Mental footnotes in Capitalism: The current social validity of the concept of price from the Adam Smith's "An Inquiry into the Nature and Causes of the Wealth of Nations"

Jose L. Vilchez, Cristina Sacaquirin Rivadeneira Facultad de Psicología, Universidad de Cuenca, Cuenca, Azuay, Ecuador, Av/ 12 de Abril & Av/ Loja Email: ilvil@hotmail.de

Abstract

The main aim of the present study is to identify which mental footnotes (related to Adam Smith's Capitalism) have more weight in the current cognitive processing of participants. We used the "Wealth of Nations" as the main source of the concepts from this author. An experimental design (based on a previous qualitative research) was carried out to test the influence of mental footnotes on the citizens' decision on the validity of the concepts. The findings point out that there are strong, current, mental footnotes related to the Adam Smith's concept of *price*. People mostly understand that, for every product, the entrepreneur has to recover their initial investment and to gain a profit. On the other hand, the fact that entrepreneurs have to pay some expenditures and they need to have profits determines the price of products.

Keywords: mental footnotes, Adam Smith, Communism, Capitalism, cognitive Psychology, Philosophy

INTRODUCTION

In the England of the mid-eighteenth century, the *Industrial Revolution* took place as a *great boom*, in economic terms (López, 2018). The industry was moving towards a vast development and the internal market offered great opportunities (Silva & Mata, 2005). People sought employment in the industry, despite it was monotonous and conditions were murky (Ashton, 1979). By concentrating workers on factories, introducing machinery and controlling labor, England increased its productivity (Fulcher, 2004). In this background and historical development, Capitalism took place (Haupert, 2019).

In the same century, *the illustration* (intellectual current) caused a renewal of science, philosophy and politics based on principles of

objectivity and universality (Yegres, 2015). This trend triggered a rational critique of the worldview, culture and religious beliefs, accepted until then (Castro, 2018). This current of innovative thinking spread throughout Europe and America (López, 2014).

In this sense, Political Economics emerged as a modern science thanks to the contributions of some thinkers, such as Adam Smith; considered as the founding father of classical political economy and a reference for *modern liberalism* (Gift & Krislov, 1991; Pfefferkorn, 2008). Regarding the financial sphere of the states, references to the author have focused mainly on the corrective mechanism of privatization and competition in the market (Yarrow, King, Mairesse & Melitz, 1986; Slater, 2015).

Smith (2007/1776) in his work "The Wealth of Nations" addresses: (a) the distinction between the value of use and the value of exchange, only the second one being of interest when people carry out an exchange; (b) the utility as a non-influential part in the alteration of prices, since these would be determined based on the amount of work dedicated to its production (human activity); (c) the division and specialization of labor as the determinant of the capacity of a society to increase its productivity and, consequently, its economic growth; and (d) employers are free to form associations and control the prices of market, while, in the case of workers, these associations would be prohibited or unauthorized (López, 2014).

Although, England was the first society to adopt the method of capitalist production (Flucher, 2004), there are abundant examples of the emergence of Capitalism in other countries (Galván & Martínez, 2001; Veltmeyer, 2010; Manley, 2015). At the end of the 19th century, Capitalism was constituted as the main world socioeconomic system (López, 2014).

From this background and in general terms, Capitalism is conceived as an economic system, in which the means of production are maintained and financed privately with the objective of generating greater income (Horning & Schweickart, 2016). However, everyone is not in the same economic condition, those--who do not have capital to invest--sell their work in exchange for a salary; the work becomes a commodity that has an exchangeble value (Horning & Schweickart, 2016). In Capitalism, institutions-that facilitate the conversion of assets in all types of capital-emerge (Fulcher, 200). Therefore, human activity, land, resources and nature itself are commercialized with uniform measurement and valuation systems (Horning & Schweickart, 2016).

The history of Capitalism has been marked by a clear tendency to increase private property (Gil, 2016). This model is constantly criticized due to the concentration and abuse of power (Felber, 2012). Given the *mental footnote* (in terms of Vilchez, 2019, 2018, 2016) of the obligation of constant economic growth of the system, large dehumanized and dehumanizing corporations promote legal regulations that base on competitiveness.

In this sense, Capitalism does not always mean development (Gil, 2016). Some of the critics to Capitalism are: (a) labor exploitation; (b) unemployment, (c) the worsening of social inequalities (Gil, 2016); (d) the increase in military conflicts; (e) insensitivity to the misery of peoples (e.g., Pérez, 1991); (f) inflation and (h) over-exploitation of natural resources (Silva, 2017).

Nowadays, Capitalism has clearly been unable to meet the basic needs of the world population. Health, education, food or housing, whose distribution should be veiled by the State, clashes with the liberal principles that support Capitalism (Vilchez, 2017). In the mid-1990s (795 million) was the number of people suffering from famine, in 2017, the data amounted to 821 million (Food and Agriculture Organization of the United Nations [FAO], 2015; 2018). Needs that do not relate to any exchange value simply do not meet, that is, capitalism does not safeguard fundamental human rights (Vilchez, 2017).

The future of Capitalism requires (Piketty, 2014): (a) the adoption of the proposal on the progressive tax on wealth and (b) the temporality of property rights, which would mean a progressive decline in great wealth. If not taken, Capitalism could split in all societies (Barreiro, 2015). Finally, some authors (e.g., Rifkin, 2014) predict the end of Capitalism for the year 2050.

Research objectives

It is palpable the presence of Capitalism in the current society. Citizens are immersed in Capitalism directly or indirectly. People need to reason with this economic trend even if they do not want. In the reasoning, it has been highlighted the influence of the so-called mental

footnotes (e.g., Vilchez, 2019, 2018, 2016). Mental footnotes are pieces of implicit information that can condition and modulate the whole reasoning (Vilchez, 2015) and, in turn, guide daily decision making. We want to study how far and how deep is the influence on the current society cognitive processing of the mental footnotes related to Capitalism inserted in the work of Adam Smith (2007/1776).

METHOD

We used two research methodologies: qualitative and quantitative ones. First of all, in order to identify the mental footnotes related to Capitalism inserted in the work "La Riqueza de las Naciones" ("The Wealth of Nations"; Smith, 2015/1776), a quantitative/qualitative analysis of the frequency of concepts within the text was taken. Secondly, for measuring the weight--in the cognitive processing of the participants--of each mental footnote extracted from the text, an experimental task (quantitative analysis) was designed. In this task, participants had to decide (before a particular sentence, where the concept was inserted [mental footnote]) if the statement presented was real or unreal in the current society.

Qualitative research

Procedure and materials

In order to identify and extract of the *most relevant* mental footnotes of the text (in its Spanish version, "La Riqueza de las Naciones"; Smith, 2015/1776), a frequency analysis of the words was carried put (by using R i386 3.6.1 software). Once the most frequent word of the text (*price*) was selected, every statement in the text--which contains *price*--was also analyzed. In this sense, sentences before or after the statement (where the concept of *price* was inserted) were added, for clarifying their semantics. Finally, for the translation of the mental notes from Spanish to English, the English version of the "An Inquiry

into the Nature and Causes of the Wealth of Nations" (Smith, 2007/1776) was used.

Quantitative research

Participants

Fifteen University students aged 19/21-years-old (M=19.4, SD=0.63; 11 females) participated in this stage of the study. All participants signed the informed consent and received no monetary reward for their contribution. All subjects reported normal or corrected-to-normal vision and hearing, and were naïve to the purpose of the experiment.

Stimuli

The 82 mental footnotes (obtained in the qualitative research stage; see Table 1) were presented in the decision task. All sentences were shown centered on a computer screen. The distance to the monitor was approximately 85 cm, the capital letters of the text were written with 1.06 cm in height, which would result in 0.006 visual angels for each character. After each mental footnote, two kinds of statement were presented in red: (a) "this statement is real in the current society"; or (b) "this statement is unreal in the current society". The words real and unreal were highlighted in bold in order to help participants to focus on the realistic/unrealistic entity of the previous mental footnote presented. The aim of this procedure was to isolate and to clarify only participants' Response Times (RTs); not their ability to read.

Procedure and materials

The experiment followed a decision task paradigm. Participants were seated in front of a computer screen and (after fulfilling the informed consent) were given the instructions of the task, which specified that a number of sentences would be presented until participant's response (spacebar). Subsequently, the two

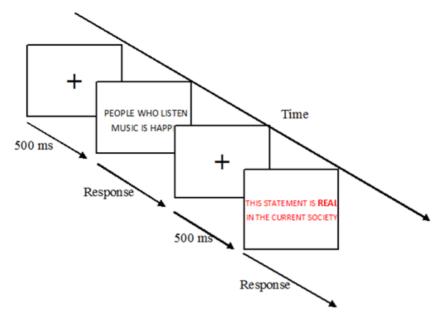


FIGURE 1. Schematic of the decision task.

Note: Presentation sequence of the task: fixation point, mental footnote, fixation point, agreement/disagreement to the statement presented.

possible statements of "this statement is real in the current society" or "this statement is unreal in the current society" would appear. Participants had to decide then (by pressing the key "p" or "q") if they agreed or disagreed (respectively) to these two kinds of asseveration (once at the time). Figure 1 shows the sequence of trials.

A practice block with 10 trials (to familiarize participants to the task) started the experiment. These practice block contained irrelevant mental footnotes such as *people who listen music is happier* or *having a degree makes it easier to work*. The experimental block consisted on the 82 mental footnotes (from the previous stage; see Table 1) followed by the statements "this statement is real in the current society" or "this statement is unreal in the current society". Therefore, 164 mental footnotes were randomly presented in the experimental block.

The software used to present stimuli and record participants' responses was OpenSesameTM

(Mathôt, Schreij, & Theeuwes, 2012). An HP Intel® Core™ 2 T5500 (1,66Ghz@1,66GHz; 0,99 RAM GB and Mobile Intel® 945 Express Chipset Family screen adapter).

Research design

Participants were presented the two kinds of decision statement for each mental footnote; first Independent Variable (IV), named Current presence of mental footnotes (with two levels: "this statement is real in the current society"/"this statement is unreal in the current society"). By using a cluster analysis of participants' RTs to those asseverations, two groups were made. This clustering constituted the second IV (manipulated "by selection"), which was named Kind of mental footnote (with two levels: "Strong mental footnotes"/"Moderate mental footnotes"). The variables measured (Dependent Variables; DVs) were the count of participants' choices

TABLE 1. Mental footnotes obtained in the qualitative research.

Mental footnotes related to price

A tax, however, upon the profits of stock employed in any particular branch of trade can never fall finally upon the dealers, but always upon the consumers, who must be obliged to pay in the price of the goods the tax which the dealer advances; and generally with some overcharge.

Abundance, therefore, renders provisions cheap, and encourages a great number of workmen to settle in the neighborhood, who find that their industry can there procure them more of the necessaries and conveniences of life than in other places. The work of the materials and manufacture which the land produces, and exchange their finished work, or what is the same thing the price of it, for more material and provisions

As any particular commodity comes to be more manufactured, that part of the price which resolves itself into wages and profit comes to be greater in proportion to that which resolves itself into rent.

As the price of any commodity rises above the ordinary or average rate, the profits of at least some part of the stock that is employed in bringing it to market, rise above their proper level, and as it falls they sink below it.

As the wages of labor are everywhere regulated, partly by the demand for it, and partly by the average price of the necessary articles of subsistence, whatever raises this average price must necessarily raises those wages.

As whatever part of it remains after paying the rent of the land, and the price of the whole labor employed in raising, manufacturing and bringing it to the market, must necessarily be profit to somebody.

At the same time and place the real and the nominal price of all commodities are exactly in proportion of the another, money is the exact measure of the real exchangeable value of all commodities.

But every branch of trade in which the merchant can sell his goods for a price which replaces to him, with the ordinary profits of stock, the whole capital employed in preparing and sending them to market, can be carried on without a bounty.

But loss must be the necessary consequence of improving land for the sake of a produce of which the price could never bring back the expense.

But the owner of that stock necessarily wishes to dispose of as great a part of those goods as he can at home. He thereby saves himself the trouble, risk, and expense of exportation, and he will upon that account be glad to sell them at home, not only for a much smaller price, but with somewhat a smaller profit than he might expect to make by sending them abroad.

But when a commodity comes to be sold for a third part of what had been its usual price, not only those who purchased it before can purchase three times their former quantity, but it is brought down to the level of a much greater number of purchasers.

By the price of labor, that all the wealth of the world was originally purchased.

Distinguish between real and nominal price, it is of none in buying and selling, the more common and ordinary transactions of human life.

Equal quantities of labor are always of equal value and price to the laborer.

Every other workman being exactly in the same situation, he is enabled to exchange a great quantity of his own goods for a great quantity, or, what it is the same, for the price of a great quantity of theirs.

High or low wage and profit are the causes or high or low price; high or low rent is the effect of it. It is because high or low wages and profit must be paid, in order to bring a particular commodity to market, that its price high or low.

If a foreign country can supply us with a commodity cheaper price than we ourselves can make it, better buy it of them with some part of the produce of our own industry employed in a way in which we have advantage.

If he sell it at a price which does not allow him the ordinary rate or profit in his neighborhood, he is evidently a loser bay the trade, since by employing his stock in some other way he might have made that profit.

(Continues)

TABLE 1. (Continued)

If in the progress of improvement, therefore, the real price of one species of food necessarily rises, that of another as necessarily falls, and it becomes a matter of more nicety to judge how far the rise in the one may be compensated by the fall in the other.

If the bounty did not repay to the merchant what he would otherwise lose upon the price of his goods, his own interest would soon oblige him to employ his stock in another way, or to find out a trade in which the price of the goods would replace to him, whit the ordinary profit, the capital employment in sending them to market.

If the quantity brought to market should at any time fall short of the effectual demand, some of the component parts of its price must rise above their natural rate.

In a year of sudden and extraordinary plenty, those masters, therefore, who want more workmen bid against one another, in order to get them, which sometimes raises both the real and the money price of their labor.

It is altogether for the benefit of the producer that bounties are granted upon the exportation of some of his productions. The consumer is obliged to pay, first, the tax which is necessary for paying the bounty, and secondly, the still greater tax which necessarily arises from the enhancement of the price of the commodity in the home market.

It is the natural effect of improvement, however, to diminish gradually the real price of almost all manufactures. That of the manufacturing workmanship diminishes, perhaps, in all of them without exception.

It is to be observed, as well as every other bounty upon exportation, imposes two different taxes upon the people; first, the taz which they are obliged to contribute in order to pay the bounty; and secondly; the tax which arises from the advanced price of the commodity in the home market.

Its great price generally arises from the wages of their labor, and the profits of all their immediate employers. By paying that price he indirectly pays all those wages and profits and thus indirectly contributes to the maintenance of all the workmen and their employers.

Labour measures the value not only of that part of price which resolves itself into labor, but of that which resolves itself into rent and of that which resolves itself into profit.

Labour was the first price, the original purchase-money that was paid for all things.

Nominal price of work consist in the quantity of money.

Rent, considered as the price paid for the use of land, is naturally the highest which the tenant can afford to pay in the actual circumstances of the land.

Rent, it is to be observed, therefore, enters into the composition of the price of commodities in a different way from wages and profit.

So price of all the commodities which compose the whole annual produce of the labor of every country, taken complexly, must parcel out among different inhabitants of the country, either as the wages of their labor, the profits of their stock, or the rent of their land.

Such combinations, however, are frequently resisted by a contrary defensive combination of the workmen; who sometimes too, without any provocation of this kind, combine of their own accord to raise the price of their labor.

The actual price at which any commodity is commonly sold is called its market price.

The children, during the tender years of infancy, are well fed and properly taken care of, and when they are grown up, the value of their labor greatly overpays their maintenance. When arrived at maturity, the high price of labor, and the low price of land, enable them to establish themselves in the same manner as their fathers did before them.

The consumer, too, is obliged to pay whatever enhancement in the price if those very productions this forced exportation may occasion in the home market.

The cultivators get a better price for their surplus produce, and can purchase cheaper other conveniences which they have occasion for.

The current prices of labor at distant times and places can scarce ever be known with any degree exactness.

The dearer what is exported is sold, the cheaper price will be what is imported.

The first sort of rude produce of which the price rises in the progress of improvement is that which it is scarce in the power of human industry to multiply at all. It consists in those things which nature produces only in certain quantities, and which, being of a very perishable nature, it is impossible to accumulate together the produce of many different seasons.

The increase in the wages of labor necessarily increases the price of many commodities, by increasing that part of it which resolves itself into wages, and so far tends to diminish their consumption both at home and abroad.

The laborer is rich or poor, is well or ill rewarded, in proportion to the real, not the nominal price of his labor.

The long time and the great expense which must be laid out in their education, when combined with this circumstance, necessarily enhance still further the price of their labor.

The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity, or the whole value of the rent, labor, and profit, which must be paid in order to bring it thither.

The market price will be liable to great fluctuations, will sometimes fall a good deal below, and sometimes rise a good deal above their natural price.

The market price will sink more or less below the natural price, according as the greatness of the excess increase more or less important to them to get immediately rid of the commodity.

The merchant adjusts the price of his goods, as well as he can, not to what those weights and measures ought to be, but to what, upon an average, he finds by experience they actually are.

The merchant who carries goods from the one to the other has nothing to consider but their money price, or the difference between the quantity of silver for which he buys them, and that for which he is likely to sell them.

The money price of labor does not fluctuate from year to year, but seems to be everywhere accommodated to the average or ordinary price of that necessary of life.

The money price of labour is necessarily regulated by two circumstances: the demand for labour and the price of the necessaries and conveniences of life.

The monopolist, by keeping the market constantly understocked, by never fully suplying the effectual demand, sell their commodities much above the natural price, and raise their emoluments, whether they consist wages or profit, greatly, above their natural rate.

The natural price itself varies with the natural rate of each of its component parts, of wages, profit, and rent; and in every society this rate varies according to their circumstances, according to their riches or poverty, their advancing, stationary, or declining condition.

The natural price, therefore, is, as it were, the central price, to which the prices or all commodities are continually graviting.

The occasional and temporary fluctuations in the market price of any commodity fall chiefly upon those parts of its price which resolve themselves into wages and profit.

The occasional fluctuations in the market price of some products arise from the same causes as the like fluctuations in that of all other commodities.

The operations of the speculative merchant are principally employed in endeavors to buy them up when he foresees that their price is likely to rise, and to sell them when it is likely to fall.

The price of each particular produce must be sufficient, first, to pay the rent of land and secondly, to pay the labor and expense of the labor.

The price of labor, it must be observed, cannot be ascertained very accurately anywhere, different prices being often paid at the same place and for the same sort of labor, not only according to the different abilities of the workmen, but according to easiness or hardness of the masters.

(Continues)

TABLE 1. (Continued)

The price of monopoly is upon every occasion the highest which can be got.

The price which the town really pays for the provisions and materials annually imported into it is the quantity of manufactures and other goods annually exported from it.

The profits of stock vary with the price of the commodities in which it is employed.

The real price of everything, what everything really cost to the man who wants to acquire it, is the toil and trouble of acquiring it.

The real price of labor consist in the quantity of the necessaries and conveniences of life which are given for it.

The second sort of rude procedure of which the price rises in the progress of improvement is that which human industry can multiply in proportion to demand.

The subsistence of the laborer, or the real price of labor is very different upon different occasions.

The third and last sort of rude produce, of which the price naturally rises in the progress of improvement, is that in which the efficacy of human industry, in augmenting the quantity, is either limited or uncertain.

The value of a share in a joint stock is always the price which it will bring in the market; and this may be either greater or less, in any proportion, than the sum which its owner stands credited for in the stock of the company.

The variations in the price of the labor not only do not correspond either in place or time with those in the price of provisions, but they are frequently quite opposite.

The whole of what is annually either collected or produced by the labor of every society, or what comes to the same thing, the whole price of it, is in this manner originally distributed among some of its different members.

The whole price of any commodity must still finally resolve itself into the price of labor, the price of that which resolves itself into rent and of that which resolves itself into profit.

There are causes which sometimes hinder the market price, that it, the actual price of the commodities, from coinciding exactly with what may be called their natural price.

Those trades only require bounties in which the merchant is obliged to sell his gods for a price which does not replace to him his capital, together with the ordinary profit; or in which he is obliged to sell them for less than it really cost him to send them to market.

Those, therefore, who have the command of more food than they themselves can consume, are always, willing to exchange the surplus, or, what is the same thing, the price of it, for gratifications of this other kind.

Though at distant places, there is no regular proportion between the real and the money price of commodities.

To the person who employs laborer, they appear sometimes to be of greater and sometimes with a smaller quantity of good, and to him the price of labor seem to vary like that of all other things.

Whatever tends in any country to raise the price of manufactured produces tends to lower that of the rude produce of the land, and therefore to discourage agriculture.

When by an increase in the effectual demand, the market price of some particular commodity happens to rise a good deal above the natural price, those who employ their stocks in supplying that market are generally careful to conceal this change.

When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labor and the profits of the stock employed in raising, preparing and bringing it to market, according to their natural rates, the commodity is the sold for what may be called its natural price.

When the quantity brought to market is just sufficient to supply the effectual demand and no more, the market price naturally comes to be either exactly, or as nearly as can judged of, the same with the natural price.

When they import more product than is wanted, they are sometimes willing to sell a part of it for something less than the ordinary or average price.

When, on the other hand, they import less than is wanted, they get something more than this price.

Yet sometimes particular accidents, sometimes natural causes, and sometimes particular regulations of police, may, in many commodities, keep up the market price, for a long time together, a good deal above the natural price.

Note: *Mental footnotes associated to the reality of the concept in the current society. ** Mental footnotes associated to both the reality and unreality of the concept in the current society. ***Mental footnotes associated to the unreality of the concept in the current society.

(agreement or disagreement to asseveration after every mental footnotes) and the same participants' RTs used for the clustering analysis. Therefore, the present study has two descriptive, quasi-experimental designs with: (a) 2 (Current presence of mental footnotes) x 2 (Kind of mental footnote) design for the count of participants' choices (DV); and (b) 2 x 2 (with the same IVs) design for the RTs (DV).

Data analysis

The total number of data rows was 2,460 (164 trials x 15 participants). The RTs were submitted to a k-means analysis, in order to cluster mental footnotes with equivalent pattern of responses (for creating the second IV). K-means is a vector quantization in which every observation belongs to the cluster with the nearest centroid (Mahajan, Nimbhorkar, & Varadarajan, 2009). The centroids are calculated based on the distribution of data, not only the mere mean of RTs. This calculation allows clustering mental footnotes that have similar form of response to. In this sense, two kinds of mental footnotes were clustered: "Strong mental footnotes" and "Moderate mental footnotes". This manner, the two groups of the second IV (Kind of mental footnote) were parted.

For the first DV, every choice in the decision task was counted. The aim was to clarify the majority of the decisions taken for each level of the Current presence of mental footnotes (first IV) and Kind of mental footnote (second IV) variables. On the other hand (for the second DV), we used Kolmogorov-Smirnov (K-S) test of goodness of fit to check the normality of the data distribution of RTs for each cluster group. This verification was made to decide the

application of a parametrical (Student's *t*) or non-parametrical (Wilcoxon signed-rank) test, in order to analyze the differences in RTs between the two level of Kind of mental footnote in each Current presence of mental footnotes level.

RESULTS

Oualitative research

In preliminary analyses, the ten most frequent words in the text were: (a) price (970); (b) work (933); (c) capital (864); (d) trade (548); (e) value (547); (f) silver (502); (g) land (491); (h) market (393); (i) profit (360); (j) income (358). Since price was the most frequent word, sentences purely related to that word (as theoretical concept) were considered, with the exception of those sentences referring to examples (e.g, The corn of France is, in the corn provinces, fully as good, and in most years nearly about the same price with the corn of England, though, in opulence and improvement, France is perhaps inferior to England). After this selection, 82 mental notes were considered (see Table 1).

Quantitative research

Cluster groups

Regarding "this statement is real in the current society" (from the variable Current presence of mental footnotes), the *k*-means test showed two groups of mental footnotes: Strong mental footnotes and Moderate mental footnotes. Eighty mental footnotes were moderate and two were strong. The Strong mental footnotes were (see

Table 2): (a) But every branch of trade in which the merchant can sell his goods for a price which replaces to him, with the ordinary profits of stock, the whole capital employed in preparing and sending them to market, can be carried on without a bounty; (b) High or low wage and profit are the

TABLE 2. Choices for "this statement is real in the current society" and "this statement is unreal in the current society".

"this statement is real in the current society"		
Strong mental footnotes	Count of agreements	Count of disagreements
(a) "But every branch of trade in which the merchant can sell his goods for a price which replaces to him, with the ordinary profits of stock, the whole capital employed in preparing and sending them to market, can be carried on without a bounty"**	12*	3
(b) "High or low wage and profit are the causes or high or low price; high or low rent is the effect of it. It is because high or low wages and profit must be paid, in order to bring a particular commodity to market, that its price high or low"	13*	2
"this statement is unreal in the current society"		
Strong mental footnotes	Count of agreements	Count of disagreements
(a) "But every branch of trade in which the merchant can sell his goods for a price which replaces to him, with the ordinary profits of stock, the whole capital employed in preparing and sending them to market, can be carried on without a bounty"**	5	10*
(b) "Those trades only require bounties in which the merchant is obliged to sell his gods for a price which does not replace to him his capital, together with the ordinary profit; or in which he is obliged to sell them for less than it really cost him to send them to market"	6	9*
(c) "Its great price generally arises from the wages of their labor, and the profits of all their immediate employers. By paying that price he indirectly pays all those wages and profits and thus indirectly contributes to the maintenance of all the workmen and their employers"	4	11*
(d) "The merchant who carries goods from the one to the other has nothing to consider but their money price, or the difference between the quantity of silver for which he buys them, and that for which he is likely to sell them"	2	13*
(e) "The whole of what is annually either collected or produced by the labor of every society, or what comes to the same thing, the whole price of it, is in this manner originally distributed among some of its different members"	7	8
(f) "The increase in the wages of labor necessarily increases the price of many commodities, by increasing that part of it which resolves itself into wages, and so far tends to diminish their consumption both at home and abroad"	5	10*
(g) "Those, therefore, who have the command of more food than they themselves can consume, are always, willing to exchange the surplus, or, what is the same thing, the price of it, for gratifications of this other kind"	5	10*
(h) "If he sell it at a price which does not allow him the ordinary rate or profit in his neighborhood, he is evidently a loser bay the trade, since by employing his stock in some other way he might have made that profit"	1	14*

(i) "The cultivators get a better price for their surplus produce, and can purchase cheaper other conveniences which they have occasion for"	7	8
(j) "When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labor and the profits of the stock employed in raising, preparing and bringing it to market, according to their natural rates, the commodity is the sold for what may be called its natural price"	4	11*
(k) "So price of all the commodities which compose the whole annual produce of the labor of every country, taken complexly, must parcel out among different inhabitants of the country, either as the wages of their labour, the profits of their stock, or the rent of their land"	8	7
(l) "As any particular commodity comes to be more manufactured, that part of the price which resolves itself into wages and profit comes to be greater in proportion to that which resolves itself into rent"	5	10*
(m) "When they import more product than is wanted, they are sometimes willing to sell a part of it for something less than the ordinary or average price"	6	9*
(n) "When, on the other hand, they import less than is wanted, they get something more than this price"	6	9*
(o) "The operations of the speculative merchant are principally employed in endeavors to buy them up when he foresees that their price is likely to rise, and to sell them when it is likely to fall"	4	11*
(p) "But loss must be the necessary consequence of improving land for the sake of a produce of which the price could never bring back the expense"	5	10*
(q) "Rent, it is to be observed, therefore, enters into the composition of the price of commodities in a different way from wages and profit"	7	8
(r) "The price of each particular produce must be sufficient, first, to pay the rent of land and secondly, to pay the labor and expense of the labor"	3	12*
(s) "The actual price at which any commodity is commonly sold is called its market price"	4	11*
(t) "The money price of labor does not fluctuate from year to year, but seems to be everywhere accommodated to the average or ordinary price of that necessary of life"	4	11*
(u) "The natural price, therefore, is, as it were, the central price, to which the prices or all commodities are continually graviting"	6	9*
(v) "Nominal price of work consist in the quantity of money"	4	11*
(w) "The real price of labor consist in the quantity of the necessaries and conveniences of life which are given for it"	7	8
(x) "The children, during the tender years of infancy, are well fed and properly taken care of, and when they are grown up, the value of their labor greatly overpays their maintenance. When arrived at maturity, the high price of labor, and the low price of land, enable them to establish themselves in the same manner as their fathers did before them"	9*	6
(y) "Such combinations, however, are frequently resisted by a contrary defensive combination of the workmen; who sometimes too, without any provocation of this kind, combine of their own accord to raise the price of their labor"	15*	0

Note: *Majority of agreements/disagreements in each mental footnote (in the case of). **Mental footnotes shared between "this statement is real in the current society" and "this statement is unreal in the current society".

causes or high or low price; high or low rent is the effect of it. It is because high or low wages and profit must be paid, in order to bring a particular commodity to market, that its price high or low. The strong real, mental footnotes (a) is shared with the strong unreal, mental footnotes. Regarding "this statement is unreal in the current society" (from the variable Current presence of mental footnotes), there were 25 Strong mental footnotes (see Table 2).

Participants' choices

Regarding "this statement is real in the current society", Table 2 shows that the strongest mental footnotes--that people think they are real--are: (a) and (b). On the other hand, participants disagreed to the majority of strong, unreal mental footnotes (which would make them believe that these statements are real in the current society [double negative]; see Table 2). The only strong mental footnotes that people think they are unreal were: (x) The children, during the tender years of infancy, are well fed and properly taken care of, and when they are grown up, the value of their labor greatly overpays their maintenance. When arrived at maturity, the high price of labor, and the low price of land, enable them to establish themselves in the same manner as their fathers did before them; And (y) Such combinations, however, are frequently resisted by a contrary defensive combination of the workmen; who sometimes too, without any provocation of this kind, combine of their own accord to raise the price of their labor. The strong, unreal mental footnotes (e), (i), (k), (q) and (w) have practically an even count of agreements/disagreements.

Comparisons in RTs between Moderate mental footnotes and Strong

Mental footnotes

Regarding "this statement is real in the current society", for the Moderates mental footnotes, Z(15) = 0.13, p = .2, the data distribution of RTs

follows a normal distribution. It is not the case for Strong mental footnotes, Z(15) = 0.24, p < .022. With regards to "this statement is unreal in the current society", for the Moderates mental footnotes, Z(15) = 0.15, p = .2, and Strong mental footnotes, Z(15) = 0.12, p = .2, the data distribution of RTs fits to a normal distribution.

Regarding "this statement is real in the current society", Wilcoxon signed-rank test confirms the significant difference between both groups of mental footnotes in their RTs, Z(14) = 2.16, p < .032; the highest RTs are for the Strong mental footnotes (M = 2,229.77 ms, SD = 1,148.51, compared to the Moderate mental footnotes [M = 1,635.29 ms, SD = 1,436.38]; see Figure 2). With regards to "this statement is unreal in the current society", there is non-significant difference between the Moderates mental footnotes and Strong mental footnotes for their RTs, t(14) = 1.48, p = .161.

CONCLUSIONS

The present study shows the only two mental footnotes related to Capitalism that are relevant in the current society. We could say that these two concepts are present in the cognitive processing of citizens nowadays. These mental footnotes require higher RTs in comparison to the rest of mental footnotes related to price in the Adam Smith's work, which in turn indicates deeper processing. On the one hand, people understand that, for every product, the entrepreneur has to recover their initial investment and to gain a profit (depending on the market); all of this without a bounty (real mental footnote [a]; see Table 2). On the other hand, the fact that entrepreneurs have to pay wages, raw materials and rents and they need to have profits determines the price of products (b).

On the other hand, University students do not believe that the children are kind of an instrument of the system (unreal mental footnote [x]). They do not think the human in fed as a mere value which has to be refund to society.

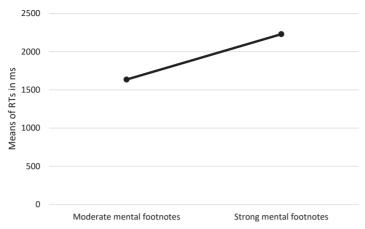


FIGURE 2. Means of Response Times (RTs) for each group for "this statement is real in the current society".

In this sense, students do not believe either that workmen agree between each other to artificially raise the price of their labor (y).

This original methodology (taken from the Experimental Psychology) means a technique to detect the relevance of determined concepts from classical works in the cognitive processing of the current society. One critic could be the fact that the ways of thinking are particular and depend on the status and characteristics of the people we study. In this sense, future research will be direct to analyze if the presence of the same mental footnotes (revealed as significant) are the same in other population. However, we can observe, with the current results, that the pattern of thinking in University young people show that there are certain mental footnotes that require more cognitive processing and, therefore, have a significant can influence on citizens' attitude and behavior.

ETHICAL STATEMENT

The authors declare no conflict of interest in this study. This study has been possible with the support of the *Dirección de Investigación de la Universidad de Cuenca* (DIUC) for the *XVIII Concurso Universitario de Proyectos de Investigación Fondos Semilla y Consolidación* (support n° 2040000 07 2144). The *Comité de Bioética en Investigación del Área de la Salud* (COBIAS) approved this research (approval n° 2019-0140EO-I). All participants signed an informed consent.

AGKNOWLEDGEMENT

This work has been possible thanks to funding from the Research Department of the University of Cuenca (Ecuador) within the XVIII University Program for Seed and Consolidation Research Projects Funds (funding number: 2040000 07 2144).

REFERENCES

Ashton, T. (1979). La revolución Industrial 1760–1830 [The Industrial Revolution 1760–1830]. Madrid, España: Fondo de Cultura Económica.

Barreiro, B. (2015). La rebelión contra las "élites" [The rebellion against the "elites"; Monograph]. Retrieved from http://ibdigital.uib.es/greenstone/collect/cd2/index/assoc/cidob007.dir/cidob0070.pdf

- Calderín, F., & Paz, A. (2018): El Capitalismo: surgimiento, características, desarrollo, transición, luchas de clases, crisis actual y alternativas [Capitalism: emergence, characterístics, development, transition, class struggles, current crisis and alternatives]. *Revista Caribeña de Ciencias Sociales*. Retrieved from https://www.eumed.net/rev/caribe/2018/05/capitalismo-surgimiento-desarrollo.html
- Castro, M. (2018). Economía, moral y derecho en la Europa cristiana: Justo precio, usura y capitalismo mercantil (siglos XII-XVIII) [Economy, moral and law in Christian Europe: Fair price, usury and mercantile capitalism (XII-XVIII centuries)]. Precedente, 13, 43–79. Retrieved from https://www.icesi.edu.co/revistas/index.php/precedente/article/view/3020/3456
- Felber, C. (2012). La economía del bien común [The economy of the common Good]. Barcelona, España: Deusto.
- Fulcher, J. (2004). Capitalism. A very short introduction. United Kingdom: Oxford University Press.
- Galván, F., & Martínez, L. (2001). Evolución y desarrollo crítico del sistema capitalista [Evolution and critical development of the capitalist system]. *Revista de economía mundial, 5,* 167–181. Retrieved from https://www.sem-wes.org/sites/default/files/revistas/rem5 9.pdf
- Gil, A. (2016). Reflexiones sobre el futuro del capitalismo siglo XXI [Reflections on the future of 21st century capitalism]. *Cuadernos Latinoamericanos de Administración, 12*(22), 60–67. Retrieved from https://www.redalyc.org/pdf/4096/409646647006.pdf
- Haupert, M. (2019) A brief history of cliometrics and the evolving view of the industrial revolution. *The European Journal of the History of Economic Thought*, 26(4), 738–774. doi:10.1080/09672567.2019.1630462
- Horning, A., & Schweickart, E. (2016). Globalization and the spread of capitalism: material resonances. *Post-Medieval Archaeology*, *50*, 34–52. doi:10.1080/00794236.2016.1169490
- Mahajan, M., Nimbhorkar, P., & Varadarajan, K. (2009). The planar k-means problem is NP-Hard. *Lecture Notes in Computer Science* 5431, 274–285. doi:10.1007/978-3-642-00202-1_24
- Manley, J. (2015). Globalization, Welfare States, and Socialism's Future. *Rethinking Marxism*, 27(4), 508–526, doi: 10.1080/08935696.2015.1076969
- Mathôt, S., Schreij, D., & Theeuwes, J. (2012). OpenSesame: An open-source,
- graphical experiment builder for the social sciences. Behavior Research
- Methods, 44(2), 314–324. López, J. (2014). Regreso a los orígenes del capitalismo a la luz de Adam smith, Cecil Pigou y Max weber [The return to the origins of capitalism in the light of Adam Smith, Cecil Pigou and Max Weber]. Teorías, Enfoques y Aplicaciones en las Ciencias Sociales, 7(15), 11–23. Retrieved from https://revistas.ucla.edu.ve/index.php/teacs/article/view/1556
- Organización de las Naciones Unidas para la Alimentación y la Agricultura. (2015). El
- estado de la inseguridad alimentaria en el mundo [The state of food insecurity in the world]. Roma, Italia: FAO. Retrieved from http://www.fao.orq/3/a-i4646s.pdf
- Organización de las Naciones Unidas para la Alimentación y la Agricultura. (2018). El
- estado de la inseguridad alimentaria y la nutrición en el mundo [The state of food insecurity and nutrition in the world]. Roma, Italia: FAO. Retrieved from http://www.fao.org/3/i9553es/i9553es.pdf
- Pfefferkorn, R. (2008). Adam Smith, un liberalismo bien temperado [Adam Smith, a well tempered liberalism]. *Revista Sociedad y Economía*, 14, 227–238. Retrieved from https://www.redalyc.org/articulo.oa?id=99616725010
- Piketty, T. (2014). El capital en el siglo XXI [The capital in the 21st century]. Méjico DC, Méjico: Fondo de Cultura Económica.
- Rifkin, J. (2014). La sociedad del coste marginal cero. El Internet de las cosas, el procomún colaborativo y el eclipse del capitalismo [The society of zero marginal cost. The Internet of things, the collaborative commons and the eclipse of capitalism]. Barcelona, España: Paidós.
- Gift, R., & Krislov, J. (1991). Are There Classics in Economics? *The Journal of Economic Education*, 22, 27–32. doi:10.1 080 / 00220485.1991.10844695
- Pérez, C. (1991). De la guerra del Golfo al orden mundial [From the Gulf war to the world order]. Buenos Aires: Grupo Editor Latinoamericano.
- Silva, A., & Mata, M. (2005). *La llamada revolución industrial [The so-called industrial revolution]*. Caracas, Venezuela: Editorial Texto.

- Silva, J. (2017). Crisis del bloque capitalista [Crisis of the capitalist bloc]. *Espacio Abierto*, 26(2), 297–317. Retrieved from https://www.redalyc.org/pdf/122/12252818016.pdf
- Slater, G. (2015). Education as recovery: neoliberalism, school reform, and the politics of crisis. *Journal of Education Policy*, 30, 1–20. doi:10.1080/02680939.2014.904930
- Smith, A. (2007). *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: NY: MetaLibri. (Original work published in 1776)
- Smith, A. (2015). La Riqueza de las Naciones [The Wealth of Nations] (Ed. & Trans. C. Rodríguez Braun). Zaragoza, España: Titivillus Ediciones. (Original work published in 1776)
- Veltmeyer, H. (2010). La crisis global y Latinoamérica: Problemas del desarrollo [The global crisis and Latin America: Development problems]. *Revista Latinoamericana de Economía*, 41(160),13–38. Retrieved from http://www.revistas.unam.mx/index.php/pde/article/view/16439
- Vilchez, J. L. (2015). Effects of mental footnotes on the trajectory movement in a driving simulation task. *Journal of Motor Behavior*, 47(3), 211–225. doi:10.1080/00222895.2014.974492
- Vilchez, J. L. (2016). Mental footnotes: Knowledge constructivism from logical thinking to personal beliefs and therapy. Research in Psychotherapy: Psychopathology, Process and Outcome, 19(2), 157–164. doi:10.4081/ripppo.2016.234
- Vilchez, J. L. (2017). The Solution for the Behavioural Constellation of Deprivation: The Popular and Solidarity Economy. *Psychology and Developing Societies*, *29*(2) 1–18. doi:10.1177/0971333617716841
- Vilchez, J. L. (2018). Mental footnotes. Knowledge constructivism: from logical thinking and personal beliefs to social rationality and spiritual freedom. *Journal of Religion and Health*, 1–19. doi:10.1007/s10943-018-0591-5
- Vilchez, J. L. (2019). Mental footnotes: knowledge constructivism from logical
- thinking to daily functioning. Review of Contemporary Philosophy, 18, 7-22. doi:10.22381/RCP1820191
- Yarrow, G., King, M., Mairesse, J., & Melitz, J. (1986). Privatization in Theory and Practice. *Economic Policy*, 1(2), 324–364. doi:10.2307/1344560
- Yegres, A. (2015). Filosofía, ilustración y Romanticismo [Philosophy, illustration and Romanticism]. *Revista de Investigación*, 39(86), 11–38. Retrieved from https://www.redalyc.org/pdf/3761/376144131002.pdf