

Hasan Gürak

Heterodox Economics 2

Alternative Analysis to the Mainstream
Blackboard Economics Based on the
Concept of *Creative Mental Labor*



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Heterodox Economics 2 consists of articles which are complementary to the subjects presented in the book titled *Heterodox Economics*, published in 2012. The aim is to present alternative economic approaches based on the concept of *Creative Mental Labor* that are intended to make a contribution to the emergence of a new economics. The analysis throughout the book is based upon the principle that the original source of all the value added to products (considering nature as a given), is the mental and physical inputs of labor that continuously create new technologies while at the same time making use of the available technologies.

The Author

Hasan Gürak, born in Istanbul, acquired an undergraduate degree with distinction in economics in 1977 from the University of Lund (Sweden). Besides working in the private sector he continued post-graduate studies in Sweden between 1977 and 1981. The author presented his Ph.D. Thesis at the University of Istanbul in 1991. Once returned to Turkey permanently in 1993, he started a career as an academic. Presently he is engaged in academic research in the field known as *Heterodox Economics*, aiming to develop alternative theories and analyses in mainstream economics.

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PREFACE

This book, **Heterodox Economics-2**, consists of eight articles, which are ‘complementary’ to the subjects presented in the book titled **Heterodox Economics** published in April 2012 by Peter Lang International, Germany and each section, though independent, is related to the others in presenting an unorthodox and alternative approach to mainstream doctrines in economics. The distinguishing feature of all sections is the concept of the laborer’s “**Creative Mental Labor**” which, more or less, has the same significance as the Marxist concept of “labor-power”. The reason for this is the consideration that the laborer’s “**creative mental labor**” is the source of all technological innovation which is the source of “long-term” economic growth.

Two other important and related concepts frequently referred to are “**technology-producing labor**” and “**technology-using labor**” for which we will use the shorter term “**laborer**”.

These articles present alternative views but do not make any claim to have found or to reveal the “**absolute truth**” in economics. There are, in fact, no ultimate or absolute truths in any science. Therefore, some criticism of the views presented is unavoidable, in fact, it is necessary for any further ideological development.

Obviously, there will be some criticism of the views presented by the supporters of mainstream economics. Hopefully the reader, regardless of her/his ideological commitment will read and evaluate the book with an open-mind and with the same degree of tolerance and indulgence that they would afford to the orthodox or mainstream theories. I would welcome and appreciate any constructive criticism in regard to any errors or shortcomings.

I’m grateful to Prof. Dr. Cihan Dura for his priceless comments and advice on the Turkish version of this book.

And special thanks goes to John Lee from Turgutreis for his patient and valuable “mental and physical labor” in helping with the English translation.

Subject content of the articles:

The “Introduction” presents an evaluation of the present economic system, its concepts and theories.

The first article entitled “**Production Factors-Productive Factors & Income Distribution**” discusses the basic concepts and issues such as labor-laborer, the interest rate and rent.

The second article entitled “**On Value and Price**” published in 2004 in YK-Economic Review, discusses the core terms in economics.

The third article entitled “**Creative Intelligence and Technology**” consists of two separate articles also published in YK- Economic Review: The first is entitled “**On Productivity Growth**”, (1999) and the second “**Economic Growth and Productive Knowledge**” (2000).

The fourth and fifth articles are reprint translations of Chapter-5 and 7 of my book entitled “**Ekonomik Büyüme ve Küresel Ekonomi**” (Economic Growth and Global Economy), published in 2006. Both are slightly modified to adjust to the concepts outlined in this book.

The sixth article entitled “Neoclassical Marxists?” questions whether the well-known economists Lucas and Romer were “latent Marxists” due to the similarities in their approach to the concept of “human capital”.

And the seventh and final article remarks on some of the negative impacts of the present economic system and offers some new insights.

Dr. Hasan Gürak

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INTRODUCTION

The richest person in this world is the one who is healthy and has true friends; not the person with highest amount of accumulated possessions.

Economic Science and the Human Being

One of the frequently asked questions of those who are interested in economic issues concerns the subject matter of economics. In other words, what is economics about? What does it investigate? And which are the main areas of interest?

But, before going any further, it would be appropriate to evaluate whether economics is a branch of the natural sciences? If it is, is it governed by the same rules that apply to other sciences such as physics or astronomy? In other words, is it possible to make observations or to measure the outcomes reliably? Can the tests be repeated under the same conditions and get the same results? And is it possible to construct “universally valid” laws?

Let us begin by introducing definitions of “science” and “technology”?

Science

Science is, according to the Merriam Webster Dictionary; “knowledge or a system of knowledge covering general truths or the operation of general laws especially as obtained and tested through scientific method”. Science is systemized knowledge concerned, normally, with the physical environment and its phenomena, which can be tested using scientific methodology.

Running tests and measuring results is essential for scientific research. However, although there are some similarities, the methodology used in the physical sciences differs vastly from the methodology applied to economic research. In spite of the claims of mainstream economists, it would be a fruitless task to attempt to repeat a test “under the same conditions” as in done in the physical sciences in order to draw universally applicable laws. Because, economic events never repeat themselves exactly, except in the minds and models of the neoclassical economic academicians. In other words, there are no exact replicas of economic events. At best one can observe similarities in some trends. There is no social science including economics which is subject to pure cause

and effect relationships; the concepts of “intuition”, “perception” and “interpretation” play an important role in the study and in the interpretation of results in social sciences. Therefore, when studying social events, one should always be aware of the distinctive differences in the research methodology between the physical sciences and the social sciences. Perhaps, it would be more appropriate to refer to economics as the “the study of social knowledge” instead of referring to it as a “social science”. However for the purposes of this study we shall continue to use the commonly accepted term “social science” throughout.

The Accumulation of Knowledge

The total amount of the already accumulated knowledge, whether it concerns the “natural sciences” or “social sciences”, constitutes a “reservoir of knowledge” readily available channeled for the benefit of mankind. This reservoir of accumulated knowledge is the result of the research, discovery and inventions over a period of thousands of years. Each and every contribution was a small contribution at the time. None descended as manna from heaven as a free gift to mankind. This accumulated knowledge was created by the unique mental ability of humans. Each contribution to this reservoir of knowledge has helped to increase our understanding and control of our environment and also helped to create new useful products for the benefit of mankind.

This drive to increase our “scientific” knowledge with reference to nature can be explained under four headings:

1. to describe;
2. to understand;
3. to explain a phenomenon; and
4. to predict.

Technology

Since our concern is with economics, the discussion of “technology” seems to be more interesting than science per se. However, it is often difficult to draw a distinct line between technology and science. Technology, in general, may be defined as “the knowledge required to control and change our environment”. In a narrower sense which is directly related to economics, it can be defined as “the knowledge required for the production of products”; that is “**the knowledge of production**” or “**productive knowledge**”. It can be regarded as the application of knowledge for commercial purposes in contrast to scientific knowledge which has no direct relationship to commercial interests.

The sole purpose of an enterprise making use of the available technology is to maximize its long term profits. In other words, the main difference between scientific knowledge and productive knowledge is that productive knowledge is "profit driven". In modern societies, technologies are generally invented, to maximize profits. In a dynamic process, new technologies are constantly being introduced employing the successive stages of research, invention and innovation which lead to the introduction of either "**new processes**" or "**new products**".

Sometimes a new technology in the form of a "new process" reduces the unit production cost which may or may not, lead to a price reduction. The most striking examples for this kind of new technology can be seen in the computer or mobile phone sectors. Sometimes a new technology introduces entirely new products which are often accompanied by a new production process. Such technological developments exert a positive impact in the markets which keep up the demand high for. As a result, the pessimistic predictions of some economists on the decline of the profit rate and economic stagnation in the long term never take place. In other words, the major determinant factor of this lack of decline in profits and the absence of stagnation is the continuous introduction of new technologies which are derived from human "**creative mental labor**".

Creative Mental Labor & Technological Progress

The single most important input of production which leads to long term welfare growth is productive knowledge i.e., technological progress. As we emphasized previously, new technologies are the products of human creative mental ability. However, the creation of a new technology alone is not sufficient to secure welfare growth. There is also a need for an appropriately qualified labor force in order to make efficient use of the new technologies. Access to a qualified labor force is as important as the creation of a new technology because in the absence of an appropriately qualified labor force new technologies cannot be used efficiently.

Software

The "software" sector has been one of the fastest growing sectors in the last two to three decades and this process seems likely to continue. Software can be described as the indispensable intermediary tool to make computers and electronic devices functional and operational. In other words, software is an intermediary input required to make a computer or an electronic device work. Each computer

or electronic device requires an “appropriate” software configuration to become functional and to meet the needs of user.

Software can be analyzed in two groups:

1. Software specific for a particular device (“**device-specific**” software):
2. Software for the communication between the device and the user (“**user-specific**” software).

The first, i.e., “device-specific” software is designed to make a device functional. It prepares the device for the user by setting into motion various internal operations and by facilitating links between them. It displays the icons on the screen and prepares the system for further instructions from the user. A computer or an electronic device may sometimes require more than one software package in order to boot up and prepare the device for the individual use.

The latter, the “user-specific” software can be further divided into two major groups:

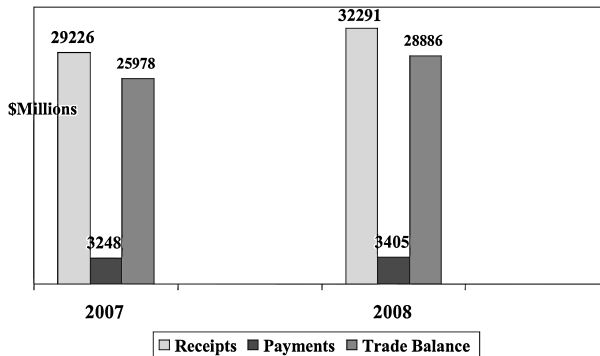
2-a: **General “user specific” software**, e.g., Windows, Games, Powerpoint, etc..

2-b: **Commercially “user specific” software** which is software designed specifically for a bank or a trading firm, or an assembly line or for the exchange markets, etc.

Figure-1 shows us the annual receipts and payments of the ‘US General Use Software’ in years 2007 and 2008. According to the data supplied by the Bureau of Economic Affairs, the receipts of the USA increased from about \$ 29 billion to about \$ 32 billion which shows a \$ 3 billion increase. The payments abroad also increased by about \$ 3 billion, increasing from about \$ 26 billion to \$ 29 billion. This data gives us a clear picture of the growing importance in global trade of software transactions.

As the BEA data shows clearly, both the value and the volume of the global trade in software has been steadily increasing. The expansion of the “device-specific” software sector is closely and directly associated with the expansion of the computer and electronic device sectors. However, the analysis of this important and constantly growing sector will not be dealt with in this study. The reason for this is that “device-specific software” for the computers and electronic devices are considered to be “complimentary” components. To put it another way, this type of software is normally introduced into market along with the hard-ware, i.e., the goods. Therefore, it seems to be sensible not to consider the device-specific software as a product independent from the main product.

U.S. General Use Software Receipts and Payments in 2007 and 2008(BEA)*



*Total for affiliated and unaffiliated

U.S. Department of Commerce | International Trade Administration

Figure: 1 Source:

[http://web.ita.doc.gov/ITI/itiHome.nsf/ea087b1279d5fb1985256ce00053c33c/8f32a883f9024ddc85257359004b2775/\\$FILE/Software%20Trade%20Data%20Tutorial.ppt#256,1,Software Trade Data Tutorial, 2012-05-30](http://web.ita.doc.gov/ITI/itiHome.nsf/ea087b1279d5fb1985256ce00053c33c/8f32a883f9024ddc85257359004b2775/$FILE/Software%20Trade%20Data%20Tutorial.ppt#256,1,Software%20Trade%20Data%20Tutorial,2012-05-30)

On the other hand, the ‘user-specific’ software displays some differences from the ‘device-specific’ software. For example, ‘user-specific’ software prepared for a ‘specific’ enterprise can be purchased on the market as an ‘independent’ component of the hardware. In other words, the ‘user-specific’ software can only be used by the “specific” user which now gives it a monopoly control over this specific software. Therefore, the “user-specific” software is not subject to trade in the market like any other product which is normally subject to competition.

Although we are aware of the importance of both the “device-specific” and “user-specific” software trade in the global market, we shall not deal with either of these issues at this particular juncture.

A Brief Evaluation of Economic Ideologies

The beginning of economic relations can be traced back to a period when man began to produce products in excess of his basic needs. With this surplus of

products they could enter into an exchange relationship with others who also had some surplus which was in demand by other consumers. Economics started to become accepted as a separate discipline in the late 18th century when Adam Smith's works came to the fore about 230 years ago. We shall follow suit and accept Adam Smith as the founder of modern economics with the introduction of his well-known book entitled "*An Inquiry into the Nature and Causes of the Wealth of Nations*". As the title of the book says, it was about "The Wealth of Nations", i.e., how the wealth is created and distributed amongst classes, as opposed to today's neoclassical approach which analyzes "distribution" in terms of "scarcity".

Adam Smith's economic system was first challenged by David Ricardo who made significant contributions to economics especially on the subjects of value, functional income distribution and international trade. However, Adam Smith's as well as David Ricardo's ideas were blown apart shaken from their foundations by Karl Marx in the 19th century. The neoclassical theories which came into being in the 1870s came to the rescue of the then economic theory which had been under attack from Marx. Since then, some economists began to believe that economics is a "science" just like astronomy and physics with "universally" applicable laws. The neoclassical school came a long way in refining and developing their doctrines and models which are largely based on the Newtonian laws of physics. Nowadays, it is accepted that Newtonian physics as the benchmark for scientific method has been developed and changed substantially since Newton's time. However, neoclassical economists still seem to be loyal to the Newtonian scientific methodology.

One of the basic principles a student of economics learns from the mainstream textbooks today is that markets are functioning "perfectly"; there are countless small producers who have no power to influence the quantity supplied or to determine the price, technology used is the same and available to all. The present "scientific" system alludes to no historical events which might have influenced today's conditions. Everybody behaves rationally making decisions based on "perfect" knowledge. The consumers are "selfish", "non-emotional" and "rational" in the sense that they always attempt to maximize their own benefits. Human psychology plays no role in the economic life and behavior of the robotic "homo economicus". All these features belong to the "imaginary world of neoclassical doctrine" and are a fallacy.

However, it would be a mistake to dismiss the neoclassical doctrine entirely on the ground of it being a fallacy. The doctrine can make useful contributions to economic science if it is treated as a "normative theory" instead of a "positive theory" as the neoclassical economists claim.

Since it is not our purpose to evaluate neoclassical theory, let us continue our investigation into the “subject matter of economics”.

The Subject Matter of Economics

According to the mainstream economic introductory textbooks the subject matter of economics is defined as “**the allocation of scarce resources**”. That is to say, it claims that man's "needs" are unlimited while the resources required to meet these needs are scarce. Thus it is the task of economists to secure and allocate these scarce resources in an efficient way. Let us consider this proposition closely to see whether it is true.

First of all, it is not “the needs of man” but the indoctrinated "wants" of an insatiable man, inflated and promoted by the "wants of commercial enterprises”, that is unlimited. The basic needs of man can generally be described as, the need for nourishment, the need to find shelter to live and the need to protect his/her life. Mankind cannot survive if these basic needs are not met. There is, without doubt, a close relationship between the economic-technological development level of a community and the quality as well as the quantity of its basic needs. For example, it would be irrational to expect people to live in primitive dwellings when they have the opportunity to live in much better quality residences equipped with modern household appliances. Similarly, the quality of food, drink and clothing are naturally much higher today than in the past. Eating delicious food with a knife and fork and living in a well-designed and decorated house are now considered among the basic needs depending on the development level of community, though they may be described as basic needs of a “secondary grade”.

What about the physical consumer items such as TV sets, mobile phones, computers, automobiles and service items such as touristic trips, listening to a musical, or watching a film? Can they be considered as “the basic needs” of man? The answer is certainly, NO! These are goods and services which make life easier, more comfortable and pleasant but cannot be classified as "basic needs". They might be beneficial in many respects but life can go on smoothly even without them. The demand for such consumer products depends on the prices of products and the purchasing power of consumers which are in many cases influenced by commercial advertising. For example, there is a continuously growing demand for the services of "new generation" mobile phones and tablet computers which are marketed as a “natural part of modern life” so if we don't have one, our quality of life would be lower. Nowadays it certainly appears to be a “natural” demand to have access to contemporary communication items.

However, "not" possessing these items would not make life miserable or intolerable. The demand for such consumption items are generally "created" and "inflated" by commercial advertising and engenders a "more and more" attitude towards consumption within the system.

Let us return to the subject matter of economics, whether it is the allocation of scarce resources, as the neoclassical textbooks claim. The related question that pops immediately to mind is: **What are these "scarce resources"?** If it is the "**number of laborers**" that is scarce, the remedy is at hand: eliminate all barriers to worker mobility, the problem is solved. If the reference is to the scarcity of "**qualified laborers**", encourage policies aimed at improving the skills of the labor force; the problem will be overcome sooner or later. Let us assume that the problem is the scarcity of "**capital-goods**". No big problem. By increasing the supply of capital-goods, the problem will soon wither away. It would be highly irrational to assume that "**capital in the form of money**" is scarce, because there is more than enough money circulating in the global financial markets to make (not to earn) more money from money. Besides, there is always the option to increase the money supply by printing money or by using the existing banking methods.

If none of the "supplies" mentioned above is scarce, then the concept of "scarcity" might be referring to the availability of natural resources. If so, then we should be looking for the appropriate methods to allocate these scarce natural resources in an efficient and fair way to all countries. Although the scarcity of natural resources is a serious global economic problem, it does not seem to be what the neoclassical textbooks refer to. Well, **just what are these "scarce resources"** that constantly trouble the minds of mainstream economists?

There does indeed seem to be a scarce production resource which should not be scarce at all; "technology". Technology was broadly defined above as; "the knowledge required in order to control and to change our environment", and in a narrower sense, as the "productive knowledge" of production. As we know, productive knowledge e.g., technology, is produced by the creative mental abilities of the human mind. As a product of the human mind knowledge is accumulated over thousands of years by millions of marginal contributions to the "reservoir" of knowledge. As such it should be available to all mankind without restriction or at least with only a limited level of restriction.

Could it be that **technology**, i.e., **productive knowledge**, owned like a "property" or a "commodity", the use of which is restricted by patent rights, is the "**scarce production resource**" for which we are searching?

If technology is this critical scarce resource, then we may find the roots of many major economic problems in imperfect technology markets. Accordingly,

the solution can be found by doing away with these imperfections in the technology market.

Actually, the invention and development process of a new technology is a costly process, especially in dynamic sectors such as bio-chemistry, avionics, computers and genetics. However, once it is produced, the distribution costs of a new technology in the form of "knowledge" are quite low, if not zero. Yet, the system used in dealing with patent rights of new knowledge makes the availability of it to other producers impossible unless the "owner of technology" decides to share it. The right of patent entitles the owner of the new technology to exclusive privileges in the market until the other enterprises catch up, if they can. Meanwhile, the owner can exert a monopolistic power, determining both the price as well as the quantity supplied in line with his or her own interests.

Yet, as we know, no knowledge drops from heaven and no new "productive knowledge", e.g., new technology is produced from the "exclusive knowledge" of the technology-producer. Any new knowledge that is created is always a marginal contribution to the reservoir of knowledge accumulated over thousands of years. In the absence of such an immense reservoir of knowledge, no one would be able to make the new inventions we frequently come across every day. Therefore, granting exclusive privileges to an enterprise to make "monopoly profits" and to control the markets seems unfair and needs to be reevaluated on "ethical grounds".

And that's not all there is to it. Any new knowledge created and patented is due partly to contributions from the society in which it is developed. Because, if the society were unable to provide the appropriate technological infrastructure, the educational facilities and the general economic and financial environment, the development of many new technologies would not even have been imagined in the first place. All these factors involved give a society "ethical" right to make claims on the new technology and the privileges granted to it.

In short, given the facts stated above, economists should start reconsidering the exclusive patent right system on ethical grounds in regard to all those who contribute to a new technology. If exclusive privileges are going to be granted enabling monopolistic profits, then all the parties concerned should get their "just and fair" share.

The Subject Matter of Economics - Reconsidered

Economics is a social science studying all kinds of economic relationships within the society. To be more specific, economics is about every economic issue ranging from the supply of products, to consumption, employment, inflation, trade, etc. with the aim of solving problems, maintaining stability and predicting

future developments. A broader scientific definition should cover all kinds of micro and macro-economic transactions, any cause-effect relationships in economic events, welfare growth and the elimination of any actual or potential problems. The purpose of all these efforts is to maximize the economic interests of human beings and to secure a prosperous environment. Therefore, human beings are always at the center of any economic system; everything is for them.

A glance at actual economic transactions clearly shows us that contemporary man often behaves quite “irrationally” in terms of his sequence of priorities, where, often, material interests take precedence over human values and ecological balance. There is no doubt that the economic system in which we live has a lot of influence over the formation and the implementation of “values”. However, one should not forget that we created this system; it has not fallen as manna from heaven.

Whose Interests Have Priority in the System?

As mentioned before, the main objective of the economic system is to maximize the income and welfare of men but of which men exactly? More specifically, to which economic group’s or class’s interests should priority be given?

Should it be to;

1. The capital owners who bring into being production? or
2. The working people, who constitute the majority of the population?

Alternatively, should society give priority to the capitalists whose only interest is the maximization of profit, or to maximize the interests of those people who actually add value to the products that are supplied, i.e., the laborers?

Historically, we observe that the political sector has always been fed by the economic sector. In other words, the political and economic sectors are always in cahoots with each other. The more economic power one economic group gains the more political power it can get, control and direct. The capitalist's rising economic power in the 17th and 18th century had gradually taken over the Mercantilist's political power by reshaping the political, legal and bureaucratic structure in line with their economic interests. Since then, the wheels of the economic order have been spinning in order to serve primarily the interests of the capital owners.

In the past, laborers gained some improvement in their economic conditions in lieu of their increasing political power. However, the actual economic and political power of the capital owners is still much greater compared to the working people’s economic and political power which in turn reinforces the dominance of the interests of one relatively small segment of the population. For ex-