PART 2: ECOSYNOMICS AND ECONOMICS: LENSES FOR SEEING AGREEMENTS

CHAPTER 4: ECONOMICS AND THE PARADOX OF SCARCITY

> Abstraction, difficult as it is, is the source of practical power.[58]

It can be difficult to see the agreements in all of your interactions. A simple, robust structure can make this easier. It needs to be simple, so that you can apply it intuitively in every relationship and circumstance. It needs to be robust, so that you know you are considering the most important and relevant elements every time. For this I will first need to abstract some key elements from all agreements. With these few elements, you will be able to see the agreements more clearly and how to choose them. This is practical power.

In Part I, we looked in depth at the basic principles of Ecosynomics. I showed you how these principles derive from life experiences that we all have and that they simply express the knowledge we have gained from those experiences about what makes a vibrant, abundant life. I also pointed out that when we experience scarcity and low vibrancy it is because, often without being aware of it, we have agreed to the relationships that produce these states. This is good news! It means that, once we have seen how our current agreements produce scarcity, we can begin to figure out how to move out of them and toward different agreements. We can choose agreements that will transform our relationships and allow us to attain the high quality of life experience we sometimes have and want more of.

In Part 2 I want to show you how the Ecosynomics perspective—plus some key concepts from economics—can help you see how to do this. In this chapter, I will focus on the way economic thinking pervades our agreements, from those that shape the minutiae of our daily lives to those that determine the political-economic systems of nation states. In Chapter 5, I will introduce you to a framework for seeing current agreements more clearly and—more important—seeing opportunities to shift them toward greater abundance and harmonic vibrancy. In the final chapter of this section, Chapter 6, I will show how this framework becomes a powerful tool for seeing agreements—the Agreement Map. The Agreement Map enables us to perceive, through analysis of concrete actions, the nature of the agreements underlying and guiding those actions. This is the first step toward seeing where we have choices that can lead us toward more satisfying agreements.

AN ECOSYNOMICS PERSPECTIVE ON ECONOMICS

Human beings in the 21st century may argue over which economic system—which specific rules of the game—we prefer to live under. Yet the reality is that political economics, broadly defined, sets *all* the rules. It is the pervasive body of thought today. Because it is so pervasive and has been for centuries, we tend to take economists' assumptions about reality as just the way things are, not something that can be challenged or changed, except in the details. Our first step will be to examine those assumptions.

Of all the social sciences, economics—or political economy, as this subject was originally called—is the most pervasive in its influence on the agreements that shape our lives. For example, governments rely heavily on the expert opinions of economists for policymaking in basic areas like taxation, spending and the rules that govern business activity. Economists also guide the activities of the central banks that manage national currencies and the regulation of national and international banking systems. Economic theories and research shape the way business executives think about fundamental issues such as markets, competition and business strategy. Rules, policies and decisions based on political economic principles determine the price you pay for a banana or a can of beans at the local grocery store or a meal at your favorite restaurant, the interest rate on your car loan, the quarterly earnings growth expected of your company, the value of the currency in your wallet, the conditions in the employment contract you sign at work, why some have money and others do not, how ownership of land and buildings is determined, and where a nation invests its money, whether in education, agriculture, infrastructure, or defense.

At a more general level, different economic theories provide the foundation for competing visions of government's proper role in society. When we see labels like "capitalist," "socialist" and "communist" used in contests between political parties or in discussions of international affairs, or in our history books, we are being invited to make distinctions among political ideologies. But the differences among them are rooted in economics. In short, the influence of economics is all around us, shaping our lives for better and worse. Ecosynomics encourages us to question how this influence affects the abundance we are experiencing.

As we consider this question, it can be helpful to remember that economics is a field of study just like sociology, social psychology, political science and history. Each of these fields focuses on understanding a particular aspect of human society. In the case of economics, the focus is on material wellbeing and how the actions of individuals, organizations and governments contribute to securing it. It is also helpful to recognize that economic thinking has evolved within the context of the larger evolution of human society. In other words, it has a history. Understanding that history, at least in broad strokes, can offer valuable perspective.

The emergence of economics in historical context

Economics as we know it originated as the product of a particular region and its particular history. Writings from ancient Babylonia, India and China, as well as the Hebrew Bible, the work of Greek philosophers and religious texts of the medieval era all addressed many issues that we would consider to be questions of economics. They are important precursors to economics. However, the formal discipline of economic study did not emerge in any of those times or places. It arose instead in Western Europe in response to the momentous changes in European society that occurred roughly from the 16th century through the 19th century. During this period, the feudalism of the medieval era gradually gave way to the rise of a market economy and the emergence of capitalism, industrialization, and the beginnings of a modern political and social order.[59]

The powerful forces shaping and unleashed by these changes inevitably affected how the people who were thinking about economic issues approached their topic. In the feudal era, there were markets, where goods such as food, spices, cloth, livestock and slaves were bought and sold, but there were no markets for labor, land or capital. Labor was the lifetime obligation of slaves or serfs to their owners or feudal lords. Land was territory to be conquered or ruled over, and wealth was the reward that came to those who conquered or ruled. By the 17th century, however, the discovery and colonization of America and the establishment of trade routes around the horn of Africa had created a merchant class whose wealth was not tied to land or objects but was money that could be used to launch new enterprises and build greater wealth, as well as to buy goods and services. The flood of new wealth and new enterprise unleashed by this "merchant capitalism" brought economic opportunity as well as painful dislocation for the individuals who lived through the period.

For example, in England, where the process moved faster than in other parts of Europe, thousands of peasants were displaced from land their families had farmed for generations so that the lords who owned the estates could enclose their fields and raise sheep for the emerging wool market. Land became a privately owned asset to be developed for the benefit of the owner. Rural people forced from their homes to look for employment in cities and towns were now free to work for any employer who would pay them. They and their work became "labor." Monetary wealth became capital, which could be invested in, say, expanding artisanal production to meet the demands of a growing urban population. In this way, the so-called factors of production—land, labor and capital—emerged in their modern form and became a central preoccupation of economic thinking.

More fundamentally, these changes transformed a system of stable economic relationships based on a tradition of top-down control into one that was dynamic and impersonal, with individual economic freedom at its core. The discipline of economics, as it began to take shape in the 17th century, reflected this fundamental change. In the words of historian Alessandro Roncaglia, "the philosophers of antiquity and theologians of the Middle Ages considered it their task . . . to provide advice on morally acceptable behavior in the field of economic relations." In contrast, Roncaglia says, political economists thinking about society in the context of emerging capitalism focused their attention on the "scientific issue" of how multitudes of actions by self-interested individuals could create an effectively functioning economy that would provide for society's material needs.[60]

This very basic history of the emergence of economics helps to explain the nature of its influence on the agreements we find ourselves working with in so many areas of our lives. The formative preoccupation of economics with the dynamics of a market economy gave the discipline—from an Ecosynomics perspective—an overly narrow focus on the self-interested individual as the key actor in creating the material wellbeing of society. We see this in its purest form in the seminal work of Adam Smith, perhaps the most well known work of economics: *The Wealth of Nations,* published in 1776. Smith showed how competition in a free market economy serves to channel, as if by an "invisible hand," the self-serving actions of individuals into positive economic outcomes for society as a whole. As we shall see later in this chapter, there have been challenges to this narrow focus on the individual. Yet Smith's exaltation of the individual was the basis of so-called classical economics and, especially in the United States, remains alive and influential today in neoclassical or "neoliberal" economics.

A second defining aspect of economics rooted in the history of its evolution is its central concern with material welfare, which means that it confines itself to the things-matter level of perceived reality. This, we have seen in previous chapters, is the realm of the concrete, the here-and-now. And it is the realm of scarcity. Now, working effectively with the concrete is important, and economics has given us an abundance of valuable knowledge about how to do this. Yet the idea of scarcity has taken on a life of its own within the discipline, to the point where it has become a fundamental assumption that scarcity dominates every aspect of life, not just material resources. From an Ecosynomics perspective, this is a big problem for our agreements. Another brief historical journey will help us see how this came about.

History of the assumption of scarcity

In classical economics, the central issue to be addressed, the "economic problem," was to figure out what conditions were necessary to sustain an effectively functioning market economy. The focus of economic analysis was on the production of material goods and the mechanisms by which those goods are distributed within society. The value of the goods, and therefore the price, classical economists saw as primarily a function of the difficulty of production. The idea of price as a function of supply and demand, in which the scarcity of products relative to consumers' desire for those products is the determining factor, had always been part of economic thinking. But it was not a mainstream theory for the first century or so, when classical economics predominated the field.[61]

This changed in the 1870s, when economists in Austria, France and England published treatises that conceived of the economic problem as the task of determining the optimal utilization of scarce resources relative to the demands of economic actors. This formulation became the new mainstream view in economic thinking so abruptly, that the shift has been called a "revolution" within the field. In this new view, value is a subjective judgment by consumers about the utility of a given product, and price is an indicator of the scarcity of the product relative to consumers' demand for it. Theoretically, optimal utilization could exist as a state of equilibrium between demand and supply. Based on this assumption, the quest for an understanding of how an economic system could achieve this desirable state became primarily a matter of data analysis. This helped to make the new economics seem more of a science, as opposed to classical economics; in which the study of how social relations and government policies affect economic outcomes had been the main concern.

The discipline of economics continued to evolve in various respects after this dramatic change in focus. Yet the idea that its overriding focus is the allocation of scarce resources has remained central. In fact, the assumption of scarcity has become all encompassing in the worldview of mainstream economics. We can see this by comparing the perspectives of two influential economists writing about fifty years apart: Alfred Marshall and Lionel Robbins.

Marshall was one of the leading figures in the revolution within the discipline. In the view of many people, he was the founder of so-called neoclassical economics, the basis for the mainstream of the discipline today. He helped develop a rigorous framework to explain how to make optimal decisions in the context of scarcity: for example, by offering a seminal depiction of how price can be based on the intersection of trends in demand and supply. So, he clearly saw scarcity as the central concern of economics. But he also saw—correctly, from an Ecosynomics perspective—that economics concerned itself with only part of human experience.

"Political Economy or Economics is a study of mankind in the ordinary business of life," Marshall wrote in *Principles of Economics* (1890). "It examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing."[62] Marshall then defined two types of *non-material* requisites of wellbeing, those aspects that economics does not address. The first class, he said, "consists of [a person's] own qualities and faculties for action and enjoyment; such for instance as business ability, professional skill or the faculty for deriving recreation from reading or music." The second class of non-material goods he defined as "beneficial" relations with other people, either in business or personal life. Economics is the "Science of Wealth," Marshall wrote. "All wealth consists of desirable things . . . but not all desirable things are reckoned as wealth. The affection of friends, for instance, is an important element of wellbeing, but it is not reckoned as wealth, except by a poetic license."[63]

Lionel Robbins, a professor of economics at the University of London writing in 1945, rejected this carefully delimited characterization of economics and offered what is now a universally accepted definition of the discipline: "Economics is a science which studies human behavior as a relationship between ends and scarce means which have alternative uses." Marshall's conception, said Robbins, "the conception we have rejected . . . marks off certain kinds of human behaviour, behaviour directed to the procuring of material welfare, and designates these as the subject-matter of Economics." In contrast, "The conception we have adopted . . . does not attempt to pick out certain *kinds* of behaviour, but focuses attention on a particular *aspect* of behaviour, the form imposed by the influence of scarcity. It follows from this, therefore, that insofar as it presents this aspect, any kind of human behaviour falls within the scope of economic generalizations."[64] From this perspective, Robbins and those mainstream economists who followed him came to see scarcity everywhere:

> "The time at our disposal is limited. There are only twenty-four hours in the day. We have to choose between the different uses to which they may be put. The services, which others put at our disposal, are limited. The material means of achieving ends are limited. We have been turned out of Paradise. We have neither eternal life nor unlimited means of gratification. Everywhere we turn, if we choose one thing we must relinquish others which, in different circumstances, we would wish not to have relinquished. Scarcity of means to satisfy ends of varying importance is an almost ubiquitous condition of human behavior.[65]

An Ecosynomics perspective on scarcity

Why devote so much attention to this history of the idea of scarcity in economics? Because the founders of modern economics pointed us towards a powerful science of choice, choice in the arena of the material world, where we must deal with scarcity. This is the arena Ecosynomics proposes is the things-matter level of perceived reality, but it is not the totality of what is real. Rather, it captures a moment in the ebb and flow of resources at the development-motion level when motion stops and something concrete appears. While economics has taught us much about how to operate effectively at the things-matter level, we have come to apply its lessons to ALL cases. As a result, the assumption of scarcity pervades most human agreements today, especially the ones most affecting our experiences of life.

Ecosynomics, on the other hand, suggests that scarcity, as defined by many leading economists, is just one particular way of looking at the world. For example, many people point to the regions of the world that are experiencing a severe lack of access to water and suggest that the scarcity of water could lead to a third world war some time in the future. People need water to survive, and since there is only so much water available, they see it as scarce. Ecosynomics offers a different take on this issue: is there really not enough water on the planet? Two-thirds of Earth is covered in water, much more than we can consume. The vast water in the ocean is salty and therefore not drinkable. Yet we have plenty of technology used every day to desalinate water, lots of it. Is the problem then that we cannot get clean water to people cheaply? While I have not traveled the entire world, I have seen and am assured by other travelers that they have seen soft drinks in the most remote villages in Latin America, Asia, and Africa. If PepsiCo can get a can of soda to these villages and make a profit, then maybe we can get water there too.

This brief thought exercise suggests, in very simplified terms, that maybe we have a water scarcity problem because getting potable water to people in remote areas is not important to the people who could make it happen, just like they have done with other products. Maybe it is the dominant pattern of focusing narrowly on individual self-interest and accepting uncritically the assumption of scarcity that creates the limits to what is possible. If we start from abundance and stay in relationship in all five dimensions, maybe we could find a way to create abundance of water. In other words, the scarcity of water might just be a matter of perspective, perspective based on the fundamental assumption of scarcity.

Ecosynomics offers an alternative way of seeing reality, in which scarcity is again relegated to a limited sphere and the five relationships together provide the foundation for agreements. Ecosynomics does not reject or seek to replace economics, however. It builds on what economists have established. In particular, it incorporates as a basis for understanding agreements, four questions that are fundamental to economics. These questions concern what people see in their environment that can contribute to human wellbeing. Let’s look at them next, then I will use them to illuminate differences and similarities among political-economic systems.

FOUR QUESTIONS ECONOMISTS ASK

The four core questions of economics are: how much of the necessary factors of production are available (resources); who will decide how to use them (resource allocation mechanism); what criteria shall we use for allocation decisions (value); and how shall we interact with each other to get what we need (organization)? When economists bring these questions together it is usually to tell the basic story depicted in Figure 11, below: resources are inputs to the production process; management organizes activities to convert these resources into the outputs a consumer values; and the allocation mechanism determines how this all happens. This story is at the heart of economics because, as Paul Samuelson states in his classic textbook, it encompasses three fundamental economic problems that society must address: "(1) *what* outputs to produce, and in what quantity; (2) *how* to produce them—that is, by what techniques should inputs be combined to produce the desired outputs; and (3) *for whom* the outputs should be produced and distributed."[66]

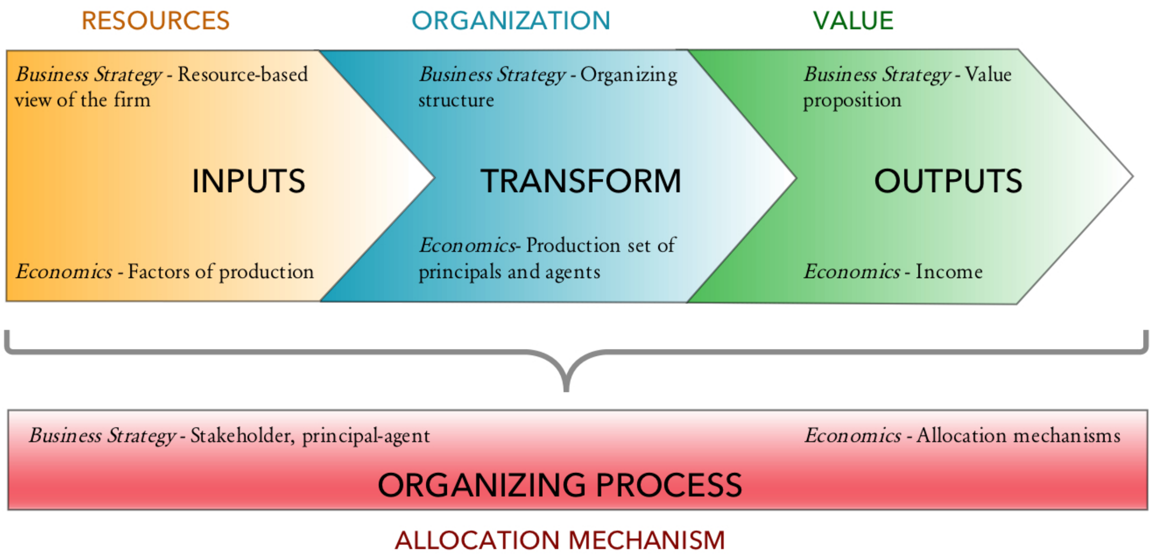

Figure 11: Key Economic Theories

Notice that Figure 11 presents this economic story as a linear flow. First resources come in, then people organize to transform them into something that, finally, others value. This is the most common way of showing these relationships—one, then another, then another. Gregory Mankiw, the author of another leading economics textbook, tells the story as a circular process, as follows: "households sell the use of their labor, land, and capital to the firms in the markets for the factors of production. The firms then use these factors to produce goods and services, which in turn are sold to households in the markets for goods and services." In both depictions, we see a process with distinct phases, and at each stage, there is a handoff—from resource owners to the organization and from the organization to the consumer, or household.[67]

This framework of distinct phases greatly simplifies a number of complexities and has allowed economists to delve deeply into and develop a comprehensive understanding of each of the four questions. At the same time, it led to dividing them up into distinct theoretical issues within either economics or the related field of business strategy, as indicated in Figure 1. While some theorists recognize the interdependence of the four questions and some practitioners in business organizations work with complex models that deal with these interdependencies, the more common usage of these four building blocks separates them into distinct disciplines. Similarly, common practice builds off of resource theories or allocation mechanism theories or organization theories or value theories, but rarely off all four together. We will look at each of the four questions separately in this chapter, and I will point out some of the ways in which economists' thinking on these questions affect your day-to-day experiences. In the next chapter, however, I will bring the questions together within the Ecosynomics framework, so that we can begin to see how their interdependencies affect agreements.

Resources

When considering the first basic economic question (How much resource is there?), the economists think about the factors of production—land, labor and capital. These are the basic building blocks of the economy. In economics, land includes anything that comes from the land, such as water, oil, minerals, forests, and natural gas. These natural resources are the raw materials for the production process. Labor is the effort people contribute to the production of goods and services. Capital is any man-made resource that makes it possible to assemble the other resources needed to produce goods and services, such as money or machines. In general, land receives its income in rents, labor in wages and capital in interest. Over the years, economists have expanded the definition of the factors of production to include intangible resources, such as intellectual property, goodwill, reputation and social capital (social relationships that have economic value).[68]

Your access to these basic economic inputs, either in their raw form or in the finished form of products and services you consume, directly influences your material wellbeing. Whether or not you are aware of it, economics-based principles determine how much is available and who has what rights to access what is available. For example, there might be fruit-full trees on your walk to the library. The fruit could satisfy your hunger, but if the trees are rooted on the land someone else owns, it is not available for you, no matter how hungry you are. This is the economic concept of ownership, and it underlies basic agreements about what resources are, who owns them and who has access to them. Ownership, as defined economically, is the exclusive right to use something, which implies scarcity. Once you own it, you have the right determine how it is used, and others do not, which is enforced by law.

Another influential economics-based concept is price. Price is the moment of agreement between producers and consumers when goods or services are exchanged. Starting from an assumption of scarcity, economics sees this exchange as occurring in the context of competition for scarce goods, and this sets the foundation for the scarcity in your daily experience. You wake up on a bed you bought in a house that the bank probably owns. You acquired the bed in an exchange with a manufacturer or retail intermediary at a price set by a mix of the company's costs, expected profits, and supply-demand-based, competitive-market conditions. The same is true of the toothbrush and toothpaste you use to clean your teeth, the clothes you put on and the food you eat for breakfast. For the privilege of having a mortgage so you can eventually own your home, you pay the bank the principal (the price of the home) plus interest (the price of the mortgage). You can afford the bed, clothes and food, as well as the mortgage, because you earn income from a job. That is to say, you exchange your scarce labor for an employer's scarce money at a competitive "price," your wage.

In all of these transactions, you are trying to minimize what you must give up in order to get what you want, and the other party is doing the same. The relationship is colored by these competing goals and so cannot be one of fluidity, sharing and a sense of abundance. Since we are nearly always in that space, it is hard to get out of scarcity mode when we deal with our friends and families. Without being aware of it, we carry this sense of scarcity—not just of money, but also of time, energy and other nonmaterial resources—into all of our relationships. In this mode, we tend to ignore the motion and light levels of perceived reality and apply only a matter-level model of exchange. It can be quite a challenge to remain positive, to be as generous as we want to be and to value the contributions people make to the quality of our lives outside the framework of demand and supply. This is how the assumption of scarcity carries over from the innumerable price-based interactions we engage in each day into those parts of our lives where it is irrelevant.

Now, ownership and price have proven to be highly effective mechanisms for mobilizing resources and resource allocation in a market economy, and market economies have produced a high level of material wellbeing for hundreds of millions of people who participate in them. This is a good thing. From an Ecosynomics perspective, however, it has come with a downside: the pervasiveness of scarcity thinking and resulting experience of scarcity in our daily lives. This is what we want to learn to shift.

Resource Allocation Mechanism

Once we see what resources are available—the first question—we want to know who will decide how to allocate them across many possible uses. "Who decides?" is a fundamental question for society and has a direct influence on your daily life. This is because the answer to this question, expressed in the so-called resource allocation mechanism, defines the political-economic system you live in. In other words, it sets the rules of the game at the national level.

Allocation mechanism theory suggests optimal designs for allocating scarce resources within a given political economy, in the most efficient way—the most value for the least cost. Comparative economics looks at the resource allocation mechanisms that characterize different systems. Economists in this field have defined a continuum. On one end of the spectrum is the most individualistic system, in which resource allocation (theoretically) occurs wholly through the choices of individuals and the rules support individuals deciding with other individuals, as in the decision-making that happens within free markets. On the other end is a system that (theoretically) is wholly directed by the government.[69] For much of the 20th century, the Cold War between systems that seemed to represent these two extremes—the "free-market economy" on the one hand and the "command economy" on the other—dominated and divided the world. So far in the 21st century, the idea of a continuum is much more relevant.

Ecosynomics offers a different perspective on the question of who decides. Later in this chapter, I will show you how differences in resource allocation mechanisms and the political-economic systems they produce can also be understood in terms of the five relationships, to self, other, group, nature and spirit. In the process, we will see another way in which the assumption of scarcity in economics contributes to the experiences of scarcity we have in our daily lives.

Value

The third core economic question has to do with the criteria used to allocate resources. Economists think of this question in terms of value—the value of specific goods and services determines their prices, and prices guide the economic decisions that determine how resources will be used to produce goods and services. Value theory in economics delves into how this process works.

Economists' thinking about value has shaped how most people think about what things are worth. Their understanding of value makes it easier for you to go to the market and exchange money for goods, to go to an employer and exchange work capacities for wages, to go to the bank and exchange future interest payments for loans today. In Ecosynomics terms, this branch of economic theory has developed ways of specifying what value is generated from existing resources at the things-matter level. This contribution has helped to create the improvements in material wellbeing experienced globally over the past two centuries.

At the same time, as noted above, a shift in thinking about value was at the heart of the 19th-century revolution in economics that enshrined the assumption of scarcity. Where classical economists considered value to be intrinsic to the good or service, derived from the inputs to production, the view in mainstream economics today is that value is a subjective criterion primarily influenced by scarcity. At least since the 13th century, however, economic thinkers have found it useful to divide subjective criteria of value into three broad categories. One of these is *virtuositas*, the ability to satisfy human needs. Another is *complacibitas*, a personal preference. And finally, there is *raritas*, the scarcity of the good. These three can be considered separately because what drives them is different: I need to eat to live. I prefer brown bread to white bread. I will pay more for the brown bread I want if there is not much of it available.[70]

From the Ecosynomics perspective, we can see that it is important to work mindfully with all three of these categories of value. *Raritas* is important, but it deals only with the things-matter level of perceived reality. *Complacibitas*, personal preference, is also important and limited in scope, in that it deals exclusively with the primary relationship to self. *Virtuositas* addresses the broader question of what satisfies human needs and so can be seen as dealing with all five primary relationships at all three levels of perceived reality. Ecosynomics invites us to consider value from a broader perspective that includes all three forms.

Scarcity-based economic thinking about value influences our lives in various ways. For example, while many people think that grade school teachers play an important role in their children's lives, these teachers tend to be paid relatively low wages. The same is true for most caregivers, who are not paid or paid relatively poorly. The wages for teachers and the lack of wages for caregivers is determined by the supply and demand for replaceable units of resource, a scarcity-based view that values only the things-level outcomes and not the development and potential levels of value realized by teachers and caregivers—how many kids were taught how many hours of what subjects and how many hours of care were given. The economic value system is focused entirely on the things-matter level, where teaching young children and caring for the sick and elderly are "unproductive" activities. In a negotiation that is confined to pay for hours worked, these workers don't have much leverage.

Another example of scarcity-based thinking in economics that affects our daily lives places primary value on outcomes, giving much less value to learning at the developmental level of reality or to potential-realization at the possibility level. This value system shows up as the job contract based on a job description—you are paid to do the job, period. The contract specifies what outcomes meet the expectation; nothing about learning and the potential of the individual.

One other major example of scarcity-based thinking in economics is the focus on short time horizons. As the primary emphasis is on the things level, most attention is given to what is in the immediate foreseeable future. This leads to a focus on immediate impacts of decisions, along with the costs and benefits of those impacts. This thinking ignores longer-term impacts, calling them "externalities," as they are economically external to the responsibility of the economic decision maker. Externalities today include pollution, and the management of common goods, such as air, forests, and water. This is how, as a society, we can have such conflicts between what we think is important and what we value in scarcity-based, economic terms.[71]

Organization

The fourth core question in economics looks at the organization of human activities to transform resource inputs into outputs people value. In economic thought, the heart of this question, rooted in the assumption of scarcity, is how to find the most efficient way to make the resource transformation happen. As in other areas, economic thinking about organization has contributed greatly to material wellbeing, even as it has introduced scarcity into other dimensions of life.

In fact, outside of the family most of our experiences with organization are influenced by the economic principles devised in Western Europe and the United States in the process of rapid industrialization in the late 19th and early 20th centuries. New manufacturing technology developed in that era, for example in the automobile industry, provided opportunities to produce more and more products at lower and lower costs through economies of scale. To take advantage of these opportunities, business owners needed to organize large numbers of workers as efficiently as possible, and two principles became central to the solution they devised: hierarchy and division of labor. These organizational devices made it possible for companies to closely control the activities of their employees, and for the employees to become increasingly proficient at executing specific tasks or operating specialized machinery at faster and faster rates of production.

The fact that, in industrialized societies today, many millions of people have access to a vast array of manufactured products at affordable prices is testimony to the effectiveness of the organizations operating along these lines, as well as to continuing advances in technology.

At the same time, however, the fact that hierarchy and the command-and-control style of management it encourages became the model for virtually all work organizations has made scarcity—of autonomy, of initiative, of relationship, of deep trust and commitment, of creativity, of responsibility—a common experience of the people who work in them. Similarly, the principle of division of labor lives on in all sorts of organizations in the form of specialization, dividing up the group's work into smaller and smaller chunks.

The basic economic idea here is that every task has a learning curve—you get better at doing something the more practice you have. The more individuals specialize, the more time they dedicate to moving up their own specific learning curves and the more efficient they get at their individual tasks. While this might allow individuals to experience some of the development level of reality, as they learn and build capacities, deeper learning and capacity development require relationships with others and the group's support for the development of that unique contribution. However, where things-matter-level efficiency is the overriding organizational goal, specialization can lead to scarcity in the relationships to the other and the group, limiting the level of vibrancy experienced. This is the more common experience.

Essentially, economists saw that every transaction has costs—the costs involved in informing oneself about the transaction, in taking the time to reach an agreement, and in making the effort to ensure that people stick to the agreement. The economic question is whether the benefits outweigh the costs. A particularly powerful framework in this arena—transaction cost economics—looks at the benefits and costs of every interaction in order to determine how to structure that interaction in a way that maximizes the net benefit. This kind of thinking about human interactions has had, and continues to have, a huge influence on the agreements by which most work organizations operate and the day-to-day experiences of the people they employ.

For example, there have been many innovations in the field of organizational science suggesting ways to increase collaboration, communication and teamwork. Transaction cost analysis might show that the costs of being in these kinds of relationships—the time involved in paying attention to each other and supporting each other—outweigh the benefits. Or it might not, and the experiment in collaboration might therefore be deemed a failure. While this transaction-cost approach has brought greater clarity to the efficiency of different forms of organizing, the benefits in human energy and creativity derived from greater vibrancy in the five relationships are not typically part of the calculation.[72]

Starting in the 1980s, great efforts in supply chain optimization and total quality began to open organizational thinking and practice into the motion-development level, integrating cooperative efforts across a set of previously isolated disciplines, in a continuous learning and improvement process focused on shared objectives. While these efforts have added great resiliency to many organizations, enabling them to survive turbulent times; their continued focus on the efficient transformation of scarce resources keeps them locked into the predominance of the things-based organizational task. This focus on the task versus on the human being restricts the amount of abundance available in the experience and outcomes, as I will show later.

SEEING DIFFERENT WORLDS THROUGH THE FOUR ECONOMIC QUESTIONS

For nearly forty-five years, the Cold War polarized the world into two hostile camps. On one side, the United States with its friends and allies promoted and defended its ideal of a free-market economy and democratic political system; on the other, the Soviet Union with its friends and allies promoted and defended its ideal of a centrally managed economy and communist political system. This conflict between political-economic systems cost thousands of lives and trillions of dollars. With this episode in our collective history, there can be little doubt that people care greatly and disagree passionately about the agreements that set the terms of political and economic life in the nation states where we live.

Ecosynomics offers a fresh perspective on these political-economic differences. From this perspective, it may be possible to find greater understanding and perhaps even collaboration in shifting agreements to make all systems better at providing the abundance and harmonic vibrancy we humans want in our lives. The four basic economic questions will help me show you some important similarities and differences in the major systems.

Comparing political-economic systems

Let's start with the most basic similarities: an exclusive focus on the things-matter level of perceived reality and preoccupation with the scarcity that exists in that realm. I have already described how these characteristics became central to the mainstream of economics as it emerged along with capitalism in Western Europe and continued to evolve between the 17^{th} and 20^{th} centuries. The alternative systems that arose out of critiques of capitalism, primarily socialism and communism, challenged many of its basic principles but not the assumption that all resources are scarce. They therefore also share the tendency of scarcity thinking to see the world in terms of either/or dichotomies and trade-offs. As a result, all of these political-economic systems are organized around the principle that one, and only one, of the five relationships (to self, other, group, nature and spirit) should be privileged in guiding resource allocation.

The key difference among political-economic systems is thus the resource allocation mechanism. As described above, as a response to rule by the monarchy, the free-market capitalism of classical and neoclassical economics saw the self-interest of individuals as the centerpiece and guiding mechanism of the economy. Either as a corrective or as an alternative to unfettered individualism, other systems start from the premise that a different relationship should be primary in resource allocation. Significantly, from an Ecosynomics perspective, no existing political-economic system proposes a mechanism of resource allocation based on all five relationships together. This choice simply cannot be envisioned from the viewpoint of the things-matter level, where all these systems are stuck.

Yet much has been learned from the cumulative experience of billions of people who have lived under these different systems and from the analysis and insights of economists who have studied that experience. All of this will be relevant and useful when we humans get to the point of framing political-ecosynomic agreements that honor all five relationships simultaneously. As a first step, we need to stop thinking of competing political-economic systems as hostile or evil. To move in that direction, I propose that we explore how their differences can be understood in terms of privileging different relationships.

The economics of relationship to self

I will conduct this exploration through a little thought experiment, beginning with the relationship to self. What would be my starting point for thinking about economic agreements if my relationship to myself were all that mattered to me? First of all, I would believe that I would experience greater wellbeing, health and success by experiencing more of my relationship to the self, more of my capacities, growth and potential. I would see my personal freedom as a key source of vibrancy in my life. After all, I am the only one who can know all of my truths, hence the only one who can make the best choices for me.

Approaching the resource question of "how much," I observe that some individuals seem to have certain things and some do not. I believe it is up to me to determine what I need and what I should do to get it. Thus, it is no surprise that when I look at the resource allocation question of "who decides," I think I should decide and act for myself and everyone else should do the same. When I then ask the value question of "what criteria," I go back to my desire to enhance my own capacities, development, and potential in order to maximize my happiness and wellbeing. Similarly, when I think about how economic relationships should be organized, I think about how I can interact in ways that benefit my own wellbeing. Since I assume that everyone else is thinking and doing the same thing, I believe that the health of the group is the aggregate wellbeing of all self-interested individuals. An elder statesman I talked to captured this perspective succinctly: "Look. It all starts with the individual. If you don't take up your own work and responsibility for your own actions, then nothing else matters."

It is not difficult to recognize the underpinnings of mainstream capitalist economics in these self-oriented responses to the four questions. Of course, there has been a great deal of criticism of free-market capitalism from many directions. Much of this criticism focuses on the effectiveness of unfettered individualism as a mechanism for allocating resources and keeping the economy running smoothly, to the benefit of society at large. Karl Marx, the most influential critic, argued in *Das Kapital* (1867) that, far from being a smooth-running mechanism, free-market capitalism has an inherent tendency to produce crises—both periodic economic crises and a more fundamental social crisis based on increasing inequity and conflict between the owners of capital and the rest of society. The criticism of inequitable outcomes became the basis for a number of alternative political-economic systems, which I will examine below. At the same time, the reality of recurring crises of capitalism—in particular the Great Depression of the 1930s and the so-called Great Recession, precipitated by the financial crisis of 2007-2008—has led even mainstream neo-liberal economists to accept the idea that unfettered individualism will not reliably produce acceptable outcomes for society.

Major alternatives to self—the economics of other and group

Focusing my attention again on my thought experiment, now I am completely engaged in my experience of the relationship to other individuals. This is the only relationship that I will pay attention to on this particular path. Again, the intention is to see what economic agreements might look like with this primary focus.

When on the path of the relationship to the other, I see that some people have certain things and some do not. People do not all have the same amount of the resources that seem to be scarce, and since I am most concerned about staying in a positive relationship to other individuals, I am concerned that the situation seems unfair. Therefore, to the second question of "who decides how resources should be allocated," I respond that everyone should have a say about what is fair. To the third question of "what criteria," I suggest that on this path the allocation of scarce resources should be balanced in a way that produces a sense of fairness. Recently, a school board member stated this principle to me clearly: "Look. If it doesn't feel fair to everyone involved, they will not participate. And, without their participation, we can never achieve our goals for the community." To the fourth question of how to organize economic activities, I answer that if everyone is treated equally, then all will do well, and the group will be healthier. I see this path as moving me toward an experience of greater vibrancy through greater equality.

These responses to the four basic economic questions express a logic that focuses on the utility of the greatest happiness for the greatest number, as described by the British philosopher Jeremy Bentham in 1776.[73] It also captures a central critique of free-market capitalism, leveled by Karl Marx and many others—the tendency toward greater and greater inequality of outcomes between the owners of capital and the laboring class. This critique and the underlying logic of the relationship to other is the basis for socialist political-economic systems. A priority in these systems is that people are perceived to have equal status under the rule of law, the purpose of which is to ensure felt-fair access of all to scarce resources.[74]

The Marxist critique of capitalism also pointed to the path of the relationship to the group, the next excursion in my imaginative exercise. I take this path because I believe that my best chance for a healthy, vibrant life lies in being part of a healthy group. If my group is weak, I am weak. A manager I was visiting in Ecuador expressed this mindset when she reminded her team, "When the group does well, we all do well. When the group suffers, we all suffer. My ability to pay you is based on our success as a group."

From this perspective, when I take up the first economic question, "how much," I observe that some groups do better than others in gaining access to scarce resources. My focus is therefore on helping my group get as much as possible. To the second question of how to allocate resources, I respond that all group members must decide together how to allocate resources in the name of the group. The criteria for resource allocation decisions—the third question—must be that they enhance the health of the group as a whole. By the same token, the organization of economic activities needs to direct the work of individuals to secure the wellbeing of all. This is how I would answer the fourth question from an exclusive focus on the relationship to group. These responses to the four questions live in collectivist economics and communist political-economic systems.

With the end of the Cold War in 1991, the lines between the major forms of political-economic system have blurred. The global economy that has emerged operates on the free-market capitalist model, and virtually all nations have adopted that model to some extent. Yet nowhere does free-market capitalism mean complete individualism. From nation to nation, in varying degrees, government regulations and economic policies and the rule of law assert the principles of relationship to other and group within a mixed political-economic system. Yet the critique of neo-classical (aka neoliberal) economics is as strong as ever, and it now comes from some additional directions.

Further critiques—the economics of nature and spirit

I will continue my thought experiment by exploring the perspectives informing these critiques. When I see my path to vibrancy as dependent primarily on my relationship to nature, I see it is essential that the abundance of the natural world that enriches me—the sunshine, clear air, the forests, lakes, rivers, mountains, and oceans—be sustained. Starting from an assumption of scarcity, when I consider the question of "how much," I feel fearful that these precious resources are finite. I see that each member of an ecological system competes for enough of the available scarce resources to be able to survive. Those individuals or groups that survive and flourish tend to be the ones who are best prepared to succeed in the ecosystem, as well as those who are most resilient to changes in the ecosystem. I accept this natural competition as the appropriate allocation mechanism ("who decides"), because, to my mind, it is the ecosystem as a whole that is most important. What I do not find acceptable is how the consumer orientation of the market economy has led to overconsumption of natural resources, which threatens that ecosystem. To me the purpose of economic activity ("by what criteria") is to maintain a dynamic balance among all the parts of the system. The organizing principle for economic action should therefore be to optimize fitness and resilience for the system as a whole, as well as its parts. Best-selling author Daniel Goleman captures this organizing principle in his concept of "ecological intelligence": "From the Arctic Circle to the Sahara Desert, native peoples everywhere have survived only by understanding and exquisitely attuning themselves to the natural systems that surround them.[75]

This is the realm of "nature" economics. As the basis for economic systems, it can be found today only in some tribal economies and in eco-friendly communities. However, as a critique of the globalized, consumer-oriented market economy, it has various forms of expression. For example, ecological economics conceives of the economy as a subsystem of the global ecosystem and focuses upon developing strategies for preserving "natural capital."[76] Environmental economics is a separate field of study focused on "the economic effects of national or local environmental policies around the world, that is, cost-benefit analysis of efforts to deal with issues such as air pollution, water quality and global warming."[77]

Finally, in my thought experiment, I want to imagine what it is like to seek an experience of greater vibrancy in my life by following the path of the relationship to spirit. On this path, I am motivated primarily by my desire to be connected to a higher power, the source of creativity. How would I then answer the four economic questions? Assuming scarcity of material resources, I accept the reality I see that some people have more than others. I do this because I answer the question "who decides" from the belief that a higher power is the ultimate resource allocator, and I see the criteria for allocating resources as emphasizing transcendence, moving beyond the material world to get closer to spirit, the creative source. From this perspective, I value spiritual resources more than material ones: economic success is positive only up to a point; and it comes with a responsibility to act charitably toward those who are less successful. To the fourth question, I respond that these principles should be embodied in the organization of economic activities. This view is expressed in the Islamic economic principle of *Adalah*, or justice, which asserts that concern for the welfare of others and cooperation are the proper basis for economic organization.[78]

Of course, people have lived for many centuries within systems of economic agreements based on the relationship to spirit, for example, in Buddhist and Islamic communities, which today include nearly two billion members.[79] However, in the post-Cold War era, believers in this path have offered it as a middle ground between free-market capitalism and "command socialism" or communism. "Of all the modern economic theories, the economic system of Marxism is founded on moral principles, while capitalism is concerned only with gain and profitability," the Dalai Lama has said. "The failure of the regime in the former Soviet Union was, for me, not the failure of Marxism but the failure of totalitarianism. For this reason I still think of myself as half-Marxist, half-Buddhist."[80] Comparative economists J. Barkley Rosser and Marina Rosser document the emergence in recent decades of what they call the "new traditional economy," based on a spirit-oriented critique of major economic systems. They show that within Islam, Confucianism, Buddhism and Christianity there are movements of varying size and strength advocating this new traditional economic model. This, they point out, is not a model that envisions turning back the clock and doing away with the global economy. Rather it seeks to establish a version of free market capitalism infused with and moderated by spiritual values.[81]

Conclusion—the paradox of scarcity

In this chapter I have tried to open up a somewhat different perspective on a couple of very large and well-studied topics—the role of economics in society and the distinguishing characteristics of alternative political-economic systems. I have suggested how these systems are not intrinsically hostile to each other but are all seeking the same goal, just along different pathways. At the same time, I have suggested that it is because *all* economic systems start from the assumption of scarce resources, and because economics is so pervasive an influence on our agreements, that scarcity is such a common aspect of our daily experiences, without our consciously choosing or even being aware of it. This brings us face to face with the economic paradox.

People everywhere want to experience the outer circle of abundance, harmony and vibrancy, and most of us do experience it sometimes. As I described in Chapters 1 and 2, when we examine what we feel like at those times, we see that the essence of the experience of the outer circle is a high level of vibrancy in all five relationships at the same time. Yet the schools of economic thought that are so pervasive in shaping the agreements that determine our experience insist that one relationship must be primary. In practice, they may accept a hybrid, but additional relationships added in are still just added in; they don't weigh in equally. Thus the paradox: we are pursuing an experience of harmonic vibrancy and abundance in a context dominated by thinking that denies the possibility of its essential characteristic.

I call this the paradox of scarcity because it is only from a place of scarcity, the inner circle, that it seems possible to experience a higher level of vibrancy in any one of the five primary relationships, independent of the others. From the experience of abundance, the outer circle, this mindset seems odd. It is like expecting to get the experience of ice cream from a substance that is not cold or not sweet or not creamy.

Scarcity exists at the things-matter level but is not all pervasive. The assumption of scarcity in economics limits us unnecessarily to seeking abundance on the enlightened-matter path. This is how the market system, which economics arose to explain, could have greatly improved material wellbeing for millions and produced great affluence for some while still leaving most of us stuck in an experience of scarcity much of the time. Ecosynomics enables us to distinguish "affluence," the accumulation of material wealth with a mindset of scarcity, from "abundance," the sense that there is enough and that what we need will be there when we need it. It suggests the existence of a different route to abundance, the grounded-potential path. This is what we will explore in the remainder of this book.