

# **An Introduction to Bubble-nomics**

## CHAPTER 01

### *Markets as Meta-systems*

Meta-systems Theory and the Structure of  
Markets : An Explanation of Speculative  
Bubbles, their Bursting and other Strange, yet  
Dangerous, Market Dynamics

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See <http://bubblenomics.biz>

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#### **Introduction**

Sometimes it is good to appeal to some other field to explain phenomena that does not seem to make sense within the field of study which addresses the phenomena directly. This is particularly true when there is some underlying assumption in the primary field that prevents the understanding of the phenomena in question. Here the phenomena in question are speculative bubbles within markets. Since we are in the middle of a market crisis brought on by the Sub-prime lending and the selling of these loans as Mortgage Backed Securities and which has led to a Credit Crisis with many firms now going out of business due to over

leveraged positions in these securities, and other problems associated with global market conditions at this time. So this crisis may cause us to reflect on the academic problem that we do not seem to have any fundamental theory of markets. And without such a theory it is difficult to understand global market phenomena and especially those that lead to binge and bust behavior on the part of investors caught up in the euphoria of the growth of these market bubbles. So we will use the terms Bubble-nomics to refer to this overall problem of markets, which seems to be the case even of determinate markets, that they give rise to bubbles. Bubble-nomics gives rise to Burst-nomics when the increasing returns<sup>1</sup> cannot be sustained within the bubble and some limit is reached which causes the market to fall apart, because the organizing principle of the market no longer can be sustained and the investors or lenders in this case lose confidence in the majority market position that has led to and sustained the bubble. In the present case a rescue package of 700 Billion dollars is being considered to help correct the imbalance in the markets caused by the Bubble. With that much money on the line I think it behooves us to spend some time seriously thinking about the problem that is will probably be costing us so much money. In this case what I would like to draw your attention to is the fact that the academic discipline of Market Theory is weak, and that explanations of seemingly endemic Bubble and Burst dynamics hard to come by. Exacerbating the problem has been a philosophy of de-regulation of the market and a fundamental assumptions that markets are self-regulating. If the markets are self-regulating the current environment does not display much evidence of that.

So here we will jump out of Economics and traditional Market Theory all together and will instead appeal to extensions of Advanced Systems Theory recently developed by the author called Meta-systems Theory to explain

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<sup>1</sup> Arthur, W. Brian. "Increasing Returns and the New World of Business" Harvard Business Review, July-Aug.,1996

the nature of Markets and also why speculative bubbles and their bursting are endemic phenomena within markets. The theory that will be developed will be at the level of Political and Economic Theory but the insights that we will be appealing to have come out of Systems Theory and Reflexive Sociological Theory instead of Economics and Politics. I will briefly try to say how I come to this question, and why I think Meta-systems theory might offer some insights into Markets.

My background is Sociology, with a Ph.D. from London School of Economics the title of which was The Structure of Theoretical Systems in relation to Emergence<sup>2</sup>. I am currently engaged in finishing my second Ph.D. in Computer Systems Engineering with the title of Emergent Design. Over the years I have worked as a Systems and Software Engineer for Aerospace firms. But I kept up my academic research specializing in Advanced System Theory based on the work of George Klir<sup>3</sup> and applying that to Software Design and now to Systems Design. Along the way I developed a theory called Meta-systems Theory which is the inverse dual of Systems Theory. Once Meta-systems Theory was defined that led to further extensions into Special Systems Theory and Emergent Meta-systems Theory. All of these extensions that make up what I call Advanced Systems Theory eventually led to a more general theory called Schemas Theory and then further to an even more general theory called Emergent Worlds Theory, and then to the most general level which I call the Theory of the Pleroma. Each of these further theories give descriptions of higher emergent levels of our Worldview that are addressed by the series of more and more general theories. But here the emphasis will be back on Meta-systems theory and its inverse duality with Systems theory, and how the pair of these theories and the theory of Special Systems together may give rise to an innovative new theory of Markets which comes from outside of Economics. It is

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<sup>2</sup> London School of Economics Ph.D. dissertation 1982

<sup>3</sup> Klir, G. Architecture of Systems Problem Solving (Springer, 1985).

interesting that Economics has not been able to define Markets well and explain them at a theoretical level. It is really a question that was lost when Political Science broke away from Economics and the broader field of Political Economy was lost within academic specialization. Also Sociology broke away and become its own discipline. In specialization some very basic theoretical questions became lost, like what is a market and how do they work. In specialization there was an emphasis on understanding everything as a system. So markets were also thought of as systems. And in our culture meta-systems, the inverse duals of systems, were in a blind spot that was left unexplored. And effectively no one noticed that Meta-systems needed to exist as the dual of Systems except some ecologists. Also when Systems Engineers started to develop ideas of Systems of Systems there were some voices that pointed out that there were other types of Schemas than just the System that needed to be taken into account. And the author was one of those who went so far as to develop a specific theory of what a 'meta-system' must be, and which has been developed over the last twelve years or so. This theory was codified by the development of General Schemas Theory which considers ten different schemas rather than just Systems and Meta-systems. And General Schemas Theory has been used to explore the nature of Emergent Design in a thesis under development in the discipline of Systems Engineering. In that thesis and associated research papers the relation between Systems Engineering and Meta-systems Engineering has been defined. Market design would be an example of Meta-systems Engineering. But if we are going to design Markets then we need to first identify what they are and to understand their specific nature in the wider context of General Schemas Theory. So that will be the aim in this paper. We can call this an attempt to understand the underlying theory behind the socio-political-economic theory of markets. We are going up to a level of abstraction in which sociology, political science and economics have not yet separated. And at that level we are going to apply the ideas underlying General Schemas Theory to attempt to understand the nature of a

specific schema, meta-systems, and how it applies to a specific phenomena *markets*. I am writing as a sociologist and systems theorist. As a sociologist I have studied what is called Reflexive Sociology which was a School of Sociology with a philosophical bent. As far as I know neither Political Science nor Economics has had a Philosophical sub-discipline previously. And thus in Reflexive Sociology certain more general questions like the Sociology of Knowledge were addressed, especially as they impinge on the questions of Philosophy of Science and Technology. From an immersion in the philosophy of Science and Technology I went on to become a Technologist, and a Software and Systems Engineer and so developed some understanding of the genesis of complex socio-technological systems. But my roots in Reflexive Sociology cause me to have a different approach toward the socio-technical meta-systems of markets. It is an approach that tries to understand the high level theory of markets based on philosophical and socio-political-economic theories with special appeal to Systems Theory and its extensions, as well as logic, science, and mathematics which serve as guides. One paper has already been written in this vein trying to bring back the theory of Meta-systems to sociology called “Possible Grounds For A Reflexive Sociology.”<sup>4</sup> A paper on “Meta-systems Engineering” was given at an INCOSE<sup>5</sup> conference in the year 2000. Other papers have been written to apply this theory to Anti-terror Meta-Systems Engineering<sup>6</sup>, and also to the Organization of

the Joint Forces in the Military<sup>7</sup>. The theory has also been applied to a wider scope of Organizations as Intelligent Enterprises in “Exploring Intelligent Enterprise System Limitations.” So I have done my best to try to show the utility of this theory presented here concerning the nature of meta-systems in a variety of fields adjacent to my own. General Papers on Meta-systems Theory also exist<sup>8</sup>. My last conference presentations were on Meta-systems, and were called “Complexity and Emergence<sup>9</sup>” and another briefing which was a “Meta-system Primer.”<sup>10</sup> In other words, this theory has had a certain amount of exposure in public academic forums already. But the market crisis is an excellent opportunity to expand the coverage of the theory to another domain, if we find that those theories already developed in that domain are inadequate. However, my acquaintance with Economics and Political Science, even as an avowed generalist, is admittedly weak. So this application of the theory to economics will be exploratory in nature, where I hope to seek evidence that the meta-systems theory applies to markets as well as it does to other types of phenomena that have been identified as meta-systemic in nature. I have had a hunch that Meta-systems theory describes markets for years, but never had the opportunity to study the economics of markets literature to confirm that fact. So, the application of the theory in this work will be somewhat hypothetical and speculative, and will serve as a basis for searching for confirming or dis-confirming evidence. One of the goals is to make meta-systems theory more well known. And so I

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<sup>4</sup> <http://archonic.net/>

<sup>5</sup> International Council of Systems Engineers  
<http://INCOSE.org>

<sup>6</sup> See also “Vajra Logics and Mathematical Meta-models for Meta-systems Engineering” and “Meta-system Engineering Futures” at <http://archonic.net>

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<sup>7</sup> “Toward an Intelligent Military Enterprise: An Introduction to an Approach to Joint Forces based on Meta-systems Theory”; “The Evolving Joint Perspective and Meta-systems Theory: A Case Study based on the Joint Vision Document”; “The Failure of Systems Engineering as an approach toward Complex Adaptive Systems in our major Customer’s Eyes: Analysis of the Capstone Concept for Joint Operations and its relation to Meta-systems Theory” at <http://holonomic.net>

<sup>8</sup> “Meta-systems Theory”; “Meta-systems Structure”; “Meta-systems Interactions” at <http://holonomic.net>

<sup>9</sup> CSER 2008

<sup>10</sup> INCOSE 2007

have set up a website called [bubblenomics.biz](http://bubblenomics.biz) and also an email list for discussion of the Current Crisis and the Nature of Markets in order hopefully to draw into discussion those who are more well grounded in current Economics and Political Theory to critique my efforts. But due to my background and approach there will be a lot of areas in which my concerns may seem to be irrelevant to current Political Science and Economic concerns. However, partially that may be because of my ignorance, but also it has to do with the fact that the theory starts from completely different grounds to try to build an overarching theory of the nature of markets based on meta-systems.

### **The Meta-system Theory of Markets**

There are some very basic ideas that we will discuss first that shape our whole approach to defining Markets as Meta-systems. First and foremost is the idea that meta-systems are the dual of systems. Second that both systems and meta-systems are examples of schemas. General Schemas Theory suggests that there are a whole set of schematic entities, and the system and meta-system are merely the two central schemas in that set. So our whole approach is going to be to try to understand Meta-systems as a schema, as the opposite of the System schema, and try to generalize what we learn from this to Markets. Markets are a specific form of the meta-system schema, but not the only one. So meta-systems are more general than markets. Another example of a meta-system is an ecology or an environment. "Meta-" here means "beyond" the system. It is the next schema outward from the system just as the system was the next schema out from the Form and the form was one step beyond the Pattern. We call it a 'meta-system' because there is no good name in our culture for it, and this is because this particular schema is a blind-spot in our tradition. Part of the reason that Markets are so ill defined theoretically is that they participate in this blindspot, as do all the specific phenomena that are gathered under the umbrella of the meta-system concept, another good example is the media. Ecosystem, Market, Media: what do they have

in common? On the surface nothing, if you do not understand that they are all examples of specific types of Meta-system schemas. We have no term that unites them conceptually like the terms for Pattern, Form, System, Domain and World do with respect to the other experiential schemas. But there is a gap between the System and the Domain Schemas that needs to be understood, and our examples Ecosystem, Media and Markets fall into that gap. So the first step is to make up a term, like meta-system that means what is beyond the system that fills that gap. Later we discover that another term, which is not perfect but perhaps more precise is the Open-scape. The word 'scape' can be seen to precisely relate to that gap, but it is imperfect because it must always be paired with another term in our language and does not stand alone normally. However we may call Meta-systems 'Scapes' occasionally in this essay. So if this seems esoteric and difficult to understand, there is a reason for it. In our language and our culture we don't really have a concept for the meta-system, even though meta-systems themselves exist. We merely think of all the examples of meta-systems as different realms within which systems exist. Markets are one such realm.

The point about meta-systems is that they are differently organized from systems. This difference is essential not arbitrary. However we can project any schema, as a template of understanding of spacetime relations, on any phenomena. So more than likely the market is thought of as a system or a domain rather than as a meta-system. As a domain it is under the auspices of Economics the discipline. As a system we are normally thinking about it as an implemented trading system, rather than as a meta-system in which traders do their trading as in an environment, or as a medium for exchange. So we can make do by projecting other schemas into the meta-system blindspot without actually having to recognize the nature of the meta-system itself as an *ecological medium* in which people engage in economic activities.

Politics reduces relations between people to power relations. Economics reduces relations

between people to economic exchanges that are in turn reduced to money. Sociology reduces relations between people to roles within society. But when we try to put people back together again it is difficult to blend the social, economic, and political characteristics after they have been split asunder. So our question that needs to be asked is what are the proto-social, proto-political and proto-economic relations that are synthetic prior to our reductions and analysis. Prior to the splitting of the human sciences from each other this discipline that looked into this subject was Political Economic Philosophy. So it is not surprising that the breakthrough into the first theory of meta-systems was attained in the neo-Political Economy of G. Bataille. He wrote Accursed Share<sup>11</sup> and in that study he defined the difference between a General and a Restricted Economy, which is the basic difference between a Meta-system and a System. But this innovation of Bataille widely recognized in Continental Philosophy<sup>12</sup> has had hardly any impact either in Political Science or Economic Science, and negligible impact in Sociology or Systems Theory for that matter. However, the work of Bataille has been taken up by Arkady Plotnitsky who developed the theory as it relates to the work of Bohr, Derrida and Bataille in Complementarity. Baudrillard used Bataille's ideas in his Critique of the Economy of the Sign. Bataille's idea have had wide ranging influence in Continental Philosophy. And that is the philosophy that we appeal to now in our attempt to define and describe Markets. Concern with anomalies in exchange go back to The Gift<sup>13</sup> by Marcel Mauss. It is these Anomalies that Bataille studied in order to create his theory of the General Economy as opposed to the Restricted Economy. All

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<sup>11</sup> Bataille, Georges. The Accursed Share: An Essay on General Economy. (New York: Zone Books, 1988).

<sup>12</sup> Derrida, Jacques. Writing and Difference. Chicago: University of Chicago Press, 1978. Chapter 9 page 251

<sup>13</sup> Mauss, Marcel, and W. D. Halls. The Gift: The Form and Reason for Exchange in Archaic Societies. New York: W.W. Norton, 2000. See also Hyde, Lewis. The Gift: Imagination and the Erotic Life of Property. New York: Vintage Books, 1983.

Economic Systems are Restricted, but when they are extended or break down they enter into a General Economy which coincides with our Systems Theory related concept of the Meta-system. Our own theory described under the rubric of the meta-system says that each schema is a template for the pre-understanding of some specific dimensions of spacetime. Each of these schemas has its own specific organization which is prior to any other projections. The schemas are the ur-projection of the most basic structure onto the noumena, i.e. that of the projection of ordering in spacetime. Kant was only wrong in the fact that he thought that space and time that were projected were a plenum. Our own theory is that space and time are striated at different scopes and these striations are emergent with respect to each other yet nested. System and Meta-systems are the central schemas in experience. But in our time System and Structure (Pattern) are emphasized and Meta-system is withdrawn from our view. Form, of course, is the most basic schema in our tradition. It is only at the beginning of this last century that Systems Theory and Structuralism were developed to any great extent as alternative ways of approaching things to the traditional approach in terms of Form. However, Systems ways of thinking go back at least to Kant. Much of his philosophy is developed in contrast to Leibniz who's Monodology is an example of a philosophy based on Pattern. All external phenomena were assumed to be internalized into the Monads and understood as the pattern of these internal relations. So right away we get deeply into some philosophical distinctions and differences between major philosophers that underlie the concept of schemas and the difference between system and meta-system, which we must relate to differences of form and structure in relation to a monadic substrate.

This is to say that markets, if they are examples of meta-systems, have deep roots in our consciousness and in our philosophical tradition. And they are also related to other phenomena like the Media and Ecosystems that are similarly difficult to define, because

we have no overarching concept for them like we do the other schemas. Therefore, if this is true, we must reconcile ourselves to having to think of them more deeply than we are accustomed to dealing with the objects of our disciplines. Ultimately Politics does not know what Power is, and Economics does not know what Worth is, and Sociology does not know what Institutions are. But this is mostly because we have split them off from each other so each of them by themselves are empty. It is only in concert that they take on any real significance because we are simultaneously exerting power through the medium of the market via our exchanges which we base on our judgment of value and worth, within human institutions that support our trades, exchanges, and gifts and supports the culture that accepts our trades, exchanges and gifts within a worldview where economic, social and political behavior all make sense. How all the separate theories can all make sense together, including psychological theories is the key question that no one is asking very deeply. They can only make sense if there is some proto-theory in which all the specialized versions of what is happening in a market engaged in by people make sense together in their simultaneity. And a good place to look for that proto-theory is in how we understand our projection of Spacetime, because in idealist circles following Kant that is the most basic interaction with the things of the world. Hegel merely reaffirms that this projection is happening as the basis for our understanding things like causality within the world. Heidegger's philosophy is merely a different version of this same strain of the Philosophy of Space and Time that is assumed to be correct in idealist philosophies. Materialism and Empiricism have little effect on this main Idealist thrust to the Western tradition in philosophy. Neither of them can understand the primal synthesis of experience prior to their analysis. Idealism starts with the assumption of that synthesis. The first moment in that synthesis is the projection of Space and Time as the basis of experience. In that first moment the schemas are projected as templates of pre-understandings on things. And as the schemas differentiate themselves from each other then

we have the makings of the distinctions that the individual sciences will use to isolate the phenomena that they have chosen for study. In that differentiation of the schemas there is at work a showing and hiding relations which Heidegger called *OntoTheological Metaphysics* and which Derrida called *Logocentrism*. And due to this asymmetry in the showing and hiding relations the meta-system gets obscured and the system gets sent to the foreground as the center of attention. Each of the schemas is emergent in their series of differentiation of spacetime at their various scopes. But the obscuration of the meta-system schema which is the dual of the system schema means that a particular dynamic is set up within our worldview in which the types of meta-systems are splintered from each other without any governing concept. And so Markets, and Media and Ecosystems seem very different to us because the common thread that binds them together is difficult to conceptualize. This has an effect on Markets, and Media, and Ecosystems which is that they are made difficult to understand. And I would venture that is why there is no general theory of markets, just like there is no general theory of media or ecosystems. The level of generality where they are all the same is obscured. The essential differences between the market, the media, and the ecosystem are difficult to reconcile without that higher level of generality. These are not the only examples of meta-systems, but we will continue to use these as our primary examples. The market needs a medium of exchange that is generally accepted in order to function. In the market there are various roles that create an ecosystem between various participants in the market. On the other hand the Media must supply news and entertainment to a mass market for information. In that market there are various roles that people play in the production and consumption of media. The ecosystem is the basis for the resources that are used by the economy and the repository of waste and abandoned goods. Industry uses the resources from the ecosystem as if it were a medium for the production of goods and services. Those goods and services are sold in a market economy after they have been manufactured or

produced out of the resources from the earths environment. Within that environment different species live together in ecological niches which are disturbed by the activities of humans which make use of that environment for industrial and cultural purposes. What we are trying to show is that the three concepts can be used to talk about each other in order to define each other. Their differences illuminate each other. But this illumination is weaker than if we had a higher concept that sublated each of our meta-system examples. The only way to get to that concept is to develop fully the duality between the system and the meta-system. We call the meta-system the inverse dual of the system, and we characterize it as "meta" which in this case means *beyond* and not *above*. Once we grasp the market as meta-system then it will be possible to see through the market to the core characteristics of the meta-system which subsumes also the media and the ecosystem or environment. So that is what we are after: the definition of the essence of the meta-system that gets expressed in the market, the media, and the environmental ecosystem. That is what is obscured from us, and what makes it difficult to understand the theory of markets, or media, or ecosystem environments.

It is interesting that things that are so key to our lives can be so ill understood. Yet they play a determining role in our lives. But they are obscured, in ways we do not understand, and unlike other things at the same level of generality. There are myriad interpretations of Pattern, Form, System, Domain, and World, the other experiential schemas, but they are not in some way veiled in mystery like the Meta-system. This veiling causes the market itself to be veiled as well, like the media and the environmental ecosystem. And thus we are constantly confronted by something we do not really understand which has a great deal of power over us, that we learn in times of crisis like these when parts of the market are breaking down. Similar things are true of the Media, which seems to be an entire industry built on the production of unnecessary extravagances. And also our attempts to come to terms with our impact on our environment

are equally illusive. But in each case we are substantially entering into the territory of Reflexive Sociology because we are dealing with human relations and interactions and mutual perceptions, and the flow of ideas between people. Markets are the flow of the medium of exchange between people. Media is the flow of images and ideas between people for their information or entertainment. And today with the web that flow has become interactive finally so that it is no longer one way. Similarly markets have fragmented and broadened their participation and thus expanded so that they touch almost everyone. And it is beginning to dawn on us that we are all animals like other species which have a market relation with each other in our various ecological niches, and whose medium of exchange is energy and matter in the food chain. Without those other species that are dying off in unprecedented rates we are much poorer, due to the reduction of variety of life on the planet. We find ourselves lost in an ecological disaster due to industrial and consumer abuses of the environment. We find ourselves in a global economy which has hit a major tipping point where a very great bubble has burst with international repercussions. And we find ourselves immersed in a media that attempts to shape and control our minds and our behaviors, and the way we view our bodies, more than it merely informs or entertains us. Display monitors are appearing everywhere so that it suddenly becomes impossible to not be watching a commercial, there is a tremendous amount of advertising spam being added to the environment. At the same time new media are allowing us to connect to each other and interact in unprecedented ways. Yet we also have to deal with spam, viruses, worms, website advertising, loss of economic identity, and other insidious side effects of the universality of the world wide web.

So it is possible to use this opportunity of Financial Crisis to try to make clear how Markets are Meta-systems, and as such how we should be treating them differently that they have been treated in the recent past. The balance between regulation and de-regulation

needs to be found. But the idea that markets regulate themselves is the application of system concepts to markets, and markets are not systems. Even with regulation markets may tend to spiral out of control due to their intrinsic structure. How can we decide the dilemma of regulation and de-regulation if we do not understand what kind of thing a market is. If markets are meta-systems then we may need different types of remedies to attempt to maintain ourselves in the ecological niches within those media. What we will try to do in this series of essays is to lay out a fundamental theory of markets as meta-systems, which also covers the media and ecosystems as well as other types of meta-systemic phenomena. We will be pursuing a deep theory of markets established as part of General Schemas Theory rather than merely as part of Systems Theory or alternatively Meta-systems Theory. Once we explain the essence of the meta-system in contrast with the System then we will try to understand what it means to function within a meta-system and what the relation between systems and meta-systems might be. Traders are the systems within the meta-system of the market. Some of those traders are human and others are not human. The market is a computer infrastructure for trading, but it is inhabited by all kinds of people with different roles who support the activity of traders. So the market is a social construction of an institution with respect to which different people have different roles. The psychology of those people is very important to the functioning of the market, and it is those cognitive factors that create and sustain and cause to crash the bubbles that appear within the market. If we just look at the transactions then we can think of those in terms of macro and micro economics. On the other hand if we consider the political power that is exercised by the corporations, and lobbying groups, and the government officials then we can see that the market is also a nexus of power, which is a spin off from the powers of government. And in the end the government has to take over and restructure the market when catastrophe strikes. So politics cannot be divorced from the working of the market, any more than can psychological and social factors. Economic

factors stretch far beyond the market itself and spread its repercussions everywhere in the fabric of the societal body politic which is a reflexive intersubjective cohort, which is the object of Reflexive Sociology.

In essence we use an extension of Systems theory, deriving its inverse dual, to explain some hard to explain phenomena like markets, media, and environmental ecologies as well as other meta-system like phenomena within our worldview. This helps us to define the essence of the Market as meta-system. And that helps us to understand what we are dealing with when it stops working properly and threatens our livelihoods. Basically the markets have been mismanaged by the government for a long time due to this idea that markets are systems and thus have self-regulating mechanisms within them like systems have. No one ever identifies what those self-regulating mechanisms are, and that is because they do not exist, they are fantasy artifacts of our projection of the system schema on to markets. Just because we can look at the markets as systems, say when building infrastructure support for them, does not mean that they *are* systems. Rather markets *are* meta-systems. And in this series of essays we will explain exactly what that means by using the inverse duality with systems as our guiding thread.

Hopefully this introduction to meta-systems theory as a basis for understanding markets will make it possible for others to understand what we are up against as we forge our way into the Globalized Economy. Republicans and Democrats formulate their economic policies on a flawed assumption that Markets are systems, rather than meta-systems. And that puts us all at risk as we move forward from this crisis to the next, as we have endured crises in the past. All these crises are black swans. But the fact that these statistically rare events happen fairly frequently in economic history does not explain them, but only why they are happening more often than we would expect. We drove the economy though this bubble into crisis, like lemmings going over a cliff, in spite of the fact that there were



warnings. And now we are all paying for it, though our taxes or through the expanding deficit, or inflationary printing of money. Let us take a lesson from Advanced Systems Theory and the idea of the meta-system in order to get a good picture of what the markets really are so that perhaps in the future we can know better what we are up against when we leave our fates to the forces surging out of control through the market economy.