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HEINRICH VON STORCH'S THEORY OF INNER GOODS AS DETERMINANTS OF A NATION'S CIVILIZATION

Heinrich von Storch, a Russian classical economist of German descent, is treated in the literature as an epigon of Adam Smith, who was critical only with respect to certain Smithonian concepts, in particular the labour theory of value. Storch is very original, however, in presenting a theory of inner goods. Outer goods are physical, inner goods are non-physical. Inner goods are parts of human beings and come into existence by services of suppliers, but also by cooperative efforts of the receivers of the services. Storch classifies inner goods into six types of main inner goods: health, skill, knowledge, aesthetics, morals and religion, and into two types of auxiliary inner goods: security and leisure.

The paper discusses inner goods with respect of

- the division of labour,
 - the concept of unproductive labour,
 - the role of inner goods in macroeconomic interpretation,
- and points to the human capital aspects of inner goods.

1. INTRODUCTION

Heinrich von Storch was born in 1766 in the Latvian city of Riga, which in former times (since 1711) belonged to the Russian Empire. Storch's parents were Germans, he studied at the German universities of Jena and Heidelberg. In 1788, he became a Professor of Literature at the Military Academy of the Russian capital St. Petersburg. Tsarina Catharine II asked for his advice, and after her death Storch was charged with the political-economic education of her successor Paul's children, the later Tsar Nicolas I and his brother Mikel. Storch in later years was a member of a state commission for development of the Russian educational system. In 1830 he became Vice President of the Russian Academy of Sciences.

The lessons given to the imperial youngsters were the basis of Storch's main oeuvre *Cours d'Économie politique ou exposition des principes qui déterminent la prospérité des nations*, published in 1815 in 6 volumes in St. Petersburg.

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Karl Heinrich Rau translated it into German and published a slightly condensed version under the title *Handbuch der Nationalwirtschaftslehre* in 2 volumes in 1819 in Hamburg; a 3rd volume contains supplements (*Zugaben*) by Storch and comments by Rau. To this German edition the quotations and translations in the following refer. Without Storch's knowledge and permission, Jean Baptiste Say edited *Cours d'économie politique* in 1823 in Paris; he supplemented this edition by his own critical and polemical comments. These comments stimulated Storch to write a further important text *Considérations sur la nature de revenu national* (1824), which he published in 1825 in German under the title *Betrachtungen über die Natur des Nationaleinkommens*.

In the literature Storch is normally seen as an epigon of Adam Smith who was critical only to certain Smithonian concepts (see, for example, Schumpeter 1954, p. 502 f.), in particular critical with respect to the English classical objectivistic labour theory of value (for an evaluation of Storch's most interesting contributions to economics see Rentrup 1989 and Schumann 1992). Storch is among those German economists of the last century who taught in Russia and who, therefore, by Roscher (1874, p. 790 ff.) were labelled the "German Russian School". He is also in the group of those German economists who rejected the labour theory of value in favour of the subjectivistic utility theory of value. This group was given the name "German value-in-use school" ("Deutsche Gebrauchswertschule") by Spann (1923, p. 157) and by Brandt (1992, vol. 1, p. 169 ff.).

The "German value-in-use school" besides Storch included authors like Ludwig Heinrich von Jakob, Gottlieb Hufeland, Friedrich Julius von Soden and Johann Friedrich Eusebius Lotz, whose German cameralistic tradition was more or less superseded by the liberal Smithonian concepts. The authors of this school, together with the German "late classical" authors of the last century, Karl Heinrich Rau, Johann Heinrich von Thünen, Friedrich Wilhelm Benedikt Hermann, Hans von Mangoldt and Wilhelm Roscher, in retrospect can be seen as economists trying in one way or another to build a bridge from the English classical objectivistic labour theory of value to the subjectivistic theory of value finally realized in the marginalistic analyses of Carl Menger, Stanley Jevons and Leon Walras (see, for this interpretation, Streißler 1990).

Storch's concept of value-in-use as determined by a person's subjectivistic utility from consuming a good (cf. 1819, vol. 1, p. 24 ff.) explicitly is directed against Smith's concept of value-in-exchange as determined by the labour represented in the good (cf. 1819, vol. 1, p. 71 ff.). Storch, like other German "pre-marginalists", did not succeed, however, to apply the subjectivistic concept to an explanation of values-in-exchange, and, thereby, of relative prices. Where Smith and Ricardo could offer the ratio of labour hours represented by the units of two commodities as (approximate) determinants of the ratio of the natural prices of the commodities

(see, for example, Schumann 1994, p. 164), Storch was not able to specify the role of utilities in determining prices. This is due to the fact that he, like other “pre-marginalists”, did not realize that it is marginal utility that matters. There is, therefore, no coherence between Storch’s anti-Smithsonian concept of value and his Smithonian theory of the market price and of the natural price; the latter is called by Storch the “necessary price”, i.e., the price which covers all costs of procurement (see: 1819, vol. 1, p. 41).

2. DEFINITION AND CLASSIFICATION OF INNER AND OUTER GOODS

Storch applied his concept of value and that of price not only to the material “outer goods” (“äußere Güter”) but also to the non-material “inner goods” (“innere Güter”) on which this paper is focussing (see 1819, vol. 1, p. 47f., and vol. 2, p. 341 ff.).

An economy’s stock of outer goods consists of its “physical commercial stock” (“körperlicher Erwerbsstamm”) and its “physical consumption stock” (“körperlicher Verbrauchsvorrath”). Outer goods derive their value from the customers’ utility originating from using the stocks in production or consumption. Both stocks of physical goods define the economy’s “material stock of wealth” (“Volksvermögen”), which can be augmented by saving and by further division of labour.

Immaterial inner goods are classified into six types of “main inner goods” (“innere Hauptgüter”):

- “health” (“Gesundheit”),
- “skill” (“Geschicklichkeit”),
- “knowledge” (“Wissen”),
- “aesthetics” („Schöngefühl”),
- “morals” (“Sittlichkeit”),
- “religion” (“Glaube”);

and two types of “auxiliary inner goods” (“innere Hilfsgüter”):

- “security” (“Sicherheit”),
- “leisure” (“Muße”).

Auxiliary inner goods are a prerequisite for the procurement of the main inner goods.

Besides outer goods, an economy has at its disposal stocks of inner goods. One part of those stocks serves as a “non-physical commercial stock” (“unkörperlicher Erwerbsstamm”) in production. In modern terminology, we may think of human capital in the form of health, skill and knowledge devoted to production. The other part of those stocks is “non-physical consumption stock” (“unkörperlicher Verbrauchsvorrat”), which we may associate with assets like the aesthetic and the

moral potential of a nation (note that in modern economic approaches to ethics moral is interpreted as a public capital asset; see, for example, Aufderheide 1995, p. 89 ff.). Both parts of the stock of inner goods define the economy's "social education" ("gesellige Bildung"), which is equivalent to its state of "civilization" ("Zivilisation").

The economy's physical stock of wealth together with its non-physical stock of social education are, according to Storch, the determinants of the nation's welfare (for the definitions and classifications see 1819, vol. 2, p. 341 ff.).

The stocks of inner goods are the result of accumulating flows of inner goods. Those flows are supplied in the form of services. Storch gives an impressive overview on the respective service supplying jobs of his time (see 1819, vol. 2, p. 353ff.). A few examples may illustrate what type of inner good is supplied by which service:

- "health": work of mothers, doctors, of hospital waiters,
- "skill": teaching to speak, read, write, teaching craftsmanship, sports,
- "knowledge": teaching and writing on science,
- "aesthetics": teaching fine arts, belles-lettres,
- "morals": teaching or writing on moral behaviour or on doing one's private or public duties;
- "religion": work of reverends, activities of those contributing to evolution and persistence of religion,
- "security": work of government and public civil and military personnel,
- "leisure": work to save other persons' time which those may use for their recreation: housewives (!), butlers, accountants.

To be exact: for inner goods to come into existence, not only the supply of the respective services is necessary. It is also indispensable that customers are willing to receive and to utilize the services. The persons who demand and receive the flows of services form and accumulate the inner goods. The principle that both suppliers and customers of services participate in the creation of inner goods is valid as well for main as for auxiliary inner goods. With respect to the latter, security and leisure are essential conditions for demanding the services by which health, skill, knowledge, aesthetics, morals and religion come into existence.

Storch argues it would be wrong to assume inner goods

"[...] would exist not longer than the services supplying them, and would necessarily be used up in the moment of their creation [...]; they cannot be circulated and transferred to other persons or merchants like [physical] stock, but rather they can exist for longer or shorter time within the receiving persons" (1819, vol. 2, p. 346).

Most of a year's production of outer goods is destined to match the decrease of the physical consumption stock and the physical commercial stock. In contrast to this, the

"[...] decrease of stocks of inner goods in general is slower. It depends, however, on various types; main inner goods, on the rule, are consumed at a very low rate, auxiliary inner goods at an extremely high rate. Security, supplied by the government to the people, is consumed at once and must be supplied again year by year; the same is true for leisure supplied by home services of others. Main goods, on the other hand, may possibly be enlarged [...] by their proper use; consuming them increases, for example, the value of health, skill" (1819, vol. 2, p. 347).

All in all, Storch does not accept the view that there is a fundamental difference with respect to the durability of inner and outer goods. Up to the present time, economists have been largely neglecting the accumulation of what Storch calls inner goods, though nobody would deny their importance for a nation's civilization and welfare.

3. PRICE FORMATION FOR INNER GOODS

As mentioned at the end of Section 1, Storch's theory of price is Smithonian. The market price is the

"... result of a struggle between suppliers and customers, [...] they reach an agreement when the difference they struggle about is divided between them in the relation of their comparative power" (1819, vol. 1, p. 41).

The market price permanently gravitates to the "necessary price" as defined by

"the cost of procurement, i.e., by those expenditures, without which a good would not be present at the place of exchange" (1819, vol. 1, p. 40).

This price reflects the English classical economists' concept of reproduction, which also defines Adam Smith's "natural price".

Storch's price theory is formulated with respect to outer goods. There are difficulties to apply the theory to inner goods:

"Inner goods cannot be sold, because those goods are non-separable properties of human beings. [...] Inner goods cannot be bought. [...] He who wants to acquire the skill of a musician does not find supply of the skill; teachers of music can only supply their services, [...]" (1819, vol. 2, p. 345 f).

A pupil must be willing to demand, receive and utilize the service; simultaneously with the teacher he must act and practice in acquiring the skill.

In Storch's *Cours (Handbook)* we find the concept that inner goods proper are not exchangeable between persons, and, therefore, cannot have a value-in-exchange and a price. Inner goods, consequently, are to be valued at the cost of procurement of service supply. Storch assumes that the services are those of labour in the jobs enumerated in the examples; he neglects the fact that even at his time labour services may have been complemented by services of instruments or machines. According to his Smithonian theory, the wage rate of labour tends to the reproduction wage rate (1819, vol. 2, p. 360 f). Storch also mentions a non-Smithonian wage component, a "rent of talents" for special

natural gifts to labour (originally introduced by Gottlieb Hufeland, see Rentrup 1989, p. 79 f.).

In *Betrachtungen über die Natur des Nationaleinkommens*, Storch has changed his views on exchangeability and prices of those inner goods which are part of the non-physical commercial stock. Though also these inner goods are properties of human beings, they are considered to be transferable and thus may be bought or sold at a price:

"[...] Think, for example, of a young man who has been a master's apprentice or has attended schools and universities. Is the value he has paid for the lessons or for the services of his teachers lost for him? No, because – provided he is no exception from the rule – the value of the skill and the knowledge he acquired by the services will be remunerated to him when applying those properties. This example can be extended to all kinds of non-physical [inner] goods which are used in commercial production" (1825, p. 21 f.).

Storch does not discuss the relation between the buying price and the selling price of such type of inner good. According to the example quoted, the stock of skill and knowledge accumulated in a person is due to a series of human capital investments, and the stock price of the inner good results from the services the person received. Using the stock in commercial production is remunerated by a flow price of the inner good, which assures amortization of the human capital investment.

Storch does not offer a concept of prices for inner goods belonging to the non-physical consumption stock. The stock price of such goods again may be thought of resulting from the services the person received. Its flow price would have to be based on the utility derived from using the stock.

4. INNER GOODS AND THE DIVISION OF LABOUR

Storch applies Adam Smith's concept of the division of labour and its productivity increasing effects to the labour services of inner goods suppliers. He calls those services "non-physical labour", in contrast to "physical labour" in the production of outer goods.

"Exchange of non-physical labour will be introduced among men as naturally as exchange of physical labour or its products" (1819, vol. 2, p. 349).

In an economy's early state of development, only the division of physical labour becomes effective. But

"When increased wealth makes it difficult to allocate the accumulated [physical] commercial stock to new enterprises, a new class of people necessarily originates, which specializes in the production of inner goods. A first division within this class relates to the supply of services connected with security and religion. [...] The more an increasing wealth can give support to this class, the more it divides. There is a separation of state officials and warriors, of priests and scholars. And there are further separations of warriors into infantry, cavalry, artillery and

pioneers, of state officials into judges, clerks and policemen, of scholars into those specializing in law, science of state, natural science [...]” (1819, vol. 2, p. 350 ff.).

The division of non-physical labour by itself contributes to the growth of the economy's stock of inner goods and increases the productivity of non-physical labour:

“The separation of labour destined to produce inner goods develops parallel to the size of the non-physical commercial stock, but this stock itself is augmented by the process of separation and offers further opportunities of separation” (1819, vol. 2, p. 387).

The process of continued division of non-physical labour described by Storch is similar to Friedrich August von Hayek's concept of the use of knowledge in society, which was characterized by Machlup as a division of knowledge (Hayek 1945, Machlup 1977, Rentrup 1989, p. 60).

5. INNER GOODS AS PRODUCTS OF UNPRODUCTIVE LABOUR

Storch's concept of inner goods in the *Cours (Handbook)* originated in his critical discussion of Adam Smith's and Jean Baptiste Say's differentiation of productive and unproductive labour. Smith in book 2, chapter 3 of the *Wealth of Nations* urges entrepreneurs to use their income for investment and not to spend it for private consumption of services. With this background, he speaks of labour connected with capital accumulation of firms to be productive, and of labour services to households to be unproductive. Blaug (1985, p.54 f.) locates two concepts of the (un-)productivity of labour in the *Wealth of Nations*, a “value version” and a “storage version”. In the “value version”, Smith states that productive labour adds its own value to the net value of its product, while unproductive labour does not create value of a product. In the “storage version” Smith says that productive labour “realizes itself in some particular subject or vendible commodity”, while “the services of unproductive labour perish in the very instant of their performance” (Smith 1937, p. 314 f.).

Say concedes that Smith's unproductive labour produces a product, but he stresses that this product is not durable and, therefore, does not contribute to the economy's (material) stock of wealth. By introducing the distinction of inner and outer goods, by evaluating the role of labour in the production of both types of goods, and by arguing that also inner goods may be durable (even more durable than outer goods), Storch supersedes Smith's misleading distinction of productive and unproductive labour. According to Storch, there is no difference between both types of labour, neither with respect to the creation of value nor with respect to durability. Storch does not hesitate to acknowledge the role of services devoted to the production of inner goods in the formation and growth of national income (1825, p. XXXII) and the economy's stock of wealth.

Storch's clarifying contribution did not come to the attention of leading economists. John Stuart Mill took over Smith's distinction but attributed services enlarging skills of labour in material production to the productive type of labour (Mill, 1867, p. 60). Karl Marx took up Smith's value version in insisting that labour in the non-capitalistic service sector of an economy is unproductive in the sense that it does not create surplus value (Marx 1968, vol. 1, p. 27). Taking notice of Storch's contribution might have prevented the grotesque misconception of the non-income creating role of services in socialist countries' national accounting.

6. INNER GOODS IN MACROECONOMIC INTERPRETATION

It may be useful to discuss the role of inner goods in the context of macroeconomic representations of an economy's circular flow of income.

The simplest Keynesian ex post representation of an economy without state activity and without foreign relations is given in Figure 1. The circular flows

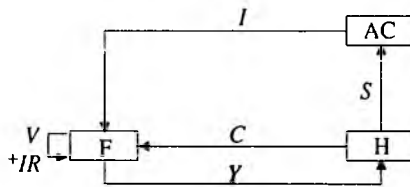


Fig. 1. Keynesian macroeconomics

represent expenditure during a period for goods (including services) of the firms transactor F and the household transactor H, the goods being valued by their respective prices. C is households' consumption expenditure. S is households' saving; its ex post equivalent I represents net investment, which enlarges firms' capital stocks and which is registered as a flow from the accumulation transactor AC to the firms' transactor F. V stands for the firms' current input expenditure, IR for their re-investment expenditure to other firms. Y is firms' income expenditure to households. The economy's gross product (valued by the respective prices) is

$$GP = V + IR + C + I, \quad (1a)$$

its net national product or national income is

$$NSP = GP - V - IR = C + I = Y. \quad (1b)$$

In Figure 2 we proceed from the Keynesian diagram to a first version of a flow diagram in the Storchian spirit by considering two aspects:

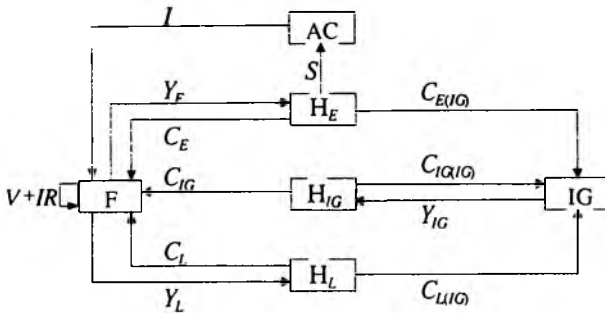


Fig. 2. Storchian Macroeconomics, Version I

Firstly, according to classical economics, labourers' households do not earn more than a subsistence income and, therefore, cannot save. In the diagram this is taken into account by disaggregating the household transactor into a transactor for entrepreneurial households H_E , from which the flow of entrepreneurial consumption C_E and that of all savings S originates, and into a transactor for labourers' households H_L , from which the flow of labourers' consumption C_L originates.

Secondly, we define transactor F as that producing outer goods. Thus Y_E and Y_L is income from the production of outer goods. The consumption streams C_E and C_L are now consumption expenditure for outer consumption goods. We introduce a transactor IG for the inner goods production, which is performed by the services of non-physical labour in collaboration with the receivers of those services. The transactor of households H_{IG} living by income Y_{IG} from transactor IG , spends C_{IG} for outer goods and $C_{IG(IG)}$ for inner goods. Like households H_L , the households H_{IG} are supposed to be unable to save. $C_{E(IG)}$ and $C_{L(IG)}$ are consumption expenditures of entrepreneurs' and labourers' households for inner goods.

In this first, simplified version of a Storchian diagram, it is assumed that inner goods are not durable; there is, consequently, no accumulation of stocks of inner goods. Net investment I and re-investment IR consist of outer goods. I is equal to (entrepreneurial) households' savings. Though the diagram is still fragmentary, the equations corresponding to it,

$$GP = V + IR + C_L + C_E + C_{IG} + C_{L(IG)} + C_{E(IG)} + C_{IG(IG)} + I, \quad (2a)$$

$$\begin{aligned} NSP &= GP - V - IR = C_L + C_E + C_{IG} + C_{L(IG)} + C_{E(IG)} + C_{IG(IG)} + I \\ &= Y_L + Y_E + Y_{IG}, \end{aligned} \quad (2b)$$

show that the non-physical labour services allocated to the production of inner goods participate in the process of income generation. There is no justification for the Smithonian or the Marxian view of considering those services in any sense less productive than labour in the production of material, outer goods.

In the second version of a Storchian flow diagram, we additionally introduce two aspects:

Firstly, inner goods are admitted to be durable and thus stocks of those goods may be accumulated, which are used either as a non-physical commercial stock or as a non-physical consumption stock. In Figure 3, households H_E , H_{IG} and H_L out of their incomes Y_E , Y_{IG} and Y_L save amounts $S_{E(IG)}$, $S_{IG(IG)}$ and $S_{L(IG)}$ destined to build up inner goods commercial stocks which are registered in the diagram as flows to the accumulation transactor AC. To the sum of those savings there corresponds a net investment I_{IG} in non-physical commercial stock. The diagram treats the accumulation of non-physical consumption stock in the same way as the accumulation of physical consumption stock. Both types of accumulation are not explicitly considered from the savings-investment point of view, but are included in consumption, i.e., in C_E , C_{IG} and C_L as for outer goods, and $C_{E(IG)}$, $C_{IG(IG)}$ and $C_{L(IG)}$ as for inner goods.

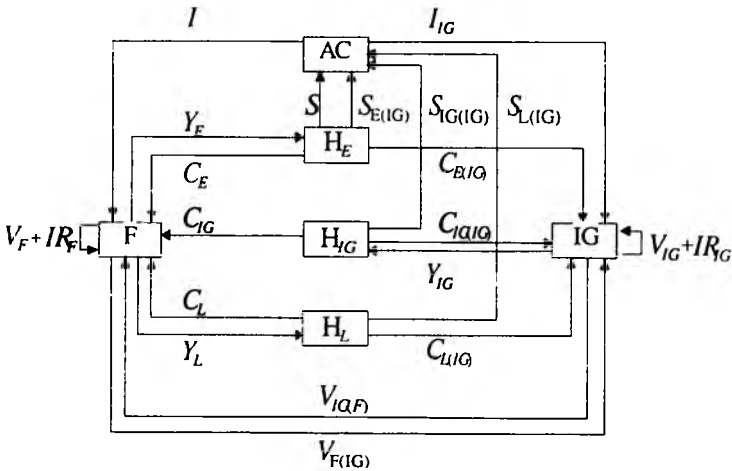


Fig. 3. Storchian Macroeconomics, Version 2

Secondly, we supplement Storch's reasoning by admitting in Figure 3 inner goods (for example security) as a current input $V_{F(IG)}$ in the production of outer goods, as well as outer goods (for example instruments or books) as a current input $V_{IG(F)}$ in the production of inner goods. And finally we consider inner goods as current inputs V_{IG} or re-investment IR_{IG} in the production of inner goods. It is not necessary to write down equations corresponding to (2a) and (2b), because they would differ from them only by explicitly stating investment and consumption of inner goods and by admitting inner goods as current inputs and for re-investment.

Comparing the Keynesian and Storchian diagrams, we should be aware of the fact that in the Keynesian concept the output produced by (labour and non-labour) services is part of the production by firms. Labour services supplied to households for the production of what Storch calls inner goods is not represented in the Keynesian approach; their neglect in national accounting has been an object of criticism. Storch, on the other hand, with respect to inner goods, concentrates on the production activity of households, and in doing so he anticipates modern consumption theorists like Kelvin Lancaster (1971) and Gary Becker (1965) (this aspect is emphasized by Rentrup 1989, p. 108 ff.). The effects of an increased commercial stock of inner goods on the economy's productive capacity is implicit in Storch's reasoning but is made explicit only by our supplements to Figure 3, in particular by recognizing the role of current inputs of inner goods in the production of outer goods.

7. FINAL REMARK: INNER GOODS, LEARNING BY SCHOOLING AND LEARNING BY DOING

Storch's concept of inner goods seems to be closely connected to the concepts of learning by schooling and of learning by doing in the New Theories of Economic Growth.

Learning by schooling in the growth model by Lucas (1988) relates investment in labour to the stock of human capacity to produce. Storch's inner goods contribute to both the commercial capacity to produce and to the capacity to create non-commercial civilization assets. There are, in particular, the inner goods "skill" and "knowledge", which correspond to learning by schooling in production, while "health", "aesthetics", "morals" and "religion" mainly relate to the non-commercial assets of civilization. Storch's concept of human capital does, therefore, not only imply the New Growth Theory's learning by schooling concept of human capital for production; it also includes non-commercial human capital, which is equally important for civilization. Had the history of

economics followed Storch to include both commercial and non-commercial human capacity building, it would certainly have extended the acceptance of market economies.

Learning by doing in the growth model by Romer (1989) defines human learning as gaining the facility of handling new machines and new equipment. Human capital is thus interpreted as a by-product of non-human capital formation. Human capital formed in this way will be available as an externality in all parts of the economy. In Storch's concept flows of human services contribute to the accumulation of inner goods. "Health", "skill", "knowledge", "aesthetics", "morals" and "religion", all the inner goods assets come into existence by supply of a typical set of human services. During the development process of an economy, there is permanent division and specialization of labour in each of those services, and this is connected with learning by doing. There is thus human capital formation in the supply of services for the production of inner goods. Similar to the New Growth Theories' procedure, the division and specialization may be identified as a learning by doing externality in the Storchian development process of commercial and non-commercial human capital stocks.

All in all, Storch's concept of inner goods not only has its counterparts in modern theories of human capital formation; by including non-commercial aspects, it points to a more comprehensive economic theory of civilization.

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