.⁹⁷

Similar texts provide us with an important background for the interpretation of Seneca's attitude, since in spite of their different literary features and ideological aims, they bear witness to a *culturally* relevant system of representations. As *Epistle* 64 shows, such traditional models exert a profound influence on the conceptual construction of Seneca's progressivism, and the Latin writer explicitly re-uses Rome's social imagery in order to impress the reader. *Mutatis mutandis*, the lover of science and philosophy is assimilated to the head of a Roman household, who is traditionally required to maintain and increase his family's wealth. It is no accident that another passage from the *Natural Questions* usually cited as a proof of the author's progressive faith reveals a very similar conception of past legacies and future possibilities. Before discussing in detail the main theories proposed by Greek philosophers on the origin of earthquakes, Seneca pays tribute to the first men of science and exhorts us to consider their achievements from a long-term perspective:⁹⁸

96. *Iug.* 4.5-6 (my translation): *nam saepe ego audiui Q. Maxumum, P. Scipionem, praeterea civitatis nostrae praeclaros viros solitos ita dicere, quom maiorum imagines intuerentur, vehementissime sibi animum ad virtutem adcendi. Scilicet non ceram illam neque figuram tantam vim in sese habere, sed memoria rerum gestarum eam flammam egregiis viris in pectore crescere neque prius sedari, quam virtus eorum famam atque gloriam adaequaverit.*

97. *Iug.* 4.7. Cf. PICONE 2012, X: «paradossalmente, il *certamen gloriae ac virtutis* si è ora volto in gara del vizio, e non solo tra i rampolli delle nobili famiglie ma anche tra gli *homines novi*, che pure si erano resi protagonisti di un vivace rinnovamento sociale e politico, trasferendo il modello della competizione fra le generazioni, non praticabile per loro, privi di nobili antenati, nel confronto orizzontale *inter aequales*, e cioè fra concittadini dello stesso *saeculum*». On Sallust's ethics-centred reading of time and cultural history see the contributions of PAPAIOANNOU, SEIDER and DAVIES in this volume.

98. For a perceptive reading of this section of the *Natural Questions*, which is not merely a doxographic exposition, see HINE 2006, 56-59, and WILLIAMS 2012, 213-257. A careful (but more doxography-centred) analysis can also be found in SETAIOLI 1988, 398-419.

Illud ante omnia mihi dicendum est opiniones ueteres parum exactas esse et rudes. Circa uerum adhuc errabatur; noua omnia erant primo temptantibus; postea eadem ista limata sunt. Et, si quid inuentum est, illis nihilominus referri debet acceptum; magni animi res fuit rerum naturae latebras dimouere nec contentum exteriore eius aspectu introspicere et in deorum secreta descendere. Plurimum ad inueniendum contulit qui sperauit posse reperiri. Cum excusatione itaque ueteres audiendi sunt. Nulla res consummata est, dum incipit; nec in hac tantum re omnium maxima atque inuolutissima, in qua, etiam cum multum acti erit, omnis tamen aetas quod agat inueniet, sed et in omni alio negotio longe semper a perfecto fuere principia.

First of all, I feel bound to say in general terms that the old views are crude and inexact. As yet men were groping their way round truth. Everything was new to those who made the first attempt to grasp it; only later were the subjects accurately investigated. But all subsequent discoveries must nonetheless be set down to the credit of those early thinkers. It was a task demanding great courage to remove the veil that hid nature, and, not satisfied with a superficial view, to look beneath the surface and dive into the secrets of the gods. A great contribution to discovery was made by the man who first conceived the hope of its possibility. We must, therefore, listen indulgently to the ancients. No subject is perfected while it is but beginning. The truth holds not merely of the subject we are dealing with, the greatest and most complicated of all, in which, however much may be accomplished, every succeeding age will still find something fresh to accomplish. It holds alike in every other concern; the first principles have always been along way off from the completed science.⁹⁹

Significantly, the early philosophers of nature are referred to by the encompassing definition of “ancients” (*veteres*), for they are seen as the ancestors of present and future inquirers.¹⁰⁰ Like the forefathers immortalized in family portraits, they may probably appear rude or clumsy to later observers. But while recognizing the naivety of certain ancient ideas, Seneca is careful in proclaiming the merits of these first investigators as well as the enormous debt every succeeding generation (*aetas*) owes them. As usual, gratitude for the past and confidence in

99. QNat. 6.5.2-3.

100. As is well-known, the collective term *veteres*, like the more evocative *maiores*, was currently employed to designate the ancestors of both individual families and the whole community. See e.g. Cicero, *Phil.* 5.47; *Rosc. Am.* 106; *De Or.* 1.186.

the future are integrated together in Senecan thought, since they are part of the same ethical-epistemological model. The linear progression initiated by the ancients must be carried on without interruptions, and every descendant shall have a chance to make his personal contribution. The properly scientific value of a similar view is evident, but a socio-anthropological contextualization of the author's claims – that is, a careful recourse to the *sociology of knowledge* – allows us to perceive the influence of stratified kinship patterns.¹⁰¹

To all appearances, the same patterns affect the work of another Latin author we have repeatedly mentioned in this paper, Pliny the Elder. In the astronomical discussion in Book 2 of his *Natural History* – a discussion including the praise of Hipparchus' foresight cited earlier¹⁰² – Pliny makes some short and penetrating remarks on the history of scientific knowledge. Like Seneca, he pays homage to his predecessors in spite of occasional disagreements and expresses his faith in future developments:

In quibus (scil. in luminum occultationumque ratione) aliter multa quam priores tradituri fatemur ea quoque illorum esse muneris qui primi vias quaerendi demonstraverint, modo ne quis desperet saecula proficere semper.

I confess that on this matter (i.e. on the aspects and occultations of the planets) I convey several notions different from my predecessors. Nevertheless, for such notions, too, I am indebted to those who first showed the way to further inquiry; just let no one lose hope that future generations will always progress.¹⁰³

According to Arthur O. Lovejoy and George Boas, «no passage of earlier date so definitely projects the notion of boundless progress into the future» – an opinion which, of course, implies underestimating

101. To be sure, Seneca's works are not the only ones in Latin literature to re-elaborate these social models. In his *Brutus*, for instance, Cicero had offered a comprehensive account of the history of Roman oratory which was greatly indebted to the traditional idea of transgenerational reciprocity: see now MARCHESE 2011. In more general terms, the essential contribution of Roman mentality to the construction of the notion of progress has been pointed out by NOVARA 1982, with special regard to the late Republican literature.

102. See above, n. 43.

103. *HN* 2.62 (my translation).

Seneca's previous statements.¹⁰⁴ And we have already seen that in Edelstein's view Pliny, Seneca and Manilius simply echo a Posidonian theory.¹⁰⁵ On the basis of Pliny's multi-faceted background, however, it seems much more plausible to see in this text a terse condensation of Greek and Roman ideals. Whatever the individual sources of Plinian science, it is undoubted that the author continues the tradition of Hellenistic scientific optimism, taking up its future-oriented epistemology. At the same time, such a long-standing tradition variously merges with Roman beliefs. Besides the well-known idea of a never ending chain of generations (*saecula*), Pliny recalls the socially meaningful notion of *munus*, that is, the notion of an interpersonal *gift* which is also perceived as a *duty* and a *service*.¹⁰⁶ By opening the way to physical research, the early thinkers assembled and transmitted a precious patrimony which was intended to benefit their successors – something consequently arousing their descendants' gratitude. In light of its definition as a *munus*, however, this notable legacy also looks like an owed service. And indeed in the Roman view every generation is expected to increase its status for the sake of posterity. What the ancestors did, in other words, should be wisely imitated by their faithful progeny. Like Seneca, however, Pliny is well aware that such a desirable improvement is far from automatic, and in several passages of his work he refers to social, political and, above all, moral conditions which prevent the advance of human knowledge.¹⁰⁷ After all, if one conceives the history

104. LOVEJOY and BOAS 1935, 377-378. Introducing a few Senecan passages after their discussion about Pliny, Lovejoy and Boas (who have previously emphasized Seneca's primitivism, 260-286) note that the Latin philosopher «expresses a similar – though not explicitly an equally unlimited – faith in the future progress of knowledge».

105. Cf. above, n. 63.

106. See now PEREIRA-MENAUT 2004, 213: «i *munera*, in termini generali, recano in sé, implicita, la necessità del loro esercizio, del loro compiersi. Si tratta di una obbligatorietà extra-giuridica, che nasce dal proprio essere della cosa, dell'animale o della persona, dai quali ci si aspetta che esercitino tali funzioni».

107. In *HN* 2.117-118, for instance, the writer contrasts the wide-ranging research interests of «ancient Greek authors» (*auctores Graeci veteres*), who carried out their investigations in a difficult political situation «for no other reward than the good of posterity» (*sine praemio alio quam posteros iuvandi*), with the negligence of his peers. Such indolent behavior is all the more blameworthy, since Emperor Titus «takes great delight in the progress of the State and the arts» (*tam gaudente proventu rerum artiumque princeps*). Cf. NAAS 2011, 68: «according to Pliny, the most important

of thought as a patiently growing heritage, depending on the willingness of its owners, it is quite natural to warn against the sources of corruption, while drawing a stimulating picture of the goals attainable by virtuous heirs. Expressing one's confidence in the future – even in the face of contemporary difficulties – consistently contributes to this paraenetic strategy.¹⁰⁸

To be sure, a complex combination of Graeco-Hellenistic and Roman themes can be recognized in Seneca as well. The Latin writer relies on three main conceptual backgrounds for his creation of a powerful model of progress: the tradition of Stoic philosophy (particularly the tenets of the Old Stoa), the empiristic and optimistic spirit of Greek science, and the moral patterns of Roman genealogical relationships. Depending on the specific context in which they occur and its thematic connections, Seneca's claims about human progress give prominence to one or the other of these conceptual backgrounds. In the meteorological treatment of the *Natural Questions*, for instance, the influence of Hellenistic scientific optimism seems especially noticeable, as shown by the writer's attitude towards previous inquirers. If in other works ancient authorities are basically an object of praise, in the *Natural Questions* eulogistic remarks are accompanied by the assertion that the early investigators should be regarded indulgently because of the continuous advance of knowledge. However, even when one of the above-mentioned ideological frameworks seems to prevail, the other

advantages of Roman peace were welfare for the people and the diffusion of practical knowledge, such as remedies (*HN* 14.2; 27.3). But at the same time, men were not making progress with knowledge. They were not even interested in preserving established knowledge, although the Empire seemed to offer them the best conditions for this, namely peace and an Emperor who supported the *artes*». See also 14.1-6, where contemporary greed (causing the loss of old knowledge) is compared with «the ancients' more fruitful diligence» and their «more productive zeal» (*tanto priscorum cura fertilior aut industria felicior fuit*). In similar texts, the paradigm of Roman genealogy is skilfully applied to the field of literary and scientific history, since ancient authors – including Greek authors – are portrayed as the ancestors one should strive to imitate.

108. Needless to say, even Pliny's portrait of Hipparchus is likely to entail a mixture of Hellenistic and Roman values, a mixture from which it is very hard to disentangle single elements. This is one of the main reasons why the attempts of the *Quellenforschung* at precisely identifying the Greek components of Pliny's text are bound to remain on a hypothetical level.

two are certainly present to the author's mind, for all such elements constitute a unitary and organic worldview.

In *Epistle* 64, the Roman ideal of family descent and ancestor worship comes explicitly to the foreground of Seneca's argument. But it is clear that both the paradigm of natural sciences and that of philosophical learning play a prominent role as well. The detailed discussion on the use and possible improvement of medical knowledge stands testimony to Seneca's conscious integration of technical-scientific and socio-ethical patterns on the basis of an underlying epistemological theory.¹⁰⁹ Even more noteworthy, the question of philosophical teaching and mastery lays the foundation of the whole letter, from its starting reference to Quintus Sextus' hortatory force through to its final mention of several icons of Roman Stoicism (the two Catos, Laelius, Socrates, Plato, Zeno, and Cleanthes). Indeed, the mutual interfusion of social and philosophical models also goes so far as to involve non-Stoic traditions. The most interesting evidence in this respect is provided by Seneca's positive consideration of the custom of keeping portraits of great men and celebrating their birthdays.¹¹⁰ On the one hand, as mentioned earlier, the contemplation of *imagines* as a material incitement to virtue (*incitamenta animi*) was a deep-rooted identitarian practice of Roman aristocracy. On the other hand, however, Seneca's hint at the celebration of *natales* seems to allude to the Epicurean commemoration of prominent figures of the school through monthly and annual festivals. And it is well-known that the Epicureans also kept and cherished inspiring portraits of their founding fathers. Both practices are recalled (and polemically commented on) by Pliny immediately before

109. Cf. *Ep.* 64.8. Though Seneca makes frequent and varied use of medical notions in his works (see e.g. MIGLIORINI 1988 and FASCE 1994), it is especially remarkable that such careful treatment of ophthalmological remedies occurs in a letter recalling the heritage of Sextian philosophy. The school of the Sextii had a strong interest in medicine and pharmacopeia, and its adherents included famous doctors like Sextius Niger (Quintus Sextus' son) and Celsus (who later left the school). Sextius Niger, in particular, wrote a treatise *On Materia Medica* cited by Dioscorides, Pliny, and Galen. See CAPITANI 1991 and LANA 1992, 115-116.

110. *Ep.* 64.9.

his discussion of Roman ancestor masks.¹¹¹

The insightful harmonization of different intellectual horizons emerging from similar texts mirrors the depth and complexity of Seneca's idea of progress as well as its strict connections with the ancient cultural milieu. In truth, it is almost impossible to understand and interpret the author's elated enthusiasm for the future and his reverential worship of the past without going back to the network of beliefs which supports such an attitude. Thus, even if it is fascinating to appreciate the influence of Seneca's prophecies on men like Christopher Columbus, who derived from a famous *Medea* chorus «not only a prediction of new discoveries but a celebration of the single, heroic individual who would reveal them»,¹¹² it is highly misleading to assimilate ancient and modern progressivism on the basis of such later receptions. The representation of time – be it a reconstruction of the past, a description of the present, or an anticipation of the future – is an intrinsically ideological activity exposed to the manipulation of cultures, groups, and individuals. And the most stimulating possibility

111. Cf. *HN* 35.5. On the Epicurean community's long-standing devotion to its founding fathers and related cultic practices see CAPASSO 1987, and CLAY 1998, 62-104, who remark on significant sources such as Cicero, *Fin.* 2.101; 5.3, and Philodemus, *A.P.* 11.44. The Epicurean exploitation of portraits as a source of inspiration and incitement for the adherents was specifically investigated by FRISCHER 1982. See now the discussion in GORDON 2012, 139-177. Indeed, Epicurus was represented not only in statues and paintings but even on drinking cups and rings. As DILLON 2006, 113-115, observes, every philosophical school, including Stoicism, conveyed particular cultural meanings through the artistic representation of its exponents. And although several features distinguish Epicurean and Stoic types, «the portrait statues of Epicurus and Chrysippus also have a number of important elements in common [...]. The statues of the other certainly named third-century Epicureans Metrodorus and Hermarchus share these elements as well. In defining visually the philosophic image, the statue body probably played the critical signifying role».

112. Cf. ROMM 1993, 84. Columbus' reinterpretation of the *Medea* passage on the discovery of new lands (375-379) is mentioned also by MOTTO 1993, 22-23, together with other modern age revivals of Seneca's progressive faith (see also *QNat* 1.praef.13, on the possibility of sailing from Spain to India). As MORETTI 1993, 275-278, points out, in his *Libro de las Profecías* (1501-1503) Columbus «gathers a whole series of texts, especially of biblical and patristic origin, that he reads as “prophecies” of his voyage, thus reinterpreting his discovery *sub specie theologica*». Drawing on an interpolated manuscript family which reads *Tiphysque* instead of *Tethysque* in line 378, Columbus offers an «interpretative translation» of the chorus and presents himself as the new Tiphys, the pilot of the legendary ship Argo.

open to the work of scholars is the exploration of differences and permutations – of the distance between Seneca’s wandering comets and Columbus’ own hopeful explorations.

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