From Some Theoretical Consequences of the Rediscovery of Economic Justice and Hoarding to the Construction of Concordian economics

This paper reintroduces Economic Justice and Hoarding in economic analysis and describes the following consequences of this operation. The discovery of 1. The economic wisdom of the Mosaic Laws of the Jubilee; 2. The economic wisdom of the Aristotelian project of economic justice; and, 3. The inner dynamics of Keynes' General Theory. The discovery also makes possible 4. The transformation of mainstream economics into Concordian economics; 5. The reconstruction of the theory of economic justice as a guide to economic policy; 6. The construction of specific economic rights and responsibilities as a guide to daily action; 7. Somism as the reconstruction of men and women in the social context; 8. Concordianism as a means to go beyond Capitalism and Socialism/Communism; and 9. The insertion of Concordian economics and Somism into the transformation of Rationalism into Relationalism as an ongoing effort to integrate everything with everything. This integration is performed here in the fields of economics, jurisprudence, sociology, and politics with the assistance of firm rules of logic and epistemology. (JEL A12, E00, K00, N10)

Keywords: *post-Keynesian economics; methodology; history of economics; microeconomic behavior; aggregative models; law and economics; economic development.*

Introduction

Aim. This paper rediscovers the ancient presence of Economic Justice and Hoarding in economic analysis. Many consequences follow from this rediscovery. The most important perhaps is the construction of Concordian economics. Concordian economics is an attempt to overcome the deep crisis that exists in mainstream economics as well as, by natural extension, in our political discourse and our "high culture." Nothing highlights the depth of this crisis better than these observations by Paul Krugman (2014): "The economics profession has not… covered itself in glory these past six years. Hardly any economists predicted the 2008 crisis… More significant, many… economists were claiming… that nothing like this could even happen. Furthermore… (they were) unable to agree on a response. They'd had 75 years since the Great Depression to figure out what to do if something similar happened again, but the profession was utterly divided when the moment of truth arrived." In a variety of contexts, we are currently witnessing a repetition of that crisis—only made worse by the concurring coronavirus pandemic.

Literature review. The literature plumbing the depths of the crisis is vast and well known. Rather than reviewing it in its many ramifications, we shall go to the root cause of the crisis. We will find that the origin of our current crisis resides in the intellectual prestidigitation that, perhaps unawares, was operated by Locke, deepened by Adam Smith, and perpetuated by all modern economists. Locke, undoubtedly influenced by the Enlightenment's bias against abstraction and in favor of measurable practicalities, **abandoned** the millenarian Aristotelian project of *economic justice* and focused our attention on the conditions that yield the *justice of property rights*. This is a project that was soon assaulted by the intellectual predecessors and followers of Karl Marx, who preferred to focus on the *injustice* of property rights.

Adam Smith deepened the birth of (or was it the descent into?) the modern world by obliterating the meaning of Hoarding in economics. Adam Smith (1776) conflated two words, two irreconcilable economic phenomena—Hoarding and Investment (capital of old)—into one: "accumulation"[1] and, by equating Saving to Capital/Investment,[2] he made Hoarding magically disappear from the economic discourse.[3] When one accepts, as Adam Smith proposed, that all what is saved automatically forms an "accumulation" of one's wealth, Saving *merges* with the idea of capital, personal capital, a word that today is better understood as Investment. It is thus that Hoarding disappeared from economics. Since **all** that is not consumed, being saved, is an investment, Hoarding does not exist; most clearly, there is *no room* for it in formal mathematical discourse.[4]

There we stand today. Economists, who, blinded by the splendor of Adam Smith's work have lost the anchor of Hoarding and, being "pure" scientists, they stay away from the law—hence, they know not of property rights—are tossed by the struggles between two extremists: Individualists, who care almost exclusively about property rights, pitted against Collectivists, who—through ad hoc measures—want the Government to settle things right. That is the core of the disquisitions that continue unabated between followers of Hayek and followers of Keynes. Voices are raised a decibel or two when the conversation naturally spills over into the political context that extolls the miracles of Capitalism versus the miracles of Socialism/Communism. Our "high culture," having thrown away with Hegel the north star of the principle of non-contradiction is of no assistance in helping us decide vital questions of economics and politics. In high culture, "everything goes." *Therefore,* in economics and politics everything goes. **Hence economics loses its purpose, which is the struggle against the slavery of the human soul to Mammon.**

There has been a constant crisis in economics since the publication of Adam Smith's *The Wealth of Nations* (1776). The succession of almost entirely new theories has been incessant. As Philip Pilkington (2014), a bright British economist, has pinpointed, "Mainstream economics moves forward not through logical development and integration, but through forgetting."

A long string of attempts to free the human soul from slavery to Mammon, older still than the last 500 years, have not had durable successes. Nor will

[1]See, esp. B. II, Chs. 1 and 3 and B. V, Ch. 3
[2]*Ibid.*, Bk. II., Ch. 3, pars. 14-18.
[3]*Ibid.,* Bk. V., Ch. 3, pars. 1, 2, 9.
[4]For confirmation, see Keynes, 1936, p. 63. But, can a banana that is not consumed be saved (forever)?

they—until we achieve, as Concordian economics proposes, a paradigm shift from money controlling people to people controlling money.

Mysterious as it may seem, it all hinges on the rediscovery of Hoarding. Thus,

- ✓ Looking back in history, this discovery helps us recover the economic wisdom of
  - the Mosaic Laws of the Jubilee; and
  - the Aristotelian project of economic justice.

- ✓ Looking at the present, it helps us
  - understand the inner dynamics of Keynes' General Theory; and
  - transform mainstream economics into Concordian economics.

- ✓ Looking at the future, it helps us reconstruct
  - the theory of economic justice as a guide to economic policy; and
  - to specify economic rights and responsibilities as a guide to action.

- ✓ Dipping into the culture wars, Concordian economics helps us rediscover that human beings, rather than being "wolf to wolf, " are "social" beings; thus the discourse leans toward
  - Somism, as a construction that sees men and women in the social context; and
  - Relationalism, as an ongoing effort to integrate everything with everything.

Methodology. Using age-old principles of logic, stern rules of epistemology, and firm guidance from linear and nonlinear math and chaos theory, we shall rediscover Hoarding and build Concordian economics as a transition from the very old to the very new. The core of this change is the transformation of such a fundamental proposition of mainstream economics as "Saving equals Investment" into a relation of complementarity between Hoarding and Investment.

Findings

The Rediscovery of Hoarding

Saving in economics is such a vague idea that it is amenable to literally 100,000 definitions (Goldsmith, 1955-56, pp. 68, 69n). Using one, what happens to the other 99,999 definitions? They remain there to bedevil our understanding of economics. Stern rules of epistemology and logic compel us to transform the vague *idea* of Saving into the firm *concept* of Saving, by assigning to it one comprehensive, non-contradictory meaning—and one meaning only (Kant, 1966, pp. 66-7).

The transformation of the vague idea of Saving into the firm concept of Saving is achieved through a long, complex—reproducible—logico-mathematical set of operations that offers a three-step solution to the problem. Step one: Focusing on the economic reality, rather than ad hoc theories, one discovers that Saving must denote all wealth that—at the moment of observation—is in a passive, nonproductive state; this is wealth that can indeed be "saved" for an indefinite amount of time. Step two: This definition of nonproductive wealth calls for a specific word. The traditional word that covers static, nonproductive wealth is Hoarding. Step three: The word Saving becomes superfluous; it is expunged from the world of economics and relegated to the world of accounting (Anon. 2002, 2009, 2016, pp. 69-137; hereinafter EP).

Thus one automatically rejects **the control** that the relation of equality between Saving and Investment *automatically has over our minds* and, ultimately, one automatically steps out of intellectual framework dictated by what is openly acknowledged as being the S = I quagmire.[5]

Thus, we achieve the transformation of the vague idea of Saving into the firm concept of Hoarding. The transformation of the equality of Saving to Investment into the relation of complementarity between Hoarding and Investment is accomplished within the structure of Concordian economics. Now is the time to give a look back in history.

Looking Back in History

Four Mosaic Jubilees. Looking back in history, the rediscovery of Hoarding helps us rediscover the *economic* wisdom of the Mosaic Laws of the Jubilee. Moses advocated for the systematic cancellation of all debts (not simply student debts) every seven years. With the cancellation of debts, money was treated as a tool of exchange not as a tool of accumulation of personal wealth—and economic life would cyclically start anew. Moses also advocated for the rotation of tillage every seven years; the economic wisdom of leaving one plot of land untilled for a year becomes more clear today, when one ought to factor in not only the cost of fertilizers, but especially the avoidance of the cost of poisoning our aquifers. Was not Moses an integral ecologist? Moses further advocated for the return of the land to its original stewards every 49 (7x7) years. The necessity of the avoidance of Hoarding of the land becomes clear today when we are able to calculate the damage done by vast land holdings—when they are left unused as well as when they are used to strangle the organic development of cities and towns. The social importance of the fourth jubilee

[5]Some evident infractions of the principle of non-contradiction that exist within the S = I quagmire are either unobserved or passed under silence: Cash under the mattress or in a safe deposit box is *not* an investment; cash in a "savings" account that earns interest is *no*t a saving. In accordance with the warnings of legal and common language, substantively, cash in a savings account *earns* money; therefore, it is, not a saving, but an investment. To say the least, savings earn—or can earn—money for the bank.

advocated by Moses, the Sabbath, becomes evident when posed in the context of the atomistic Stick Figures bleeding life today. The avoidance of Hoarding of time at least every seven days allows us to establish joyful relations with at least family, friends, and Nature—if not God. One might even stretch economic analysis and determine how much more fruitful are such people compared with the productivity of the morose multitudes of the Lonely Crowd.

The Aristotelian Project of Economic Justice. As, for instance, Wood (2002) points out, the Aristotelian project of economic justice—with its central concern about hoarding—ruled over our daily lives uninterrupted until Locke wrote his *Two Treatises of Government* (1689). There one can in vain search for economic justice; not a peep about it. The project is passed under silence. The project was not unsubstantial; it ruled over two fundamental aspects of economic life: the distribution of ownership rights among the producers of wealth (distributive justice) and fostered a steady equivalence of values in the exchange of wealth (commutative justice). The project was absorbed by the concern over the justice of *property* rights. Thus we have reached such monstrous proportions in the distribution of income that compensation for top executives is 200, even 300, times that of the average employee. One cannot find economic justice in *The Wealth of Nations*. One cannot find economic justice in *The General Theory*. In the economics literature today one finds intense concern for such an undefinable entity as *social* justice, a term that in its most charitable expression covers the terrain covered by the "old" term politics: getting together to improve the human condition.

Looking at Current History

Understanding the Inner Dynamics of the General Theory. Looking at current history with the assistance of Hoarding, we get a definitive insight into the General Theory and by extension into mainstream economics. In his Preface to the *General Theory*, Keynes wrote: "The ideas that are here expressed so laboriously are extremely simple and should be obvious" (1936, p. viii; hereinafter GT).

As a complement to the "three perplexities which most impeded (his) progress" (Ibid. p. 37), the General Theory is built on three fundamental ideas, which, cast in their proper framework, are indeed simple and should be obvious: 1.The rate of interest is the price for not-hoarding (Ibid. p. 174); 2. Real wealth must be measured in "labor units" (Ibid.. p. 41); 3. Economic growth results from the interplay of the rate of interest with the marginal efficiency of—real—capital (Ibid., p. 28); these are two phenomena that the classical theory had "inextricably confused together" (Ibid. p. 352). Specifically, through a transition from micro- to macroeconomics that was automatic in Keynes' thought (Ibid. p. 85), growth depends on the interplay between aggregate demand and aggregate supply.

Thus, it is evident that *without* Hoarding, one is deprived of the understanding of the process of determination of the rate of interest; without the understanding of the rate of interest and its interplay with the marginal efficiency of capital, one cannot understand the factors that determine economic growth; without the presence of the marginal efficiency of (real) capital, the search for a measure of the real economy becomes a fool's errand. Without a separation of the real from the monetary economy, Keynes' model of the economic system is restricted to the syllogistic model that can be found on page 63 of the GT and the substantive mathematical model in Chapters 20 and 21 of the GT is utterly neglected (Brady and Anon., 2009). Without any of these components, it is **impossible to understand the General Theory.** It is for the lack of understanding of these long chains of thought that Keynes' ideas are still not recognized as "simple" and "obvious."

Understanding Hoarding One Understands the Transformation of Mainstream Economics Into Concordian Economics. With the assistance of Hoarding we get a clear understanding of Concordian economics. Concordian economics is built on the relation of complementarity between Hoarding and Investment. Concordian economics offers an integration of theory, policy, and practice.

Concordian Economic Theory

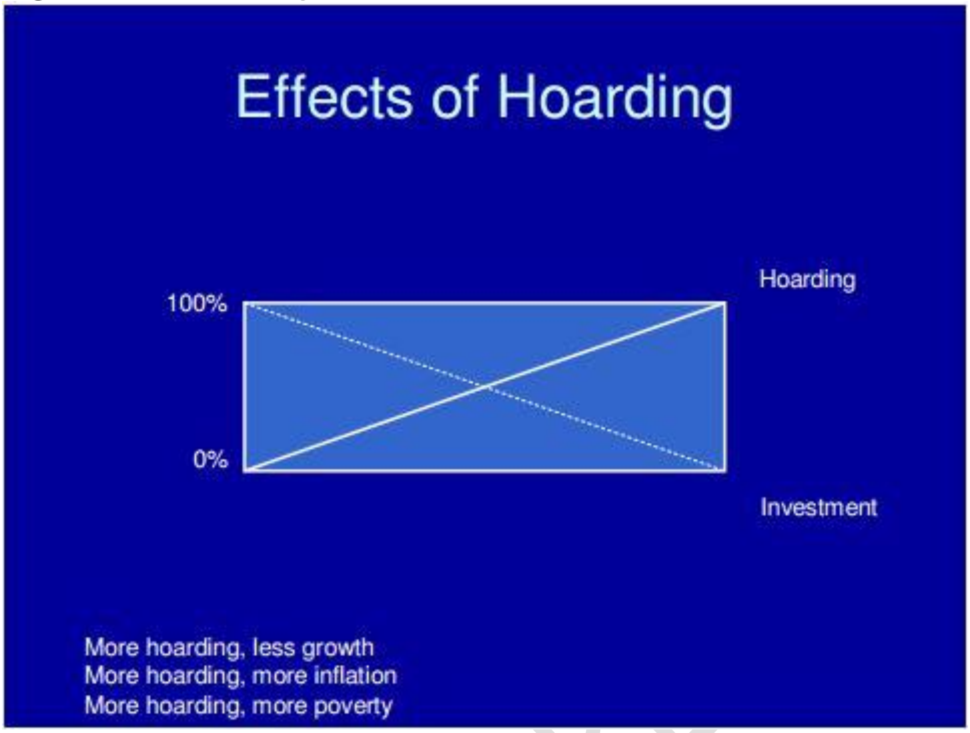
A long engagement, started in 1965, with Keynes' General Theory culminated in the revision of Keynes' model (GT, p. 63) through the introduction of Hoarding into the structure of that model. At the introduction of Hoarding, the original model was shattered (EP, pp. 3-118). The model became incongruent: It declared that Nonproductive Wealth is equal to Productive Wealth.

A new model had to be constructed. The immediate benefit was the breakup of the saving-investment nexus (Ibid. pp. 69-137). From there ensued the freedom to analyze each component of Keynes' original model by itself. It was then discovered that none of them obeys any of the rules dictated by such fundamental principles of logic as identity, non-contradiction, and equivalence. (Keynes, at GT, p. 63, concludes that the S = I relation is an equivalence, but he never provides the third term to which both S and I must be equivalent.)

This analysis provided the building blocks for the construction of the new model, whose core characteristic is the relation of complementarity between Hoarding and Investment (EP: 69-158, 270).

This intuitive relationship is best represented with a classic Lorenz diagram:

Figure 1. *The Hoarding-Investment Nexus*



The effects of Hoarding *on economic growth* are summarized in this statement: Growth (achieved through as little hoarding as possible) is the natural result of the harmonious unfolding of the economic process; they are explored in EP (pp. 235-270). The effects of Hoarding *on inflation* are summarized in this statement: Relative—as distinguished from absolute (or price)—inflation occurs when costs rise faster than prices and/or expenditures rise faster than incomes; they are explored in EP (pp. 271-302). The first step in both relative and absolute inflation is this: When money is put in circulation to buy goods to be hoarded, more money chases fewer goods available on the market (because of more Hoarding and thus less Investment and less Growth). The effects of Hoarding *on poverty* are summarized in this statement: We must distinguish between relative poverty (ineradicable) and absolute poverty (a scourge of humankind): Both effects are obtained through less hoarding and more growth; they are explored in EP (pp. 331-353).

Enveloping this substantive content of EP, there is the formal structure of the revised Keynes' model, whose first equation is: Income = Consumption + Hoarding (a totally legitimate transformation since Saving = Investment in mainstream economics and Hoarding replaces Saving in Concordian economics. As against the overbroad traditional conception of Saving, Hoarding is *restricted* to define only wealth in a current passive, non-productive state).

The second "moment" (equation) in this model yields the long-awaited (by this reader[6]) definition of Investment, namely Investment = Income – Hoarding. The explosive force of this definition became apparent to this writer when, after forty years of study, he finally cast a look backward toward the long history of economic analysis and discovered that this definition is none other than the mathematical formulation of the Parable of the Talents,[7] which, in turn, is a synthesis of Mosaic Laws of Jubilee—all laws destined to preclude hoarding. Concordian economics is nothing but the full fruition of that seed.

The third equation yields the surprising equality of Investment to Consumption. "I=C, I love it!" wrote a reader who desires to remain anonymous. "In fact, I think Keynes's General Theory is incoherent without it… Someday, I=C will shift from radically ridiculous to patently obvious."

The I=C formulation is "scaffolding." Once discarded, its meaning is revealed as soon as Investment is translated as Production; and the meaning of Consumption is *expanded* from simply expenditure on consumer goods to include expenditure of all monetary wealth to purchase real goods and services; namely, expenditure to purchase Consumer Goods, Capital Goods, and Goods to Be Hoarded—as well as financial assets of different nature or maturity. The result is P = C.

The conclusion P = C yields the ***automatic separation*** *of the real economy from the monetary economy—thus bringing much clarity to the economic discourse.*

Then, since an equality *must be an equivalence* for that relationship to be logically valid (see, e.g., Suppes, 1957), a third term is searched for and found in the need to apportion the values of ownership rights to their proper owner as soon as wealth is created.[8] This term is Distribution (D) of (financial value of) ownership rights. This logical need yields the additional benefit that the two parts of the economy—real wealth and monetary wealth—are not indefinitely left separate from each other but are joined together through the concept of Distribution of the value of ownership rights. In obeisance to the principle of equivalence, wealth is thus studied from the point of view of (1) the real, physical world, (2) the monetary world, and (3) the legal world in its relation to both real and monetary wealth. The result is: Production ≡ Distribution ≡ Consumption.[9]

[6]Having been born in Sothern Italy, this reader was interested, not in Saving, but in Investment, namely the conditions to grow his country out of the doldrums of underdevelopment.

[7]An invitation is hereby extended to religious and spiritual people to pay special attention to this proposition.

[8]The re-incorporation of property rights within economics, expunged by Jefferson from polite discourse, because ownership then included ownership of human beings, has an enormous economic and political presence. *It makes workers owners of the wealth they produce.* Did not Marx, by agreeing that "labor" is akin to merchandise, lose the "war" without even entering the ring? This complex issue is clarified by a magistral essay by Luis O. Kelso (1957) calling Karl Marx an "almost" capitalist.

[9]Epistemology specifies that these three elements are clear, concrete, non-contradictory *concepts*. The concreteness of these concepts also establishes the Grand Divergence between Relationalism (Anon., 2003—) and Rationalism in which concepts, rather than being concrete

This equivalence completes Keynes' thought and forms the core of Concordian economics.

Two essential advances are immediately worth stressing. In Concordian economics, monetary wealth is firmly distinguished from real, physical wealth (thus avoiding the pitfall of double counting, which is a hidden curse of modern economics); furthermore, the economics profession is now offered the opportunity to fill a major lacuna in economic analysis: The economics profession, no longer in pursuit of "pure" science, but preferring the pursuit of *real* science, can now acknowledge the functions that the distribution of economic values of ownership rights performs in the economic process. Thus, it will no longer need assistance from Pareto Laws of distribution of national income and wealth, through which the analysis starts from the results of the production process (see, e.g., Funk). Economists—and sociologists like Karl Marx—will no longer need to try to redo what the law has done. Thus avoiding the parallel pitfall of becoming the master, rather than the servant of society.

Once the task of resolving problems of inequality and poverty is shifted from economics to politics, is there any wonder that the political system is flooded with money?

In extended fashion, Concordian economics presents the integration of *Production* of real goods and services; *Consumption* or expenditure of financial assets to acquire real goods and services (or financial assets of a different nature); and the *Distribution* of (the financial value of) ownership rights over real goods and services as well as money. This is in full accordance with the economic reality, in which even the purchase of a chocolate bar requires an exchange of three items: the chocolate bar; the money; and the sales slip. The sales slip is a complex legal document that directly or implicitly attests to three relationships: 1. That the store had legal ownership of the chocolate bar; 2. That the consumer had legal ownership of the money spent; and 3. That the consumer now has legal ownership of the chocolate bar. Likelihood of jail is an incentive to exit the store in possession of the sales slip.

Is the writer permitted to imitate Galileo, and protest that *he did not* put these items into the economic process—items of such different nature to boot?

For an indication of the complexity of these syncretic expressions, it is also necessary to specify that they are complex entities that stand respectively for the *process* of production of real wealth (EP, pp. 183-194); the *process* of consumption (expenditure) of monetary wealth to acquire real wealth as well as a variety of financial assets (Ibid. pp. 195-205); and the *process* of distribution of (financial value of) ownership rights over real and monetary wealth (Ibid. pp. 207-234). Organically related to each other, these processes describe the economic process as a whole (Ibid. pp. 161-234). One cycle of the overall process is completed when goods and services pass from producers to

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entities, are abstract narcissistic expressions of the mind reflecting upon itself. The principle of equivalence automatically bridles Reason with the twin tools of logic and epistemology.

consumers; for the exchange to occur—in a civilized manner—both producers and consumers must be lawful owners of what they exchange.

More extensively stated, at the core of Concordian economics one encounters the study of the economic process, namely, operating on the force of the laws of supply and demand the process of production of real wealth is poised against the expected consumption or expenditure of money to take that product off the shelves (retail stores are an integral part of the production process[10]), so to make room for a next batch, a batch that is requested not only in words but with real money. Money that makes the world go round is met there, as well as another entity, property, that was insulated within common language by Jefferson (by implicitly giving it a negative connotation—an afflatus that still envelops the minds of many a member of the New Age, and not the New Age only). When he wrote the Declaration of Independence, in order to preserve the union Jefferson was compelled to literally erase the word "property" from the famous Lockean formula, "life, liberty, and property," even though it was not the word that had been debased; it was society that accepting the sordid institution of slavery had debased itself. Yet, Jefferson did not come up with any better solution. He came up with the new formula, "Life, Liberty, and the pursuit of Happiness." Thus, did he plunge the world of economics and politics into the La La Land of confusion. While property conferred economic independence and even political power, how is one to achieve Happiness? Is the Government going to confer Happiness? Does the recipient of public munificence—which presumably grants Happiness—assume any responsibility?

By happy happenstance rather than premeditated solution, to recover the world of property Concordian economics introduces at the core of its construction the theory of distribution of economic values of rights of ownership over real and monetary wealth.

These relationships are better analyzed with the help of mathematics and geometry.

The Mathematics of Concordian Economic Theory

The Model of Production

$$P = CG + KG + GH \tag{1}$$
$$KG = P - (CG + GH) \tag{2}$$
$$KG = OKG \tag{3}$$

where
P = Production of Real Wealth
CG = Consumer Goods
KG = Capital Goods

[10]Retail stores are part of the distribution of *merchandise*; not the legal distribution of *ownership*.

GH = Goods Hoarded
OKG = Ownership of Value of Capital Goods.

The Model of Distribution

$$D = OCG + OKG + OGH \quad (4)$$
$$OKG = D - (OCG + OGH) \quad (5)$$
$$OKG = I \quad (6)$$

where
D = Distribution of Ownership Rights over Real and Monetary Wealth
OCG = Ownership of Value of Consumer Goods
OKG = Ownership of Value od Capital Goods
OGH = Ownership of Value of Goods Hoarded
I = Investment Assets.

The Model of Consumption

$$C = E_h + E \quad (7)$$
$$I = C - E_h \quad (8)$$
$$I = E \quad (9)$$

where
C = Consumption (or Expenditure) of Monetary Wealth
E_h = Money Hoarded
E = Expenditure to Buy Consumer Goods, Capital Goods, and Financial Assets.

An analysis of these three *dynamic systems* reveals that they are in a position of equivalence with each other; things happen instantaneously and simultaneously in economics. At the moment of the exchange, three items rotate around each other: Real wealth, monetary wealth, and ownership titles all pass from one set of hands to another. Non-linear math is familiar with such systems (see, e.g., Thompson, 1986; Burstein, 1988). Correspondingly, in Concordian economics the three processes are fused into one, as in the geometry of Figure 2 below and in the following three models of the economic system as a whole:

1. Static Model of the Economic Process
(as Seen in Figure 2 Below)

(10) $(KG = OKG) \equiv (OKG = I) \equiv (I = E).$

2. Synthetic Model of the Economy
(Adapted from Thompson [1986, p. 36] and Burstein [1988, Ch. 5])

$$p^{\cdot} = fp(p,d,c) \quad (11)$$

(12) $\dot{d} = fd(p,d,c)$
(13) $\dot{c} = fc(p,d,c)$,

where
$\dot{p}$ = rate of change in the value of total production
$\dot{d}$ = rate of change in the value of distribution of ownership rights
$\dot{c}$ = rate of change in the value of total expenditure.

Once relationships among these factors are analyzed in detail over the course of many years, a synthetic model might then be built as follows:

3. General Analytic Model

(14) $\dot{p} = f(r,d,mec)$
(15) $\dot{d} = f(YL,rW,R)$
(16) $\dot{c} = f(w,d,m)$

where
r – rate of interest
d = existing pattern of distribution of wealth
mec = marginal efficiency of capital
YL = labor income
rW = capital income
R = rent
w = real wealth
m = monetary wealth.

These mathematical models have been discussed in three editions of Anon.'s book copyrighted in 2002, 2009, and 2016.

These values can not only be described; once numbers are collected in accordance with the categories of thought of Concordian economics these values can be *measured,* because, thanks to a decisive contribution by Joan M. Anon., the writer's wife, they can be kept distinct and separate from each other simply by denoting them respectively as p-(dollar) values, d-(dollar) values, and c-(dollar) values (Anon., 2017). The incessant, and futile, but necessary search for esoteric measuring rods such as "labor units" or "BTUs" is resolved.[11] In a more detailed discussion than necessary at this stage, the analysis of the economic process ought to study the demand and supply of p-values, d-values, and c-values.

Interactions among p-values, c-values, and d-values can be detailed through systems analysis, once numbers are collected in accordance with the

[11] We are long past the search for the "util" as a yardstick for measuring utility. Yet, the "rational," non-scientific superstructure of utility maximization—no matter what studies in Social Cognition Theory and Behavioral economics uncover—still rules the mind of mainstream economists (see, esp., Brady, 1981-2020).

categories of Concordian economics. We will then be able to ask such questions as "What is the effect on *each* element of the system, if we change any one, and eventually more than one, variable by any specific amount?"

All three models give us the mathematical representation of three spheres rotating within each other—while in a perfect world. In the "real" world, the three spheres are more like three teragons. In Concordian economics, we pass from the analysis of points and lines to the analysis of solids in space.

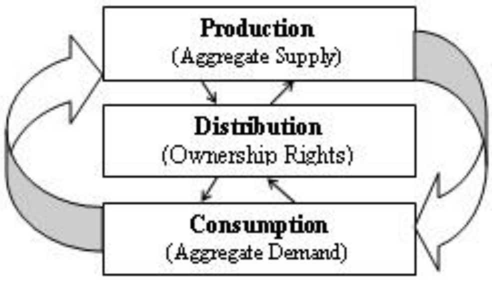
With these models we also pass from micro- to macroeconomics without the need to adjust anything in our mental framework: The structure of the models does not change; it is only the scale that changes. Each model describes the economy of the individual person, the nation, or the world.

These relationships are more clearly analyzed and visualized with direct recourse to geometry. Relying on the adage that a picture is worth a thousand words, the verbal description of the following figures is sparse.

The Geometry of Concordian Economic Theory

The *statics* of the economic process is represented by the following figure:

Figure 2. *The Economic Process*



This figure describes the process—at one instant in time—through which **Production** of real wealth is ready to pass from producers to consumers, in exchange for the **Consumption** or expenditure of monetary wealth that is ready to pass from consumers to producers. For the transaction to occur in a civilized manner, both producers and consumers have to be legal owners of the wealth they exchange; the process of **Distribution** of ownership rights is invisible in economics, but it is an indispensable component of the economic process and it is made visible in this Figure 2. Title of ownership can be represented in weighty formal documents, or in a sales slip. The sales slip is important; if one exits a store without it, dire consequences might ensue. The harsh, cold world of the law can be unforgiving. But what is the alternative? Chaos?

The *dynamics* of the economic system is represented by this idealized figure:

Figure 3. *The Economic Process over Time*

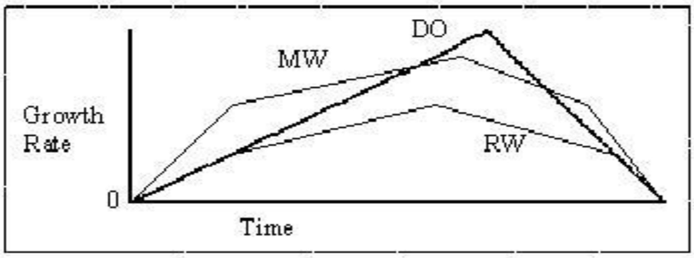
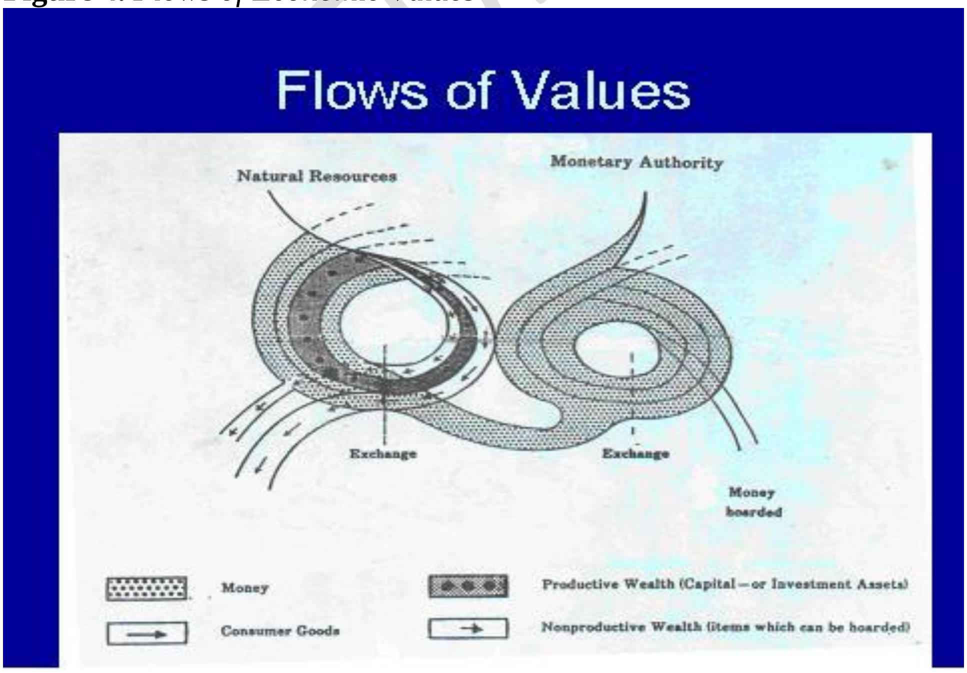


Figure 3 derives from the transformation of each rectangle in Figure 2 into a line, which is restricted to a point of origin (0,0,0), and then a line again. Figure 3 describes an idealized economic process of growth over time. It describes a process whereby the creation of Monetary Wealth (MW), for the ease with which financial assets can be created, tends to grow faster than the values of production of Real Wealth (RW). And the Distribution of values of Ownership Rights (DO) tends to be concentrated in a few hands, whereby the system collapses.

The area between MV and RW represents—not the bubble of individual sectors or individual commodities—but the *economic* bubble. This is the bubble within the economic system as a whole. This area can be *measured in Concordian economics* because the three lines are represented by p-value, d-values, and c-values as seen above.

Figure 4. *Flows of Economic Values*



Interactions among these values can be visualized through the dynamics of Figures 2 and 3 above. Figure 4 briefly describes a few additive interactions that take place over time among the major elements of the economic system.

Consumer goods are no longer of interest to the process; non-productive wealth and money exits the process and is hoarded; capital goods and (most) money remain in the process of production. This figure reproduces the cumulative cycles of production and exchange that one obtains combining natural resources with monetary wealth over time.[12] This figure records all the cycles that have occurred since the beginning of civilization (with some civilizations dying over time).

Closing the two halves together, one obtains the image of a cyclotron, a doughnut (Raworth. 2017), or a manifold, to be sliced into Poincaré sections for analysis—or vice versa from Poincaré sections to manifolds.

Figure 4 is well known to contemporary scientists. Its name as well as the details of the specific reality it describes and analyzes indicate phenomena that show a common behavior, not a "rational" linear behavior but a non-linear chaotic pattern.

In the language of Chaos Theory, Figure 4 might be characterized as a Strange Attractor.

Figure 5. *Strange Attractor*

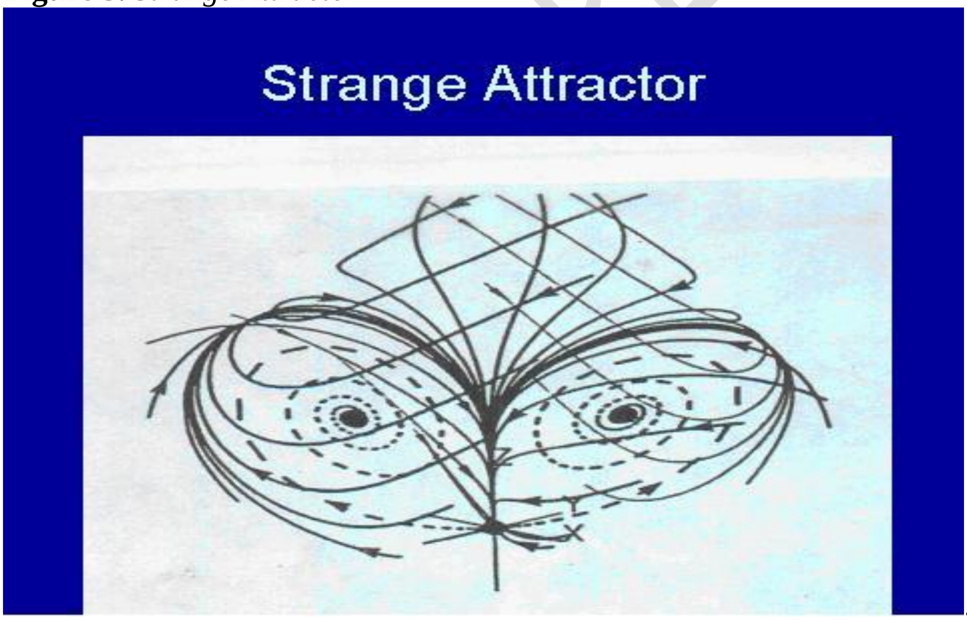


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Figure *5 is* defined as a "Strange Attractor," namely the ascertained dynamic, chaotic behavior of interactions for many physical phenomena.

Are there structural underlying similarities between Figure 4 and Figure 5?

[12]All too briefly, financial credit is here clearly seen as being "balanced" by the (monetary value of) extraction of resources from Mother Nature.

Time and much study will tell whether apparent similarities are validated or disproved.

Concordian Economic Policy

With the reintroduction of Hoarding in the economic discourse, one pierces the mathematics of modern economics (Missos, 2020) and finds oneself in a world that Adam Smith left behind. This is the world of economic justice, a world that started with Moses, was codified by Aristotle, synthesized by Jesus, validated by St. Thomas Aquinas, deepened by the Doctors of Salamanca—and, as we have seen, abandoned by John Locke and Adam Smith.

There are many advantages to the recapture of the world of economic justice. One of the most important, as Gissy (2013) has recognized, is the transformation of the doctrine of economic justice into the *theory* of economic justice with the addition of Participative Justice to the two traditional planks of Distributive Justice and Commutative Justice. That done, it takes just a step to incorporate this integration of Participative Justice, Distributive Justice, and Commutative Justice into the body of Concordian economics as *Concordian economic policy.* This transition is established as soon as the representation of the two entities is set in place and the two corresponding geometric figures are presented together, side by side. The first figure, reproduced from the above Figure 3, represents the theory of the economic process, or Concordian economic theory; the next figure represents the theory of economic justice, or Concordian economic policy.

Figure 6. *Concordian Economic Theory*

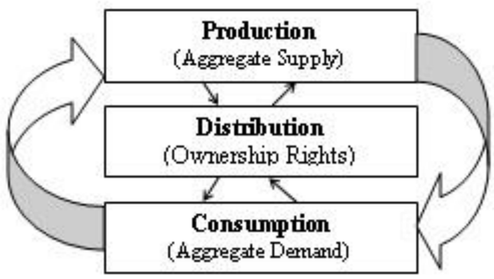
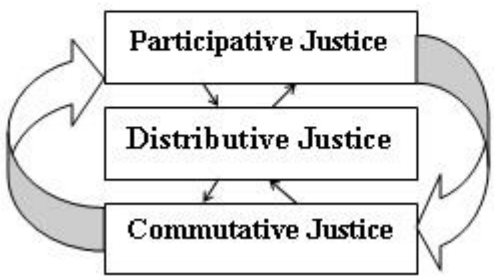


Figure 7. *Concordian Economic Policy*



The two figures show a perfect integration between theory and policy. In a 3D presentation these figures can be represented, Janus-like, back to back. The two diagrams, observed side by side, reveal the inner relationship between the topics they represent: There is a one-to-one correspondence between the production process and the plank of participative justice; between the process of distribution of ownership and the plank of distributive justice; between the consumption process and the plank of commutative justice (commutation = exchange). As the two sides of a coin, Concordian economic theory is the mirror image of Concordian economic policy. One can just as soon separate the two as one can separate people from their shadow. They can be separated intellectually, but only at great risk and peril.[13]

In brief, *Concordian economic policy* presents an integration of the three planks of "*the economics"* of economic justice: The right to participate in the economic process **(participative justice)** is essential to obtaining the right to a fair share of what one produces (**distributive justice**); and the right to receive an equivalent value of what one gives **(commutative justice).** All three relations are ruled by (the measurable economic values) inherent in the principle of equivalence.

Much can be said about the essence of Concordian economic policy. The core is offered by this reality. This framework generates a set of yardsticks with which to judge any existing or proposed economic policy: Does the policy favor an open participation in the economic process? Does it favor an equitable distribution of the wealth created in the economic process? Does it favor an equitable exchange of wealth among participants in the economic process? If the answers are positive, the policy in question can be allowed to stand. If not, the policy ought to be changed.

More importantly still, this integration of economic theory and policy leads directly to a novel approach to the daily practice of economics.

Concordian Economic Practice

As there are four factors of (modern) production, so there are four necessary and sufficient economic rights in Concordian economics. They are: 1. Right of access to land and natural resources; 2. Right of access to national credit, an entity whose value we all create and on the basis of which we create money; 3. Right to the enjoyment of the fruits of our labor; 4. Right of enjoyment of the fruits of our property, especially as specified in the tools of production (capital).[14] Each and every product of our agricultural, industrial, or

[13]Fiscal and monetary policy, the mainstay of mainstream economics, are submerged in these figures; duly transformed, they appear in due course explicitly and are combined with a novel labor policy and industrial policy.

[14]Fully expounded, these rights give birth respectively to a full blown fiscal policy, monetary policy, labor policy, and industrial policy.

commercial activity is a result of the amalgamation of these four economic rights.

Where do these rights come from? They are natural rights, which satisfy human needs; they come from our very nature as being human. We are not angels, therefore we cannot do anything without land and natural resources; we cannot attempt any great socially constructive endeavor without money (conversely, let us think how much more difficult would life be without money); we cannot do anything without labor; we cannot do anything without tools, the result of our imagination and ingenuity. Without the enjoyment of these four rights, we cannot even bake our daily bread.[15]

Being social human beings, we do not derive these rights out of thin air but from a corresponding set of *economic responsibilities*: 1. The responsibility to pay taxes on the land and natural resources that we keep under our personal control—because taxes on land reduce the price of land by reducing its hoarding and thus making larger portions of it available to a larger number of people; 2. The responsibility to repay the loans that we receive through access to national credit—because repaying loans is not only a general responsibility, but fulfills the responsibility to restore the integrity of the pool of national credit; repaying loans we also destroy money in circulation and thus we reduce the danger of inflation; 3. The responsibility to perform tasks required in the performance of wealth creation—because we thus establish an equivalence between the value of performance and the value of compensation for tasks performed; 4. The responsibility to respect the wealth of others—because that is the best legal assurance that our wealth will be respected.

The complex implications of these responsibilities become clearer when placed in the context, not of Keynes' or Hayek's writings, but the writings of four powerful American thinkers: Benjamin Franklin, Henry George, Louis D. Brandeis, and Louis O. Kelso.[16] Individually, their works do not stand; together they form a formidable fortress. Let us see them side by side:

[15]It so happens that Jesus' prayer to *Our Father* encloses the totality of Concordian economic policy. In addition to the call for the exercise of these four economic rights, in response to the Mosaic seven-year jubilee, there is in Concordian monetary policy the call for the systematic cancellation of all debts every seven years. See, e.g., Anon. 2020.

[16]For more detailed discussions, see Anon., 1999, 2009, and 2020.

1. The right of access to land and natural resources	*1. Pay taxes on land and natural resources that are under our control*
2. The right of access to financial resources imbued in national credit	*2. Repay loans obtained through access to national credit*
3. The right of access to the fruits of one's labor	*3. Perform tasks required in the process of wealth creation*
4. The right of access to the fruits of one's property	*4. Respect the property of others.*

If economists join this debate in earnest, they will even discover the talisman that has eluded them so far: knowledge of the source of inequality of income and wealth (see, e.g., Gould). Finally integrating economics and jurisprudence, they will discover four horses of inequality that arise out of **lack of respect** for the above economic responsibilities[17]: 1. *Low or nil taxes* on land and natural resources foster vast land holdings; 2. The *concentration of national credit* in the hands of primary dealers, rather than its judicious dispersal among the people who are the creators of the value of our national credit, generates an inequity whereby the few accumulate financial multiples of zeros, while the many starve; 3. (Legal) *appropriation of capital appreciation* that ought to belong to the creators of wealth grows into vast accumulations of real and financial wealth in the hands of the few; and 4. The practices of the *Pac Man Economy* give rise, not to internal harmonious growth, but to zombie corporations that are "too big to fail." These ventures/vultures must be allowed to fail—if they fail.

When rights are organically put in relation with responsibilities, it becomes evident not only that there are many reasons supporting the necessity for the exercise of responsibilities, but especially that, if clearly explained, there is no one who can rightfully object to their execution. Who dares to object to paying one's dutiful share of taxes on land and natural resources? Who dares to object to distributing loans among the creators of national credit?[18] Who dares to object to compensating creators of wealth for their contribution? Who dares to object to respecting the wealth of others, once one's wealth and enterprise is left free to grow internally and organically as large as possible?

[17]The overall context, of course, is the theory of the distribution of income and wealth which is inserted at the very core of Concordian economic theory and it is thus consistently carried out into practice.

[18]Even the Fed found this proposal reasonable. Passing over one hundred years of contrary practice, the Fed suggested that the proposal ought to be presented to state and federal representatives (Anon. 2015).

Who will be allowed to object to the fulfillment of responsibilities, once it is realized that it is through the exercise of our responsibilities that we create economic justice and a web of mutual relations: we create our common good—and peace and prosperity at home and abroad?

"If you want peace, work for justice," Pope Paul VI sternly admonished.

Thanks primarily to Locke, Adam Smith, and Jefferson, lack of understanding of economic responsibilities has created a void at the heart of our modern political and economic discourse. This intellectual void is occupied by wicked practices that lead to inordinate accumulation of wealth into a few hands, a tottering economic structure, social unrest, and much unnecessary suffering.

Through concentration on economic rights and responsibilities, we automatically destroy two cleavages that have been created—by the extreme right and extreme left of the political spectrum—at the beginning and the end (if we are indeed at the "end of an age") of the modern world: Away from the Lockean insistence on the **justice** of *property rights* and the Marxist insistence on the **injustice** of *property rights*, we concentrate our attention on **economic rights**.

Economic rights *are the creators of property rights*; they come indissolubly associated with **corresponding responsibilities**. Both the right and the left will eventually converge on the realization that economic rights and responsibilities arise from the requirements of the economic process, rather than the requirement of abstract theories.

By the same token, we heal the schism between The Market and The Government, a schism that, thanks to the inability of Keynes and Hayek—and their followers—to understand their respective positions, has become increasingly destructive of social cohesion (while the oligarchs reign undisturbed[19]). Economic rights and responsibilities are promulgated by governments and are exercised in the markets. With the enunciation of economic rights and responsibilities we can see and we can heal this deep cleavage that has been speciously created in the modern world: The Market and The Government are two **complementary entities**; *one cannot exist without the other*.

Toward Healing

Concordian economics has not only the depth of knowledge to analyze both right and left ideologies; Concordian economics also has the tools to heal the deep wounds and grievous intellectual mistakes that have been tearing us asunder especially during the last 500 years. We can get out, we must get out of the frightful pit into which we have fallen—we have **all** fallen of late (oligarchs included). The current gyrations in the Stock Market are proof

[19]See, Anon., 2012a. See also Adam Smith about the "vile maxim" of the "masters of mankind" (1776, Bk III, Ch. 4, para. 10).

positive that we are all suffering from one or another dysfunction of the modern life.

The rational (near shamanic) tool to get out of the pit is an automatic negation of intellectualism, a mental approach that, whether consciously or not, has assumed the task of covering up immorality—in any field.[20] Thus, the central tool to get out of the pit is, not an insouciant set of ethical rules, but a return to morality. Morality was pivoted toward sentimentality by Adam Smith (1756). We must return to the practice of morality in the social sciences, a robust morality, a virtue-based morality.[21] This underlying task is specified in the very construction of Concordian economics through "remorseless" use of stern rules of logic and epistemology naturally extended to cover: (1) Somism, which operates like a solvent to dissolve the reciprocal hatreds built over the centuries by both the Individualism of Locke and the Collectivism of Marx; (2) Concordianism as a set of economic policies that mend the malpractices of both Capitalism and Socialism/Communism; and (3) the intellectual thoroughness of the ongoing transformation of Rationalism into Relationalism. A barebone outline of these three steps is presented in the following paragraphs; carrying these precepts into implementation is, of course, an entirely different order of magnitude.

If a journey of a thousand leagues starts with a single step, these are the first steps.

Somism. Somism is a mental apparatus that lets us go beyond Individualism and Collectivism. Once the economic—and political—discourse is moved away from both the Lockean concern about the *justice* of property rights and the Marxist concern about the *injustice* of property rights, with the introduction of economic rights and responsibilities we automatically pass from the analysis of Martian Stick Figures operating independently of each other on to the analysis of the behavior of Aristotelian men and women living in a social context, namely (for want of a better word) Somism. This is a construct in which **one's** economic rights are born out of **one's own** responsibilities, and *one's* economic responsibilities automatically safeguard economic rights of *We the People*, namely everyone else, namely the common good.

Concordianism. The essence of Concordianism is the attribution of specific, complementary rights and responsibilities respectively to The Government **and** The Market. The Government, by promulgating specific economic rights and responsibilities, establishes the rules of the road; The Market executes the actions necessary to implement specific rights and responsibilities.

[20]The writer does not know who is immoral; but he does know what an immoral act is. An immoral act is the act that hurts The I, hurts The Other, including Nature, and lets Others hurt you. See, Anon., 2012b.

[21]Justice is a cardinal **virtue**. Aristotle divided it into political justice and economic justice. All too briefly, "Political democracy is essential to justice"; but "Political democracy is empty without economic democracy."

Relationalism. With Concordian economics, Somism, and Concordianism the core of Rationalism is **automatically** transformed into Relationalism. Annotating EP—for the second time—the *Journal of Economic Literature* has recognized that "Expanded third edition presents the transformation of economic theory into Concordian economics, shifting the understanding of the economic system from a mechanical, Newtonian entity to a more dynamic, relational process."

Much work has been done; more remains to be done.

Conclusion

Concordian economics is a new paradigm that holds the promise of resolution of the current crisis in economics, politics, and culture. Most of today's political and economic discourse is inveigled in the well-intentioned, but impossible task of creating more and more entitlements—and, then, facing the reality of lack of financial means to "pay" for them as well as, much more importantly, lack of objective, rational, defensible rules for the allotment of each entitlement. An essential topic, which can hardly be effectively presented here, is the *effect* of entitlements on both the recipient and the giver. Economists ought to be able to break the impasse between demands of the extreme right and extreme left by focusing on the other side of the issue, the side of responsibilities. The full exercise of economic rights and responsibilities will produce all the wealth that individually each one of us needs. This way, and this way only, can we ever hope to eradicate absolute poverty from the face of the earth—without the contribution of one cent from the affluent.

Once inordinate concentrations of wealth into a few hands no longer occur, there will be no justifiable call for the redistribution of wealth. Most important of all, the foundation of morality will no longer be torn asunder under daily assault from self-serving frustrated extremists. The essence of economic justice is the proposition that people have the right to the wealth **they create**; they have *no right to the wealth of others*. Appropriation of the wealth of others is **stealing**, even if, for deficiencies in our understanding of economics, the action is not officially thus classified. This is the moral pit into which the "right" falls. The left falls into the pit of *reverse stealing* when it attempts to recover through expropriation and draconian fiscal policies some of the wealth that has been legally appropriated by the few. A *moral* claim to the wealth of others must in all cases be subordinated to the willingness of the owner to part with any portion of that wealth to satisfy the needs of others. That is charity. Charity means love. Forced charity through *moral extortion* is an oxymoron; it actually performs the destruction of love. Socialistic policies—those today classified as acts of *social* justice—built on envy are destroyers of Christian charity. That is the moral pit into which fall "social" justice followers who stand on the "left" of the political spectrum.

To get out of each pit takes an effort of the will summoned through intellectual clarity and moral fortitude.

Concordian economics is uniquely endowed to help in this endeavor. Concordian economics is uniquely endowed to help us pass from the "dismal science" to *The Economics of Jubilation* (Anon. 2020).

The transformation of mainstream economics' into Concordian economics is an ongoing interdisciplinary process that is far from finished. Indeed, to say the least, this work requires the transformation of both Individualism and Collectivism into Somism and ultimately the insertion of Concordianism into Relationalism.

Since Concordian economics is the pivot in the transformation of Rationalism into Relationalism, in its creation Concordian economics offers us the unique opportunity to realize the ancient ideal for which Socrates—and the long string of his moral disciples—offered their lives:

To finally have the Polis

governed by

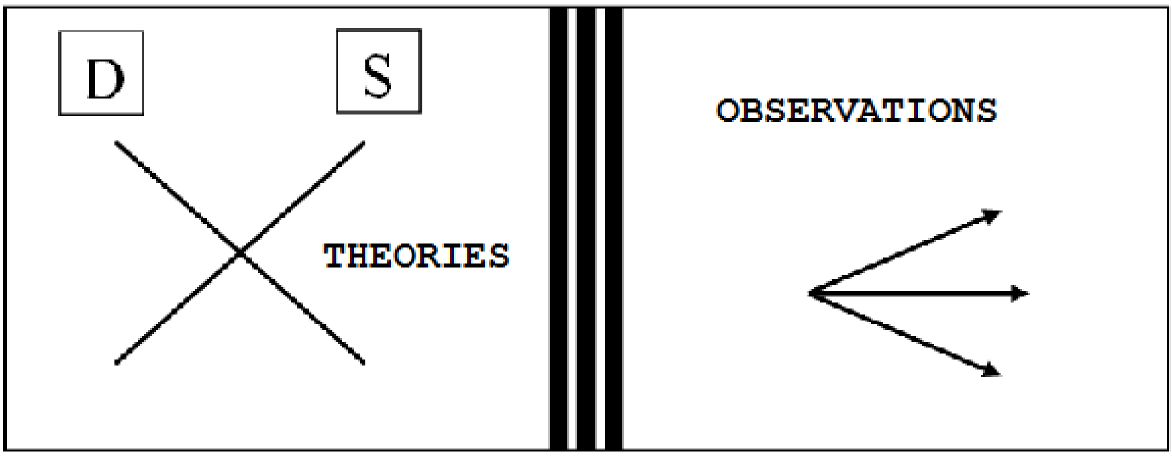
"philosopher kings" and "philosopher queens."

Appendix

The Structure Left Behind

As widely recognized, at the center of the structure of mainstream economics that has been developed from Adam Smith to the present, one faces the void: a "black box," a pit into which many an innocent falls. This is neither an esoteric issue, nor a made-up attack against the integrity of mainstream economics. It is sheer reality; it is sheer mechanics. Manipulating the laws of demand (D) and supply (S),[22] economists develop ad hoc theories of what should go in and observe what comes out of that box. In this fashion:

[22]Writing this Appendix, it became clear to the writer that the laws of supply and demand are *tools* of economic analysis; they **do not form a theory** of economics.



Slide 1 - INPUT Slide 2 - OUTPUT

This structure generates questions that reveal the deepest possible content of the current crisis:

- Demand of what?
- Supply of what?
- What is the time frame of the data?
- Can these “laws” be applied indiscriminately to any phenomenon?

Since the core structure of mainstream economics is “void of content,”[23] filling the void is an arbitrary operation that leads to a black box. Economists do not know what happens within the box. Hence, they have no guidance as to what *ought* to precede their analysis. With economic theory always invented anew and faced with a constant infinity of facts, in a world in which the Apotheosis of Liberty (for the few) reigns supreme, it is only their inner wisdom that lets economists explore such questions as: Is this a supply of bread, cannons, pornography the? At what cost? Does the demand arise from rich people, poor people, young, old people? Is the demand for cash, corporate stock, or foreign currencies? Who is accumulating what wealth? Should we go back in the analysis five years, 50 years, 100 years? In an ideal world, the purpose of these inquiries is not to control anyone's actions, through a favorite tax policy, perhaps, but to know, to understand, and to warn that "if this, then that." Computers are silent in front of these questions. Upon the sign of addition or multiplication, computers only spew out Bigger and Bigger Data.

The variegated answers to these (very rough) questions, analyzed in depth, have given rise to all theoretical disquisitions we have witnessed during the last 250 years. The ultimate result has been unavoidably constant: As evident from Slide 2 above, some economists have projected a rising trend, others a steady trend, and others a declining trend—out of the same data set.

[23]Keynes quoted by R. F. Harrod (1947, p. 136).

If the reader should think that this is an overbroad generalization, Ester Duflo (2010) pinpointed the issue. She said: "(Without foreign aid, Africa might have turned out better, or worse, or the same). 'We have no idea. We're not any better than the medieval doctors and their leeches.'"

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