

# The Wheels of Progress – Substructures of Modern Historiography

**1** The writing of history has always been an instrument of legitimation. When new kings, or a new dynasty ascended to their thrones, the re-writing of the official history was amongst the first things commissioned. Depending on the situation, previous rules were depicted as cruel, barbaric, ignorant, decadent etc., or the new reign was put into analogy with a 'golden age', with an age of prosperity.

**2.1** The most explicit examples of this re-writing can be found among the Chinese emperors, because they did not only change the narration of history, but also changed their calendars. Due to the symbolic-religious importance of chronology and numbers, calendars were made up by the official astronomers so as to link up with numbers of luck, so as to synchronise with times of prosperity.

c'est en fixant les heures, jours et mois initiaux que les différentes dynasties déterminaient leurs insignes et leur calendrier de façon à singulariser le temps de leur domination.<sup>1</sup>

Historiographic traditions in monotheistic cultures are in this respect more simplistic. Just as rulers who see an empire of thousands of years before their eyes, their chronologies have a zero point, the birth of a prophet, the crowning of an emperor. From the zero point upwards, the years just add up and up.

**2.2** Since the secularisation of European countries, and since the birth of national states in the 18th and 19th centuries, this scheme got reorientated. Neither religion, nor a dynasty could provide the substratum of linearity, as, e.g., the French revolutionaries of 1789 understood very well and consequently started to count anew: L'An I, l'An II etc. since the Revolution. En marge, it may even be said that by introducing the metric system, they even took up their own measurement of time (seconds, minutes) and made the week decimal (10 days).

**3.1** Apart from this mere chronology, however, the narrative scheme of events also has a structure of its own. One can write a loose travelling account, a static history, a history reaching for the apocalypse, for the Reign of God, or a circular history, a history of rise, decline and fall. Again, these schemes are correlative to a certain order of the world, be it religious, political or philosophical. It need then not surprise that around 1800 new variants of a historiographic scheme were invented that did not rely upon religion nor monarchy, but upon a secular philosophy.

---

<sup>1</sup>M. Granet (1934): *La pensée chinoise*. Bibliothèque de Synthèse historique, l'Évolution de l'Humanité, Paris, 68.

**3.2** The 18th century, through travelling accounts and encyclopaedic endeavours, may said to be marked by an anthropological turn. This means that a certain kind of relativism amongst cultures and civilisations was professed, and the history of mankind – as it was called then – was presented as a collection, a list of facts without all too explicitly favouring this or that period and/or culture. Of course, this panorama-like narration engendered many side-remarks and analogies, confronting other cultures and ages with the present age.<sup>2</sup>

**3.3** Near the close of the 18th century, however, a new scheme rapidly gained popularity and acceptance:

Man arbeitet heut zu Tage an historischen Systemen, und unter andern an einem, welches von dem Gedanken ausgeht: daß das Menschengeschlecht *immer und immer* in seiner Kultur und Verbesserung vorwärts schreite, u.s.w. Dieses hat besonders der französische Bürger Condorcet zu behaupten und zu beweisen gesucht, und nach Kants Idee unter den Deutschen zu gleicher Zeit Hr. Pölitz. Es fallen folglich alle analogischen Schlüsse weg, welche man von den alten Begebenheiten auf das machen kann, was unter unseren Augen vorgeht; denn wir sind mehr kultivirt, als man sonst war, haben mehr Gewandtheit der Kräfte u.s.w. <sup>3</sup>

This is the appearance of the idea that humankind has always progressed, sometimes at a faster, sometimes at a slower pace, through history. As Laukhard observes, the idea seems to have been independently conceived of in France and Germany, with slightly different features. Laukhard's regret that all analogies fall away with these schemes of historiography is exactly the regret of someone educated in the 18th century Enlightenment circles and is a sharp observation of one of the main features of the progress scheme: The anthropological perspective becomes impossible.

**4** Perhaps with some modifications this scheme of historiography is still very much alive today. Therefore, we will return to its origins, how it was formulated and with what arguments, how it has changed – and then return again.

**5.1** The title of an early essay by K.H.L. Pölitz (1795) is clear enough: Sind wir berechtigt, eine größere künftige Aufklärung und höhere Reife unsers Geschlechts zu erwarten? His answer is affirmative. How much Pölitz – contrary to Condorcet, see infra – tries to propose a translation from the religious to the secular is quite obvious:

Der übersinnliche Theil des Menschen ist also unsterblich, d.h. er ist zu einer unendlichen Fortdauer bestimmt; so wie nun die Unsterblichkeit selbst sich nur als Mittel verhält zur Erreichung des letzten Zweckes der menschlichen Natur, und wir nur insofern unsterbliche Wesen sind und seyn können, inwiefern in uns Anlagen

---

<sup>2</sup>In this regard, see, e.g., C.M. Wieland (1770/1795): *Reise des Priesters Abulfauaris ins innere Afrika & Bekenntnisse des Priesters Abulfauaris*. In: *Sämtliche Werke*, Teil V, Band 15, 1–66. And particularly recommended: A. v. Knigge (1791): *Benjamin Noldmann's Geschichte der Aufklärung in Abyssinien, oder Nachricht von seinem und seins Herrn Veters Aufenthalte an dem Hofe des großen Negus, oder Priesters Johannes*. Göttingen, Dieterich.

<sup>3</sup>F. Laukhard (1796): *Leben und Schicksale*, Teil II, Band 3. Leipzig: Fleischer, 315-16

vorhanden sind, die grenzenlos entwickelt und vervollkommt werden sollen; so müssen auch mit ihr zugleich dem Menschen alle die wesentlichen Bedingungen gegeben werden, unter welche jener Zweck der Fortschritts einzig und am sichersten erreicht werden kann.<sup>4</sup>

Taking up Kant's philosophy, with plain overtones from Fichte and Schelling, Pölitz deduces the apriori conditions under which a culture can evolve. Partly these are material and finite, partly these are spiritual and infinite. These last ones, the spiritual abilities of man, are bounded (man cannot do everything), but, Pölitz argues, they are capable of infinite perfectibility. When applied to the material conditions of culture, the perpetual progress of culture becomes a self-evident deduction.

**5.2** Pölitz's arguments regarding the material conditions of culture are partially outdated, pointing to the political revolutions of his days, but partially still 'valid' (i.e. reproducible as an argument) today:

Der Kreis der Erfahrungen hat sich erweitert.  
Die Völker sind sich näher gerückt.  
Die Wissenschaften haben eine tiefere Begründung gewonnen.  
Die Erziehung ist zu einem höheren Grade fortgeführt worden.

Summarised: The amount of information has grown, its transmission has improved, its scientific processing is better and the technical abilities to do so are transmitted to everybody thanks to general education.<sup>5</sup>

**6.1** Exactly these preconditions for the thesis of progress are more fully developed by the Marquis de Condorcet, who, ironically, wrote his book *Esquisse d'un tableau historique des progrès de l'esprit humain* while in prison. The main thesis is:

montrer, par le raisonnement et par les faits, qu'il n'a été marqué aucun terme au perfectionnement des facultés humaines; ...; que les progrès de cette perfectibilité désormais indépendante de toute puissance qui voudroit les arrêter, n'ont d'autre terme que la durée du globe où la nature nous a jetés. Sans doute, ces progrès pourront suivre une marche plus ou moins rapide, mais jamais elle ne sera rétrograde<sup>6</sup>

An important corollary to the progress thesis is introduced here: There cannot be a retrograde movement, we can only advance in exploiting our human faculties.

---

<sup>4</sup>K. H. L. Poelitz (1797): 'Ueber die letzten Principien der Philosophie, und ber das daraus resultierende Princip zu einer Philosophie der Geschichte der Menschheit', *Deutsches Magazin*, 13 & 14 (3, 4 & 1), 405-462, 543-593 & 28-66, here 32.

<sup>5</sup>In the sense of: everybody has a right to education, and, the content of education is a general one, not only limited to, e.g., religion. This kind of education was still rare in the 18th century and only got gradually realised in the 19th century - and it must be said, that exactly the philosophers defending the progress of mankind, Condorcet and les idéologues in France, Fichte in Germany, contributed much to putting this general education on the political agenda.

<sup>6</sup>M. de Condorcet (1795): *Esquisse d'un tableau historique des progrès de l'esprit humain*. Agasse, Paris, 4.

**6.2** Contrary to the idealistic schemes of Pölitz, who classifies the phases in the history of mankind according to the preponderance of *Sinne*, *Gemüth* and *Vernunft* respectively, Condorcet more clearly brings the main stages of human development in connection with a technological innovation. The invention of (alphabetic) writing marks an epoch, the proliferation and specialisation of science in ancient Greece and Rome, the further development of science during the Renaissance, the arrival of printing and the last stage, 'From Descartes jusqu'à la formation de la République française' – the consequence of this lineage is telling.<sup>7</sup> This brings out one of the strongest arguments for a history of perpetual progression: The impact, growth and penetration of communication between people, based on novel technologies, has indeed expanded and/or accelerated.

**7.1** One plain advantage of this historiographic scheme is reduction. Instead of the panorama of many tribes and various times a much simpler narration becomes possible.

il est nécessaire de choisir [les faits de l'histoire] dans celles de différens peuples, de les rapprocher, de les combiner, pour en tirer l'histoire hypothétique d'un peuple unique, et former le tableau de ses progrès.<sup>8</sup>

Die Philosophie soll daher für die Kulturgeschichte der Menschheit nichts als einen *Maasstab* darbieten ...sie gewinnt denn die Resultate über das, was jedes Zeitalter, jedes Volk, jedes Individuum ... geleistet hat. Am Ende dieser Resultate wird sich denn auch ein *Ueberblick über das Ganze* daraus ergeben.<sup>9</sup>

Not unlike the monocausal scheme of myths, where gods act upon nature,<sup>10</sup> this scheme of progress brings all histories in a linear, if not 'transcendental' perspective<sup>11</sup> – a compression of the mass of data.

**7.2** This feature of compression is in immediate correspondence with the development of communication devices. When the amount of information and the rate of its transmission grows, techniques of compression and reduction are wanted, just to be able to do something with these informations. The paradox of a history of indefinite progress is therefore this: The more progress in the development of human faculties (in the quantitative, though not necessarily qualitative sense), the more specialised this knowledge becomes, the less people have access to it or the less people can still have an overview. An uncertainty

---

<sup>7</sup>It must be noted that this scheme very nearly resembles the one by Fichte in his *Die Grundzüge des gegenwärtigen Zeitalters* (1804), in *Fichtes Werke*, VII, 1–256. Fichte may, however, have been influenced by Condorcet, since his work was already translated into German 1796 by Posselt.

<sup>8</sup>Condorcet, *Esquisse*, 13.

<sup>9</sup>Pölitz, 'Prinzipien', 54.

<sup>10</sup>And which got into a crisis through the introduction of writing, that introduced the possibility of more complex, pluricausal explanation schemes – As Havelock argued, cfr. E. Havelock (1965): *Preface to Plato*. Yale University Press, New Haven.

<sup>11</sup>The term transcendental perspective was used by J.H. Lambert, to indicate the possibility of a synthetic overview of different interpretations. However, Lambert very much doubted that such a perspective could be achieved, except in simple and limited cases.

relationship marks the circulation of knowledge in a society: The larger the amount or the faster the velocity of information transmissible, the smaller the group of recipients who can still operate on this information. Moreover, these groups of recipients are more or less mutually exclusive groups. A group able to operate on one corpus of information will most likely be unable to operate upon another body of knowledge, accessible in practice only to another group. The history of the world as a linear progression in the perfection of human abilities therefore splinters to pieces, a patchwork of groups who locally can manage some information.

**7.3** This is one instance of what may be called an incommensurability of communication, because the communication amongst mutually exclusive groups may become near impossible. In the realm of everyday experience they may communicate (common speech is remarkably strong in this regard, though often despised because it conveys 'no information' – q.e.d.!?), in the realm of their specialised knowledges only great efforts can achieve communication. This is the prize to pay for a highly detailed and specialised discourse, its transmission has to deal with strict boundary conditions, with limitations. However, the fallacy of the progress thesis lies not in the fact that an uncertainty relationship undermines its premisses, but in the nature of communication. It is never monocausal – neither is our everyday life – and can only become so through enforcing strict transmission conditions.

**8.1** Around 1900 a new variant of the progress thesis is proposed. Acting on the paradoxes already stated, the progress of humankind was no longer a global or universal phenomenon, but got limited to one specific activity of mankind: Science. Until our present day (we write 2006) it is for many people still a firm conviction - nay, belief - that all sciences, and mathematics in particular, are cumulative, i.e., the body of knowledge these sciences organise, can only grow, both in breadth and depth. This knowledge may perhaps get reorganised or revolutionised, but its conquests can never be forgotten, nor its structure and parts decrease in information content.

**8.2** Curiously enough, this variant of the progress thesis has firm gnostic overtones. In Gnosticism it is believed, that a God created the universe, but then gradually retreated from it (*deus absconditus*), leaving behind realms further and further removed from the original creation. Something like this echoes in Sarton's words:

If the history of science is a secret history, then the history of mathematics is doubly secret, a secret within a secret, for the growth of mathematics is unknown not only to the general public, but even to scientific workers. Yet that secret activity is fundamental; it is all the time creating new theories, which sooner or later will set new wheels moving, new machines working, or, better still, will enable us to obtain a deeper understanding of the mechanism of the universe.<sup>12</sup>

---

<sup>12</sup>G. Sarton (1936): *The Study of the History of Mathematics*. Cambridge/Mass.: Harvard University Press, pp. 8–9.

In contrast with Gnosticism, God is not absent, but Science is present in the world. However, Mathematics communicates its conquests only to a select few, who communicate their results to a somewhat larger group of scientists, who then again inform engineers &c. who then build machines and other devices that change the destiny of the whole of humankind. This is the gnostic version of the progress of mankind.

**8.3** Taking this philosophy of history to its present extreme, the Gnostic Universe has expanded to the point, that, wheels within wheels, an even more select group of, let's say, set theorists, number theorists or perhaps topologists, or more specialised fields are at the heart of mathematics, who are at the heart of &c. Actually, mathematics having lost somewhat its aura of being a leading discipline (*Leitdisziplin*), perhaps some geneticist or nanotechnology specialist may claim residence at the heart of all secret sciences guiding the universe. In this respect, may the fallacy of the progress thesis lie in the intricacies of communication (see 7.2 & 7.3), it nevertheless exposes itself but all too bluntly when taken to its extreme.

**9** As it is said in an interview with Cabaret Voltaire:

- Repetition, that was the big thing.
- Yeah, we've only ever got one idea.
- And I don't remember what it was.

27.09.2006

Maarten Bullynck

[www.kuttaka.org](http://www.kuttaka.org)