Globalization and the Complexity of Human Dignity

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Introduction

Is “complexity theory”—the investigation of dynamic, interactive systems of interconnected but relatively independent components—applicable to an understanding of the process of international economic integration: globalization?

Investors are ever more able to move funds around the world market in search of the highest economic return, with scant regard for national borders or local needs. A complex, global, social order is emergent, as nation states are integrated into the international economy, in spite of local social priorities being subordinated to global economic exigencies. This order is dynamic and unpredictable, though not chaotic; “patterns” or relationships are emergent, though there is no apparent trend toward something that might be called “equilibrium.”

How is such complexity to be understood?

In the 1990s a “science of complexity” emerged, addressing the “ancient idea that within life and the cosmos there might be fundamental ordering processes” (Albrecht, 2000: 409).

“complexity” … refers to systems with many different parts which, by a rather mysterious process of self-organization, become … ordered … “ordered complexity.” (Cowan, 1994: 1-2)

Complex systems evolve. They exist at a number of levels, or scales, which interact and change, so that it is impossible to describe these changes in terms of particular rules, nor is it possible to reduce understanding to one level of explanation. What is peculiar about complex systems is that within these changes patterns emerge and order is restored: “ordered complexity.” More than this, the patterns by which order is maintained themselves change.

Within this evolving ordered complexity there is a “spontaneous emergence of new structures and new forms of behaviour” (Capra, 1996: 85, emphasis added), creating order in open systems out of apparent chaos.

Historically, complexity theory grew out of the natural sciences—physics, chemistry, and biology—and really came into its own in the 1970s, when sophisticated computing hardware and software became relatively cheap, and developments in nonlinear mathematics allowed scientists to develop complex mathematical models of evolving, interconnected systems of independent components. Although there are still limits to the explanatory power of mathematical equations, there is a research agenda oriented toward making mathematical explanations of complex systems more generally relevant and accessible.

The science of complexity defines:

both the extent to which phenomenological descriptions of apparently real world systems actually resemble one another in fundamental ways and the extent to which our metaphors and abstract concepts of such systems … resemble one another. (Cowan, 1994: 3-4)

Social processes have been conceived of as complex systems, in which people interact through language, symbols, cultures, communication mediums, production processes, and so on, within social collectivities, which have evolved into a complex, integrated, global system. Complex systems are understood to maintain order, in spite of change, through feedback mechanisms. This raises the question: In what sense is there a feedback mechanism between people and the international social order, embodying individuals’ choices on how to behave into a spontaneous, evolving, global order, which is ever more integrated and interdependent?

Humans are creative, social beings. Progress implies the enhancement of individuals’ social potentials; and the concept of development addresses the social, institutional changes through which individuals’ enhanced potentials might be realized. Complexity theory, to understand patterns of behavior created out of evolutionary social change, has to examine the feedback mechanism by which individuals spontaneously organize themselves into dynamic social systems in order to progress and develop, to enhance and realize their social potentials. The research agenda must investigate the possibility of increasing understanding of emergent social orders through the mathematical modeling of complex individual/social interactions.

In complexity theory the world is modeled as a dynamic, nonlinear, mathematical system, with no simple relation between
Conventional approaches to the analysis of the economy and of society must be altered fundamentally if we are to make progress in understanding how the world operates ... The behaviour of the system as a whole can never be understood mechanistically adding together its component parts ... the economy and society are more than the sum of the individuals who inhabit it ... In the living, constantly changing economic and social worlds, the connection between the size of an event and the magnitude of its effects is no longer routine and mechanical. (Ormerod, 1998: x)

Models do not so much “predict” as “explain” and “understand” (on scientific method and analyses that “predict,” “explain,” and/or “understand,” see Cole, 1999: Part 4).

What might be the social, cultural parameters to individual behavior constituting the “feedback mechanism,” establishing “patterns” of behavior, within which millions of individuals choose how to behave, develop, and progress?

The question for complexity theory is: How and why do people reconcile their individual (creative) ambitions to progress, to the customs and needs of a global social order? Is it a question of individuals’ hedonistic choices creating patterns of social behavior? Alternatively, are individuals’ preferences tempered by the social exigencies of human existence? Or is it a question of individuals organizing to overcome the constraints to people realizing their emerging social potentials?

Are people essentially, respectively, “independent of,” “dependent on,” or “interdependent within” society?

Independent Individuals

If individuals' potentials are understood to be essentially independent of society—people’s characteristics are innate, biologically determined, a genetic endowment—then the analysis of an emergent social order has to focus on how millions of independent individuals' free choices, reflecting their particular, essentially genetically determined tastes and talents, are reconciled to each other within a social order.

Adam Smith described a complex mechanism for reconciling a multitude of individuals’ independent choices: the “invisible hand” of market forces. “Smith ... [observed] that economic growth had to be understood as a process involving increasingly complex patterns of specialization” (Rosenberg, 2000: 48, emphasis added). The dominant interpretation of the economics of Adam Smith is that if people are assumed to be essentially “independent” beings, “endowed” with tastes and talents, then individuals’ potentials (and choices) can only be fully realized through free-market exchange. Since the 1870s such an approach to reconciling individual choice and social order has followed parallel trajectories: neoclassical theory and Austrian theory (see Cole, 1999: 35-9).

For neoclassical theorists, the ideal social environment in which independent individuals might realize their potentials (what neoclassical economists refer to as “maximizing utility”) is the system of “perfect competition.” In such a state, given individuals’ biological endowments, there can be no increase in individuals’ enjoyment of utility (see Cole, 1999: 37-43, 1995: Chapter 3). However, neoclassical theory cannot account for or analyze activity out of equilibrium.

mainstream [neoclassical] theory fails to explain how markets do in fact come to work. It explains in great detail the relationships that would prevail in markets that already work. (Kirzner, 1997: 13)

That individuals are independent and naturally competitive, and that as long as free markets obtain there will be a trend toward “equilibrium” and the “maximization of utility”—the full realization of human potentials—is an assumption, an article of faith, a belief in human nature. “The market's advantage is that it allows things to evolve in a very human way, through free choices of millions of individuals” (Economist, Sept. 11, 1999, emphasis added).

The belief that there is an inherent trend toward equilibrium implies that there is no theory of complexity inherent within the neoclassical economic orthodoxy, no theory of the emergence of changing, complex patterns of behavior by which social order is established through independent individuals choosing according to their unique subjective preferences.

However, for Austrian theorists markets do not necessarily tend to “equilibrium”; rather, markets are processes through which individuals exchange information: Individuals become aware of one another’s distinct preferences, as expressed through the market supply and demand for commodities.

[markets are] coordinative process[es] during which market participants become aware of mutually beneficial opportunities for trade. (Kirzner, 1997: 67, emphasis added)

Since the analysis assumes the dynamic of social existence to be individuals’ hedonistic expediency—people competing to...
realize their own potentials—problems of inequality can only be a consequence of limitations to individuals’ free choices; or people are personally inadequate.

The solution? Freer, more competitive markets. Ontologically and epistemologically, such an approach cannot even ask questions of social/inequality; society is merely the sum of the individuals of which it is composed. The approach is fundamentally politically conservative. As long as individuals live in an environment of free, competitive exchange, then the advantaged are privileged by dint of their hard work and talent and deserve to be wealthy. If the economic environment is not fully (perfectly) competitive—and it never is—then the social and economic policy agenda should be oriented toward further liberalizing economic exchange and human existence. The social order is not a meaningful research question.

There is an implicit theory of complexity here, mapping out and identifying the mechanisms through which individuals’ choices are coordinated within market mechanisms as information processes, as complex patterns of specialization emerge allowing individuals to fulfill as yet unrealized preferences. Development policy for emergent potentials must be directed toward facilitating the free flow of information between billions of independent consumers (see Montgomery, 2000). Increasing complexity reflects the growing number of individuals independently choosing and competing to realize their unique potentials within global markets. This trend can only, globally, increase individuals’ welfare and the satisfaction of their emergent preferences, as people—as consumers—are able to access a greater pool of producers’ talents; and as people—as producers—can offer their particular talents to greater numbers of consumers.

This is reflected in the World Bank's endorsement of global economic integration:

> stimulating economic growth, making markets work better for the poor and building up their assets—is the key to reducing poverty [and realizing human potentials] ... Future trade talks will require a forward-looking agenda for broader trade liberalization [global free markets]. (World Bank, 2000: 1, 5)

Such a liberalizing agenda is to be implemented by institutions such as the World Trade Organisation (WTO), the International Monetary Fund (IMF), the World Bank (WB), and so on, controlling individuals “natural,” competitive economic activity within the social parameters of a legal system that mandates individuals to exchange freely. This is the social feedback mechanism that creates “organized complexity.”

For instance, the Palestine Economic Policy Research Institute and the World Bank (Diwan & Shaban, 1999) acknowledge the constraints of Israeli occupation, the large refugee population, the difficulty of access to the world economy except through Israel, the separation of the West Bank from the Gaza Strip, the ongoing process of institution building since the 1993 Declaration of Principles on Interim Self-Government Arrangements signed in Oslo (and following the 1989-91 Intifada), inadequate transport, electricity, telecommunications, water, sanitation, infrastructure, and so on, but consider all of these constraints in terms of how free-market exchange is inhibited, which, for the World Bank, explains Palestinian underdevelopment.

The solution?

> a dynamic private sector ... [which after the] removal of regulatory constraints, the establishing of supporting institutions and infrastructure, and reduced political uncertainty should ... allow the economy to grow. Once free of the legacy of high debts, inefficient public enterprise, and a revenue base too small to meet needed public expenditures, public policy can focus on creating a framework conducive to development. Direct foreign investment is likely to follow once profitable opportunities and a stable environment are established. (Diwan & Shaban, 1999: 1, 12)

Progress is a question of “getting the prices right” and development initiatives are intended to control individuals’ competitive instincts within an appropriate social order.

DEPENDENT INDIVIDUALS

With regard to the reconciliation of individuals’ choices and the maintenance of social order, rather than the analysis beginning with the activity of independent individuals (the micro level)—reductionism—we could just as coherently proceed from society and social order (the macro level)—holism. Individuals, in their nature, rather than being considered to be independent of society, can equally be understood to be dependent on society.

Human beings exist within societies characterized by a division of labor: technical specialization. Individuals can only specialize in particular branches of production if there is a social system through which they can cooperate to their mutual advantage within extant technical parameters. Where the technical basis of production is primitive and undeveloped, production is necessarily based on individuals’ particular talents and is small scale. In such a context, individuals are effectively “independent” and free markets can be an appropriate mechanism for achieving cooperation between producers and consumers. However,
with technical progress, increased efficiency, and rising standards of living, producers and productive systems become ever more sophisticated and technically dependent on each other; individuals are not independently “free to choose.” People’s potentials reflect their position within the (evolving) technical division of labor. Increasingly, societies and economies have to be managed within the parameters of the technical division of labor, and free markets (addressing individuals’ needs) become less relevant as a process of establishing cooperation within society.

Essentially, individuals are socialized and their potentials adapt to the needs of society. The basis of social existence is specialization within a technical division of labor, and social life has to be institutionally managed within these productive parameters. Individuals are organized to cooperate within an institutionally based social structure.

If the economy is truly complex then individuals cannot rationally deal with every part of it … People develop institutions to deal with the world. (Colander, 2000: 33, emphasis added)

With the development and increasing efficiency of production, the technical division of labor becomes every more complex and individuals in their economic activity are ever more specialized. The institutional feedback mechanism between individuals and society by which social order is emergent evolves and changes:

... [identifies] regularities in that information, condensing those regularities into a ... model, and ... [acts] in the real world on the basis of that schema [model]. (Gell-Mann, 1994: 17)

Social structures become differentiated and complex as individuals’ mutual dependence deepens with technical change, and the institutional, structural management of social existence evolves: “good economic policy is about ‘Getting the Institutions Right’” (Prasch, 2000: 222, emphasis added).

A technically integrated global economy needs international institutions in order to promote and organize cooperation between individuals as producers and reconcile their activity with individuals’ choices as consumers. In particular, there has to be an emphasis on “human” (social/cooperative) development as opposed to “economic” (individual/competitive) development. If there is to be global economic cooperation to our mutual advantage, an emphasis on institutionally enforced universal human rights is paramount.

Human rights and human development share a common vision and a common purpose … the mark of all civilizations is the respect they accord human dignity and freedom … The concepts and tools of human development provide a systematic assessment of economic and institutional constraints to the realization of rights. (UNDP, 2000: 1-2, emphasis added)

Human rights and human needs cannot be realized universally without purposeful international action to support the disadvantaged and the excluded, and to offset growing global inequality.

International economic integration has to adapt to local needs: “The state has primary responsibility for ensuring that growth is pro-poor, prorights and sustainable” (UNDP, 2000: 11). Corporations have to be held accountable; progress cannot be a consequence of global, competitive free markets; individuals’ potentials are dependent on society and the global economy has to adapt to local needs (not vice versa). The emphasis is on localization (not globalization).

... control of the economy by ... nation states. The result should be an increase in community cohesion. (Hines, 2000: 5, emphasis added) new technology will lead to healthier lives, greater social freedoms, increased knowledge and more productive livelihoods ... Without innovative public policy, these technologies could become a source of exclusion [impoverishment], not a tool for progress. (UNDP, 2001: 1, emphasis added)

The analytical agenda for the science of complexity, then, is to specify the linkages, or “path dependency,” between an increasing number of institutions within complex civil society. Identifying the institutional path dependency in complex social systems becomes the basis for social and economic policy to establish an institutional management framework appropriate to an expanding technical division of labor, emphasizing, “the role that norms and institutions play in moulding social economic relationships” (Prasch, 2000: 223).

There is now no justification for inequality. Income is not a reward to individuals for exercising their unique talents in production. Wealth is socially produced and should be socially distributed through pluralist, social democratic political institutions that function in the common interest; a degree of fairness and equality is essential if a cooperative economic environment is to be fostered.
INTERDEPENDENT INDIVIDUALS

In the analysis of an emergent, complex global order, and the specification of a feedback mechanism between the individual and society, creating “organized complexity” out of apparent chaos, the World Bank, believing that societies adapt to individuals’ evolving preferences (which have to be controlled within competitive markets), understands progress to be consequent on national economies adapting to the exigencies of global markets: globalization.

However, the analyses of the United Nations Development Programme assume that the technical/social parameters of human existence constrain individuals’ choices so that people have to adapt to the needs of society. Individual choice has to be managed to facilitate social cooperation within the exigencies of a technical division of labor. Local, technically defined social needs are paramount: localization.

That we approach the interaction between individuals in society, partially, from either the individual (independent individuals)—reductionism—or society (dependent individuals)—holism—reflects assumptions about the nature of human existence: beliefs about what is understood to be the dynamic of social experience and human motivation, and how individuals’ choices are reconciled to each other within a changing, complex social order. Such beliefs arbitrarily define and dogmatically assert the intellectual parameters of particular interpretations of social reality, assertions that (as noted) have an ideological and a political dimension (see Cole, 1999: Chapter 18). However, because human beings, as social animals, only exist in some form of society, and societies can only be conceived of as a product of individuals’ activity, an analysis of organized, complex systems of social activity cannot simply begin from either the “individual” or “society”: People are social individuals.

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For dialectics the universe is unitary but always in change; the phenomena we can see at any instant are parts of processes, processes with histories and futures whose paths are not uniquely determined by their constituent units. Wholes are composed of units whose properties may be described, but the interaction of these units in the construction of the whole generates complexities that result in products qualitatively different from the component parts … In a world in which such complex developmental interactions are always occurring, history becomes of paramount importance … the past imposes contingencies on the present and the future. (Rose et al., 1984: 11, emphasis added)

Importantly, the dialectic does not predict anything, proves nothing, and causes nothing to happen; it is a method for understanding complex patterns of relationships that evolve in an interdependent but unpredictable manner. People exist in society, which provides an institutional basis for social order: organized complexity. This social order has to be compatible with the basis of human existence: how we economically survive; how we produce and exchange. In class-based societies the social relations of production reflect who has power in society, who controls/owns the means of production. In capitalist society based on private enterprise, social power lies with capitalists, workers having to sell their ability to work in the labor market like a commodity. Indeed, power is exercised, and privilege maintained, through relations of commodity exchange (see Cole, 1999: Chapter 5).

With an evolving technical division of labor, people’s social potentials develop and social interaction expands and changes. At times the extant social norms and structures, which are beyond individuals’ control, militate against people realizing their emerging potentials. For instance, with technical change people’s work may become repetitive and unfulfilling, or individuals may become unemployed or forced to take a wage cut.

Such frustrations can either be destructive—people feeling inadequate and worthless, perhaps suffering depression or resorting to alcohol or drugs—or constructive—people being conscious of others who share their frustrations (and class interest), with whom they can organize and mobilize to change society and establish a qualitatively different complex social order.

For people to realize their evolving social potentials implies that individuals are able to participate in the organization and direction of their social existence. For society to evolve in a process reflecting people’s changing ambitions, needs, and abilities,
Globalization and localization unite at all societal levels … [and] local activities accumulate to create chaotic but global outcomes … there is no collective vision on how sustainability and democracy [organized complexity] can combine … This will need a special form of governance. (O’Riordan & Church, 2001: 1, 24, emphasis added)

The individual/social feedback mechanism that creates “ordered complexity,” the “special form of governance,” is democracy. But democracy is a process, the institutional form of which evolves with the changing nature of individuals’ complex social interdependence, and their resultant social potentials and needs. Of course, the extent to which participatory democracy progressively evolves between social individuals will in part be a reflection of people’s awareness of their own individual, emergent potentials, and in part a product of an emerging social consciousness of the constraints, beyond their individual control, that frustrate the realization of people’s creative, evolving social potentials.

What people know and think is important: The mind matters.

The production of ideas … of consciousness, is … the natural intercourse of men, the language of real life … the direct efflux of their material behaviour … Consciousness can never be anything else than conscious existence, and the existence of men is their actual life process. (Marx & Engels, 1970: 47, emphasis added)

The process of global economic integration is characterized by a concentration and centralization of economic power, essentially within the boardrooms of transnational corporations (TNCs). The interests of privately owned and controlled capital and the profitability of production are paramount. Yet the social, political regulation of economic activity, the basis of complex social cooperation between individuals, is still located at the level of the nation state.

At the economic level, the global logic of a world economy prevails, whereas, at the level of the political, a state-centered logic of the world system prevails. (Robinson, 2001: 162)

Within the emergent, integrated world economy, national governments (and by implication citizens) are powerless to regulate the basis of human social existence: production and consumption. The complex integration of individuals’ choices and social order is stymied. The result? A process of impoverishment as economic power is socially unaccountable. A process that is increasingly as much a part of human experience in developed market economies as in the marginalized developing world. In both worlds more and more people are sinking below the poverty line; are more insecure; suffer worsening educational provision and declining health services; are increasingly alienated from the political system that cannot address their emerging (local/global) needs, and so on. People are being denied the right to realize their creative social potentials; it is a question of human dignity.

Confronted by unaccountable, global economic power, individuals’ futures are constrained by economic forces beyond their control. Their frustrations, their anger, the denial of their dignity, will only be relieved when this power is subject to democratic, social control. Such a process of participation cannot be achieved within existing political institutions, which historically evolved to address the political dimension of national economic organization. The feedback mechanism by which “ordered complexity” in a globally integrated economy might be restored has yet to evolve: “This will need a special form of governance” (O’Riordan & Church, 2001: 24, emphasis added, quoted above).

Such a process is in train, and such institutions are emergent. Around the world social movements, challenging and addressing local constraints to people realizing their potentials—homelessness, hunger, environmental degradation, discrimination, unemployment, inadequate public services, and so on—are uniting people in a spirit of solidarity, justice, and human dignity, against unaccountable global economic power.

The factor uniting these disparate social movements is people’s frustration at being unable to protect themselves and control their futures and the social conditions for the fulfillment of their emergent potentials. It is a struggle for human dignity, a struggle that will crucially reflect how people interpret their social existence, how people understand the social context of their individual experience; how people might participate in the social control of human existence in a spirit of solidarity and (in an integrated world) of internationalism.

Increasingly, the belief in individuals’ independence within anarchic market forces, or their dependence on social and political institutions that are incapable of protecting their livelihoods within a complex global order, are being supplanted by an awareness that people are globally interdependent, and that their futures will mutually, creatively evolve as a social process in which individuals themselves will participate in building their own social future.
We are part of a movement … that understands that an alternative is possible … The system that oppresses us in one corner of the world … is the same system wreaking its havoc elsewhere. We have realized that a fundamental change in society is required. (Bircham & Charlton, 2001: 3)

It is not a question of globalization, or localization, but the mobilization of all those people who share an interest in challenging the unaccountable, unregulated economic power of TNCs and private capital. Human existence is being increasingly socialized by the process of global economic integration; and yet the dictates of the IMF, WTO, and WB require people to interact through competitive markets, individualizing social existence. This contradictory human experience is prompting people to reflect on their lives and develop new understandings to make sense of this confusing reality. People are becoming aware and conscious that their individual creativity—humanity—can only be enhanced (progress) and realized (develop) within a changed and emergent global social and political order.

Within the process of human social experience, an emergent understanding of the need for complex, participatory, global integration, respecting human creativity and human dignity, will lead toward a process of socialist development (on understanding such a process, see Cole, 1998: Chapters 4 and 7, 1999: Chapter 13).

Socialism is … a process of successive upheavals not only in the economy, politics and ideology but in consciousness and organized action. It is a process premised on unleashing the power of the people, who learn how to change themselves along with their circumstances. Revolutions within the revolution demand creativity and unity with respect to principles and organization and growing participation. In other words, they must become a gigantic school through which people learn to direct social processes. Socialism is not constructed spontaneously, nor is it something that can be bestowed. (Heredia, 1993: 64, emphasis added)

Such a process will evolve with people’s greater understanding of and insights into their social existence. While this process is not, of itself, amenable to abstract, complex, mathematical modeling, the science of complexity can be useful in producing knowledge of the processes of human existence, and aspects of and potentials within the human environment that are not primarily a reflection of an individual's evolving social potentials.

Until there is an international process of political and social change, which accommodates individuals’ emerging social potentials to an integrated global economy, a process of human dignity—the realization of human potentials—social existence will be more or less conflictual, and the complex international social order will be maintained by more or less repression. And the crisis of the world economy and global “complex” society can only deepen.

While the intellectual debate on “ordered complexity” and “progress” is restricted to questions of globalization or localization, a debate that is unable to address the qualitative change in human potentials consequent on deeper social interaction, a theoretical consideration and understanding of the appropriate social and political institutionalization of economic activity for progress are impossible.

The social feedback mechanism reconciling individuals’ evolving social needs and potentials with social organization is political participation in people’s daily existence—people’s “actual life process” (Marx & Engels, 1970: 4, quoted above)—not the illusory participation of periodic voting in competitive elections between alternative political parties for political control of national parliaments, which are more or less impotent to foster development and progress by being unable to address the most important aspect of social wellbeing: the social means of production. Social control over the processes of production and exchange is the foundation of people being able to realize their emerging social potentials: It is the basis of progress and development. Evolving, qualitatively distinct forms of social and political organization, based on democratic, political participation, in a context allowing individuals’ global, social potentials to be realized—potentials that are increasingly internationally defined—can be the only development strategy.

When progress—the enhancement of individuals’ emerging social potentials—and development—the realization of these evolving potentials, implying deeper complexity—is stymied by anachronistic market institutions, which maintain and preserve extant vested interests, the disadvantaged have to organize themselves to effect progressive social change and socially develop.

Progress is not a reflection of globalization or localization, but mobilization. Action to promote development and progress is not a question of controlling individuals to compete within free markets, nor institutionally managing individuals’ cooperation within society, but actively facilitating people to organize and empower themselves to participate in social organization to promote human dignity. This is the creative process of building an emerging, global society, to reflect changing human potentials.

People will increasingly “act locally” but think “globally.”

References

Emergence: Complexity and Organization