

That necessity is the mother of invention

Population, progress and inequality in Smith, Malthus, and the four stages theory

“Then, I said, let us begin and create in idea a State; and yet the true creator is necessity, who is the mother of our invention.”

Plato, *Republic*, Book II (translator Benjamin Jowett)

1. Introduction

Writings on theories of socio-cultural evolution, and in particular on the type common in 18th century Scotland, usually cite some part or other from a section of Dugald Stewart’s ‘Account of the life and Writings of Adam Smith’. In this segment of his biographical essay, Stewart first remarks how the ‘Considerations concerning the First Formation of Languages’, one of Smith’s earliest writings, “deserves our attention”, chiefly, “as a specimen of a particular sort of inquiry, which . . . seems, in a peculiar degree, to have interested Mr Smith’s curiosity.” Indeed, Stewart continues, “Something very similar to it may be traced in all his different works, whether moral, political, or literary” (Stewart II. 44, in EPS, p. 292). Stewart then describes the method in question. He first remarks that:

When, in such a period of society as that in which we live, we compare our intellectual acquirements, our opinions, manners, and institutions, with those which prevail among rude tribes, it cannot fail to occur to us as an interesting question, by what gradual steps the transition has been made from the first simple efforts of uncultivated nature, to a state of things so wonderfully artificial and complicated. (Stewart, II.45, p. 292)

Yet, Stewart notes, since most of what we are interested in, in this connection, happened before there were any written records, history

proper gives us only little information.¹ “In this want of direct evidence,” then, “we are under a necessity of supplying the place of fact by conjecture”. And thus men’s actions in previous ages must be traced “from the known principles of human nature” and “the circumstances of their external situation”, using “the detached facts which travels and voyages afford us . . . as land-marks to our speculations”. And Stewart proceeds to christen this “species of philosophical investigation”, accordingly, “*Theoretical or Conjectural History*” (II.46-8, p. 293; italics in original).

This method of tracing events “from the known principles of human nature” had been used, too, by Machiavelli, one of the authors most admired by Smith,² who wrote in 1516 that “passions and dispositions remaining in all ages the same, naturally give rise to the same effects” (Machiavelli 1883 [1537], p. 475).³ And the use of “circumstance” to explain the differences between societies found a prominent place in Montesquieu’s work.⁴ As John Millar remarked: “The great Montesquieu pointed out the road. He was the Lord Bacon in this branch of philosophy. Dr. Smith is the Newton” (Millar 1803 [1787], p. 429-30, EPS p. 275, Meek 1971, p. 12).

Stewart’s expression “conjectural history” (but not “theoretical history”, interestingly) has been universally adopted to denote this type of theorising about the development of human societies. The terms “philosophical history” or “philosophy of history” have also been in use (see for example Flint 1894). Duncan Forbes (1954), linking the

¹ “On most of these subjects very little information is to be expected from history; for long before that stage of society when men begin to think of recording their transactions, many of the most important steps of their progress have been made.” (II. 45, p. 292)

² He was one of the few thinkers cited repeatedly in the *Wealth of Nations* (at III.iii.19, p. 407, V.i.g.2, p. 790, and V.ii.a.6, p. 819), and in the *Lectures on Rethoric and Belles Lettres* (ii.70, p. 115) is reportedly praised by Smith as “of all modern Historians the only one who has contented himself with that which is the chief purpose of History, to relate events and connect them with their causes, without becoming a party on either side.”

³ In *Discourses on the First Decade of Titus Livius*, Book III, Chapter 43, §1. See further Skinner (1975, p. 170) and Winch (1992a, p. 92, fn. 10).

⁴ In the Anderson notes, to which will be further referred later, Smith is reported to have had this to say about Montesquieu: “Monsieur de Montesquieu is one of the most singular Men that has ever been in the World for he possesses four Things which are never almost united. An excellent Judgment, a fine Imagination, great Wit, and vast Erudition”. For Montesquieu’s influence on Smith in general, and particularly on his historical method, see Clark (2008).

issue to political debates, wrote of “‘Scientific’ Whiggism”. The particular theoretical framework adopted by Adam Smith and his contemporaries was dubbed the “four stages theory” by Ronald Meek (1971, 1976b).⁵ The label has stuck and shall be used here throughout to refer to the common theory of the authors considered: principally Franklin, Smith, Kames, Dalrymple, Helvétius and Blackstone in the 18th century, and Pufendorf and other natural law theorists in the 17th.

This particular narrative of human progress showed a remarkable degree of uniformity between the different authors who elaborated it and made use of it. Several elements can be found repeatedly throughout and are defining of the theory: the emergence of social classes, property rights, government, laws, division of labour and arts and sciences, being all interrelated, are explained, starting from a state of society (the savage state) in which all these were as yet missing; and four particular stages, defined by the prevailing mode of subsistence, are thereby distinguished.⁶ The central driving force of this process of evolution of society is the growth of population and the necessity it induces to innovate and introduce new technologies, institutions and rules of conduct. It is with this role of population and necessity in the theoretical framework of the four stages theory, and the importance of this theoretical framework in both Smith’s and later Malthus’ work, that the present paper is centrally concerned.

In this connection, it is interesting to compare Stewart’s exposition of conjectural history related above to a statement made 200 years later by Ester Boserup:

Little is known about the prehistoric change from food gathering to food production, and although new information on prehistoric populations and the technology they used is steadily being obtained by archeological research, we still have to rely on speculation more than on facts. (Boserup 1981, p. 31)

As will have been noted from the short exposition of the four stages theory and the role of population therein given above, this is not the

⁵ Initially (in Meek 1971) with quotation marks around “four stages” (as “the “four stages” theory”), which were later (in Meek 1976b) dropped. In the secondary literature since, one finds various orthographies (“Four Stages Theory”, “Four Stages theory”, “four-stages theory”, etc., with or without quotation marks variously placed, but generally without). Meek’s own (1976b) spelling (without capital letters nor quotation marks nor hyphen) has been adopted here.

⁶ Sometimes the stages were only three, and sometimes more than four, in different expositions of the theory, but the essential features of the progression were sensibly the same despite such differences, and the label *four stages theory* is generally used invariably for all (as it was originally by Meek).

only resemblance between Boserup's writing and the present subject. Indeed, Boserup developed a theory of development in which population played a crucial positive role for the development of more advanced subsistence technologies. And population was playing precisely the same role in the conjectural history of the Enlightenment philosophers and earlier natural law theorists. Boserup's famous contribution to the debate on population and development in the mid-twentieth century (Boserup 1965, 1981) in fact bears a striking resemblance to the way Adam Smith conceptualised the same subject in his Glasgow lectures. That this position is today known among social scientists (and especially those concerned with population questions) as the "Boserupian" position only shows the value of not neglecting the history of thought in social science. The idea that population pressure leads to technological development was fully developed in the theories of Enlightenment scholars two full centuries before Boserup's work on the issue, and this rather straightforward idea is in fact very much older, the natural law theorists having been mainly influenced in this regard by writings of Antiquity and the Bible.

Although seldom treated as such, the four stages theory undoubtedly is a product of and contribution to the general debate about population questions in the second half of the 18th century, which is likely why Malthus also felt inclined to use it as frame of reference in his *Essay on the Principle of Population*. The classification of human societies that can be found in the four stages theory, moreover, itself inherited from classical sources and the natural law tradition, further found use, with ever so slight variations, in all subsequent sociological, anthropological and ethnological research in the 19th and 20th centuries, so much so that the theory can be considered in many respects as foundational in the creation of modern human sciences as a whole.

The one central element used as a causal variable in the explanation of the succession of stages in 18th century theories of socio-cultural evolution, including the version formulated by Adam Smith, is the growth of population. By a precise sequence of steps, involving population growth disrupting the balance between human societies and the ecosystem which provides them food, and the shortage of food thus created offering an opportunity for the accidental discoveries of naturally curious and creative human beings to find wider application, ushering in technological revolutions, population growth ultimately takes human societies to higher stages of development. This view of population growth being the original source of economic development (or in any case a crucial link in the causal

chain leading to it) appears to be in stark contrast with the Malthusian view of population growth as an explanation for the impossibility of the progress of society as considered by Condorcet and Godwin. Yet, Malthus himself adopted the classification of human societies into the different types contained in the four stages theory and in fact used this framework to demonstrate the eternal and overarching validity of his population principle. The Malthusian population principle itself, indeed, is intimately linked to (if not identical with) the way the interaction between population growth and the environment was conceived in the four stages theory. And Malthus himself also did, through what he called the “goad of necessity”, recognise the stimulating role of population growth to human industry that was a central element of four stages theory.

As we shall see, however, Malthus deviated from this theory, or from the way it had generally been used until then, by the change of some assumptions, and, more significantly, by an important change of focus, which set the “population principle” (already contained, in substance, in the four stages theory) on an entirely different track. Having been used until then principally to explain the progress of laws and government, it became a tool for those arguing against the “perfectibility of society” (its appropriateness and its very possibility). Yet, the “population principle” was in fact for Malthus, in line with the four stages theory, still a theory of progress. Misunderstandings about this until this day can be attributed in no small part to the ambiguity of the word progress, which was never well defined to begin with, but which also underwent an important change of meaning at the end of the 18th century.

For these reasons the four stages theory is not only an important subject for the study of Smith’s theory of progress, it is also an important subject for the broader study of population theories in the 18th century. Yet, the authors studied in this paper — including Smith, with regard to the content of his lectures on jurisprudence, and especially the content of the later discovered set of notes on these lectures — are all but absent from common studies of “pre-Malthusian” population theories, from early 20th century works like Stangeland (1904) and Bonar (1931) to more recent ones like Spengler (1972) or Caselli, Vallin, and Wunsch (2006). This is less surprising for Smith, with regard to the subject of the present paper (it is more so with regard to the subject of the next one), the second set of lecture notes on jurisprudence having re-emerged only in 1958 and first been published in 1978, and it is this second set which contains the more explicit mentions of the role of population in the four stages theory.

The absence from studies of population theories of the other authors considered in this paper, and of the four stages theory as a common way of conceiving the role of population for economic progress more generally, is more striking. Even Ronald Meek, although he mentioned it, did not pay great attention to population and its causal role in the four stages theory, including in Smith's version, in his foundational study of this intellectual tradition (Meek 1976b). This is all the more surprising as Meek was interested in both population questions and Marxist theory — he edited a book (Meek 1954b)⁷ with selected texts of Marx's and Engels's response to Malthus population theory, more than twenty years prior to *Ignoble Savage* — and he saw the four stages theory as a precursor to Marx's historical materialism (Meek 1954a), following Pascal (1938). Tying in these two themes — the opposition between Marx and Malthus and the positive causal role of population in four stages theory, itself conceived as precursor to historical materialism — would have presented itself, but Meek did not follow this route.

“Pre-Malthusian” is put in inverted commas above, for the significant break represented by Malthus' theory which this term implies is hard to observe in actual facts. The debate that Malthus' *Essay* stirred (and has continued to stir — if later expressions on the subject of population that have been associated with his name can be deemed at least in some respects to have rightly been so) is indeed very considerable. But neither the arguments presented in the *Essay* nor the way they were presented were very novel. Schumpeter noted that “the ‘Malthusian’ Principle of Population sprang fully developed from the brain of Botero in 1589” and that “the ‘law of geometric progression,’ though not in Botero's work, was suggested by Petty in his *Essay concerning the Multiplication of Mankind* (1686), by Süssmilch (1740), by R. Wallace (1753), and by Ortes (1774), so that, within this range of ideas, there was nothing left for Malthus to say that had not been said before”.⁸

⁷ In a later edition the book was called *Marx and Engels on the Population Bomb*, most probably for marketing reasons; the original less sensational title is *Marx and Engels on Malthus*.

⁸ Schumpeter further lists “Franklin (1751), Mirabeau (1756), Steuart (1767), Chastellux (1772), and Townsend (1786)” as among “the eighteenth-century authors who, without committing themselves to this particular mathematical form, stated that population will always increase to the limit set by the supply of means of subsistence” (Schumpeter 1954, p. 244-5). Among these, Chastellux's *De la Félicité publique, ou Considérations sur le sort des hommes, dans les différentes époques de l'histoire* is an especially clear example of the widespread use of

Smith too had noted the tendency of population to conform to the means of subsistence, not only in the *Wealth of Nations*, where he remarked in his chapter on wages that “Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it” (WN i.viii.39, p. 97), but also in his earlier major work, in which he noted, in the passage where the second reference (of three in total) is made to an “invisible hand” in all of Smith’s works, that “The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining” (TMS IV.1.10, p. 184).⁹

This theme of population conforming to the means of subsistence (and hence of population growth pressing on the means of subsistence) plays a central role, also, in the four stages theory. Indeed, as Jacob Hollander — visibly more informed on the subject than Stangeland and Bonar cited above (p. 5) — noted at the Sesquicentennial of the *Wealth of Nations*:

The eventual pressure of mankind upon subsistence had been noted by writers of the seventeenth and eighteenth centuries, *to the extent of becoming a commonplace in conjectural history*. . . . Malthus entered the lists with a weapon sharpened and furbished, but not new in the sense of one theretofore unknown or even unused. (Hollander 1927, p. 190)

To elucidate the seemingly paradoxical relationship between the “positive” role of population growth in four stages theory and the “negative” role it plays in Malthus’ work — paradoxical only to those, indeed, who read 18th century views on population through the prism of such later categories as Malthusianism or “Populationism” — is one of the aims of this paper. Winch (1993) presents a convincing case for considering the common conception of the “break” represented by Malthus’ theory as being one away from moral and ethical concerns as just as much of a dead-end.¹⁰ As shall be developed below, however, with regard to the particular use Malthus made of the population mechanism outlined in the four stages theory, Malthus’ work did represent a significant break.

conjectural history in the period by which, according to Meek (1976b), this method had become an orthodoxy.

⁹ At LJ(A) iii.47 (p. 159), Smith is also reported as stating that “the number of men is proportion’d to the quantity of subsistence.”

¹⁰ Winch’s particular targets in this respect are Himmelfarb and Dean, and in a different regard Samuel Hollander.

On this note, it will be apposite to return briefly to the term used by Duncan Forbes to speak of conjectural history: “Scientific Whiggism”. This term has to be related, of course, to the teleological view of history designated “Whig history” by Butterfield (1931). That a direct reference to Butterfield’s work is absent from Forbes’ (1954) article — Butterfield is cited once, but no reference is provided nor the connection with the title of Forbes’ article explicitly drawn — underlines an argument made in the present paper, with regard to the theory of socio-cultural evolution prevalent at the end of the 18th century: that references to a well-known theory can be highly implicit and yet be perfectly understood (indeed, in a more general sense, the very way language functions relies on these types of automatic associations by people); but that these types of references may become largely undecipherable at a later date, when the idea, occurrence or theory in question, which is referred to, has lost its prominent and well-known character. L. P. Hartley’s phrase “the past is a foreign country” is overused, but to the point. The point here is that not only do “they do things differently there” (as Hartley added), but that a foreign language is also spoken in the past — not only literally so (i.e. entirely different languages being spoken in the same places at different times, which is of course relevant too), but also in the sense that one and the same language becomes foreign over time, not merely through the evolution in grammar, syntax and vocabulary, but, too, through the loss of automatic associations with things no longer in the public debate or otherwise familiar to us, and the difficulty therefore of understanding what is implicit in past author’s texts. One of the principal aims of intellectual history may well be to unearth and explain such opaque references in old works for a contemporary audience.

The following section (2) will consider the role of the four stages theory in Smith’s overall work, and especially its disputed role in the *Wealth of Nations*. Section 3 looks at how precisely the interaction of population and progress is conceptualised by Smith through this theory. In the subsequent section (4) we shall examine how the causal role of population in the progression of stages had a central position in the four stages theory not just in Smith’s work, but in the work of a number of authors in Britain and France who wrote at about the same time and made use of this theoretical device. By showing that this conceptualisation of population was quite commonplace at the time, it will be easier to concede to the sparing passages from Smith’s transcribed lectures we have to content ourselves with on this question their proper bearing. Section 5 looks at Malthus’ idiosyncratic

use of the four stages theory, showing both the continuity of Malthus' work with this theoretical tradition and his deviation from it, especially as regards the purpose of the use he made of its theoretical elements. Section 6 concludes.

2. Conjectural History and progress in the *Wealth of Nations*

Some modern authors have written about a theory of growth by Smith as distinct from his theory of development and his theory of history. In the first category is often put something derived from Books I and II of *Wealth of Nations*, with emphasis on demand and supply, prices, and division of labour and capital accumulation, viewed as a relatively short term analysis (Thweatt 1957 , Spengler 1959a, 1959b , Anspach 1976 , Kim 2001). Under his "development theory" some authors have treated Smith's rural-urban historical theory developed in Book III, depicted as a more long-term view of development (Khan 1954 , Singh 1959 , Bell 1992 , Blecker 1997); while his four stages theory of Book V, but especially as formulated in *Lectures on Jurisprudence*, is referred to as his theory of (economic) history (Brewer 2008). But of course these categorisations are entirely arbitrary as well as being anachronistic. Smith himself was interested in the historical development of man in society, which he considered from different angles, but as a unified subject. The overarching theme was what Smith himself called the "progress of society". There was no need for him to divide this subject into different modern categories (growth theory, development theory, economic history) which obviously were entirely foreign to 18th century thinking in general and Smith's thinking in particular. The four stages theory, moreover, and more generally the comparative analysis of savage and civilised societies, was not merely a particular aspect of Smith's consideration of the progress of society. It was, rather, the overarching theme that underlay all his thinking on the matter and stretched to considerations of most every other subject.

This particular frame of reference, as Meek points out (1976, p. 115) with reference to Dugald Stewart, was one that occupied Smith till the end of his life, and to the degree of 'obsession' (use of the term is Meek's).¹¹ We are told by John Millar, as reported by Stewart, that

¹¹ The exact phrase Meek uses is that Smith "came near to being obsessed with" the four stages theory. Meek refers to Stewart but these were not Stewart's words. The relevant passages in Stewart are the ones cited on page 1 above, and one where Stewart relates Millar's memories, according to which: "The same turn of thinking was frequently, in his social hours, applied to more familiar subjects ; and the

Smith's course on moral philosophy at Glasgow University, where he was appointed in 1751, "was divided into four parts", of which:

In the third part, he treated at more length of that branch of morality which relates to justice. . . . Upon this subject he followed the plan that seems to be suggested by Montesquieu; endeavouring to trace the gradual progress of jurisprudence, both public and private, from the rudest to the most refined ages, and to point out the effects of those arts which contribute to subsistence, and to the accumulation of property, in producing correspondent improvements or alterations in law and government. This important branch of his labours he also intended to give to the public; but this intention, which is mentioned in the conclusion of the *Theory of Moral Sentiments*, he did not live to fulfil. (Stewart I.18-9, p. 274-5)

Fortunately, we can today form a very good idea of what such a treatise as Millar alludes to would have looked like from the detailed student notes of Smith's jurisprudence lectures that are published in *Lectures of Jurisprudence*. It is true that Smith never got to publish that "account of the general principles of law and government, and of the different revolutions they have undergone in the different ages and periods of society", which he had announced to "endeavour to give" in "another discourse" in the last paragraph of the *Theory of Moral Sentiments*. Smith "partly executed this promise", he himself announced in the 'Advertisement' to the 6th edition of *Moral Sentiments*, "In the *Enquiry concerning the Nature and Causes of the Wealth of Nations* [sic] . . . at least so far as concerns police, revenue, and arms" (TMS, p. 3). But, over and above this partial treatment of the subject in *Wealth of Nations*, the comparative analysis of the political, economic, moral, cultural, and individual and social conditions of societies of the "savage" and the "civilised" type is one that runs through Smith's entire oeuvre.

Smith takes up this theme, in 1756, when discussing Rousseau's *Discours* in his *Letter to the Authors of the Edinburgh Review* (EPS, p. 242-56), his second ever published piece (appearing only six months after and in the same journal as his very first). Further, it is in connection with the wonder of "savages" about natural phenomena that the first mention of an "invisible hand" occurs in Smith's works (of three in total), in section III of the 'Principles which lead and direct

fanciful theories which, without the least affectation of ingenuity, he was continually starting upon all the common topics of discourse, gave to his conversation a novelty and variety that were quite inexhaustible . . . and of which his lively and circumstantial descriptions amused his friends the more, that he seemed to be habitually inattentive, in so remarkable a degree, to what was passing around him" (Stewart II.54, p. 295)

Philosophical Enquiries; Illustrated by the History of Astronomy', described by Smith himself in a letter to Hume as a "juvenile work" (Corr. 137, p. 168). That section, significantly, opens with the phrase "Mankind, in the first ages of society, before the establishment of law, order, and security" (Astronomy III.1, EPS p. 48).

In the *Theory of Moral Sentiments*, many comparisons are drawn between individuals in "rude" and "civilised" societies, especially in part V,¹² but also in parts II, VI (written after *Wealth of Nations*) and VII.¹³

Smith's 'Considerations concerning the First Formation of Languages', first published in 1761, two years after the first edition of the *Theory of Moral Sentiments*, is the essay that was described by Dugald Stewart, in the terms already cited at the beginning of this paper, "as a specimen of a particular sort of inquiry, which . . . seems, in a peculiar degree, to have interested Mr Smith's curiosity", which Stewart termed "*Conjectural History*" and that according to him "may be traced", in some form, "in all [Smith's] different works, whether moral, political, or literary". Smith, in the essay on the origin of language, considers the formation of languages in a hypothetical setting among savages. An actual comparison between the situation of "Savage nations on the coast of Africa" and "Wherever the Inhabitants of a city are rich and opulent" appears in lecture 23 of Smith's lectures on rhetoric (LRBL, p. 137), amidst a discussion of the effects of commerce and opulence on the refinement of arts and manners (and more specifically "the improvement of Prose"), with mention, too, of "the first ages of Society". (Lecture 3 covers the material corresponding to Smith's essay on the formation of language, of which the notes resemble the essay in every respect.)¹⁴

Mentions of savage, rude, and civilised nations, and of the different ages of society in the *Lectures on Jurisprudence* (both sets of notes reporting lectures held by Smith in the early 1760s as well) are

¹² See V.1.9, p. 199 and V.2.7-15, p. 204-10. The first of these passages in particular is quite remarkable for its cultural relativism (two centuries before that term was coined). See Fleischacker (2011) for a detailed treatment of Smith's cultural relativism (containing some imprecision, however; see footnote **Erreur ! Signet non défini.** above).

¹³ See II.iii.2.4, p. 100-1; VI.ii.1.12-13, p. 222-3; VII.ii.1.28, p. 282; VII.ii.1.34, p. 288; and VII.iv.36, p. 341.

¹⁴ The student notes on these lectures on rhetoric published in the corresponding Glasgow edition volume (first published by John M. Lothian, who discovered the notes, in 1963) pertain to the session of 1762-3. But Smith had already been teaching rhetoric since 1748.

too numerous to be reported here, but some will be considered in the following sections.

In the *Wealth of Nations*, finally, it is in the fourth paragraph of the opening section (WN 4, p. 10) that Smith first compares “savage nations of hunters and fishers” and “civilised and thriving nations”, announcing a theme that runs through the entire work. In the same “Introduction and Plan of the Work”, Smith tells us about the object of the first four books of the *Wealth of Nations* being “To explain in what has consisted the revenue of the great body of the people, or what has been the nature of those funds which, in *different ages and nations*, have supplied their annual consumption” (WN 9, p. 11). Every book of *Wealth of Nations* begins with a comparison of rude and civilised societies.¹⁵ And savage, rude or barbarous nations are mentioned, and compared with civilised or commercial ones, or the rude, barbarous or civilised state or age of society are discussed, at regular intervals from the first to the last pages of Smith’s opus.¹⁶

It is significant to note, in this respect, that the *Wealth of Nations*, according to Millar, as reported by Stewart, actually grew out of the

¹⁵ In Books II and V, the comparison appears in the first two paragraphs, respectively. Book III mentions “civilised society” in its first sentence. In Book I, the comparison is reintroduced mid-way through Chapter 1, after the pin factory passage, having been announced in the ‘Introduction and Plan of the Work’ just before the beginning of Book I. In Book VI the comparison appears towards the end of the first chapter (IV.i.33, p. 448).

¹⁶ Use is made of the categories of analysis of the four stages theory in the *Wealth of Nations* in the form of: “ages and nations” (8-9, p. 11; I.viii.41, p. 99; III.i.2, p. 377; III.ii.9, p. 387; IV 2, p. 428; IV.vii.a.19, p. 563; IV.vii.b.55, p. 587; V.i.f.38, p. 774), “rude(st)”, “advanced”, “civilized”, “commercial”, (and “every”) “state of society” (I.i.4, p. 15; I.vi.1-3, p. 65; I.x.b.3, p. 117-8; I.xi.e.28, p. 206; I.xi.m.7, p. 247; II.1, p. 276; V.i.a.2-3, p. 689-90; V.i.a.6, p. 692; V.i.a.8-11, p. 694-5; V.iii.1, p. 907; V.iii.5-9, p. 910-1), “barbarous (and uncivilized) state” / “nation(s)” / “countr-y/ies” (I.iii.3, p. 34; I.iii.8, p. 36; I.ix.16, p. 112; I.xi.c.4, p. 178; I.xi.c.6, p. 180; I.xi.m.7, p. 247; I.xi.m.11, p. 250; I.xi.n.3, p. 257; III.iv.24, p. 427; IV.vii.2, p. 556; IV.vii.b.2, p. 564-5; IV.vii.b.4, p. 567; IV.vii.c.100, p. 634; V.i.a.35-44, p. 703-8; V.i.b.5, p. 711; V.i.b.15, p. 717; V.i.e.2, p. 731; V.i.e.29-30, p. 754; V.i.f.20, p. 765; V.i.f.40, p. 776; V.i.f.51, p. 782-3; V.ii.k.20, p. 878), “civilized (and thriving) nation(s)” / “societ-y/ies” / “countr-y/ies” (4, p. 10; I.i.11, p. 22-3; I.ii.2, p. 26; I.iii.5, p. 34; I.iii.8, p. 36; I.iv.11, p. 44; I.vi.24, p. 71; I.viii.39, p. 97; I.xi.d.3, p. 194; I.xi.g.26, p. 221; I.xi.n.3, p. 257; I.xi.p.7, p. 265; III.i.1, p. 376; III.iii.15, p. 407; IV.i.33, p. 448; IV.v.b.4, p. 525; IV.vii.b.1, p. 564; IV.ix.38, p. 679; V.i.a.5, p. 691; V.i.a.11, p. 695-6; V.i.a.36-40, p. 704-6; V.i.a.44, p. 708; V.i.b.5-7, p. 711-2; V.i.b.19, p. 719; V.i.e.2, p. 731; V.i.f.50-4, p. 782-5; V.i.f.61, p. 788; V.i.g.10, p. 794; V.ii.a.16-21, p. 822-4; V.ii.e.8, p. 843), “ages of society” (I.iv.3, p. 38; V.i.a.10, p. 695), “stages of improvement” (I.xi.e.27-28, p. 206).

same lectures on moral philosophy as the *Theory of Moral Sentiments* and the *Lectures on Jurisprudence*. The first of the four parts of those lectures was, Millar reports, devoted to theology, the second contained the material of *Theory of Moral Sentiments*, the third, as cited above, was made up of the contents of *Lectures on Jurisprudence*, and the fourth comprised the germs of the *Wealth of Nations* (Stewart II.18-20, p. 274-5). And for anyone who would doubt whether Smith may not have given up this line of enquiry (i.e. the four stages theory as frame of analysis) at some point in his career, one of the last of Smith's works, which he had been working on late in life and left to be published after his death (Ross 2010, p. xxx, 91; introduction to EPS), the essay *On the Imitative Arts*, contains, too, a comparison of savage and civilised nations (in part II, starting EPS p. 187) as does indeed part VI of *Theory of Moral Sentiments*, written after *Wealth of Nations*, as already noted. This theme, and its corresponding language of barbarism and civilisation, is so ubiquitous in Smith's entire work, including the *Wealth of Nations*, in fact, that the question must be, not so much why this theme was in recent decades given renewed attention, but why it was so utterly neglected for so long by the large majority of Smith scholars.

It is true that references in *Wealth of Nations* to the four stages theory proper are for the most part of a rather implicit nature. Although Smith opens nearly every book of *Wealth of Nations* with a consideration of the "early" or "rude" stage of society (see above p. 12), which sufficiently shows the importance of this general frame of analysis for the *Wealth of Nations*, Smith here always only *refers* to the four stages framework.¹⁷ He never *explains* it or even *presents* it in full. The closest we come to a full exposition by Smith of this theory is in Book V, but even here it lacks the detailed description that it was given in Smith's lectures. And while the four stages theory is never laid out in full in the *Wealth of Nations*, neither is the passage of stages explained by the mechanism characteristic of the theory.¹⁸ In fact, neither is this mechanism outlined in the set of lecture notes published by Cannan in 1896, and hence available to the academic and wider public for the whole of the 20th century. It is only in the set of lecture notes on jurisprudence first published in 1978 that the causal mechanism behind the passage of stages as we can find it in typical accounts of the four stages theory, some of which we shall examine in Section 4, is clearly explained. Smith's explanations of how nations pass from one to

¹⁷ An extensive list of such references is given in n. 16, p. 16 above.

¹⁸ As noted by Hollander (1998 [1976], p. 89).

the next of the four institutional and economic stages, i.e. by population growth pressing on the means of subsistence and thus prompting technological revolutions, was thus not available in writing to the wider public in its fully formulated form before the publication of the second set of notes on Smith's jurisprudence lectures in the Glasgow edition.

The explanation of the development of society from savagery to civilisation through the joint progression of population, division of labour and capital accumulation, on the other hand, already fully present in the lectures, was in fact laid out in great detail in the *Wealth of Nations*.¹⁹ Hollander (1998 [1976], p. 87-9) held that the "analytical model" explaining the growth and development of society in the *Wealth of Nations* was clearly distinct from the approach of the "Scottish Historical School". It is the opinion defended in the present work that Smith's explanation of development in the four stages theory (by population growth pushing on subsistence and inducing technological development) and the explanation of development in the *Wealth of Nations* (through expanding markets, capital accumulation and division of labour) are complementary features of the same theory, which to a large extent is already present in the *Lectures of Jurisprudence*. Where the *Wealth of Nations* and the *Lectures* overlap in their explanation of the development process, there is no clash.²⁰ Where elements are missing in one or the other instance, they can easily be integrated in the general framework.²¹ As we shall see,

¹⁹ For a famous exposition of the assessment that the central question of the *Wealth of Nations*, to which the theory of productivity growth through division of labour is the answer, is the differential material well-being of savages and the poor in commercial society, see Hont and Ignatieff (1983).

²⁰ As Hollander (1998 [1976], p. 88) also observes.

²¹ The most notable absence in the lectures (the only true innovation in the *Wealth of Nations* in this respect, but which is not essential to the theory of development as already present in the *Lectures of Jurisprudence*) is the notion of productive and unproductive labour, which was very likely an inspiration from the Physiocrats upon Smith's visit to France, and which Smith tied to the different employments of capital, and through that to the natural progress of opulence (but the latter can also be derived, and maybe more naturally so, from the sequence of development outlined by the four stages theory). The importance of the accumulation of capital (or stock) for the development of the division of labour is also often today still ascribed to Smith's contact with French thinking (an enduring influence of the "Umschwungstheorie", which we shall look at in the following section). This feature of Smith's thinking was, however, already fully present in the lectures on jurisprudence as well as in the 'Early Draft'. See especially LJ(B) 286, p. 521; and further LJ(A) vi.35, p. 344; vi.38, p. 345; vi.93-4, p. 365; vi.127-30, p. 377-8; vi.138-

population growth as a moving force is one notable connecting element of the explanation of development in the *Lectures of Jurisprudence* and the *Wealth of Nations* (and, insofar as that work deals with this theme, the *Theory of Moral Sentiments*).

According to Hollander, the statements by Stewart and by Smith himself on the importance of the (conjectural) historical investigation in Smith's work, discussed at the beginning of this section, only apply to "particular sections of Books III and V".²² Thus, Hollander held, as far as the *Wealth of Nations* is concerned, "The historical analysis is best viewed as a digression", while "Smith's main object in the *Wealth of Nations* was the formulation of a reform programme on the basis of an analytical model of the operation of a capitalist exchange economy" (1998 [1976], p. 87-8). Let alone the anachronism of claiming Smith's 18th century writings to be primarily concerned with "a competitive capitalist exchange economy", this refusal to concede to Smith's comparative historical analysis an actual relevance in the *Wealth of Nations* led Hollander notably to espouse the view — reminiscent of proponents of the "Umschwungstheorie", but equally typical of some late 20th century readings of Smith — according to which, in the *Wealth of Nations*, "the proposition that self-interest is the governing motive throughout time and space as far as concerns man in his economic affairs is Smith's fundamental *axiom*" (ibid., italics in original). In fact, even in the *Wealth of Nations* alone (i.e. disregarding the *Theory of Moral Sentiments*, where many other motives of human behaviour are discussed, including in economic affairs), the self-interested motive as main organisational basis of economic matters is not independent of time and space, but is a specific feature of commercial society, while in hunter and pastor societies, and even in feudalism, economic affairs still rely mainly on personal relationships and ties of submission and dependency.²³ The contrast Smith here draws between savage

57, p. 382-9; LJ(B) 140, p. 454; 233, p. 498; 244-70, p. 504-15; 282-326, p. 519-38; ED 35-37, p. 576-7; 41-3, p. 577-9; 45-6, p. 580.

²² Clark (2008, p. 144) holds, by contrast, that "The fourth Book, likewise, is conceived as a further broadening of the historical analysis of Book three".

²³ Properly developing this point would take us too far astray. Suffice it to say that immediately preceding the most famous statement of the importance of self-interest by Smith ("It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest"), Smith had stated that "In civilised society [man] stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. . . . But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their

societies and civilised nations, far from being a digression, is precisely the means by which he illustrates how advanced countries, despite greater inequality in wealth, can achieve greater material well-being even for the poorest members of society than savage nations.²⁴

It is very clear in the second set of lecture notes on jurisprudence, not only how the passage from stage to stage unfolds, but also what is the underlying causal element. It is the growth of population which progressively creates shortages, by exerting pressure on the local ecosystem, hence forcing society to adopt a new technology of subsistence. Hence population pressure creates problems, but it is these problems which, by calling for solutions, lead society to higher stages of evolution. This also involves the progress of division of labour and exchange, the accumulation of stock, the introduction of laws and government, the introduction of private property and economic (and social and political) inequality (social classes). All these elements are present and important in the *Wealth of Nations* too. Smith there also links them to the different stages, in the same way as in the lectures.²⁵

We could take the fact that Smith does not clearly outline the four stages theory in the *Wealth of Nations* as a sign for a distancing by him from this theme in his second major published work.²⁶ But his constant references to it throughout, in connection with a wide variety of subjects, makes this an unlikely possibility. It is more likely that Smith considered the theory so well known, at the moment of the book's writing, that explicit references to it were not necessary. With this supposition, I am not formulating some esoteric claim about what Smith *really* meant, as opposed to what he actually wrote in the *Wealth of Nations*. Rather, I am following, first, what Smith himself stated to have been his intention, and what he considered at least the partial fulfilment of it by the publication of the *Wealth of Nations*, in the last paragraph of the *Theory of Moral Sentiments* and the Advertisement to

benevolence only" (WN I.ii.2, p. 26). The key phrase here is "in civilised society". In savage society, indeed, man is not in need of the assistance of great multitudes, but only of the relatively few members of his tribe, whom he is closely related to and has other ways to deal with, including in "economic affairs", than through self-interest alone.

²⁴ See on this notably Hont and Ignatieff (1983). The characteristic statement is made by Smith in the last paragraph of the first chapter of the *Wealth of Nations* (p. 23-4).

²⁵ Details of presentation of course sometimes vary, as do the purposes for which Smith invokes elements of the four stages theory at different instances. See on this Okan (2016).

²⁶ This is the position taken by Hollander (1998 [1976]).

the sixth edition of the latter work, respectively, both referred to above, as well as in his correspondence (see a letter to Rochefoucauld, 1st of November 1785, in Corr., p. 287); second, I am relying on the accounts of Stewart and Millar of the origin of the *Wealth of Nations* in Smith's teachings, and of the central place of conjectural history therein, also referred to above; finally, I am drawing on the historical investigation by Meek, showing a very widespread use and knowledge of the four stages theory in the second half of the 18th century (Meek 1976b, p. 177-230). The accounts by Smith himself and by Stewart and Millar show that Smith's jurisprudential theories (in which the four stages theory clearly has a central position) always formed, and were always conceived by Smith, as an important part of an integrated whole. And Meek's work allows one to conclude that references to the four stages theory, at the time of the publication of the *Wealth of Nations*, did not need to be very explicit to be understood. Yet, only a few decades later (after Smith's death), this was no longer the case, and the indefinite references Smith makes to this theory in the *Wealth of Nations* were for the most part indecipherable for 19th and still more so for 20th century readers of *Wealth of Nations*. Thus the explanation of development in the *Wealth of Nations*, to the effect that the progress of society is spurred by the division of labour, which depends on the extension of the market and the accumulation of capital, ceased to be read as a theory of socio-cultural evolution along four-stages-theory lines.

The remembrance of the importance of the four stages theory for Smith's work as a whole since the 1970s we owe in no small part to Ronald Meek. Meek's *Social Science and the Ignoble Savage* (Meek 1976) is a foundational study of the emergence, shape and scope as well as the overall importance of this theory in the Scottish Enlightenment debate about progress and human nature. This study was published the same year as the bicentenary edition of *Wealth of Nations*, of which Meek was also initially one of the editors, together with Andrew Skinner and Roy Campbell (although Meek later resigned from this position to concentrate on editing the *Lectures of Jurisprudence* (Skinner & Brown 2008, p. 212)). Thus, besides remaining an advisory member of the editorial board of *Wealth of Nations*, Ronald Meek, appropriately, became the main editor²⁷ of the volume of the Glasgow edition of Smith's works entitled *Lectures of*

²⁷ As the two other editors, D. D. Raphael and P. G. Stein "wish[ed] it to be known", the "main part of the editorial burden" of the volume was carried by Meek (LJ, p. 43).

Jurisprudence (the name by which these lectures are since universally referred to), in which the four stages theory takes centre stage — and especially so in the more extensive lecture notes that form the first and larger part of the volume, discovered only in the mid-twentieth century, and published (and extensively formatted and annotated to render them in readable print form) for the first (and still only) time in this edition. In the Glasgow edition of *Wealth of Nations*, the link between the ideas expressed by Smith therein and the ones contained in his earlier writings (as well as in works of other authors contemporary and anterior to Smith) is continuously drawn by the editors through cross-references in the footnotes. It thus becomes much more apparent when reading Smith's work as a whole in the Glasgow edition that there is coherence and that there is a commonly shared structure and a paradigmatic framework that runs through all of Smith's work. This concerns the moral and economic dimensions of Smith work as much as the 'conjectural-historical' one.²⁸

We shall now look at the particular instances in which Smith makes use of elements of the four stages theory in various works, with the particular objective of outlining the role of population therein, before examining in the following section how the same structure and causal system is at work in several other authors' work, illustrating the commonly established causal role of population in conjectural history, before looking at the adoption but diversion of the theory by Malthus in the last section.

²⁸ It is generally considered that the Glasgow edition put the nail in the coffin of the "Adam Smith Problem", at least as far as Smith scholarship proper is concerned (the "problem" has survived in economics and the social sciences more generally as Dixon and Wilson (2014) elaborate on). In the introduction to the Glasgow edition of the *Theory of Moral Sentiments*, the editors Raphael and Macfie note: "the so called 'Adam Smith problem' was a pseudo-problem based on ignorance and misunderstanding. Anybody who reads *The Theory of Moral Sentiments*, first in one of the earlier editions and then in edition six, will not have the slightest inclination to be puzzled that the same man wrote this book and *The Wealth of Nations*, nor to suppose that he underwent any radical change of view about human conduct." (TMS, p. 20). Hont describes the two works as parts of the same intellectual project: "Smith had a consuming interest in both the domestic and external, moral, and economic patterns of competition, and his analysis of all these aspects contributed equally to his theory of commercial society. Economic competition was the subject matter of the *Wealth of Nations*, whereas the artificial morality of commercial man was the central theme of the *Theory of Moral Sentiments*. The two books together provide a complete analysis of market behavior. In these works, Smith merged and reworked insights that were first adumbrated by Pufendorf, Nicole, and other French moralists." (Hont 2010, p. 50-1)

3. Smith's conjectural history of population and development

In the famous passage from the *Theory of Moral Sentiments* in which Smith mentions the “invisible hand” it is observed that “The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining” (TMS IV.1.10, p. 184). If this is so, then growth of population must in time create a shortage. This is a critical element of four stages theory. But it must be remarked, first, that it is not the soil which maintains people directly, but the “produce of the soil” (and this says itself nothing about the fixity or variability of this produce);²⁹ second, that the produce of the soil is apportioned to the number of people, precisely, “at all times”. One can detect here a theme that is, too, a central element of the four stages theory, namely that the availability of the means of subsistence depends not merely on the number of people in relation to the soil, but depends very significantly on the period or stage of society, characterised by a particular mode of subsistence and degree of division of labour distinctive of the latter. As Smith tells us in the *Wealth of Nations*, “the difference is very great between the number of shepherds and that of hunters whom the same extent of equally fertile territory can maintain” (IV.vii.c.100, p. 634). A society passes from the hunting to the shepherd state, however, precisely under the impulse of the increase of the number of people in relation to the soil, as we shall see in what follows.

The same idea according to which the number of people in any territory or nation is always proportional to the means of subsistence is expressed by Smith in the *Wealth of Nations*, not only in the sentence already quoted (p. 7 above), “Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it” (WN i.viii.39, p. 97), but also at another place, with specific reference to “savage and barbarous nations”:

Countries are populous not in proportion to the number of people whom their produce can clothe and lodge, but in proportion to that of those whom it can feed. When food is provided, it is easy to find the necessary clothing and lodging. But though these are at hand, it may often be difficult to find food. In some parts even of the British dominions what is called a house may be built by one day's labour of one man. The simplest species of clothing, the skins of animals, require somewhat more labour to dress and prepare them for use.

²⁹ For some thoughts on the importance of this distinction, see Rutherford (2007, p. 220-1).

They do not, however, require a great deal. Among savage and barbarous nations, a hundredth or little more than a hundredth part of the labour of the whole year will be sufficient to provide them with such clothing and lodging as satisfy the greater part of the people. All the other ninety-nine parts are frequently no more than enough to provide them with food. (WN I.xi.c.6, p. 180)

The important element here insofar as the four stages population-subsistence relationship is concerned is not contained in this passage alone, but in the contrast Smith draws in the following passage with the situation in more advanced countries:

But when *by the improvement and cultivation of land the labour of one family can provide food for two*, the labour of half the society becomes sufficient to provide food for the whole. The other half, therefore, or at least the greater part of them, can be employed in providing other things, or in satisfying the other wants and fancies of mankind. (WN I.xi.c.6-7, p. 180)

Indeed, “the populousness of every country must be in proportion to the degree of its improvement and cultivation” (WN IV.vii.b.7, p. 568). And the improvement and cultivation of land (indeed the very beginning of agriculture) depends itself on the particular stage on the continuum between savagery and civilisation a nation has attained.

The degree of division of labour is one of the main characteristics of the different stages of society. And as Smith specifies at the very beginning of the *Wealth of Nations*, “Whatever be the soil, climate, or extent of territory of any particular nation, the abundance or scantiness of its annual supply” depends chiefly on the degree of “skill, dexterity, and judgment with which its labour is generally applied” (WN 3-4, p. 10), “and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour” (I.i.1, p. 13).

Before looking at the way Smith explains the succession of stages in the lectures of jurisprudence, we may look at an even earlier source in which Smith’s conjectures on population and technology were outlined. The “Anderson Notes”, as they are generally referred to today, are a set of handwritten notes discovered in 1970 by Professor Archie Brown in a notebook having belonged to John Anderson, a colleague of Smith’s at Glasgow. They were made accessible to the reading public by Meek in 1976. Meek (1976a, p. 440) believed this document to consist in “selective extracts from a student’s notes of a relatively early version of Smith’s Jurisprudence lectures”. Pauchant (2016) recently argued, based on his own investigation, that these notes correspond to lectures given in 1749. They were not included in the Glasgow edition of Smith’s Works and Correspondence, but Meek made a convincing case,

by comparison with the then not yet published set of lecture notes of Smith's jurisprudence lectures, for the Anderson notes being in fact notes from Smith's lectures, and he reproduced them in part in the 1976 article cited above.³⁰ As in the *Lectures on Jurisprudence*, Smith here approaches the subject of the four stages theory from a jurisprudential perspective. Smith tells us that:

Hunting and fishing are all the arts that prevail in the first states of society. To deprive a man of the beast or fish he has caught, or of the fruit he has gathered, is depriving him of what cost him labour and so giving him pain, and is contrary to the laws of the rudest society. By the second principle, when a clan or nation hunt and fish long (i.e., have lived long) in one tract of country they acquire an exclusive property and it is considered as theirs, i.e., they acquire property in common (vide the histories of America and Caesar and Tacitus), which is the second state of perfection in society. (Meek 1976a, p. 467)

"When their numbers increase," Smith tells us further,

when instruments of husbandry are invented (vide Hesiod), and when they have built huts and towns, they will begin to labour little spots about their houses and the publick fields will be neglected, and hence will arise private property in lands founded both upon the first and second principle; which is the third state of society advancing towards perfection. (ibid.)

Later Smith remarks that "Where there are no manufactures and where agriculture is little minded, the country must soon be overstocked with inhabitants" (which resembles what Franklin wrote in 1751, see quote on p. 37 below), before noting that

hence the Teutones, etc. made their invasions. Feu, the German word, signifies pay (as fee in English). As the conquests were made by armies and by generals who were not able to maintain them, they were put in possession of the lands, instead of receiving pay, and were obliged to military service, etc. (ibid.)

These citations contain only scattered elements of Smith's more detailed and coherent account of the four stages in the *Lectures of Jurisprudence*. A few elements are noteworthy nonetheless: first, as already noted, the treatment of this theme within a presentation of the laws of nations (as in Pufendorf's work, and in Smith's own later

³⁰ The article containing the notes was republished the following year in a collection of essays (Meek 1977) with no apparent modifications. References in this paper are to the 1976 version. The original of the Anderson notes are kept and can be viewed at the library of Glasgow University. For a recent detailed examination of the Anderson notes see Pauchant (2016).

lectures on Jurisprudence); second, the absence of division of labour (“Hunting and fishing are all the arts that prevail”) and private property (common property implying no private property) in the first stage; third, Smith’s reference to ancient sources (not made explicitly in the *Lectures of Jurisprudence* in this context); and finally the element of population pressure (absent from the Cannan notes), linked to the development of arts (appearance of division of labour), private property, and agriculture (the third stage, although it is not clear in this account whether agriculture was not already practised in some form on the “public fields”; these could be considered, more in line with the common version of the four stages theory, as graze lands for herds). Before moving to the more detailed account (in particular with regard to the role of population) in the Lothian notes, let us look at a last quote from the Anderson notes:

Of mankind the half die under 7, and of these the children of the vulgar most commonly. It is not unusual in Wales, Ireland, and the Highlands to see women without a child who have born above a dozen, which is owing to their poverty which renders them unfit to bring up the most tender of all animals, viz infants. This then must be one cause of the want of inhabitants in ancient nations, and where polygamy takes place. (Meek 1976a, p. 476)

This quote is interesting not only for the clear connection to Smith’s treatment of population in Chapter VIII of Book I of *Wealth of Nations* (and Malthus’ one in his *Essay*), but also because Smith here concurs with Hume (contra Wallace and Montesquieu) about the lesser populousness of ancient nations, as compared with modern times (an indication, which, although implicit in the four stages theory — which implies rising population through the stages of social evolution — cannot be found expressly in the *Wealth of Nations*).³¹

Let us then consider the exposition of the four stages theory in the *Lectures on Jurisprudence*, and the role of population growth therein. Although the sequence of subjects treated differs in both sets of notes, the four stages theory is introduced in each case in the context of the laws of occupation (just as it was in Pufendorf’s work; the chapter in the *Law of Nature and Nations* in which the four stages theory appears, Chapter IV of Book IV, is entitled “Of the Origine of Dominion, or Property”). Yet the first set of notes (LJ(B)), which in general treats

³¹ In the *Lectures of Jurisprudence*, however, Smith is reported to have stated not only, as in the preceding quote, that polygamy “must certainly be detrimentall to the population of the country”, but also that “This may possibly be the reason why Persia, and the countries of Greece, and those on the African coast, which were formerly very populous, are now but very thinly inhabited” (LJ(A) iii.46, p. 158).

subjects in a much more summary fashion than the second (LJ(A)), does not mention the mechanism behind the passage of the stages. It seems unlikely that Smith's account would have substantially differed in the same class he gave in two successive years (and if Pufendorf was Smith's inspiration, the role of population appears there too³²). Maybe the student did not deem this to be sufficiently important for a summary — or maybe he had forgotten it — while he was rewriting his notes in clear fashion, or he had not had time to take them down in shorthand. Whichever the reason, the passage of stages is not explained.³³ As a result, Smith scholarship has only been able to address this interesting feature of Smith's theory since 1978 (or only a few years earlier for those who had access to the unpublished notes, notably Meek), and comparatively little has been written on the subject yet as a result.³⁴

In the notes first published by Cannan, Smith's account of the four stages is reported thus:

The four stages of society are hunting, pasturage, farming, and commerce. If a number of persons were shipwrecked on a desert island their first sustenance would be from the fruits which the soil naturally produced, and the wild beasts which they could kill. As these could not at all times be sufficient, they come at last to tame some of the wild-beasts that they might always have them at hand. In process of time even these would not be sufficient, and as they saw the earth naturally produce considerable quantities of vegetables of

³² See below page 45.

³³ Meek, Raphael and Stein believed LJ(A) (the second set) to be a retranscription of shorthand notes from the original lectures, which allows for greater accuracy and a more important capture of what was actually said in the lectures, while LJ(B) (the Cannan notes) appear to first have been taken down in longhand, which explains their more concise nature, and to have been quite heavily edited as they seem to have been intended for sale, maybe as a summary of Smith's lectures. (The number of subjects treated, at the contrary of their individual length, is larger in LJ(B)). The second set seems to have been made by a student for his own private use (as the text contains many spelling errors and poor formatting). The notes taken in each lecture are of considerable length and were complemented by additional notes (written on the verso pages of the manuscript) which probably stem from comparison with another student's notes, or could be additions made in Smith's complementary class in which specific points were explained at the students' request, and apparently many illustrations provided. See Introduction to LJ, p. 6-7, 11-13, 23.

³⁴ Craig Smith (2006b) and Kennedy (2008) stand out for having given the causal role of population in Smith's rendering of the four stages special mention (even though Craig Smith calls it a "prompt" rather than a "cause", on which I shall comment at the close of this paper).

it's own accord they would think of cultivating it so that it might produce more of them. Hence agriculture, which requires a good deal of refinement before it could become the prevailing employment of a country. . . . The age of commerce naturally succeeds that of agriculture. As men could now confine themselves to one species of labour, they would naturally exchange the surplus of their own commodity for that of another of which they stood in need. According to these stages occupation must vary. (LJ(B)150, p. 459)

All the elements of the succession of stages are here presented, but no causal explanation is provided. As we shall see by examining the corresponding passage in the notes first published in the Glasgow edition, this passage is indeed only a short summary of Smith's account.³⁵ There is a hint to the causal role of population in an earlier passage of LJ(B), where Smith had already mentioned nations of hunters, but had not talked about the four stages as a whole yet. But it is only a mention in passing among a discussion of the differences of governments in the different types (or ages) of society. Smith states here that in a nation of hunters, only few people can live together:

We shall now make some observations on nations in the two first periods of society. These viz. of hunters and shepherds.

In a nation of hunters and fishers few people can live together, for in a short time any considerable number would destroy all the game in the country, and consequently would want a means of subsistence. Twenty or thirty families are the most that can live together, and these make up a village (LJ(B)27, p. 407)

This is the clearest indication to a possible causal role of population of the four stages type (i.e. of the "necessity is the mother of invention" kind) that one can find in the Cannan notes — and it is not very clear. There is thus a hint here, but only a hint, which is hard to read independently of any knowledge of the passage in the Glasgow notes where this causal role is clearly laid out. The corresponding passage to the one just cited in the newer set of notes is also more informative:

In the age of hunters it is impossible for a very great number to live together. As game is their only support they would soon exhaust all that was within their reach. Thirty or forty families would be the

³⁵ An interesting element of this passage is the one of shipwreck. While this immediately calls to mind Marx's accusation of "Robinsonnades", Marx could not have known this particular passage. Pufendorf also mentioned "a Number of such helpless Wretches thrown together by Nature on some uninhabited Soil" (Hont 2010, p. 172), many decades before Daniel Defoe published his famous novel. As Hont notes, "The picture of a group of castaways on an uninhabited island often served the very same purpose as the fictional image of a "state of nature.""

most that could live together, that is, about 140 or 150 persons. These might live by the chase in the country about them. (LJ(A) iv.36, p. 213) ³⁶

In the Glasgow notes, then, the passages where Smith presents the four stages (as most corresponding passages in that set of notes) are longer. Smith starts his exposition of the four stages in the second set of notes in the same way as in the first, by listing the distinct stages that “mankind” passes through:

There are four distinct states which mankind pass thro :— 1st, the Age of Hunters ; 2^{dly}, the Age of Shepherds ; 3^{dly}, the Age of Agriculture ; and 4^{thly}, the Age of Commerce.

If we should suppose 10 or 12 persons of different sexes settled in an uninhabited island, the first method they would fall upon for their sustenance would be to support themselves by the wild fruits and wild animals which the country afforded. Their sole business would be hunting the wild beasts or catching the fishes. . . . This is the age of hunters. (LJ(A) i.27, p. 14)

The same narrative of a few individuals on an isolated island as in the first set is thus used (without the shipwreck). It is important to note that this is meant as illustration of the process of societal development, not as an actual account of how human societies have developed (Smith begins this part by “If we should suppose”). As such

³⁶ Smith observes in the ‘First Fragment on the Division of Labour’ that “In a savage tribe of North Americans, who are generally hunters, the greatest number who can subsist easily together seldom exceeds one hundred or onehundred and fifty persons.” (FA.3, LJ p. 583) These figures of groups of hunters being limited to about hundred-fifty individuals are very interesting with regard to recent research on the size of ancient hunter-gatherer societies. Dunbar (1992), using findings by primatologists linking mean group size of primate species to the average size of their neocortex, established, in concord with the anthropological and ethnographic literature on early human group sizes, that early humans probably lived in groups of about a hundred-fifty individuals (a finding popularised in the business and popular science literature of the past two decades — inferring lessons for the ideal size of the workforce of firms among other things — under the name “Dunbar’s number”). It must be remarked that Dunbar reported to have extensively consulted classical sources as well, thus some of his sources may have been the same as Smith’s.

The variation between the number of families Smith is reported to have mentioned in the two corresponding quotes of LJ(A) and LJ(B) reproduced above — “Twenty or thirty families” in LJ(B), “Thirty or forty families” in LJ(A) — reflects a frequent difference in illustrative numbers and figures (and other insignificant details, but no substantial points) between the two sets of notes. (In the *Fragment on the Division of Labour*, Smith, or his amanuensis, apparently crossed out the words “one hundred and fifty men two hundred” next to the quote at the beginning of this note.)

it presents a “philosophical fiction” in the sense of Hume.³⁷ It is at this stage that population growth as causal element in the passages of stages is introduced. (And it is at this point only that the first and second set of notes diverge.):

In process of time, *as their numbers multiplied*, they would find the chase too precarious for their support. They would be *necessitated* to contrive some other method whereby to support themselves. At first perhaps they would try to lay up at one time when they had been successful what would support them for a considerable time. But this could go no great length.—The contrivance they would most *naturally* think of, would be to tame some of those wild animals they caught, and by affording them better food than what they could get elsewhere they would induce them to continue about their land themselves and multiply their kind. Hence would arise the age of shepherds. (LJ(A) i.28, p. 14) ³⁸

Among the elements put (by me) in italics in this quote, the first two are of central importance for the way the passage of stages was explained, not only in Adam Smith’s account, but also in the corresponding descriptions by other authors making use of this theory, whom we shall subsequently look at: that “necessity is the mother of invention”; and that this necessity is created by a shortage occasioned by the growth of population. (We shall look at the third italicised element later in this section.) The growth of population is described as the prime mover, with the necessity or want it creates being the element that will set into motion a technological revolution. Growth of population creates a shortage. Up to a certain size of population a people can hunt the wild animals without having too much of an incidence on the local ecosystem. But once people become more numerous, continuous hunting on the same territory will start to decimate the wild animals, which will gradually decline in numbers. And it will thus be harder and harder for the society, once its members increase, to subsist by this method.

In the passage from the second to the third stage of society (from the shepherd stage to the agricultural stage), the same mechanism is at work:

³⁷ See Hume (1739, Book III, Part II, Section II: ‘Of the Origin of Justice and Property’). (Hume 1888 [1739], p. 493)

³⁸ The reference to accumulation in this quote is interesting for two reasons: first, for the consideration of the first (or “primitive”) accumulation of capital in *Wealth of Nations* also occurring in the setting of the savage state — although this too, as we shall see, is in fact a “philosophical fiction”; and second for Smith’s mention that “this could go no great length”, which is related to Smith’s considerations of the “slow progress of opulence”.

They [the shepherds from the end of the previous quote] would more probably begin first by multiplying animals than vegetables, as less skill and observation would be required. . . . But *when a society becomes numerous they would find a difficulty in supporting themselves* by herds and flocks. Then they would *naturally* turn themselves to the cultivation of land and the raising of such plants and trees as produced nourishment fit for them. . . . And by this means they would *gradually* advance in to the age of agriculture. (L)(A) i.28-31, p. 15)

Here again, it is the growth of population which creates a shortage (“difficulty”). And the discovery and implementation of the new technology of subsistence is introduced.

One can also see from this quote that, although Smith classified the different ages of society into four definite categories, this was only a simplification, while his full-blown theory was more complex.³⁹ In fact, society moves “gradually” through these stages, which implies that at any time there may be features of earlier stages still present (or of future ones already present, depending on how one looks at it). This gradualism plays an important role, too, in the explanation of the move from feudalism to the modern European monarchies (coinciding, from a mode-of-subsistence perspective, with the move from predominantly agricultural to proper commercial societies) described by Smith in Book III of the *Wealth of Nations*.⁴⁰ It is important to stress this

³⁹ The same approach can be observed in the treatment of the division of labour in *Wealth of Nations*: Smith first introduces this subject by the intentionally spectacular example of the pin factory, inside a single workhouse, before he widens the subject to the social division of labour at the end of the same chapter, and to regional and international trade in later considerations and throughout the work.

⁴⁰ In the state of Europe described by Smith in that part of *Wealth of Nations*, features of the agricultural age are present (there are towns and agricultural areas, which exchange their produce with each other), but there are still features of the previous shepherd stage as well (the very great authority of chiefs and the total dependence on them of the rest of society) which constitute a hindrance to the seamless progress to ulterior stages of development (the authority of the feudal barons notably disturbs the free trade between town and country). It is the fact that Europe was stuck in these antiquated institutional arrangement that Smith used to explain why Europe, instead of by the “natural progress of opulence”, had to develop through an “unnatural and retrograde order”, whereby it were elements of the next stage (commercial society), that finally liberated the current state (if we can agree on situating the Europe described in Book III in the agricultural stage) from its elements of the former one. It is the commerce of the towns with other far-away towns (a feature — international trade — that would “naturally” be one of commercial society only) which weakens the authority of the feudal lords (the remnant from the shepherd stage) and finally lets the agricultural stage progress to

intentionally reductive nature, for it is prone to be taken as a classification into which Smith believed all nations, in all ages, to neatly fit or have fitted. But it was above all a model by which to analyse and compare different societies at different levels of development, and with the help of which to understand that development itself, much like Montesquieu's model of different forms of political regimes was such a tool, while actual political regimes could incorporate elements of different types.⁴¹

A society will further improve the several arts, Smith next tells us, explaining the passage to the ultimate, commercial stage; and here we encounter another characteristic element which can be found very similarly in other authors' use of the four stages theory at around the same time: the introduction of different trades, or, in other words the division of labour. The division of labour in time evolves to international trade, bringing about the age of commerce:

As society was farther improved, the severall arts, which at first would be exercised by each individual as far as was necessary for his welfare, would be seperated; some persons would cultivate one and others others, as they severally inclined. They would exchange with one an other what they produced more than was necessary for their support, and get in exchange for them the commodities they stood in need of and did not produce themselves. This exchange of commodities extends in time not only betwixt the individualls of the same society but betwixt those of different nations. Thus we send to France our cloths, iron work, and other trinkets and get in exchange their wines. To Spain and Portugall we send our superfluous corn and bring from thence the Spanish and Portuguese wines. Thus at last the age of commerce arises. (LJ(A) i.31-2, p. 15-6)

We can observe, at this point, how difficult it is to separate the four stages theory from the *Wealth of Nations*, it appearing as no coincidence that Smith, in his later opus, begins the discussion of both the division of labour and the accumulation of capital with reference to the "early stages of society", which are then being compared to the more advanced ones. Although Smith intended to write a separate treatise on jurisprudence, the material of the *Wealth of Nations* emerged from his considerations on laws and government that he was teaching in these lectures, as is very visible to anyone who reads the

the commercial one, by extending this commerce between towns 'backwards' (or 'unnaturally') to the rural areas.

⁴¹ In this sense Richter (2006, p. 169) notes that when "Herder convicted Montesquieu of empty abstraction . . . He mistook an ideal-type analysis of political regimes for reductive crudity."

Lectures of Jurisprudence. And the different elements are being presented in the *Wealth of Nations* in sensibly the same way, inseparably bound up, as they are, with Smith's stadial (or conjectural-historical) frame of reference.

Another observation that can be made about the previous quote is that population growth is not mentioned here, in the transition to the commercial stage, as a causal element. We know that for Smith, the progress of society and the growth of population were inextricably bound up — a position he shared, to the best of my knowledge, with all major 18th century thinkers, including Malthus (if the latter is still to be included in that category) —, so that this omission of population as factor certainly does not point to the fact that Smith believed population growth would cease in the course of the agricultural stage. Indications to the contrary abound.⁴² Yet it *could* point to the fact that Smith does not see the growth of population as just as much of a necessary condition for the progress of an advanced society as he does see it as the condition for the progress of an as yet primitive one.

The exposition of the four stages theory at the beginning of the Lothian notes that we have hitherto examined is only a relatively brief introduction by Smith to his considerations of law and government, and more particularly of the theme of property, or occupation. After having described all four stages, Smith thus concludes that "It is easy to see that in these severall ages of society, the laws and regulations with regard to property must be very different" (LJ(A) i.32, p. 16). Smith next tells his students that property is introduced in the shepherd state with the ownership of flocks (and theft is there consequently severely punished, whereas it is hardly a misdemeanour in the hunting stage, where no property of any significance exists (i.33)). In the agricultural stage, although theft is no longer so acute a problem, as property progressively diversifies and spreads to a larger part of society laws must accordingly complexify (i.34). In general, Smith concludes, "The more improved any society is and the greater length the severall means

⁴² See also the clear association of these in Smith's famous statement at WN I.viii.23, p.87-8: "But though North America is not yet so rich as England, it is much more thriving, and advancing with much greater rapidity to the further acquisition of riches. The most decisive mark of the prosperity of any country is the increase of the number of its inhabitants. In Great Britain, and most other European countries, they are not supposed to double in less than five hundred years. In the British colonies in North America, it has been found that they double in twenty or five-and-twenty years. Nor in the present times is this increase principally owing to the continual importation of new inhabitants, but to the great multiplication of the species." See further on this quote p. 48 below.

of supporting the inhabitants are carried, the greater will be the number of their laws and regulations necessary to maintain justice, and prevent infringements of the right of property” (i.35). In what follows (i.35-63, p. 16-27), Smith notably discusses the moral and psychological foundations of property, in a language and with allusions in part reminiscent both of *Wealth of Nations* and *Theory of Moral Sentiments* (use is repeatedly made of the impartial spectator(i.36-8, i.42-4)); Smith discusses the doctrines of ancient roman legal theorists (i.39), and cites Tacitus, Homer and Aristotle (i.51-2). And he mentions the “tyranny of the feudal government” (i.54) familiar from Book III of *Wealth of Nations*. Significantly, the four stages of society are used throughout as frame of analysis. In fact, in both sets of notes, although the order of subjects treated differs considerably,⁴³ the four stages are presented right at the beginning of his lectures and used as frame of reference continuously throughout.

We may at this point briefly review the different elements and steps that make up Smith’s four stages theory as laid out most clearly in the *Lectures of Jurisprudence* (and in particular the second set of notes), but to which references are made, and of which elements are used, throughout Smith’s entire oeuvre. Society in the savage state is composed of few individuals, who live together in groups of about a hundred-fifty. Population is in balance with the environment (“The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining”). There are thus nearly as many people as the produce of the soil can maintain, but these will gradually increase as long as the environment they inhabit furnishes them with some surplus food, which is assumed to generally be the case (for otherwise no society could ever have progressed).⁴⁴ This in turn exerts a pressure on the means of subsistence that forces the nation to innovate in terms of food procurement and production. Hunters become shepherds as animals (which they already dealt with) are easier to tend to than the more complicated art of agriculture which they do not know yet (Smith also lists some exceptions). This

⁴³ This was the main reason for the editors of *Lectures of Jurisprudence* to attribute the two sets of notes to Smith’s classes of two different academic years. See on this LJ, p. 7-8.

⁴⁴ Note that Smith also explained the non-progression of certain nations by this not being the case. Thus he invoked the infertility of the soil (as well as, importantly, the absence of natural means of transportation, familiar from Chapter III of *Wealth of Nations*) to explain why the Arabs and Tartars had remained stuck (and would continue to do so) in the Shepherd stage (LJ(A) iv.53, p. 220; iv.56, p. 221; iv.60-3, p. 223; LJ(B) 30-1, p. 408).

also introduces inequality, as some individuals will appropriate more animals, whereas before everyone lived directly from nature, considered common property, and hence no private property needed to exist. In the shepherd state laws are thus introduced (under the authority of chiefs, being the great proprietors of livestock). Eventually the shepherd mode of subsistence, in turn, does not provide sustenance anymore for a growing population, and the nation thus turns to agriculture (the possibility of which would have been discovered already by man observing nature, but it is only introduced as mode of subsistence when there is need for it). In this state, too, towns develop. And as a corollary, the division of labour develops in society, laws, government and the various arts and trade complexify and subdivide their activities, with each becoming more productive in the process. Eventually, as the members of the society in question exchange all their surplus products with each other, they extend this to foreign trade (the possibility of which is both effect and cause of this progress), and this is the stage of commerce, which has some air of finality.

All these elements can be found in one way or another in a number of other authors who used the theoretical framework of the four stages theory at around the same time. We shall principally, in the following section, concentrate on some authors who made the causal role of population in the passage of stages very explicit, to show the prevalence of this feature in the four stages theory as it stood at that time.

4. Population and development in the wider four stages theory

The central role of population as a causal variable in the four stages theory can be ascertained by examining the use made of this theory by several authors writing around the same time Smith held his lectures on jurisprudence. By bringing out this central causal role of population in the use of the four stages theory, as well as the remarkably uniform character of this account of the development of society across the works of different authors, the causal role population plays in Smith's own version of the theory will be more easily recognised. In what follows, we shall hence consider the four stages theory as exposed by a number of Smith's contemporaries, as well as make some brief references to earlier accounts of the development of society which resemble the four stages theory, to uncover the central role population played in this theory overall.

The origin of the precise shape the four stages theory took among the scholars referred to by Roy Pascal (1938) as the “Scottish Historical School” is disputed. Meek, on the basis notably of the Anderson notes, speculated that Smith himself could be the true ‘inventor’ of the theory in his early Glasgow lectures of the 1750s (Meek 1976b, p. 107-16). Pauchant (2016) endorses this view. If an 18th century originator of the theory needs to be found, Kames is another likely candidate. Even though his *Sketches on the History of Man* were published only in 1774, he claimed himself they had been thirty years in the making (Lehmann 1971, p. 59, 181). Istvan Hont (2010, p. 160), by contrast, held that the “intimate continuity” between earlier natural law theories of property and Smith's four-stages theory “does not need elaborate demonstration.” It should be noted that Meek's position is largely conditioned by his very narrow definition. Only those views of the succession of stages firmly based on the mode of subsistence can be counted as constitutive of four stages theorising proper according to Meek.⁴⁵ This was related to his personal interest in seeing the Scottish perspective on social evolution as a precursor to Marx's historical materialism, which he had outlined twenty years prior already to writing his *Ignoble Savage* (Meek 1954a). Although, by virtue of Meek being the inventor of the term “four stages theory”, retaining his restrictive definition may be dictated by the rules of deontology and intellectual property, it is more apposite for historical accuracy, and with regard to the present examination — concerning primarily the role of population in the four stages theory, and the role of the four stages in population theory — to use the term in a wider acceptance.⁴⁶

⁴⁵ “unless the postulated stages are fairly firmly based on the mode of subsistence, such contributions should not in my opinion be regarded as anticipations of the eighteenth-century four stages theory. To take the contrary view would be virtually equivalent to claiming not only that there was nothing new in the Enlightenment, but also that there was nothing new under the sun.” (Meek 1976b, p. 6-7)

⁴⁶ For a clarification of Meek's perspective on the four stages theory and a friendly critique of his former supervisor's position, see Skinner (1982). The problematic nature of Meek's position becomes apparent, notably, when he considers the contribution to the four stages theory of Dalrymple (Meek 1976b, p. 102), noting that: “Only rarely, however, does he expressly (or even impliedly) relate these 'stages' to different modes of subsistence. The impression one is left with is that Dalrymple regarded the four stages theory as something whose use lay mainly, if not exclusively, in illuminating the problem of changes in the state of property.” This, however, seems to indeed have been the original use and origin of this theory, as outlined by Hont, who traces it to the natural law tradition (as Meek

As acknowledged by Meek himself, a type of four stages theory (although without the clear focus on modes of subsistence) was already to be found in Lucretius (and more particularly, and more observant of modes of subsistence, in Dicaearchus, Meek 1976b, p. 10-11). As was seen in the quotes from the Anderson notes, references to classical writers abound in Smith's early outline of the four stages.⁴⁷ With regard to the causal role of population in the succession of the evolutionary stages of society, Plato, too, is a more important source for 18th century conjectural history than Meek (with his focus on a clear distinction of modes of subsistence) acknowledged. At various places in Book 3 of the *Laws*, indeed, Plato mentions that his group of shepherds and hunters, to which he refers in order to conjecture about the origin of government, just as the theoretical historians of the 17th and 18th century would, is increasing in numbers, which leads to the adoption of laws, the development of arts, and urbanisation (Plato 1988, p. 58-88). Hont (1987) traced the 18th century four stages theory more centrally to the 17th century writer Samuel Pufendorf. In the latter's theory, population plays the same causal role, as Hont (2010, p. 180) notes.⁴⁸

himself does, but without giving this association much importance). As we have seen, Smith too introduces the four stages theory in both sets of lecture notes on jurisprudence in the context of the explanation of the laws of property. And as we shall see shortly, so do Kames and Blackstone, the latter, being a jurist, using the four stages theory exclusively for this purpose; and Helvétius, too, writes of magistrates and laws in this connection.

⁴⁷ As Harris (1968, p. 26) notes, a type of cultural-evolutionary theory is also present in the Bible. Reference to this — as to scripture in general, as Campbell and Skinner note in the introduction to *Wealth of Nations* — is conspicuously absent in Smith. This, in addition to his association with Hume, as Rothschild (1992) observes, made him be regarded very suspiciously by the church. Harris further observes that Lucretius, whom he sees as the main influence on Enlightenment thinkers in this connection, was himself inspired by Epicurus (1968, p. 26). (The latter, incidentally, is a potent contender for an influence on Marx's historical materialism, insofar as he was the subject of Marx's doctoral dissertation.) Harris also notes how, for Lucretius, language, too, "must . . . have been the result of a long evolutionary process", which reinforces the connection with Smith's conjectural history. (As Stewart remarked when he coined the term, Smith's earliest use of this methodology was in his dissertation on language. Smith, in the latter, adopted an evolutionary position on language, thus joining the dominant "organic school" against the theological position represented by Süssmilch and the rationalist one presented by Mondobbo; see on this Berry (1974, especially pp. 132-5)).

⁴⁸ Pufendorf, in Book IV, Chapter IV, Section IV of *Of the Law of Nature and Nations* (Pufendorf 1729, p. 367) notes how with the growth of population must arise

Very little of what Smith wrote was in fact either new or original. Counter Rashid (1998), and the many others before who sought to downplay Smith's importance for not having come up himself with most of his ideas, this does not diminish his genius or importance. As Dugald Stewart early on remarked, Smith's importance as a scholar came from having woven together different strands of thought and presented them in a coherent and comprehensive way (Stewart IV.26-27, p. 322). He has ever since been called a great synthesiser.⁴⁹ As will be visible from a comparison of the material in this section with the account of Smith's conjectural history in the former, this is true for the four stages theory as well.

The categories of barbarians and savages are as old as their antonym — the polis, the ancient equivalent to the 18th century concept of the civil, and eventually of "civilisation" (and the 19th century "bourgeois" that Marx — or his English translators — made of it⁵⁰). The word "polis" (Greek for city, city-state) has given, as Pagden

competition and conflict over the access to those things that God has handed over to man, and that the development of private property is a response to this. This idea indeed can be found (usually without reference to God) in many versions of the four stages theory. (The many translations of Pufendorf's work into French, English and German vary often considerably — Pufendorf wrote in Latin — but the idea can be found at that place in some form in all)

⁴⁹ Notably by Schumpeter (1954, p. 180). See also n. 28, p. 24 above, for the application of this idea, by Hont, to Smith's project as a whole, concerning both the *Theory of Moral Sentiments* and the *Wealth of Nations*. Earlier, Feilbogen (1889, p. 219) had noted that "Smith himself is supposed to have said almost nothing that was not to be found in his predecessors. There's no denying that every great man is a 'child of his time.' Accordingly, the historians of political economy have employed much diligence and ingenuity, on the one hand to gather up all the individual doctrines of Adam Smith among his predecessors, on the other hand to explain Adam Smith's world-historical achievement by everything, just not by his almost unprecedented combination of observation skills and deductive keenness, of erudition and originality, of caution and boldness in criticism and dogma, in short: by his genius" (my translation).

⁵⁰ The transition from "civil society" to "bourgeois society" in English may actually be an instance of something being lost in (re)translation. When speaking of what was translated from *Das Kapital* into English as "bourgeois society", Marx always used "bürgerliche Gesellschaft", which was his translation of the 18th century "civil society". Both "bourgeois" and "bürgerlich", as "civil" too, derive from "b(o)urg" ("civis"), i.e. a citadel or town or townsmen (German "Burg", French "bourg", English "borough", latin "civis", "civitas", "ci(vi)tatem"). The urban connotation is thus present in all three terms. The class connotation in general is, however, in fact contained mostly in the words of Germanic origin (*bourgeois*, *bürgerlich* — whence Marx's "bourgeois economics", which in the original German also reads "bürgerliche Ökonomie"; the original Germanic root refers indeed to fortresses,

(1988b, p. 33) notes, the word “polished” much used by the 18th century Scots. Use of these categories, generally coupled with a unified view of human nature, can be found in ancient Greek and Roman literature and philosophy (Thucydides, Plato, Lucretius, Tacitus), the work of medieval Islamic scholars (Alberuni, Khaldun), Renaissance European scholars like Machiavelli and natural law theorists of the 16th and 17th centuries like Hugo Grotius, Thomas Hobbes, Samuel Pufendorf, and John Locke. Stadial theories of development of human society derived from (or used as explanation for) these categorisations can be discerned to varying degrees in all these thinkers. The 18th century four stages theory can be traced directly and indirectly to all these “streams of thought” (as they are referred to by Meek 1976b, p. 14, 23, 26, 127).⁵¹ Many of these thinkers had also laid out the causal mechanism we are here concerned with, whereby population, by pressing on the means of subsistence, induces technological development.

For ideas about savages and civilised society in Alberuni see Wilczynski (1959, p. 461-2), and for the connection with population the somewhat distorted account by Spengler (1971).⁵² Ibn Khaldun

generally inhabited by the nobility; the latin root “civis” of “civil society”, on the other hand, refers simply to town-people, and later, by extension, to citizens, i.e. people under the jurisdiction of a state from which they derive certain rights). The mistranslation and two connotations of “bourgeois society” was observed by Roy Pascal, a professor of German at the University of Birmingham, who translated the *German Ideology* and wrote the (1938) article tying the “Scottish Historical School” to Marx’s Historical Materialism, and in this was attacking (at a time the Nazis had remilitarised the Rhineland) the reactionary interpretation of Smith of the German Historical School. For citation of Pascal’s observations and an extended discussion of this context and the (mis)translation, see Mizuta (2006, p. 109-12). (The linguistic observations in this note are mine.)

⁵¹ Whether we want to regard the writings of these thinkers, and especially the earlier ones, as forming the “*history*” or the “*prehistory*” of the four stages theory (Meek 1976b, p. 6) seems to me a question more rhetorical than substantial.

⁵² Spengler (1971) considered Alberuni a “Malthusian”. This, however, not only rests on the surmised compatibility of Alberuni’s writings with the approbation of birth control, which is a position Malthus himself explicitly rejected; but, further, the passage into which Spengler reads this position actually states no such thing, as he himself acknowledges, noting that: “This passage does not, of course, relate to demographic issues. Yet its *spirit* is compatible with the *spirit* underlying endorsement of population controls” (*ibid.* p. 98, emphasis added). In other words, Spengler makes the connection between Alberuni and Malthus by attributing to the first a position the second actually disapproved; a rather curious way of establishing intellectual lineage. And that position itself, in the case of Alberuni, is inferred not from actual content but from the surmised “spirit” of a passage. It is

deserves particular mention in the present context, for not only does he present an evolutionary theory of human society, but population growth is, as in the versions of the four stages theory by other 18th century authors we are about to consider (and in the one of Smith considered in the previous section), and in much the same way, a causal element in the development of society.⁵³

The first contemporary of Smith who deserves attention as a writer on stadial theory and population may be Benjamin Franklin. His *Observations Concerning the Increase of Mankind, Peopling of Countries, etc.* is a short essay which he wrote in 1751 and which was first published in 1755. It was often reprinted and much cited and read. In it, Franklin made the two observations that “Marriages in America are more general, and more generally early, than in Europe . . . and if in Europe they have but four Births to a marriage (many of their marriages being late) we may here reckon eight, of which if one half grow up, and our marriages are made, reckoning one with another at twenty years of age our people must at least be doubled every twenty years.” (§7); and (§22) that “there are suppos'd to be now upwards of One Million English Souls in North America, (tho' 'tis thought scarce 80,000 have been brought over sea)” and “This million doubling, suppose but once in twenty-five years, will in another century be more than the people of England”. Smith integrated these observations in his theory of the adjustment of population to labour demand developed in Chapter VIII of Book I of *Wealth of Nations*, in the form of the statement that “In Great Britain, and most other European countries, they are not supposed to double in less than five hundred years. In the British colonies in North America, it has been found, that they double in twenty or five-and-twenty years” (WN I.viii.23, p. 88).⁵⁴ The same

hard to see how such a “spirit” could be so clearly read, while eight centuries separate us from the time of writing and it would take a great amount of contextualising simply to establish what the author was writing about precisely (let alone recovering elements likely lost in translation), which Spengler did not engage in.

⁵³ See Spengler (1964), Boulakia (1971), Von Sivers (1980) and Mouhammed (2004). For the relationship between the four stages theory and 17th century natural law theory see Meek (1976b, p. 12-25) and, particularly in relation to Smith, Hont (1987) and Hont (2010, p. 38-51).

⁵⁴ For the whole passage (including the two sentences preceding and the one succeeding this segment) see n. 42, p. 39 above. The editors of the Glasgow edition of *Wealth of Nations* cite in footnote to this passage Richard Price’s 1772 *Observations on Reversionary Payments* which uses the same figures for North America, but do not note that Price himself got them from Franklin, his work incorporating comments on Franklin’s essay that he had made in letter form first

figures were later also used, famously, by Malthus, who may have taken them either from Smith or Franklin.⁵⁵

As regards the four stages theory, the relevant quote from Franklin appears at the beginning of the essay (§ 5):

Europe is generally full settled with husbandmen, manufacturers, &c. and therefore cannot now much increase in People: America is chiefly occupied by Indians, who subsist mostly by hunting. But as the hunter, of all men, requires the greatest quantity of land from whence to draw his subsistence, (the husbandman subsisting on much less, the gardener on still less, and the manufacturer requiring least of all), the Europeans found America as fully settled as it well could be by hunters; yet these having large Tracts, were easily prevail'd on to part with portions of territory to the new comers, who did not much interfere with the natives in hunting, and furnish'd them with many things they wanted.

Although the outline of the four stages is rather thin in this quote, it is clearly stated, at least, that the amount of food a people can produce or retrieve from a given amount of land varies with the stage of society, as was discussed with reference to Smith at the beginning of the previous section.⁵⁶

Alan Houston (2008, p. 125) considers Franklin's essay a fully fledged contribution to the four stages theory. Indeed, the relationship not only between the method of subsistence and the stages of development that Meek was so adamant about, but also the relationship between the stages of development and the relation of

in 1769 (Houston 2008, p. 140). There is no reason why Smith, who was well acquainted and had developed a friendship with Franklin by the time he was writing the *Wealth of Nations*, should not also have gotten the inspiration directly from Franklin (especially considering the very low opinion he held of Richard Price; see Smith's letter to George Chalmers, 22 Dec. 1785, Corr. 251, p. 290).

⁵⁵ Franklin clearly also directly influenced Malthus, especially with the statement, appearing immediately before the last cited, that: "There is in short, no bound to the prolific nature of plants or animals, but what is made by their crowding and interfering with each others' means of subsistence. Was the face of the earth vacant of other plants, it might be gradually sowed and overspread with one kind only; as, for instance, with Fennel; and were it empty of other inhabitants, it might in a few Ages be replenish'd from one nation only; as for Instance, with Englishmen." (Franklin 1755, §22)

⁵⁶ This quote from Franklin's essay, along with the ones reproduced in the previous footnote and earlier in the text, illustrate how closely the four stages theory and the "population principle" (generally associated with Malthus, but the phrase was first used by Godwin and Arthur Young (see Hollander 1927, p. 190 for references)) were associated in 18th century writings. We shall consider this connection in detail in the following section.

population to the means of subsistence (and thus to land), which we are in this paper more centrally concerned with, clearly come out from the cited passage, although it may be too much to claim that the passage lays out the four stages *theory*. Franklin became friends with both Kames and Smith, but only several years after writing this essay. His use of the four stages framework thus unlikely derives from them, but Houston notes that he used the same sources.⁵⁷

Next in line for a consideration of his use of the four stages theory is Helvétius. Smith met Helvétius in France, and this contact, along with the one with Holbach, was given much importance in the history of economic thought.⁵⁸

Helvétius' account of the four stages theory appears in his *De l'esprit*, a controversial book (notably for its atheism, for which Helvétius was forced to publicly apologise) published in 1758, a few years before Smith's lectures of jurisprudence (to which the recovered notes pertain). The four stages theory is invoked in chapter IX of *De l'esprit*, entitled "De l'origine des passions". Helvétius starts his account of the four stages by positing "several men" brought about by the heavens, and, interestingly, starts the passage in which the four stages appears with a consideration of the formation of language:

En effet, supposons que le ciel anime tout-à-coup plusieurs hommes, leur première occupation sera de satisfaire leurs besoins; bientôt après ils essaieront, par des cris, d'exprimer les impressions de

⁵⁷ "In 1749 alone he borrowed James Logan's copy of Lucretius and recommended Grotius, Pufendorf, and Locke in his curriculum for the Philadelphia Academy" (Houston 2008, p. 125). Houston further notes that a likely direct source was the "Scottish-born and Boston-based physician and historian William Douglass" who had published a book in 1747 where he notes that the native Americans were representative of the first rude stages of society. This idea was of course already widespread at the time, found notably in Locke's phrase "in the beginning all the world was America" (Meek 1976b, p. 20-3 and 37-67).

⁵⁸ Ross (2010, p. 231) considered Smith's contact with the French intellectuals as "the most exciting passage in Smith's intellectual development, second in importance only to his early contacts with Hume". But the first to give much importance to Smith's contact with Helvétius (and Holbach) were the instigators of the "Adam Smith Problem" (Knies, and above all Skarżyński, see *Theory of Moral Sentiments* p. 22-5), who believed that Smith adopted his "individualism" and insistence on the importance of self-interest from them — a position easily proven wrong by a reading of the *Lectures of Jurisprudence*, reporting classes held by Smith before his departure to France and in which these features of his 'economic' theories clearly figure. On Helvétius' relationship to the four stages theory see (Meek 1976b, p. 91-4, 132-6). For Helvétius's relationship with Smith specifically, see Ross (ibid.) and further Plechanov (1896, p. 103-6), and Cumming (1955, p. 129-30, and 164-66).

plaisir et de douleur qu'ils reçoivent. Ces premiers cris formeront leur première langue, qui, à en juger par la pauvreté de quelques langues sauvages, a dû d'abord être très courte, et se réduire à ces premiers sons. (Helvétius 2009 [1758], p. 261) ⁵⁹

One resemblance with Smith's use of conjectural history thus appears immediately. Helvétius, just as Smith in his essay on the formation of language, observes how language must have come about in savage society. Smith treated of these questions in different works, the connection having been established by Steward, while Helvétius' considers language formation in the very same passage in which he introduces the four stages theory. He introduces, immediately following, the crucial element of population growth:

Lorsque les hommes, *plus multipliés*, commenceront à se répandre sur la surface du monde ; . . . lorsque les familles seront plus voisines les unes des autres ; alors le désir commun de posséder les mêmes choses, telles que les fruits d'un certain arbre ou les faveurs d'une certaine femme, exciteront en eux des querelles et des combats : . . . alors ils feront entre eux des . . . premières lois. (ibid.)

Another central element of the four stages theory here appears. As already established, the four stages theory was immediately emerging from a tradition of natural law theorising, and one of its central aims was to explain the origin of government and laws, offering an alternative but related explanation to Hobbes' *Leviathan*. In Helvétius' account, laws are a response to the process of competition created by scarcity, itself created by population density. Smith constructs this in a different yet very similar way. In Smith's account, the age of shepherds creates inequality and this makes laws necessary. Helvétius expressed it more directly: increased competition due to higher shortage makes laws necessary to settle disputes, as Pufendorf had written. It is laws, in Helvétius' account, which by necessity bring about the order of judges in society (the first division of labour and creation of social classes):

Les lois faites, il faudra charger quelques hommes de leur exécution : et voilà les premiers magistrats. (ibid.)

Helvétius now introduces the critical element of scarcity prompting technological development:

Ces magistrats grossiers de peuples sauvages habiteront d'abord les forêts. Après en avoir, en partie, détruit les animaux, lorsque les

⁵⁹ Interesting, too, is that Helvétius, for all the atheism he was accused of, did not start his story with a few shipwrecked stranded on an island, as Smith (in LJ(B)), but with this tale of men who "heaven suddenly animates" much closer to the story of Genesis.

peuples ne vivront plus de leur chasse, *la disette des vivres leur enseignera l'art d'élever des troupeaux.* (ibid.)

As in Smith's account, savage people first live directly from nature, but eventually animals to hunt become scarce, and it is then "la disette" (shortage of subsistence) that "teaches" men the art of tending to animals ("élever les troupeaux"). This is directly brought about by population pressure, which brings about new technological stages:

Ces troupeaux fourniront à leurs besoins, et les peuples chasseurs seront changés en peuples pasteurs. Après un certain nombre de siècles, *lorsque ces derniers se seront extrêmement multipliés, et que la terre ne pourra, dans le même espace, subvenir à la nourriture d'un plus grand nombre d'habitants, sans être fécondée par le travail humain*, alors les peuples pasteurs disparaîtront, et feront place aux peuples cultivateurs. (ibid., p. 262)

The same territory cannot furnish enough subsistence for a multitude of people without recourse to improvements ("sans être fécondée par le travail humain") which cannot be conceived of independently of technological innovation. And hunger (necessity), just as it has taught them pasturage, also teaches men agriculture; and by the same token it teaches them to divide land, which renders necessary the introduction of property, which in turn brings about new laws and new "sciences":

Le besoin de la faim, en leur découvrant l'art de l'agriculture, leur enseignera bientôt après l'art de mesurer et de partager les terres. Ce partage fait, il faut assurer à chacun ses propriétés : et de-là une foule de sciences et de lois. (ibid.)

Property laws multiply in the age of agriculture, exactly as in Smith's account. And Helvétius also explains, like Smith, the introduction of money by the need created by the introduction of exchange. Note, however, that division of labour arises for Helvétius from the *differences* of the produce of land (as for Ricardo), not from the productivity advantages that a larger market makes possible, as for Smith:

Les terres, par la différence de leur nature et de leur culture, portant des fruits différents, les hommes feront entre eux des échanges, sentiront l'avantage qu'il y aurait à convenir d'un échange général qui représentât toutes les denrées ; et ils feront choix, pour cet effet, de quelques coquillages ou de quelques métaux. (ibid.)

This last passage cannot fail to remind us of the way money is introduced and explained in chapter VI of the *Wealth of Nations*. This furnishes us with another connection of a part of the *Wealth of Nations* with the four stages theory. The reference to it by Smith in that chapter

is rather oblique, being made merely through reference to “when the division of labour first began to take place” (WN I.iv.2). Once we connect the division of labour itself to Smith’s account of the four stages theory, as was done above, this reference becomes clearer.

Finally, Helvétius mentions another characteristic element of the four stages theory equally central to Smith’s work: that with the progression to higher stages inequality and social classes appear:

Lorsque les sociétés en seront à ce point de perfection, alors toute égalité entre les hommes sera rompue : on distinguera des supérieurs et des inférieurs. (*ibid.*)

Let us then move on to another one of Smith’s contemporaries and acquaintances who made use of the four stages theory in much the same vein. The earliest written statement of the theory that satisfied Meek to have been a manifestation of the latter is contained in John Dalrymple’s *Essay Towards a General History of Feudal Property in Great Britain* (1757), closely followed by Kames’ *Historical Law-Tracts* (Meek 1976b, p. 100, 102). The former, Lehman (1971, p. 218) notes, was “a work directly inspired by Kames, both in its substance and in its method”. Dalrymple in fact dedicated his book to Kames, “as to the person, who not only led me into the general train of enquiry contained in them, but to whom any merit that may be found in the conduct of the particulars of that enquiry, justly belongs” (Dalrymple 1758, p. iii).⁶⁰ At the beginning of his book, Dalrymple explains what he sets out to do, in terms reminiscent of Smith’s announcement (see above p. 10) in the last paragraph of the *Theory of Moral Sentiments* (published two years later):

The following chapters contain an attempt, to trace from the earliest feudal times, the great out-lines of the laws which relate to land property, in England and in Scotland, so far as they are derived from a feudal origin; to mark their variations in different ages, and to assign the causes of those variations. (*ibid.* p. v)

Dalrymple tells his readers about the four stages of society, as had Pufendorf, in the context of the explanation of property rights, and at first concentrates strictly on these in his account. The four stages thus appear in Chapter III, entitled “History of the Alienation of Landproperty”, at the beginning of Section I on “Voluntary alienation”. “This subject”, Dalrymple tells us, “is curious and interesting; in order to trace the progress of it, the progress of society must be traced”:

⁶⁰ The title page also contains a citation of Montesquieu, who, as noted in the introduction to this paper, was seen, notably by Stewart and Millar, as having laid out the plan that Smith followed with the four stages theory.

The first state of society is that of hunters and fishers; among such a people the idea of property will be confined to a few, and but a very few moveables; and subjects which are immoveable, will be esteemed to be common. . . .

The next state of society begins, when the inconveniences and dangers of such a life, lead men to the discovery of pasturage. During this period, as soon as a flock have brouzed upon one spot of ground, their proprietors will remove them to another; and the place they have quitted will fall to the next who pleases to take possession of it: For this reason such shepherds will have no notion of property in immoveables, nor of right of possession longer than the act of possession lasts. (ibid. p. 90-1)

It is at this point that Dalrymple introduces the element of the pressure on land and the means of subsistence (first mentioning cattle and soon after population):

The words of Abraham to Lot are : "Is not the whole land before thee? separate thyself, I pray thee, from me. If thou wilt take the left hand, then will I go to the right; or if thou depart to the right hand, then will I go to the left". And we are told that the reason of this separation, was, the quantity of flocks, and herds, and tents, which each of them had, and which the land was unable to support.⁶¹

A third state of society is produced, when men become so numerous, that the flesh and milk of their cattle is insufficient for their subsistence, and when their more extended intercourse with each other, has made them strike out new arts of life, and particularly the art of agriculture. This art leading men to bestow thought and labour upon land, increases their connection with a single portion of it; this connection long continued, produces an affection; and this affection long continued, together with the other, produces the notion of property in land. (ibid. p. 91-2)

Meek held that it "should be noted" that both Dalrymple and Kames "were members of Smith's circle". But it may be more accurate to consider Dalrymple and Smith to have been members of Kames' circle, who was twenty-seven years Smith's senior, and thirty years Dalrymple's, as well as fifteen years Hume's, to whom, as well as to Smith, he served as patron (Ross 2010, p. 80). Smith himself affirmed: "We must every one of us acknowledge Kames for our master" (ibid.).⁶²

⁶¹ We shall reencounter Abraham and lot in the following section.

⁶² See also Dalrymple's dedication cited on p. 55 above. Ross (2010, p. 80) writes of a version of the four stages theory being contained already in Kames' *Essays on Several Subjects concerning British Antiquities* (1747) and cites to this effect Meek (1976b) (but without page number). Meek, however, clearly wrote that the first

Kames' account of the four stages is contained in Book 1, Sketch 1 – significantly entitled “Progress Respecting Food and Population” – of his *Sketches on the History of Man* (1774). As mentioned above, at the moment of its publication, he had apparently been working on this opus for the past three decades. Kames starts off his account of the four stages with reference to population and subsistence:

Plenty of food procured by hunting and fishing, promotes population
(Kames 2007 [1778], p. 55)

Population grows because in the beginning of the hunting stage, there are still a lot of animals to be found, and they provide for surpluses of food. Yet the very growth of population eventually creates scarcity (the idea so central to Malthus' work, that population progresses faster than the means of subsistence, is clearly contained here). But, importantly, it is this very scarcity (through necessity being the mother of invention), that prompts technological progress and results in a new age characterised by a new mode of subsistence:

but as consumption of food increases with population, wild animals, sorely persecuted, become not only more rare, but more shy. Men, thus pinched for food, are excited to try other means for supplying their wants. A fawn, a kid, or a lamb, taken alive and tamed for amusement, suggested probably flocks and herds, and introduced the shepherd-state. (ibid.)

Precisely the same mechanism for the passage to a superior subsistence technology as the one outlined by Smith and Helvétius is described here by Kames. More or less by coincidence, people discover that they can tame wild animals. And it is when necessity arises that it becomes economical to do so. Necessity, in itself, presents new opportunity. The same mechanism repeats in the next stage:

The shepherd state is friendly to population. Men by plenty of food multiply apace; and, in process of time, neighbouring tribes, straitened in their pasture, go to war for extension of territory, or migrate to land not yet occupied. *Necessity, the mother of invention*, suggested agriculture (ibid., p. 56)

It is through necessity being the mother of invention, indeed, that population moves society through successively higher stages, because humans are naturally inventive:

When corn growing spontaneously was rendered scarce by consumption, it was an *obvious thought* to propagate it by art. (ibid.)

version of the theory which appeared in writing that he identified was the one of Dalrymple of 1758.

There is a clear resemblance to Smith's "naturally" in Kames "obvious thought" (see the quote from LJ(A)i.28 on page 26 above). Kames then explains how this will again first create a surplus of food which makes population rise, through the division of labour (everyone earns his living, now, through "skill and labour"):

A lasting division of the land among the members of the state, securing to each man the product of his own skill and labour, was a great spur to industry, and multiplied food exceedingly. (ibid.)

There is a further element of importance involved here: the introduction of private property, which, as in Smith's version, is an effect of the passage to a higher stage, and at the same time a cause of the passage to a further one. Through the introduction of property, because people have more interest to tend to land that is their own, food production is increased. How the causality chain is precisely laid out varies ever so slightly, but the result is the same as in Smith's and Helvétius's version.

Population made a rapid progress, and government became an art; for agriculture and commerce cannot flourish without salutary laws. (ibid., p. 57)

Government and laws are also introduced as in Smith, and in Helvétius, within the passage through the stages, as a result of population pressure. (Notice also the resemblance to Smith's insistence on just laws for his system of natural liberty.) Kames proceeds:

That the progress above traced must have proceeded from some vigorous impulse, will be admitted, considering the prevailing influence of custom: once hunters, men will always be hunters, till they be forced out of that state by some overpowering cause. (ibid., p. 59)

Kames makes here the important observation that we cannot simply suppose that society will develop. The laying bare of the causal mechanism is of prime importance. Of course, there might be a drive by man to better his condition, as Smith observed, but the element here emphasised (as in Smith's account) is "necessity". There has to be a strong impulse, Kames remarks, to change the mode of subsistence (because, as Smith also noted, people have a tendency to proceed as they are accustomed, and laws and institutions can thus stay in place even long after they have finished to serve their purpose). This strong impulse to change the status quo, according to Kames, is created by necessity:

Hunger, the cause here assigned, is of all the most overpowering; and the same cause, overcoming indolence and idleness, has introduced manufactures, commerce, and variety of arts. (ibid.)

As we shall see in the next section, this same idea was to play a prominent (but too often ignored) role in Malthus' theory.

We shall next consider the work of Sir William Blackstone (1723–1780), an English judge and Tory politician. More notably, he was the first lecturer of English law in Britain. After a couple of works on English law, he published in 1766 his magnum opus, *Commentaries on the Laws of England*. The book was the first systematic treatise of English common law, was extensively cited not just in Britain but also until much later in the United States, and went through many editions. Smith too had read it, and cites from it twice in the *Wealth of Nations*.⁶³ It is in this work that Blackstone makes use of the four stages theory. As in his natural law predecessors', and in Smith's, Helvétius' and Kames' accounts, it is used to explain the introduction of laws in society. And in Blackstone's version too, population is the original causal element driving the progress of the succession of stages.

In Blackstone's account (as in Pufendorf's), scripture is invoked in a reverential manner, at the difference of Smith and most other authors considered in this section (but recall Helvétius' oblique reference to Genesis and Dalrymple's mention of Abraham and Lot). This does not in any meaningful way alter the content of the theory, however. Blackstone's exposition of the four stages appears in Chapter 1 of Book 2, entitled "Of Property, in General". And Blackstone here introduces the four stages as had Smith, with regard to the laws of occupation:

In the beginning of the world, we are informed by holy writ, the all-bountiful creator gave to man "dominion over all the earth; and over the fish of the sea, and over the fowl of the air, and over every living thing that moves upon the earth." ...

The earth, therefore, and all things therein, are the general property of all mankind, exclusive of other beings, from the immediate gift of the Creator. And, while the earth continued bare of inhabitants, it is reasonable to suppose, that all was in common among them, and that every one took from the public stock to his own use such things as his immediate necessities required. ...

These general notions of property were then sufficient to answer all the purposes of human life; and might perhaps still have

⁶³ At I.v.13, p. 52 and III.ii.13, 391, Smith mentions the opinions of "Doctor Blackstone". Campbell and Skinner (ibid.) give references to the corresponding passages in the *Commentaries on the Laws of England*. I have found no indication of Smith and Blackstone ever having met, either in biographies of Smith or of Blackstone, but it is quite possible that they would have, for both Smith and Blackstone studied in Oxford in the period 1740-46. For an examination of Blackstone's position in the jurisprudential tradition of the 18th century, with some interesting remarks on its bearing on the development of wider social science in that period, see Lieberman (1988).

answered them, had it been possible for mankind to have remained in a state of primeval simplicity (Blackstone 1859 [1766], p. 393-4)

In the savage state, Blackstone writes (as Smith explained in his Glasgow lectures, as Helvétius put it in *De l'esprit* and as Kames exposed it in his *Sketches*), society is egalitarian. There are no differences of wealth as there is no private property. Exactly as Kames had argued, there is a force of habit and custom which makes men like to remain the same, but they are eventually bound to innovate by some overwhelming force, and in Blackstone also that causal element is the increase of population creating shortage and necessity:

But when mankind increased in number, craft, and ambition, it became necessary to entertain conceptions of more permanent dominion. . . . Such, as were not contented with the spontaneous product of the earth, sought for a more solid refreshment in the flesh of beasts, which they obtained by hunting. But the frequent disappointments, incident to that method of provision, induced them to gather together such animals as were of a more tame and sequacious nature; and to establish a permanent property in their flocks and herds, in order to sustain themselves in a less precarious manner . . .

As the world by degrees grew more populous, it daily became more difficult to find out new spots to inhabit, without encroaching upon former occupants; and, by constantly occupying the same individual spot, the fruits of the earth were consumed, and its spontaneous produce destroyed, without any provision for a future supply or succession. (ibid. p. 394-6)

Here also it is population that creates necessity because there are more people on the same territory and stress is put on the local ecosystem. If people do not introduce a superior technology of food production, they cannot subsist:

It therefore became necessary to pursue some regular method of providing a constant subsistence; and this necessity produced, or at least promoted and encouraged, the art of agriculture. And the art of agriculture, by a regular connection and consequence, introduced and established the idea of a more permanent property in the soil, than had hitherto been received and adopted. (ibid., p. 396)

Naturally, as property is what Blackstone is centrally dealing with, he always comes back to the idea of property. As in Smith, property takes on more importance with the passage of stages. And laws and government are themselves a result of the introduction of private property, which they serve to protect:

Necessity begat property; and, in order to insure that property, recourse was had to civil society, which brought along with it a long

train of inseparable concomitants; states, government, laws, punishments, and the public exercise of religious duties. (ibid.)

The appearance of government and of legal and political institutions (with the particularity that Blackstone also includes religious institutions in these) is thus explained by the same familiar mechanism of population creating necessity. Finally, another element characteristic of the four stages theory, and more widely associated with Smith's theory in general, division of labour and specialisation, is introduced by Blackstone (using almost the same formulation as Smith's "the labour of half the society becomes sufficient to provide food for the whole" and "The other half, therefore, . . . can be employed . . . in satisfying the other wants and fancies of mankind"⁶⁴):

Thus connected together, it was found that a part only of society was sufficient to provide, by their manual labor, for the necessary subsistence of all; and leisure was given to others to cultivate the human mind, to invent useful arts, and to lay the foundations of science. (ibid.)

The last work we shall consider in this section is the long "Didactic Poem" of 1793, entitled *The Progress of Civil Society*, by Richard Payne Knight. Like Helvétius, Knight was watched rather circumspectly by religious authority — though not precisely for the same reason.⁶⁵ His poem is divided in six books, of which the first four are significantly titled "Of Hunting", "Of Pasturage", "Of Agriculture" and "Of Arts, Manufactures, and Commerce" (the two last books deal with "Climate and Soil" and "Government and Conquest" respectively). The most interesting part of the poem for our purpose is the beginning of Book II:

In every species of each living kind, . . .
Progressive numbers without end increase,
While nature gives them safety, food, and ease:
Whence, through the whole the balance to sustain,
And in proportion'd bounds each race restrain,
Each stands opposed to some destructive power,
By nature form'd to slaughter and devour;
And still, as each in greater numbers breeds,

⁶⁴ See p. 26 above for the full quote (which at this point may perhaps be read more beneficially with the full four stages theory in mind).

⁶⁵ Knight was known foremost for his 1786 book *A Discourse on the Worship of Priapus, and its Connection with the Mystic Theology of the Ancients*, a book about ancient phallic cults, vividly illustrated, regarded as somewhat subversive by the established Church. He further wrote about the aesthetics of art and collected ancient coins.

More foes it finds, and more devourers feeds. . . .
 Promiscuous death, through all the finny brood,
 Destroys the less to give the greater food:
 Their countless hosts no social right protects;
 No mutual instinct in fond pairs connects;—
 Unfelt the sweet delights of love, they breed;
 And, undisgusted, on their offspring feed.

As growing numbers claim'd increase of food,
 In smaller herds the cattle browsed the wood:
 The hunter's labours less productive grew,
 And pale-faced famine slowly rose to view;
 Hence want inventive, and prospective thought,
 More certain sources of nutrition sought;
 Directed man his genius to employ
 To guard and save, as well as to destroy; . . .
 As more the bounds of social rights expand,
 And peaceful herds submit to man's command;
 Still as a faithful minister, he shares
 The shepherd's labours, and divides his cares;
 (Knight 1796, p. 28-30)

The mechanism from population growth via the creation of want to technological development is here concisely laid out. Meek (1976b, p. 209-13) considered Knight's poem as part of the "revisionist" literature on the four stages theory, and remarked, pointedly, that revisionist tendencies "presuppose the existence of something 'orthodox' to revise", seeing Knight's poem in this connection as "Striking evidence of the rise of the four stages theory to the status of orthodoxy". What Meek does not note is that Knight himself saw his poem mainly as a commentary on Lucretius.⁶⁶

As the elements of the four stages theory as used by the various authors considered in this section were sensibly the same as in Smith's version, it will not be necessary to sum up anew the various steps of this theory (see the last paragraph of the previous section on p. 30 above). This section was mainly intended, indeed, to show the great

⁶⁶ Knight thus wrote in his preface: "The learned reader will perceive, that the general design of the following work is taken from the latter part of the fifth book of Lucretius, beginning with verse 923; and that I have also borrowed many particular passages, which I should have given at the bottom of the page, did I not rather wish that the whole should be read in its proper order, as a text, upon which I have written a commentary, as nearly in the same style and manner, as my poor abilities, and the inferior language which I employ, will allow; for that style and manner I consider as perfect. Lucretius is, in my opinion, the great poet of the Latin language". See n. **Erreur ! Signet non défini.** on p. **Erreur ! Signet non défini.** above for a view of the importance of Lucretius for 18th century theories of socio-cultural evolution.

resemblance in almost every detail of the four stages theory as used by various authors at the time, and, by highlighting the centrality of the population mechanism therein, to throw additional light on Smith's use of this feature of the theory.

The 'Malthusian' flavour of the beginning of the quote from Knight above will have escaped few, which brings us to our next subject. Only two years after the work considered last (Knight's poem of 1796), the first edition of Malthus' *Essay on the Principle of Population* was published (anonymously). Malthus was naturally deeply influenced by the categories of analysis of the four stages theory. He adopted from this theory the three critical elements of: population being at any one time nearly proportional to what food can be obtained from nature with the given state of subsistence technology; population having the tendency to increase, and to do so faster than the means of subsistence, so as to produce scarcity;⁶⁷ and this very scarcity spurring people on to industry and invention. As we shall see, however, Malthus also introduced elements of his own which made his use of the four stages theory only partial, and may have had the effect, deplored by Meek, of contributing to the coming into disuse of the original four stages theory rather than to its wider circulation. The four stages theory in its original outline was made use of, in turn, by some authors to criticise Malthus' population theory (sometimes not recognising, however, to what extent what they were advancing to counter Malthus was in fact close to what he had written himself — as is often the case in scholarly controversies⁶⁸).

5. Malthus and his critics

As Rutherford (2007, p. 222) remarks, too little attention has been paid by commentators on Malthus' work to his use of 18th century conjectural history. It may be added that those who have recently paid some attention to this feature of Malthus' work (including Rutherford himself)⁶⁹ have in turn paid insufficient attention to the intimate connection between the four stages *theory* (and not merely the stadial

⁶⁷ In the savage state, indeed, the means of subsistence do not increase at all once the balance between society and the food to obtain from nature is broken by ongoing population growth, but rather decrease by the progressive decimation of the wild animals.

⁶⁸ For an interesting parallel with 20th century development theory, see Alacevich (2011).

⁶⁹ Others include Dzelzainis (2006) and Bashford and Chaplin (2016).

model as categorisation of human societies) and Malthus' own theory of population and the theoretical content of his *Essay* more widely.

Meek (1976b, p. 223) accused Malthus of having used the four stages theory merely to show the eternal and overarching validity of his own propositions about population. On the one hand, the charge is justified and largely true: Malthus not only used the four stages theory in an instrumental manner, but, for this purpose, he also deviated from it in important respects. On the other hand, Meek's quick dismissal of Malthus in his detailed investigation into conjectural history does not do justice to the considerable use Malthus in fact made of the four stages theory. Meek was interested mainly in Malthus' role (or absence thereof) in the continuation of this theoretical tradition in the same form. The more interesting questions for the history of thought may be, conversely, what role the four stages theory played in shaping Malthus' hugely influential propositions about population and society; and to what degree this theory thus lived on in Malthus' work while taking on a different shape and an entirely new purpose.

The popular historical simplification consisting in the view that, up to Malthus' *Essay*, everyone believed population was a great force for good, and suddenly, Malthus having enlightened the whole world to the real effect of population, everyone realised that it was the actual cause of impending doom, is of course as implausible as it is wrong. The development of ideas about population at the end of the 18th century was, as always, one of many contradictory positions being held, and the same, sometimes widely accepted argument being used for various purposes. It is true that the major *controversy* on population in the 18th century concerned not the beneficial or harmful character of population growth for society, but rather the relative population of the ancient and modern world (i.e. the question whether Europe had been populated or depopulated since Roman times), which was itself taken but as a means to discuss the superior or inferior character of institutions of classical versus modern European states (a continuation of the 'querelle des anciens et des modernes'). On the question of the beneficial or harmful character of population for society (surely an ambiguous question to begin with), which would frame the major controversies about population of the 19th and 20th centuries, there was a relative consensus in the 18th century: population was seen as an integral part of progress, thus usually as a sign of progress, and by many thinkers (including Smith) jointly as a cause of it.⁷⁰ Yet the idea that population curtailed the means of

⁷⁰ For useful summaries and analyses of debates and positions on population in the 18th century, see notably Whelan (1991), Tomaselli (1988) and Kreager (1991).

subsistence and laid stress on society was equally widespread, as we have seen. Indeed, these two ideas were in general neither presented as, nor seen as contradictory, and, in the four stages theory, they in fact complement each other, the stress brought about by population pressure being itself seen as the cause of progress. The caricature of the state of population theory before and after Malthus presented above (reinforced by such adjectives as “pre-Malthusian” to qualify theories of population before Malthus) totally obscures the direct continuation of many theoretical elements and themes of former works in the one of Malthus. Nor was Malthus in fact predicting impending doom. Instead, his theory included a view of the progress of society, which, importantly, incorporated population growth, very much along four stages theory lines.

Malthus himself recognised that he was not a pioneer of the principle of population — and with more detail and emphasis so in the second edition of his *Essay*. In the first edition he declared that “It is an obvious truth, *which has been taken notice of by many writers*, that population must always be kept down to the level of the means of subsistence” (1998 [1798], p. vii). And in the second and subsequent editions, he affirmed to have “deduced the principle, which formed the main argument of the *Essay*, [from] Hume, Wallace, Adam Smith, and Dr. Price” (1826a, p. v). Wallace had famously laid out the Malthusian population theory in full detail in 1761 already (Wallace 1809 [1753]), almost forty years before the publication of Malthus’ first *Essay*.⁷¹ And part of Malthus’ theory was derived directly from the *Theory of Moral Sentiments* and the *Wealth of Nations*, notably the chapter on wages in

See Black (1985) for a somewhat narrower focus on economic questions in this regard.

⁷¹ On Wallace’s ideas on population, see Luehrs (1987). There is a curious parallelism in the history of ideas between two famous ‘Wallaces’ (which can lead to confusion when centuries are not told apart): Robert Wallace (1697–1771), here considered, was minister of the Church of Scotland, and a precursor to the cleric Malthus on population; Alfred Russel Wallace (1823 –1913), British naturalist and geographer, preceded — or coincided with — the naturalist and geologist Charles Darwin in the formulation of the theory of evolution by natural selection; and Darwin, of course, was famously inspired by Malthus in his elaboration of the theory of natural selection, the “struggle for existence” (title of chapter three of *Origin of Species*) being, in Darwin’s words, “the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdoms” (Darwin 1859 p. 63, 1872 p. 50).

the latter (WN I.viii). Malthus only gave these ideas more polemic focus by tying them more clearly to contemporary political concerns.⁷²

To uncover the lesser known connection between the four stages theory and Malthus' population theory, one needs to be prepared to further look for population theories in works that do not expressly deal with population issues. Thus it is at least possible that the connection between Malthus' work and conjectural history was obscured for later scholars by the fact that this theoretical tradition was not dealing principally with population questions. The word "population" was indeed only beginning to find widespread use at the end of the 18th century. Kames, as we have seen, presented the four stages theory in a section of his *Sketches on the History of Man* entitled "Progress Respecting Food and Population"; and Franklin had earlier written a four-stages-theory-like segment in his essay entitled *Observations Concerning the Increase of Mankind, Peopling of Countries, &c* (both of which Malthus had likely read — Franklin was indeed specifically named by him as one of his sources). The connection between the four stages and population theory thus appears very clearly in these two sources at least. But neither Smith in his lectures, nor Helvétius in *De l'esprit*, nor Dalrymple in *History of Feudal Property in Great Britain* or Blackstone in *Commentaries on the Laws of England* presented the four stages theory in any way as connected to population theory, nor were they likely by this means to have wanted to contribute to population theory or debates about population. Malthus himself, indeed, did not mainly intend to do so. His *Essay*, in any case the first edition, notwithstanding the population theory presented therein, was primarily intended to refute the theories of Godwin and Condorcet about the "perfectibility of society". Both of them had themselves considered what would be Malthus' objection (the disturbing force of population), but ultimately dismissed it, for reasons which Malthus attacked. The connection between Malthus' work and the four stages theory as used in jurisprudential theories and theories of societies of the 18th century is thus not likely to appear when too much focus is put on the population aspect alone. It is from a more comprehensive consideration and comparison of these theories with the one of Malthus that the connection will become visible. Notwithstanding, it is precisely in the population aspect of their theories, and the connection to hardship and the development of society, that the resemblance can be found.

⁷² For the evolution of the intellectual context between Smith's and Malthus' time, see Winch (1998, p. 5-10).

Just as Smith, with the *Wealth of Nations*, presented a great synthesis of economic theories that had been formulated hitherto, so Malthus did something similar with regard to population theories in his *Essay*. But while they are commonly hailed today, respectively, as the founding father of economics and of demography — justly or wrongly —, it is quite obvious that neither of them had the intention of founding such a science; not only because they did not ever profess such an intention, but also because their work was in direct keeping with contemporary debates and quite clearly intended as a contribution to the fields of knowledge existing at the time: theology, moral philosophy, political economy; and jurisprudence in Smith's case at least. (Smith taught all four of these subjects, as we have seen, although not in classes exclusively dedicated to them; Malthus, as a scholar, a cleric, and later as the first professor of political economy, was clearly concerned with the three first at least). Their sources were, in their majority, not explicitly "economic" and "demographic", respectively. Just as Smith found much of his inspiration ("economic" and other) in the legal (or jurisprudential) tradition (Pufendorf's *Law of Nature and Nations*, Montesquieu's *Esprit des Lois* and the works by Smith's contemporaries and acquaintances considered in the previous section), so Malthus, too, found therein (whether directly or indirectly) some of the sources of his population theory (or rather of his theory as a whole, of which his population theory was a part).

If the four stages theory was in fact as widely known and used at the end of the 18th century as Meek established, it would have been surprising, to be sure, had Malthus entirely ignored it. And indeed, he did not. Both the idea that the growth of population exerts a pressure on subsistence and thus creates hardship (itself related to the idea — if not deriving from it — that population always naturally conforms to what the environment, with the given state of technology, is capable of producing) and the idea that the hardship the pressure of population produces is both good and necessary for the progress of society were contained in the four stages theory. Malthus adopted both these ideas and they both played a crucial role in his theory. But he also utilised them in a new context and for different motives. Indeed, the idea of the constant pressure of population on subsistence and the social, political and economic changes this brought about, having been used by the natural law theorists (including Smith) as a means to explain the introduction of property, laws and government, became in Malthus' theory an argument against the prospect of an egalitarian society. Malthus thus held — which was a deviation from the four stages theory as formulated hitherto — that the pressure of population

always exerted itself exclusively on the lower ranks of society, and would recreate these lower ranks if they ever were made to disappear.

The idea that the pressure of population, despite the hardship it creates, is ultimately a good thing, as it spurs society on to higher stages of development, also took on a new purpose in Malthus' *Essay*. While the four stages theory had before been presented by reference to God or scripture (notably in Pufendorf's early version, or later in Blackstone's), these were invoked merely as a way to introduce the idea of early humanity from whence the development of society could then be traced. Other authors had used different devices for the same purpose, such as Smith's island metaphor. Under Malthus' pen, however, the idea became theodicy.⁷³

It is ironic, as I signified in the introduction to this paper, that the idea of population pressing on the means of subsistence and thereby bringing about technological change as a response to the want it creates is today known as the "Boserupian" position, while Ester Boserup formulated her theory two centuries after Helvétius, Smith and Kames, and the idea in fact can already be found, as we have seen, in classical authors, as well as natural law theorists of the 17th century (who indeed all inspired the former). On the other hand, the connection of this set of ideas with Boserup's name in contemporary social science is not all that surprising in face of the fact that the conjectural historians did not have a 'Malthusian' theory of population to confront, and their integration of the positive role of population growth was thus not polemical, and has not been remembered in that connection. It was, however, as we shall see shortly, used by some authors in the first decades of the 19th century already specifically to attack Malthus.⁷⁴

⁷³ For a consideration of Malthus' theodicy see notably Pullen (1981), Santurri (1982) and Harvey-Phillips (1984). For a more recent take see Denis (2006).

⁷⁴ Ironical too is that Boserup is often depicted as 'standing Malthus on his head' (Elliott 1965, p. 655, Clark 1984, p. 177, Robinson & Schutjer 1984, p. 356, Schultz 1990, p. 2) even though this very theme of population pressing on the means of subsistence, and thereby inducing positive change in society was in fact recognised by Malthus himself and played a crucial role in his theory. Boserup can thus hardly be said to have 'stood him on his head' with her use of this theory. Boserup herself reportedly had this to say about this allegation: "In my first book on agricultural growth, there was a flap noting that I turned Malthus on his head. I did not say that; it was the publisher. A great advertisement, of course. In reality, I wrote very, very little about Malthus. Malthus said many things on many issues, and you always find a counter-example. I am not interested in old economists but in how things relate to each other today. . . . It is incorrect to say that I turned Malthus on

As we are concerned here with the use of conjectural history, it will be apposite to start our textual examination of the link between Malthus' work and the four stages theory by looking at Malthus' position on the use of conjecture. This he disclosed in the opening pages of the first edition of his *Essay on the Principle of Population*:

In entering upon the argument I must premise that I put out of the question, at present, all mere conjectures, that is, all suppositions, the probable realization of which cannot be inferred upon any just philosophical grounds. (Malthus 1998 [1798], p. 3)

Malthus, observes, a few paragraphs later:

I have thus sketched the general outline of the argument, but I will examine it more particularly, and I think it will be found that experience, the true source and foundation of all knowledge, invariably confirms its truth. (ibid., p. 5)

And a few pages later he declared, resonating with four stages theory:

That population does invariably increase where there are the means of subsistence, the history of every people that have ever existed will abundantly prove.

And that the superior power of population cannot be checked without producing misery or vice, the ample portion of these too bitter ingredients in the cup of human life and the continuance of the physical causes that seem to have produced them bear too convincing a testimony. (ibid., p. 11)

Malthus had thus turned the "conjectural history" of Adam Smith and his peers into an 'historical truth'. It is upon having been amply criticised for this (stipulating a population theory without showing that it was relevant in the real world, while professing to base himself on experience) that he undertook a serious scholarly effort in comparative analysis of population mechanisms in various countries and epochs that form the bulk of the second edition of his *Essay*, which, as has often been noted, was in many respects a new book. It must be remarked, of course, that the term "conjectural history" was Stewart's, not Smith's, and in stressing the importance of experience over conjecture Malthus was in fact following in the empiricist (and anti-rationalist) tradition of Smith and Hume.

It should be remarked too, however, that Malthus' declaration of avoidance of conjecture and espousal of proof from experience, which he repeats numerous times throughout the book,⁷⁵ is mostly rhetorical.

his head." (Mathieu 2014, p. 14-15; the quoted conversation was held, according to the author, in 1981.)

⁷⁵ Malthus' assurance that what he is stating is derived from experience is repeated no less than thirty-six times in the short work (125 pages in the edition used) that

A few paragraphs before the first of the two passages quoted above, indeed, Malthus first exposes what is still one of the most famous conjectures in the history of economic thought, political theory and the human sciences as a whole, i.e. the particular formulation he gave the principle of population, with its arithmetical progression of food pitted against a geometrical progression of population:

Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetical ratio. A slight acquaintance with numbers will shew the immensity of the first power in comparison of the second.

By that law of our nature which makes food necessary to the life of man, the effects of these two unequal powers must be kept equal.

This implies a strong and constantly operating check on population from the difficulty of subsistence. This difficulty must fall somewhere and must necessarily be severely felt by a large portion of mankind. (ibid., p. 4-5) ⁷⁶

All the elements listed by Malthus in the preceding two quotes (save for the “arithmetical” and “geometrical” nature of the relative increase of food and population) are fully congruent with the population mechanism we have hitherto observed to be the main ingredients of some of the typical versions of the four stages theory. While declaring to eschew conjecture, Malthus thus still endorses the framework of “conjectural history” (the phrase having been coined by Stewart five years earlier), “the history of every people that have ever existed” resounding with Smith’s “ages and nations”. Friedrich Engels notably remarked 40 years later how Malthus’ computation was purely conjectural:

Malthus established a calculation, on which his whole system is based. Population increases in geometrical progression: 1 + 2 + 4 + 8 + 16 + 32 etc., the productive power of the soil in an arithmetical one: 1 + 2 + 3 + 4 + 5 + 6. The difference is manifest, is terrifying, but is it correct? Where has it been proven that the productivity of the soil increases in arithmetical progression? (Engels 1844, p. 110 my translation)

the *Essay* still was in its first edition (Malthus 1998 [1798], p. 5, 7, 10, 13, 17, 40, 41, 46, 52: five times, 65, 66, 70, 72, 73: three times, 75, 80: twice, 82: twice, 85, 88, 105, 112: twice, 113, 115, 116, 120, 121, 122).

⁷⁶ Although he was much less blunt and more elaborate when exposing the principle of population in subsequent editions, Malthus always maintained the contrast between the “geometrical” and “arithmetical” progressions. Malthus also explained, in later editions, that the progression of population in geometrical proportion was a *tendency*, not an actual rate (he insisted on the difference between the two in his correspondence with Senior; see Senior (1829, p. 60-6)). In the first edition this was not yet clearly spelled out.

Engels' counter-argument is worth considering:

The extension of soil is limited, all right. The labour power to apply to this surface increases with population; let us even suppose that the increase of returns is not always in proportion to the increase of labour; there still remains a third element, which the economist admittedly never deems important, science, and its progress is as infinite and at least as rapid as the one of population. What progress does agriculture in this century owe to chemistry alone, indeed to two men alone — Sir Humphrey Davy and Justus Liebig? But science increases at least like the population; the latter increases in proportion to the numbers of the last generation; science progresses in proportion to the sum of knowledge, which it has inherited from the previous generation, hence in the most normal of situations in geometrical progression too, and what is impossible for science? (ibid.)

The accumulation of knowledge, which Engels here invokes, was also a feature of the four stages theory, as we have seen (consider the many instances of necessity 'teaching' society various 'arts' in the quotes of the previous sections).⁷⁷ With the division of labour that is introduced especially in the agricultural and commercial stages, arts and sciences multiply, and, as Smith so poignantly pointed out in the opening passages of *Wealth of Nations*, with the division of labour the skill of the workmen increased, and hence the level of skill in society overall.⁷⁸

⁷⁷ For an examination of the theme of the accumulation of knowledge in four stages theory, see especially Craig Smith (2006b). (But see my comment in the penultimate paragraph of this paper.)

⁷⁸ The idea of the acceleration of science forms an integral part of Smith's theory of the division of labour. It is the division of labour which creates a special class of "philosophers" in society that can dedicate themselves entirely to scientific research, and with the progress of the division of labour this class of philosophers further subdivides and scientific research consequently becomes, like all other branches of activity, more productive (WN I.i.9, p. 21-2), whence the idea of an acceleration of science with increasing population and (thus) division of labour in Smith's theory.

A related theory (which Engels also alludes to with his mention of the "two men alone" that 19th century agriculture was so deeply indebted to) is sometimes called the "geniuses" theory. It was used by Turgot to explain that with increasing population, there would be an increasing amount of geniuses, and hence progress in knowledge would accelerate (Whelan 1991, p. 63-5). Petty exposed the same theory a century before, and Julian Simon used it a century after Turgot (Simon 1998 (1981)). In the four stages theory, however, as it was examined in the prior two sections, such a theory was not spelled out. The progress of society was explained in purely materialistic terms, necessity inducing people, not so much to be inventive, as to make use of the discoveries and observations they were, in fact,

Other authors who criticised Malthus in the first decades of the 19th century made more specific use of the four stages theory. John Weyland did so in 1816; Michael Sadler in 1830 and George Poulet Scrope in 1833.⁷⁹ Interestingly, in reaction to Malthus' work — which the writings of these three authors explicitly constituted — the role of population now took centre stage in considerations of the evolution of society. In Malthus' work, indeed, population got charged with such a prominent negative role that it naturally was the most obvious feature of his theory to attack, and the one that consequently became the most attacked.

The role of population in the four stages theory had been an unambiguously positive one for the progress of society (in the long run at least, while in the short run it created some hardship, which, however, was the very cause of the long-run progress). But this role was not emphatically stated or made the central aspect of the theory. Indeed, as has been remarked already, the four stages theory was never principally formulated as a contribution to population controversies, nor did it need to be, the positive role of population for progress being largely taken for granted by the majority of scholars at the time the theory emerged. In Malthus' work, population continued, in fact, to carry this positive role for progress (alongside its more prominent negative role) in the form of the "goad of necessity".⁸⁰ But as this was overshadowed by the more dazzling "geometrical" progression of population contrasted with the "arithmetical" progression of the

most naturally inclined to have made anyway (without having as yet a use for them), by virtue of humans being by nature observant and creative. Genius, it may be recalled, in Smith's theory, is not seen as the cause of progress in technology, but rather both the progress of genius and the progress of technology are the effect of a common cause, namely the division of labour. Smith's egalitarian stance indeed made him shun theoretical elements based on the natural inequality of individuals. In Smith's theory, it is the division of labour which creates the essential part of the inequality of talents in society. At birth and in early childhood, the future porter and the future philosopher are essentially identical in genius (WN I.ii.4, p. 28-9).

⁷⁹ Weyland is noted in this connection by Meek (1976b, p. 224), who sees in him (and List) one of the few "exceptions of the type that proves the rule" to the decline of the use of four stages theory in the 19th century. Sadler's and Scrope's anti-Malthusianism are considered in Coontz (1957, p. 22-45) and Kern (2009) respectively.

⁸⁰ The "goad of necessity" is mentioned by Malthus at (1826b, p. 5, 1826a, p. 50, 92, 1998 [1798], p. 47). Alternative expressions, such as "goadings of want", "goaded by constant distress", "want was the goad" appear at (1826b, p. 29, 302, 1998 [1798], p. 13, 61)

productive power of the soil, it was often overlooked by friends and foes alike — the Neomalthusians, indeed, wanting to do away with population growth altogether, entirely ignored it. The use Weyland, Sadler and Scrope made of the four stages theory was thus to bring the positive causal role of population for the progress of society to the fore. The latter of these three might be used here for illustration.

In Scrope we find, again, the same familiar elements of the four stages theory, and the same mechanism of population creating necessity and thereby opportunity for a superior subsistence technology:

Many savage tribes still existing offer an example of the mode in which our ancestors must have subsisted . . . Their sustenance must have been confined to the fruits and berries of the plain or forest, the flesh of wild animals and fish, and the water of the spring. . . . and as the numbers of a society increased, there must have been felt a very inconvenient scarcity of food When, however, a people had attained a knowledge of the art of domesticating animals, whose milk or flesh supplies a wholesome and pleasant diet, a great addition was made to their power of providing themselves with food from a limited territory. A tract of land employed as pasturage for herds of cattle and flocks of sheep might be made to support, probably, not less than a hundred times the population which could subsist on its spontaneous supply of wild fruits and animals. . . . But as the numbers of such a society increased, they might not impossibly find themselves pinched for want of a sufficient range of pasture land. We have an example of this recorded in the sacred history of the Jews.

Under these circumstances two resources, as before, are open to such a people, — viz. either to spread themselves over other distant lands yet unoccupied, (which was the proposal of Abraham to Lot . . .) or by the exercise of their ingenuity to contrive means for making the district they inhabit afford them more copious supplies of food (Scrope 1833, p. 263).⁸¹

“To these”, Scrope remarks at this point, in barely covert reference to Malthus:

modern political economists have added a third, namely, the keeping their numbers sedulously within the limits of their existing means of subsistence by ‘a prudential abstinence from marriage’. Fortunately our ancestors in the earlier ages of the world did not adopt this sage plan; or the probability is, that we, and the other civilized nations of the globe, would never have existed at all; and mankind would have been confined, in local occupation, to some one or two snug corners, — a rich island, or a fertile valley, — and in numbers, to the few

⁸¹ Recall that Dalrymple also referred to Abraham and Lot in this connection (see above p. 56).

thousands whom the pasture of this limited territory could supply with milk, cheese, and cattle! (ibid.)

Scrope's criticism potently illustrates the absurdity of the view that population always and everywhere constitutes an obstacle to the progress of society. But this was not in fact Malthus' view. The idea of the necessity of population for the progress of society in Scrope's remark was in fact one with which Malthus wholeheartedly agreed. Thus he stated:

That an increase of population, when it follows in its natural order, is both a positive good in itself, and absolutely necessary to a further increase in the annual produce of the land and labour of any country, I should be the last to deny. (Malthus 1826b, p. 241)

The "natural order" bit of this quote is of course in direct lineage of Smith: what "nature" (Smith) or "God" (Malthus) produced was good. What man contrived — whether to force capital into channels it would not have gone into "of its own accord" (Smith) or bring about more (or less!) population growth than would naturally occur, by the artificial stimulus of the poor laws, or the artificial restraint of birth control (Malthus) — was pernicious.

Malthus was thus less worried with the effect of a growing population (as long as it had grown by "natural" means) in the long run (which he recognised would, much like in the four stages theory, contribute to society's progress) and more with how to bring that growing population about — or rather how to allow it to naturally occur. Indeed, his view that population everywhere and always pressed *immediately* on the means of subsistence made the actual growth of population (other than its tendency to great growth) not an obvious and straightforward affair. He believed, indeed, much like Smith,⁸² that some nations did not attain higher stages precisely because their population had not increased:

There is a principle in human society, by which population is perpetually kept down to the level of the means of subsistence. Thus among the wandering tribes of America and Asia, we never find through the lapse of ages that population has so increased as to render necessary the cultivation of the earth. (Malthus 1998 [1798], p. 56)

It was not population growth alone, however, which would move society to higher stages of development, in Malthus' view. Indeed:

⁸² See n. 44 on p. 41 above.

Had population and food increased in the same ratio, it is probable that man might never have emerged from the savage state. (ibid. p. 115)

Instead, what was needed was precisely the fact that population produced privation, and this privation motivated people to work harder and become more productive. It was only by *this* means that society could *both* grow in population *and* move to higher stages of development:

if we return to the principle of population and consider man as he really is, inert, sluggish, and averse from labour, unless compelled by necessity . . . we may pronounce with certainty that the world would not have been peopled, but for the superiority of the power of population to the means of subsistence. Strong and constantly operative as this stimulus is on man to urge him to the cultivation of the earth, if we still see that cultivation proceeds very slowly, we may fairly conclude that a less stimulus would have been insufficient. Even under the operation of this constant excitement, savages will inhabit countries of the greatest natural fertility for a long period before they betake themselves to pasturage or agriculture. . . . The principle, according to which population increases . . . keeps the inhabitants of the earth always *fully* up to the level of the means of subsistence; and is constantly acting upon man as a powerful stimulus, urging him to the further cultivation of the earth, and to enable it, *consequently*, to support a more extended population. (ibid. 114-5) ⁸³

In later editions, Malthus similarly stated:

A history of the early migrations and settlements of mankind, with the motives which prompted them, would illustrate in a striking manner the constant tendency in the human race to increase beyond the means of subsistence. Without some general law of this nature, it would seem as if the world could never have been peopled. A state of sloth, and not of restlessness and activity, seems evidently to be the natural state of man; and this latter disposition could not have been generated but by the strong goad of necessity (Malthus 1826a, p. 92)

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⁸³ Note that Malthus' contention that the inhabitants of the earth are always kept "*fully* up to the level of the means of subsistence" contrasts directly with Smith's view according to which "The produce of the soil maintains at all times *nearly* that number of inhabitants which it is capable of maintaining" (see above p. 9). Smith's view makes more room, indeed, for a natural and comfortable growth of population before any obstacle is encountered.

⁸⁴ Even the increase of population *and* the necessity it brought about was not, according to Malthus, a sufficient cause of the increase of wealth, as he stated in his *Principles* (Malthus 1836, p. 311). Yet, as clearly emanates from the previous quotes, the pressure of population was seen by Malthus as a *necessary* cause of

The context in which Malthus defends the importance of the “goad of necessity” is the process by which “mind” arises from “matter”:

The first great awakeners of the mind seem to be the wants of the body. . . . They are the first stimulants that rouse the brain of infant man into sentient activity . . . The savage would slumber for ever under his tree unless he were roused from his torpor by the cravings of hunger or the pinchings of cold . . . if those stimulants to exertion which arise from the wants of the body were removed from the mass of mankind, we have much more reason to think that they would be sunk to the level of brutes, from a deficiency of excitements, than that they would be raised to the rank of philosophers by the possession of leisure. In those countries where nature is the most redundant in spontaneous produce the inhabitants will not be found the most remarkable for acuteness of intellect. *Necessity has been with great truth called the mother of invention.* Some of the noblest exertions of the human mind have been set in motion by the necessity of satisfying the wants of the body. . . . Locke, if I recollect, says that the endeavour to avoid pain rather than the pursuit of pleasure is the great stimulus to action in life . . . it is by this exertion, by these stimulants, that mind is formed. (ibid. 112-3) ⁸⁵

Malthus’ explanation of the importance of necessity to rouse man to action very much resembles Kames’ explanation of the same examined in the previous section (see especially the quotes on p. 43-44 above). Both authors spell out Plato’s maxim that necessity is the mother of invention; and although Kames’ first speaks of *custom* as the force that needs to be overcome by “some vigorous impulse” and “some overpowering cause”, he next states, like Malthus, that “Hunger, the cause here assigned, is of all the most overpowering; and the same cause, *overcoming indolence and idleness*, has introduced manufactures, commerce, and variety of arts”.

Malthus takes this idea, and derives from it a theory of mind (which he links to Locke’s). More importantly, it becomes for Malthus

society’s progress. (The passage in the *Principles* just referred to appears in Chapter I of Book II, entitled “On the Progress of Wealth”, in which Malthus notably exposes his theory of “universal glut”.)

⁸⁵ David Hume had written in ‘Of Commerce’ (first published 1752): “What is the reason, why no people, living between the tropics, could ever yet attain to any art or civility, or reach even any police in their government, and any military discipline; while few nations in the temperate climates have been altogether deprived of these advantages? It is probable that one cause of this phaenomenon is the warmth and equality of weather in the torrid zone, which render clothes and houses less requisite for the inhabitants, and thereby remove, in part, that necessity, which is the great spur to industry and invention.” (Hume 1987 [1777], p. 267)

an argument to tackle the problem of evil, and vindicate the ways of God. Indeed, the growth of population, by the shortage it creates, induces hardship, but God allowing this evil to prevail is justified by the powers of the mind it stimulates and the higher stages mankind is thus moved to:

As we shall all be disposed to agree that God is the creator of mind as well as of body, and as they both seem to be forming and unfolding themselves at the same time, it cannot appear inconsistent either with reason or revelation, if it appear to be consistent with phenomena of nature, to suppose that God is constantly occupied in forming mind out of matter and that the various impressions that man receives through life is the process for that purpose. The employment is surely worthy of the highest attributes of the Deity. . . . If Locke's idea be just, and there is great reason to think that it is, evil seems to be necessary to create exertion, and exertion seems evidently necessary to create mind. . . . The necessity of food for the support of life gives rise, probably, to a greater quantity of exertion than any other want, bodily or mental. . . . To furnish the most unremitted excitements of this kind, and to urge man to further the gracious designs of Providence by the full cultivation of the earth, it has been ordained that population should increase much faster than food. . . . But it is impossible that this law can operate, and produce the effects apparently intended by the Supreme Being, without occasioning partial evil. (ibid. 112-5)

Let alone his use of the "necessity is the mother of invention" argument as theodicy, it may be remarked that Malthus, by giving such prominence to the development of the mind as an intermediary step between hardship and (technological) development, was, despite his insistence on the passions in stimulating mind to exertion, closer to those theories who described the progress to civilisation as a constant development of reason (like the very two authors he primarily attacked in his first *Essay*, namely Godwin and Condorcet) than to those, like Smith, who saw the progress of society merely as a response of natural human propensities to changing material circumstances. In Smith's theory, as we have seen, no development of the mind is necessary. Civilised man is different from savage man merely because of the difference in their circumstances, just as the philosopher is different from the porter by that virtue alone. Although Malthus also gave some importance to the difference of circumstance in the development of mind,⁸⁶ his theory implies that civilised man has, as a result of differing

⁸⁶ "It has been not infrequently remarked that talents are more common among younger brothers than among elder brothers, but it can scarcely be imagined that younger brothers are, upon an average, born with a greater original susceptibility of parts. The difference, if there really is any observable difference, can only arise

circumstances over time, altered his mental faculties, and is by that virtue intellectually superior to the savage. By that intermediary step between circumstances and results which the formation of mind represents, then, Malthus' theory is a less universalist theory than Smith's.

Malthus' theory, too, was primarily an attack on the very idea of egalitarianism. It is this aspect of Condorcet's and Godwin's theories, the prospect of the elimination of the class society, which was the main target of his criticism. In this context as well, the "pressure of want" imported from the four stages theory played an essential role. Yet, in order for him to use it to that end, Malthus needed to adapt the idea to his specific purpose.

Malthus' reasoning is as follows: The principle of population is always acting *specifically* on the lower orders of society. The principle of population is a necessary ingredient in the progress of society, as considered above. Therefore, the progress of society itself relies on the existence of social classes. For that reason, the progress of society cannot entail the elimination of social classes.

But in order to show that the principle of population is always acting specifically in this way — i.e. exerting itself exclusively on the lower classes of society — Malthus had to show that it was acting this way even in the first stage of society, that is among hunter-gatherers. For that he had to introduce into hunter-gatherer society a lower social class. So Malthus introduced, in the first stage of society, an inferior order of people: women, children and the aged.

The North American Indians, considered as a people, cannot justly be called free and equal. In all the accounts we have of them, and, indeed, of most other savage nations, the women are represented as much more completely in a state of slavery to the men than the poor are to the rich in civilized countries. One half the nation appears to act as Helots to the other half, and the misery that checks population falls chiefly, as it always must do, upon that part whose condition is lowest in the scale of society. . . . In estimating the happiness of a savage nation, we must not fix our eyes only on the warrior in the prime of life: he is one of a hundred: he is the gentleman, the man of fortune . . . The true points of comparison between two nations seem to be the ranks in each which appear nearest to answer to each other. And in this view, I should compare the warriors in the prime of life with the gentlemen, and the women, children, and aged, with the

from their different situations. Exertion and activity are in general absolutely necessary in one case and are only optional in the other." (Malthus 1998 [1798], p. 116)

lower classes of the community in civilized states. (Malthus 1998 [1798], p. 21)

Thus, according to Malthus, male middle-aged hunters may be compared to the nobility in civilised societies; and women, children and the elderly respectively to the poor. In the shepherd state, Malthus tells us:

Where there is any inequality of conditions, and among nations of shepherds this soon takes place, the distress arising from a scarcity of provisions must fall hardest upon the least fortunate members of the society. This distress also must frequently have been felt by the women, exposed to casual plunder in the absence of their husbands, and subject to continual disappointments in their expected return. (ibid., p. 15)

Even here, by singling out women in such a way, Malthus was in fact following an important theme of four stages theory. John Millar, notably, made the treatment of women a defining mark of a nation's degree of civilisation.⁸⁷ Smith too had remarked that women were to their husbands as slaves in some situations. None of those, however, occurred in the savage state.⁸⁸ In the savage state, indeed, there was no marriage at all (or no oath of fidelity at least), as there was no jealousy, according to Smith; even child-rearing is in this state of society (as among Plato's guardians) viewed as a communal affair (LJ(B) 104, p. 439). "When manners became more refined," Smith further tells his students (ibid.):

⁸⁷ On Millar's treatment of this subject specifically, see Bowles (1984) and Olson (1998). For the role of women in theories of progress of the Scottish Enlightenment more generally see Sebastiani (2013, p. 133-50). Meek (1976b, p. 161) thought that "In Millar's books and lectures, it is hardly too much to say, the new social science of the Enlightenment comes of age. For one thing, the range of topics with which it deals is appreciably increased: although Millar's main emphasis is still on the development of systems of law and government, he is also concerned to explain the changes which occur (for example) in the condition of women, in father-child and master-servant relationships, in manners and morals, and in literature, art, and science, as society develops." Smith had considered all these subjects too of course, and was likely the main inspiration for Millar. Meek (ibid.) believed, however, that "No one before Millar had ever used a materialist conception of history — for, in his hands, that is what it in effect became — so ably and consistently to illuminate the development of such a wide range of social phenomena."

⁸⁸ Smith noted that women are as slaves to their husband especially in polygamy (LJ(A) iii.51, p. 160; iii.54, p. 161; LJ(B) 118, p. 445), as well as "amongst the Romans . . . By the ancient marriages, which were performed either by *confarreatio* or *coemptio*" (LJ(A) i.155, p. 65-6).

jealousy began and rose at length to such a height that wives were shut up, as they are among the Turks at this day. As mankind became more refined, the same fondness which made them shut up woemen made them allow them liberties. In the latter ages of Greece woemen were allowed to go any where. This same fondness carried to a high degree gives as great a licence as when infidelity was disregarded. In no barbarous country is there more licentiousness than in France. (LJ(B) 104, p. 439)

In other words, while there is great inequality between women and man in some barbarous nations and in feudal countries, according to Smith, in the most primitive state, there is a great deal of equality between the sexes, which becomes to a degree reinstated in the most civilised countries.⁸⁹

Not only are women treated in the hunting stage with the most respect, but, according to Smith — and we find this identical in the accounts of the other conjectural historians —, hunter-gatherer society is in every respect a very egalitarian one:

there can be very little government of any sort, but what there is will be of the democraticall kind. . . . The power of making peace and war in such nations belongs to the whole people. . . . There may indeed be some persons in this state who have a superior weight and influence with the rest of the members; but this does not derogate from the democraticall form, as such persons will only have this influence by their superior wisdom, valour, or such like qualifications, and over those only who incline of themselves to be directed by him. In the same manner as in every club or assembly where the whole members are on an equall footing there is generally some person whose counsil is more followed than any others (LJ(A) iv.4-7, p. 201-2)

Thus, in such society, “each individuall had the same power as an other” (LJ(A) iv.19, p. 207). Malthus’ contention that women in the shepherd state were constantly left alone by their combating husbands also is in contradiction with the view of this state of society held by Smith, who wrote in the *Wealth of Nations* that:

When such a nation goes to war, the warriors will not trust their herds and flocks to the feeble defence of their old men, their women and children; and their old men, their women and children, will not

⁸⁹ But to a degree only, as Smith tells us: “Tho’ there was little or no regard paid to woemen in the first state of society as objects of pleasure, yet there never was more regard paid them as rational creatures. In North America, the woemen are consulted concerning the carrying on of war, and in every important undertaking. The respect paid to woemen in modern times is very small. They are only put to no trouble for spoiling of their beauty.” (LJ(B) 105, p. 439)

be left behind without defence and without subsistence. The whole nation, besides, being accustomed to a wandering life, even in time of peace, easily takes the field in time of war. . . . Among the Tartars, even the women have been frequently known to engage in battle. (WN V.i.a.3, p. 690-1)

Hence Malthus, when introducing a lower class of people in hunter-gatherer society in order to prove the eternal validity of the population principle as he conceived it (i.e. as exerting itself always exclusively on the inferior ranks of people) in order to prove the impossibility of a classless society as conceived by Godwin and Condorcet, was introducing into the four stages framework a contrivance that went entirely against the grain of the theory as hitherto laid out. When Smith wrote that “in civilised society it is only among the inferior ranks of people that the scantiness of subsistence can set limits to the further multiplication of the human species” (WN I.viii.39, p. 97-8), indeed, he had clearly stated that this was the case, in particular, “in civilised society”. And although the authors previously considered in this paper (including Smith) did not envision a fifth stage of society where perfect equality reigned, as would Godwin and Condorcet (the latter of which also used a stage theory), nothing within four stages theory as laid out before explicitly precluded the advent of such a state. Indeed, the very first state had been, according to this theory, one of perfect equality, and even Smith’s (and Millar’s) musings, according to which the condition of women, after gravely worsening in the stages of society following the very first, gradually improved thereafter, points into the direction of improving equality (in any case between the sexes, precisely the criterion singled out by Malthus) in civilised society. Using the four stages theory against such a prospect, as Malthus seemed to want to do, was hence not warranted.

In the context of the four stages theory as before considered, moreover, Malthus’ idea that the principle of population was exerting its pressure always exclusively on the lower classes was putting the carriage before the horse. Indeed, for lower classes to be concerned by the want created by the principle of population more than the rest of society, there first need to be different social classes, which Malthus simply postulated to have always existed, by contriving some artifice to introduce them even in the savage state. Malthus then uses the population principle to explain why social classes could never disappear. The four stages theory, by contrast, first explained the very emergence of social classes, starting from a state where there were none. Malthus hence breaks with a central tenet of the four stages theory: that the different stages are different and contain different elements entirely one from the other, in terms of social institutions,

rules of conduct and make-up of society in general.⁹⁰ In any case in the exposition of the effects of his population principle, Malthus did not take this into account. In this sense, Marx' criticism of Malthus — to the effect that Malthus applied the law of population as he conceived it, i.e. as specifically acting on the lower classes only, to all times and places, while in fact, according to Marx, this was a particular feature of the capitalist mode of production — is more in keeping with four stages theory than Malthus' approach.⁹¹ With regard to the laws of population, then, the continuity Pascal and Meek saw between the four stages theory and Marx's historical materialism can be noted as well, notwithstanding the considerable imports Malthus (whom Marx so adamantly criticised) also made from this theoretical tradition.

Having noted in which way Malthus deviated from the four stages theory, then, stress should again be put on how much he adhered to it when it comes to the general effect of population on society. Thus, while Malthus strongly argued against the "perfectibility" of society, he was often misread to mean that population was an obstacle to the "progress of society" in general. He portrayed population as an obstacle to the prospect of a perfectly egalitarian society only, and used it as an explanation of why such a society could never be realised. But it was also precisely through population pushing on the means of subsistence and bringing about hardship — and this is the important aspect Malthus took over from the four stages theory — that there was any progress in society at all according to him. It is for this reason that Malthus opposed birth control. If the pressure of population on the means of subsistence, and thereby the hardship it causes in the lower orders of society, was entirely removed, this would take away the necessary spur to industry. In this sense, there was a more radical break between Malthus and the Neomalthusians (who wanted to halt population growth completely) than between the four stages theory and Malthus.

⁹⁰ Notably, in Smith's theory, while sympathy and the ties of family-relationships and personal acquaintance suffice to direct affairs in savage society, self-interest comes to take on more and more importance as the principle by which economic life functions in society with increasing division of labour and population and the concurrent increasing anonymity that this necessarily brings about, as Smith explains in probably the most read and known part of his entire works (i.e. the first chapters of the *Wealth of Nations*).

⁹¹ Meek (1976b, p. 224) noted that John Weyland, cited above, also used the four stages theory specifically to argue, against Malthus, that in different stages of society different laws of population prevailed.

Much has been made of Malthus' expression of his opposition to birth control with the sentence that "Mr Condorcet . . . proceeds to remove the difficulty in a manner which I profess not to understand" (Malthus 1998 [1798], p. 48). This misunderstanding surely must have been a rhetorical one, for Malthus ends the same paragraph by observing that "To remove the difficulty in this way will, surely, in the opinion of most men, be to destroy that virtue and purity of manners, which the advocates of equality, and of the perfectibility of man, profess to be the end and object of their views" (Malthus 1998 [1798]). Even this moral stance, however, does not fully enlighten us to the full motives of Malthus' opposition to birth control. For these, the last two chapters of the first edition of the *Essay*, from the first of which was amply quoted in this section, must be taken into account. As clearly emerges from these, Malthus' real motive for being opposed to birth control was that to refuse the children God had send on the way to be born was to contravene the deity's great design, in which the pressure of population was a necessary ingredient in spurring humanity on to those higher stages of mind and of existence which God can only have intended to be the purpose of humanity.

It may be remarked that Malthus' mention of the possibility of preventive checks to population in the form of delay of marriage is in contradiction with the necessity of the pressure of population. This is a potent objection. The preventive check was given far greater prominence in subsequent editions of the *Essay*, in which the additional vocabulary of "moral restraint" and "prudential checks/habits/restraint" was introduced and much used in this connection. The infamous passage of the banquet, where people coming into the world when the means of subsistence were not available for them were depicted as unwelcome guests, which was introduced in the second edition but removed from later ones, also seems to be in contradiction with the idea of the necessity of the pressure of population for the progress of society. Indeed, the last two chapters of the first edition, in which Malthus made the "goading of want" theodicy, were omitted entirely from all subsequent editions. Several possible reasons for this omission have been evoked.⁹² It may be that Malthus came closer to believing, as time went by, that at least in civilised society, the pressure of population was no longer a much needed force for progress (while in the last two chapters of the first edition the stress of want was described as being constantly necessary to keep mind aroused), and delay of marriage may do society more

⁹² See the references in n. 73 above, as well as Rashid (1984).

good — a position later elaborated on by the Neomalthusian John Stuart Mill, who wrote that “The density of population necessary to enable mankind to obtain, in the greatest degree, all the advantages both of co-operation and of social intercourse, has, in all the most populous countries, been attained” and exulted the advantages of a “stationary state” in which the “trampling, crushing, elbowing, and treading on each other's heels, which form the existing type of social life” could finally cease (Mill 1965 [1848], p. 754-6). On the other hand, while the theological chapters were removed from later editions, the “goad of necessity” was still mentioned and presented in much the same way as before.⁹³ Himmelfarb (1984, p. 114) observes that the prudential checks may have been suggested to Malthus by Godwin, who criticised him after the publication of his first *Essay* for having neglected that restraint from childbearing could prevent the misery-inducing effects of the principle of population. Malthus, significantly, replied that this would remove a necessary spur to industry and thus reduce the means of subsistence (*ibid.*). Probably, Malthus’ seeming contradiction as to the necessity of population growth and its misery-inducing effect on the one hand but the possibility to reduce misery by moral restraint on the other can only be properly understood by bearing in mind the importance of balance and middle-positions in his thought.⁹⁴

Why was Malthus misread to have believed that population was an obstacle to the progress of society in the absolute? It may be because of a shift in meaning of the concept of progress, at around the time he wrote. As both increasing equality and increasing wealth came to be seen, at the end of the 18th century, more so than when Smith wrote, as marks of the progress of society (notably through the credo of “égalité” during the French revolution⁹⁵), Malthus’ attack on the “perfectibility of society” came to be charged with a great weight of ambiguity and confusion (especially for later readers). Malthus’ ambiguity as to this

⁹³ See n. 80 on p. 78 above for mentions of the concept in the first and sixth edition.

⁹⁴ On the importance of the idea of balance in Malthus’ thought see notably Winch (1992b, 1993).

⁹⁵ The famous hendiatis which now forms the national motto of France, although first uttered in an official context by Robespierre in a speech of 1790, only acquired the prominence it has today much later. The association of “égalité” with “liberté” (i.e. without the “fraternité”), however, was already common during the period running up and immediately following the French revolution, and the concept of “égalité” can well be taken as representative of the claims of the revolutionaries in France and their influence on British debate at the time. On the history of the tripartite motto see Borgetto (1997).

positive role of population notably lead Senior, in correspondence (published as appendix to Senior (1829)), to politely confront Malthus with his own thoughts about population, thinking first that they were more in agreement than could appear from the formulations they both used (p. 55-9), discovering from Malthus' response that their disagreement was in fact more substantial (p. 60-72), before settling on the position that they were essentially in agreement (p. 87).

For Malthus did believe in progress. But this progress, for him, did not — indeed, within the terms of his theory could not — include the realisation of a perfectly egalitarian society. It is crucial, in order to understand this distinction, to realise that when Malthus, in the preface to the first edition of the *Essay*, described the means by which “population must always be kept down to the level of the means of subsistence” as “to his⁹⁶ mind, the strongest obstacle in the way to *any very great future improvement of society*”, it is not the “improvement” that Adam Smith wrote of that he had in mind, but the one envisioned by Condorcet and Godwin. Thus, in Smith's work, the “improvement of society” described such things as increase in the *general* level of wealth (although with beneficial effects for all its members), higher agricultural yields, urbanisation, etc., all subsumed under the general movement of society, examined in the present paper, from the state of savagery and barbarism to the ones of agriculture and civilisation. The “improvement of society” which Malthus described in his preface was designating, by contrast, the view of Godwin and Condorcet of the possibility of a total elimination of inequality in society; the realisation of a society, not only classless, but infinitely wealthy and healthy, to the degree of the future near-immortality of human beings (in Godwin's work). It was *this* “improvement of society” that Malthus viewed as implausible, and to which the principle of population was described by him as the greatest obstacle. This distinction is made quite clearly in a famous passage of the sixth edition of the *Essay*, when Malthus affirms that:

On the whole, therefore, though our future prospects respecting the mitigation of the evils arising from the principle of population, may not be so bright as we could wish, yet they are far from being entirely disheartening, and by no means preclude that gradual and progressive improvement in human society, which, before the late wild speculations on the subject, was the object of rational expectation. (Malthus 1826b, p. 440-1)

⁹⁶ Malthus was here referring to himself (as “the author”) in the third person.

And Malthus concludes the paragraph in which those words appear with the sentence “it is hoped that the general result of the inquiry is such, as not to make us give up the cause of the improvement of human society in despair.”

Moreover — and this is the crucial part — this very principle of population, while being an obstacle to the kind of “improvement” described by Godwin and Condorcet, not only did not preclude the kind of “improvement” Smith had envisioned, but was viewed by Malthus, in line with the four stages theory, as the very engine of this type of improvement. Indeed, it was the very fact that the principle of population was necessary for Smithian-type improvement that, according to Malthus, made it an obstacle to improvement of the Godwinian type. Bearing in mind that according to him the principle of population acted always specifically on the lower orders, it is essentially this that Malthus was expressing when he wrote, in the same passage from which was just quoted:

A strict inquiry into the principle of population obliges us to conclude that *we shall never be able to throw down the ladder, by which we have risen to this eminence*; but it by no means proves, that we may not rise higher by the same means.

Quite to the contrary of the principle of population being an impediment to progress, Malthus thus saw the population principle itself, and the misery it brought about as an engine of progress. In this, then, he did nothing more and nothing less than following the orthodoxy of the four stages theory. He deviated from this theory merely in two particular, and related, aspects: First, Malthus deviated from four stages theory in the *use* he made of the theory, taking one of its components (the pressure of population on the means of subsistence) to argue against the possibility to completely remove social classes in the future progress of society, which Condorcet and Godwin had speculated about. Earlier writers, as we have seen, had used the four stages theory principally to explain the development of laws and government. As has often been remarked, Malthus’ use of the population principle in this way was not an innovation, for the same argument (i.e. the impossibility of a perfectly egalitarian society due to the pressure of population on subsistence) had been invoked by Robert Wallace already four decades prior (see Luehrs 1987, p. 329-35). Even Condorcet and Godwin, against whom Malthus argued, had evoked it, but had dismissed it on the ground that in an egalitarian society, men would also, if need be, be able to regulate population growth, notably by birth control (which Marx and Engels would reiterate to be the case in communism). Second, and more

fundamentally, Malthus deviated from the four stages theory in seeing social classes (in *some* form or other) as a timeless feature of society, while in four stages theory, a class society was the outcome, and not the starting point, of the development that the theory described. In line with four stages theory, the population principle could not, then, have always exerted its pressure exclusively on the inferior classes of society as Malthus held.

As we have seen in this section, Malthus made significant imports from the four stages theory. The pressure of population, the want it creates and the spur to industry this want constitutes were all prominent concepts in his work that he directly adopted from the authors before considered. Whether Malthus consciously drew on the jurisprudential tradition in which the four stages theory was repeatedly used shall not here be considered. In some way or another, in any case, these elements of the four stages theory found their way into Malthus' theory of population and progress. But Malthus also deviated from the four stages theory, mainly in the purpose for which he used it, and by his insistence on the idea that the pressure of population was always exerted on the lower social classes exclusively, while the first "age" of the four stages theory in fact had none such. In this, then, Malthus became more susceptible than was the original four stages theory to the criticism of Marx and other critics of political economy, according to which the "bourgeois economists" used timeless laws that did not take into account the historical and geographical specificities of individual societies. This charge was clearly wrongly waged, as we have seen, against Smith, notably (but not exclusively) by the members of the German Historical School. Smith has often incorrectly been assimilated into the classical economics of both Ricardo and Malthus, and it is therefore of importance to insist on these differences.

6. Conclusion

This paper was concerned with the four stages theory of socio-cultural evolution: its origin and nature, its presence in Adam Smith's work, and its relation with population theories in the 18th century, notably Malthus'. Five major points were formulated in the preceding sections. It was argued, in sections 2, that the four stages theory and the four ideal-type categories it uses (savage/hunting, barbarian/shepherd, feudal/agricultural and civilised/commercial) are ubiquitous in Adam Smith's work, and play a central role therein, including in the *Wealth of Nations*. The role of population in the four stages theory, and the role of

the four stages theory for 18th century population theory, including the one formulated at the close of the century by Robert Malthus, were next considered. Sections 3 and 4 analysed the precise sequence of steps by which population growth induces technological and societal progress in the four stages theory, in Adam Smith's work, and in the work of a number of his predecessors and contemporaries who used the same theory with remarkably little variation. Section 6, finally, examined the influence of the four stages theory on Malthus' population theory, considering both the import and the deviation Malthus made from this theory. We shall at present briefly reconsider some of these points, and further attempt to situate the population theory to be found in the four stages theory in its wider theoretical context, in Smith's work and beyond.

The essential shape and logic of the four stages theory can be found already in Plato: both the idea that population growth induces a shortage, and that this very shortage is — because necessity is the mother of invention — the origin of technological progress are present in Plato's work. Through a number of classical and modern writers of various origins this theory was transported into the 18th century. The connections between these authors are manifold, and it is difficult to know who — in the same period — exactly influenced whom. The theory that these writers have in common is characterised by the fact that it explains human differences by the stage of societal development alone, itself explained by external circumstances (mostly geographic), rather than by the intrinsic characteristics of the culture, language, religion or 'genetic make-up' of human groups. (Rather, these latter elements were explained themselves by the material historical circumstances of the society in question.) In this sense, the theory relies on, and itself constitutes, a universalist representation of humanity and human societies.

In an effort to link the four stages theory to Marx' historical materialism, Pascal (1938) and Meek (1954a) have insisted on the materialist nature of the four stages theory. As such, the theory could be read primarily as an 'economic' one, in the sense that economics is the branch of the human sciences most centrally concerned with the material conditions of individuals and societies. But let alone the anachronism of this perspective — insofar as economics did not exist as an independent branch of philosophy or speculation in the 17th and 18th centuries —, the theory was not used primarily, at the time, to describe 'economic' phenomena. Rather, it became associated, in the 17th century, with the natural law tradition and the effort by such writers as Grotius, Hobbes, Locke and Pufendorf to explain (or justify)

the existence of property, government, social classes and inequality in modern societies, with the starting point being the Aristotelian (and Christian) view of the earth having been inherited equally by all its inhabitants (which makes the existence of property and inequality something *to be* justified). Tying Smith to *this* tradition (as Hont and Ignatieff (1983) have notably done), rather than to 19th century political economy (an intellectual movement Smith did not live to see, but in the category of which he is more frequently included) considerably mitigates his purported role as founder of an ‘independent’ discipline of economics, and the supposed “epistemic break” that the *Wealth of Nations* constitutes in 18th century social science.

Use of the categories of the four stages theory is ubiquitous in Smith’s work, whether in the language of the savage-civilised spectrum (savages, barbarians and civilised people) or the corresponding subsistence-technology vocabulary of hunters, shepherds and commercial society, with the third stage (the age of agriculture) being defined either in socio-political terms (villains, serfs, barons) or again in subsistence-technology ones (peasants, husbandmen), and the last stage being further associated with cities and urban life. As a professor of moral philosophy and jurisprudence, Smith was naturally concerned with the major debates of 17th and 18th century social science, which itself was heavily influenced by classical Greek and Roman thought: natural law theorising seeking to explain the existence of the state and legal, social and administrative institutions of modern society as compared to the “state of nature” on the one hand, and the debate over the superiority of the moderns over the ancients, and more generally of civilisation over savagery, on the other, with obvious links between these two strands of thought. Yet, in the course of the 19th and 20th century, Smith’s work came to be, through the reading of economists, increasingly disconnected from these concerns, Smith himself having come to be regarded as a founding father of 19th century economics, itself increasingly conceived as being concerned primarily with such matters as value, prices and monetary and financial affairs, with the comparison of modern to ancient or savage societies moving increasingly to the background or being absorbed by the new fields of sociology and anthropology. What Smith *did* write about money, value, prices and finance thus came increasingly to be read independently from the 18th century debates mentioned above, which these things were clearly intended by Smith to contribute to (as a comparative reading of his work with a multitude of other contemporary works —

most of which are not considered today to be 'economic' in nature — cannot fail to reveal).

Two major intellectual movements were instrumental in this severance of Smith's 'economics' from his moral philosophy and jurisprudence. The first is the 19th century criticism of Smith's work by German-speaking scholars, who saw in him both a "cosmopolitan" thinker, and a representative of British interests, both of which was seen as being a challenge to the efforts of German intellectuals of the period to conceptualise and bring about the German nation-state. Whether or not the attack on Smith as a cosmopolitan thinker was justified, the connected charge of him paying insufficient attention to particular local conditions was clearly misguided (the four stages theory is precisely built on the differing circumstances of different societies), but remained influential well into the 20th century and indeed to this day. In the 20th century, furthermore, economists came to take pride in the independence of the field from other social sciences (seeking to orient the discipline along the lines of the 'hard' physical sciences instead). The 'dichotomy-view' of Smith's work, seeing his moral philosophy (and along with it the entirety of his earlier work) as disconnected from his 'economic' work that the *Wealth of Nations* purportedly represented, thus got revived and/or kept alive. Smith's moral philosophy and jurisprudence was seen, by now, by economists as of little interest to their work, at best as interesting but non-substantial quirk. It is only in recent decades, and especially since the bicentenary edition of the *Wealth of Nations* together with the entirety of Smith's work and correspondence, that a more interdisciplinary interest in his work, especially from intellectual historians and other social scientists, has revealed anew the central position of the jurisprudential tradition in Smith's work as a whole.

The four stages theory, in Smith's work as in the one of the other authors considered in this paper, has multiple dimensions. One dimension is primarily concerned with legal and political matters, consisting in an explanation of laws and public institutions: universal democracy and loose laws among hunters, strict hierarchy and severe punishment for theft among shepherds, continuing hierarchisation of property and political power in agricultural society, and a further complexification of laws and institutions, but coupled with a possible return to more democratic political forms, in commercial society. Another dimension of the four stages theory is more 'economic' in nature, namely the explanation of the mode of subsistence: savages hunt, barbarians are pastors, feudal society is generally associated with agriculture, and in commercial society, while agriculture remains

the dominant mode of subsistence, an increasing number of people become invested in non-food-procuring activities through the division of labour, notably between towns and rural areas, while agriculture, in conjunction, becomes more and more productive as the soil is “improved”. There is a third, much less known and studied dimension of the four stages theory, which was the focus of this paper: the population theory contained therein. According to this theory, hunting communities are very limited in numbers (Smith speaks of circa hundred-fifty individuals), as hunters need a large territory to procure enough food by this method even for a small number. Shepherds can sustain larger numbers, especially when they migrate with their livestock, allowing it to periodically graze on new land. Together with these larger numbers also comes military might, especially as in this stage of society there is very little division of labour, and hence everyone (including women) is a warrior, as much as a shepherd. This permits barbarian societies further to absorb other nations in their wars of competition that arise from the limited availability of grazing lands. Eventually, however, this state must give way, if the territory and climate permits it (and otherwise further development will cease) to an agricultural mode of subsistence, implying sedentarisation. Agriculture, by the much larger food surplus it produces, permits population to increase much further, and this is amplified by the building of towns, division of labour and trade (first regional then international), progressively ushering in commercial society.

The decisive element moving human society through the successive stages, with legal and political systems, new socio-economic arrangements, and a larger population attached to each, is the growth of population itself. With a given state of subsistence technology, the growth of population induces shortages, and thus forces societies to adopt more productive means of food procurement as well as new legal arrangement (the shepherd state introducing property and inequality) and therefore particular forms of government and judicial systems. While there has been some debate about whom, among Malthus and his contemporaries, ‘invented’ what later became known as the “law of diminishing returns”, it has to my knowledge never been remarked that, in the form of the idea of shortages being created by the growth of population, the four stages theory in fact contains a clear anticipation of this ‘law’ — which constitutes another significant import Malthus made from the theory (if we choose to side with those who connect the law to his name). Thus, in the four stages theory, with increasing population, the same subsistence technology — whether hunting, pasturage or agriculture — yields ever decreasing returns per

person, and hence needs eventually to be replaced by a superior technology. Or, said differently, on a given amount of land, food ‘production’ yields decreasing returns with increasing population. The surface of land is not entirely fixed, as hunters and especially shepherds may still periodically migrate, and the term “food production” squarely applies only in later stages, as food is initially not produced but directly consumed in its natural state, but the essential idea that the law of diminishing returns was still principally connected with in the 19th century, namely that the food to be obtained from land increases less than proportionally with population, is quite clearly contained in the four stages theory.⁹⁷

In a way, Malthus, with his idea that population growth always presses on the means of subsistence and induces shortages directly and immediately, is more removed from the law of diminishing returns than the original four stages theory, in which this shortage only gradually comes about, and intensifies at the brink of each stage. Thus hunters, in Adam Smith’s work, although often described as ‘miserable’ compared with the inhabitants of civilised society, are not suffering from hunger at every instance. Within the limits of the hunting stage, although they have to invest most of their labour in hunting, and this activity yields little surplus (both of which, as well as the too small population, makes an intensive division of labour impossible at this stage), hunters can live relatively comfortably from this activity as long as they remain a small group.

It has often been noted that Smith was a direct influence on Malthus’ and Ricardo’s (and later Marshall’s) ideas of diminishing returns in agriculture and increasing returns in manufactures by his singling out of the former as being much less amenable to division of labour (and thus increasing returns) than the latter. Revealing the presence of the idea of diminishing returns in the four stages theory, and the influence of this theory on Malthus, not only offers a more direct line of influence on Malthus’ adoption of this idea, but also

⁹⁷ Reid (1989) offers an interesting conceptualisation of Smith’s stadial theory in terms of “Societal Growth Trajectories”, which culminate in stationary states when the institutional arrangement of particular stages are no longer adequate for a changed economic reality, and thus need to be replaced, opening a new growth cycle. (Although not noted by Reid, there is here too, then, a clear parallel between the four stages theory and Marx’ Historical Materialism with its inherent contradictions of capitalism — or any other stage — being exacerbated and ushering in new institutional arrangements.) A lack of contextual reading of the historical material does not allow Reid to connect this theme to population and diminishing returns, but these are implicit in the concept of “stationary state” when this concept is read in the context of its theoretical emergence.

throws additional light on Smith's insistence on a more limited applicability of division of labour for the obtainment of food from land. Indeed, would food procurement be *directly and immediately* subject to the same increasing returns that can be obtained from employing additional people in manufactures, the explanatory mechanism of the four stages theory, which relies on shortage and necessity being created, so that people can be pushed by this necessity to be more productive, would no longer hold.

It has to be remarked, then, after having noted the presence of the idea of diminishing returns in the four stages theory, that these diminishing returns are themselves only the means by which increasing returns can be secured *in the long run*. Thus, after having been pushed to its limits by diminishing returns, a technology of food procurement is replaced by a superior one, which yields higher returns. In this way, it is *because* of these diminishing returns that increasing returns finally set in. It is because there are diminishing returns in the short run that there are increasing ones in the long run (to put the proposition in Marshallian terms). It is the shortage brought about by population growth that steers society to develop a new subsistence technology, more productive than the former. Hence there will be higher yields per person than before, once the new technology has been adopted, although this new technology may itself be subject to diminishing returns in the long run. In this way, the four stages comes closer, in fact, in its view of food-procurement technology, to the view of technology as production process or 'factor mix', subject to diminishing returns, prevalent in neoclassical micro-economics, than to the 'classical' idea of diminishing returns from land — although the two are certainly linked theoretically and genealogically.

What is of crucial importance furthermore is that the new technology of subsistence, which characterises the new age of society, *could not have been adopted before*. Indeed, not only is necessity the mother of invention through the constraint it occasions, it is also the mother of invention through the opportunity it offers. Thus, as long as people can live comfortably by hunting, the important investment in time and energy necessary to pass from the less (but at this point still sufficiently) efficient hunting habits to the more (but at this point excessively) efficient shepherding habits remains itself inefficient. What Smith expressed with the idea that "the division of labour is limited by the extent of the market" is that the efficiency gains the division of labour permits remain uneconomical as long as there is not sufficient need for them. As Allyn Young (1928, p. 530) put it in his justly famous exploration of the meaning and importance of this idea,

“It would be wasteful to make a hammer to drive a single nail; it would be better to use whatever awkward implement lies conveniently at hand”.

This crucial feature of Smith’s view of economic organisation and economic progress — put emphatically in the short third chapter of the *Wealth of Nations*, and used as frame of reference throughout the work — is already expressed in the four stages theory: there will not be adoption of superior technology as long as there is no need for it. People are using technology in accordance with the task at hand. When the problem to be solved changes in proportion (more mouths to feed) solutions will tend to change in nature (use of a superior technique of food procurement). The need for this becomes pressing when population increases, as the current technology of food procurement outruns the natural reproduction of resources that this technology relies on: wild animals for hunters, which are decimated by too intensive hunting, grasslands for shepherds that becomes too scarce with intensive pasturage, and the “productive power of the soil” once agriculture has become the main mode of subsistence, which cannot keep pace with increasing population, as was more emphatically stated by Malthus.

There are thus two dimensions to the process of population and development outlined in the four stages theory, which in fact are the two faces of the same coin: the growth of population creates the necessity to adopt a superior technology of subsistence, but at the same time offers the possibility of doing so. Because the division of labour is limited by the extent of the market, this superior technology could not have been introduced at an earlier stage. The *need* is created by a larger population. But it is only through the larger population in turn that the *opportunity* for it is also created. One may observe the semantic affinity between the concepts of “need” and of the “demand” that expresses itself, and can be met, on a market.

This feature of the role of population in the four stages theory, that it is at once responsible for hardship and, through this initial hardship it brings about, eventually makes for a higher level of development and thus opulence, is mirrored in Smith’s theory of population formulated in the *Wealth of Nations*, even though it is expressed there in different terms. Although Robert Heilbroner, I believe, read Smith’s population theory wrongly, through the prism of Ricardo’s and not Smith’s own wage theory, he pointedly observed (speaking of the *Wealth of Nations*) that “There is something fascinating in this automatic process of aggravation and cure, stimulus and response, in which the very factor that seems to be leading the

system to its doom is also slyly bringing about the conditions necessary for its further health” (Heilbroner 1999, p. 66).⁹⁸

A last point may be made at the close of this long paper, directly related to the subject we shall next consider. Craig Smith (2006b) has put the principal focus, in his study of the four stages theory, on the role of knowledge in the succession of stages of society. This runs the risk, in my opinion, of giving undue weight to a feature of the theory that is in fact a mere by-product of the dynamic described therein. It is because the fundamental nature of the theory is a materialist, rather than an idealistic one, that it has been described (by Pascal and Meek) as a precursor to Marx’ historical materialism. Even though it is difficult to maintain that the theory, with its many dimensions, is purely a materialist one, as Shearmur (2007) has more recently argued, this materialist dimension cannot be denied, and representing the role of ideas therein as the driving force is clearly a misrepresentation.⁹⁹

⁹⁸ Heilbroner sees the stimulus and response he describes here in the growth of population first reducing wages — and in this way, according to him, population growth brings about its own halt — but this very reduction in wages then allows capitalists to invest more, as reduced wages raise profits, and hence wages rise again and population can grow once more. But in Smith’s theory, wages and profits do not directly compete with one another, as they do in Ricardo’s. (In both Smith’s and Ricardo’s theories, profits tend to fall when wages rise, but for Smith it is not the rise in wages itself which occasions the fall in profits, but rather both have the same cause, namely the accumulation of capital.) Thus, while the precise sequence described by Heilbroner to which the remark quoted pertains may not be an adequate representation of Smith, the remark itself perfectly describes the stimulus-and-response-mechanism contained in Smith’s population theory as a whole: population growth may have a tendency to reduce wages by raising the supply of labour, but since at the same time the growth of population enlarges the market, it also allows for more division of labour and hence a rise in productivity and thus profits and capital accumulation, which will eventually lead to a rise in wages permitting a new cycle of growth.

⁹⁹ Craig Smith (2006a, p. 49-50) holds that “population growth itself cannot be the reason behind a change in the stage of the mode of subsistence. It certainly may act as a prompt to that change, but the means depend on the acquisition of the knowledge requisite to pursue the new mode.” I cannot see any substantial difference in meaning between “the reason behind a change” and “a prompt to that change”. There may be a distinction to be made between a *necessary* and a *sufficient* cause, but that is another matter. Also, “the acquisition of the knowledge requisite to pursue the new mode” which Craig Smith stresses is not given great stress by Adam Smith himself. As was customary in four stages theory (see notably Kames description cited above p. 57), development of the knowledge of pasturage and agriculture are described by Smith in his lectures as casual chance discoveries (LJ(A) i.28-31, p. 14-5; LJ(B)150, p. 459); and the development of division of

One aspect of this materialist dimension of the four stages theory is that what conditions the progress of society, especially in the early stages (questions of policy, to a larger degree volitional, take on more importance in later stages, especially in Smith's use of the theory) are material conditions, principally the geographical characteristics of the territory a people inhabit: its position in relation to navigable rivers and coastlines, the fertility of its soil, the clemency or harshness of its climate. These will allow a people to either obtain enough surplus of food from the environment for population to increase or conversely be condemned to stagnate in the early stages, as well as to entertain (or not) trade relationships with other people, which can help to overcome the limits of the immediate environment and thus act as motor to the progress of society. In line with what was advanced above concerning the two faces of the population-creates-necessity element, as being both a push and a pull factor, both a constraint and an opportunity, it has to be recognised that knowledge, as much as technology, can only be used in accordance with the task at hand, and the knowledge of how to build castles, ships and manufactures will be of no use in a society of hunters. Population pressing on the means of subsistence is itself a material factor, not an ideational one. Together with more mouths to feed, an increased population also represents more arms and legs to work, and more brains to invent, which can serve for the division of labour. Increased population also represents a larger market, allowing for this division of labour to be usefully deployed. It is with these crucial elements of Smith's thought — the relation of population to the extent of the market defining the scope for the division of labour and thus economic progress — to which Malthus (and Ricardo) paid insufficient attention.

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labour and exchange that underlie the emergence of commercial society are for Smith, as is well known, "not originally the effect of any human wisdom" but "the necessary, though very slow and gradual consequence of a certain propensity in human nature . . . to truck, barter, and exchange one thing for another" (WN I.ii.1, p. 25).

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