

## **IMPLICATIONS OF HIERARCHICAL COMPLEXITY FOR SOCIAL STRATIFICATION, ECONOMICS, AND EDUCATION**

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The institutionalization of systems of informed consent in market economies has exaggerated rather than minimized the meritocratic effect of such economies. In developing economies, it may help reduce both inherent economic gaps and effects of inherited wealth. In both cases, the highest paid people are those whose performances evidence the highest hierarchical complexity, and lowest paid people have the lowest stages of performance. Society is stratified according to stage of performance. Postformal thought is more likely to develop in graduate level education. Higher education has the effect of further stratifying individuals by stage of performance, rather than equalizing opportunity.

*KEYWORDS: Economy, education, hierarchical complexity, informed consent, social stratification.*

This article applies research in positive adult development that yields a new understanding of social stratification. A common definition of what it means to stratify something, including a society, is to divide or arrange it into classes, castes, or social strata. Social strata are distinctly different socioeconomic levels within society, to which groups of persons are classified when their education, culture, and/or other qualities are similar. This article argues that social stratification stems from the inevitable arrangement of a market-driven society according to hierarchical complexity of tasks that produce income, wealth, and power.

Modern society has striven toward the democratic ideals of human development, where human beings reaching their potential. It also strives for personal autonomy's "right to choose," in which a marketplace based on informed consent has developed. This empowers the individual consumer. This empowerment is often considered to be positive because it appears to support individual rights. However, it carries consequences that go unnoticed, by unintentionally stratifying society based on individuals' stage of performance. This is the insight from positive adult development research. The implications of this insight, the role

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of informed consent, and where the economy does and does not support it, are introduced and developed in this article.

As is well known, the roots of the idea of a market-driven society can be traced back to Adam Smith (1776), who developed his market theory during the 17th century renaissance of economic philosophy. Smith disagreed with the feudal model of society that had dominated for centuries, in which wealth was based almost completely on inheritance, an idea from the Abstract stage 9. A market economy, he thought, could eliminate the unfairness of feudalism by rewarding productivity and innovation, rather than inheritance. According to Smith, a fair society did not necessarily mean equal wealth for everyone. Instead, it meant providing the opportunity for people to produce as much wealth as they could in a free marketplace. Smith's free market theory reflects at a minimum the logic of Systematic stage 11, because it describes a system of relationships.

Although nearly everyone agreed that moving away from feudalism was positive progress, some felt that Smith's, and Ricardo's (1817) free market ideas had to be tempered with income redistribution and programs to achieve economic and social equality (e.g., Owen, 1813, 1962). To theorists such as Marx, for example, equality of wealth was as morally essential to a fair society as equality of opportunity. The early utopian socialist schools of thought peaked in the mid-19th century with the social utopianism of Marx and Engels in which communism was set forth as an ideal. Marx's thought was Metasystematic stage 12 because it was a reflection on at least Systematic stage 11 systems as set forth by capitalists such as Adam Smith and David Ricardo on one hand and the utopian socialists such as Owen and Saint-Simon (Taylor, 1975) on the other. To coordinate two systems as morally essential, that is, equality of wealth and equality of opportunity, reflects Metasystematic stage 12's principled reasoning. Constructing a principle at stage 12 is not the same as designing sociopolitical structures and finding people to enact the principle in institutions. Few could make the hierarchically complex leap from formal thought through systematic thought of the early market economy to Marx's conceptions.

Recently, for the most part, people have judged that socialist governments have largely failed to produce robust economies and have been shown to be inefficient. But inequality of wealth persists especially in two major areas of the world, the Middle East and Africa. Even large previously very poor countries such as China, India, and Russia are developing rapidly after they shifted to capitalist economies. But what we have learned is that within such economies, the playing field in free markets is often made unequal by variances in education and capital.

One way modern liberal democracies have tried to level the playing field is by giving consumers of products and services real informed choice by institutionalizing informed consent. The theory is that by educating consumers about the characteristics of the products and services they are buying, power is shifted to the consumers and stratification is minimized. In the United States, the institutionalization of informed consent began in the 1960s, with such industries as home audio and the automobile industry. There had been standards committees for a long time before that but the standards were internal to the industry and not

for the consumer. In the audio industry, the Fair Trade Commission (FTC) forced standardized performance measurements for audio power. In the automotive industry, crash testing began. Such standardization provided useful criteria upon which consumers could base their purchasing decisions. Ideally, this should result in the liberal goal of redistribution of political power, disconnecting money from the right to know the characteristics of a product.

Theories of social stratification seem to ignore the important role that informed consent has played in shaping our modern society. In the last thirty years, there has been increasing interest in moral development and the attainment of higher-stage notions of fairness. These interests have motivated the institutionalization of informed consent. Informed consent is, essentially, an extension of the political social contract to the marketplace. The heart of informed consent is that the customer or client can freely choose the provider of goods or services and the services and goods themselves. Such providers may operate in the formal or informal economy.

In the formal, market-driven economy, the customer or client chooses not only an expert (e.g., doctor, attorney, accountant, consultant, manufacturer, retailer) but also chooses what action the expert takes on behalf of the client. That expert has to inform the client of the risks and benefits of the given activity or product. In professional transactions, such as medicine and law, the expert must also give the alternative courses of action and provide a real set of choices for the client. In transactions involving product purchases, the products themselves come with disclosures, disclaimers, and warranties as well as implied warranties. The informed consent system assumes that there are alternative providers of expert services and goods, and that there are (a) consumer capacities to make informed decisions, (b) free markets, and (c) a free political system including a free press to investigate and debate the quality of the goods and services.

On the surface, it appears that a liberal market-driven economy incorporating informed consent should create a level playing field for everyone. I argue that certain disparities in this picture cannot be ignored. Here, I focus on the disparities of the informal economy, income, and education. It is erroneous to assume that the liberal market-driven economy is *the* economy. There are a number of reasons for this. First, less developed countries do not yet have well-functioning formal institutions of governance. Second, they do not tend to have the legal protections that are taken for granted in developed Western countries. Further, the economics literature documents significant percentages of informal economic activity conducted within, and between, all national economies, both developed and less developed. This means that high volumes of economic transactions are conducted outside of the formal liberal market economy and are not included in Gross Domestic Product (GDP), tax revenues, or legal protections. The concept, procedures, and protections of informed consent may be absent in the informal economy. Buyers and sellers are at the mercy of each other and other ethnic, cultural, and socioeconomic factors. The informal economy represents a perennial form of social stratification that does not enjoy the level playing field assumed by liberal economics. The hierarchical complexity of the informal economy's tasks and actors explains this when other disparities are taken into account: much of the

informal economy uses Concrete stage 8 and Abstract stage 9 performances of tasks (Ross, 2005).

Income disparity is still omnipresent in today's societies. Environmental determinists such as Sluyter (2003) argue that this lingering inequality reflects persistent discrepancies in quality of education and a lack of caring, whereas nativists such as Herrnstein and Murray (1996) argue that this inequality demonstrates immutable individual differences in performance.

I contrast the economic assumptions about a market-driven economy and some of the empirical divergences from those assumptions. First, as mentioned, classical economics assumes that if all consumers have access to information, that all consumers will be able to use the information (e.g., sufficient levels of literacy to read and understand it). It also assumes that all consumers will have equal capacities to judge the merits of products and services once they have read about them. The basic Formal stage 10 logic of the market economy about consumers is "If we provide the information, they will be able to choose for themselves in a rational manner." Similarly, the basic logic about providers of goods and services is: "If consumers choose for themselves, then providers are not liable as long as they have provided the information." The arguments of both the environmental determinist and the nativist can be coordinated easily, as each has a piece of the puzzle: There is an unbridged gap between the way the market-driven economy works and the capacities of consumers to benefit from it. Some consumers are excluded by primarily operating in the informal economy. Some consumers are excluded by not having the stage of task performance required to participate. Education has much to do with it (Al-Ansari, 2002).

This article argues that the institutionalization of informed consent has the unintended consequence of contributing to further social stratification. In a liberal market economy, people at Formal stage 10 or higher stages of performance can produce goods and offer services that reflect higher quality and expertise than workers at lower stages. The incorporation of informed-consent into goods and services may seem to increase the cost accordingly. But because the effect of education at the formal stage and above is to dramatically increase productivity, actual costs may decrease. People who are able to do so are willing to pay for the informed consent process that is incorporated into such purchases. Price reflects the quality of services under such a system, which in turn correlates with the stage performance of the service provider. The end result is a spiraling requirement for better but cheaper consumer goods and services produced by higher-stage performance.

Starting with the first human settlements in Moravia, Czech Republic, 25 to 40 thousand years ago, human populations have specialized in different activities. Such specialization inevitably leads to social stratification. One of the things that determine what positions people may hold in a society are the orders of hierarchical complexity demanded by the work. Research in adult development (e.g., Newman, Tellegen, and Bouchard, 1988) has shown that performance is distributed roughly normally in the population, with the mean in the United States at Formal stage 10. It is possible that the mean stage in some other educated countries may be slightly higher than the United States. Work at the lower stages has not benefited from

increases in productivity. These positions require the least amount of education. Hence, wages are stagnant. Still, systematic and metasystematic performances are in short supply, and the demand is high for such persons for the services of such individuals with such levels of performance. Most people performing at the Systematic stage 11 are professionals or managers. Many people performing at the Metasystematic stage 12 are top legislators, corporate or non-profit leaders, sales people, research professors, appellate judges, and the like. Free market rules of supply and demand raise costs to acquire less widely available goods and services. Thus society is stratified according to stage of performance: The most highly paid people are those with the highest stages of performance, and the lowest paid people are those with the lowest stages of performance. Therefore the institutionalization of informed consent actually exaggerates rather than minimizes the meritocratic effect of a market economy. It could, however, help reduce the economic gaps inherent in informal economies and reduce the effects of inherited wealth.

Environmental determinists have often argued that we can reduce the social stratification of a meritocracy by providing unlimited education for everyone. Data (e.g., Armon and Dawson, 1997) show that education does indeed increase the number of people capable of operating at higher stages. This is especially easy to do when correct answers to problems are reinforced with outcomes of value to the participants. Education raises the mean stage performance of a population. For example, in 31 nonliterate participants in Mexico (Commons, Galaz-Fontes, and Morse, 2006), the mean stage of performance was concrete, whereas in educated areas of the United States the mean stage of performance is formal.

However, education also introduces a new reality that is often overlooked—that education causes people to reach their inherited ceiling of performance, for which there is no social remedy. In twin studies (Bouchard, Lykken, McGue, Segal, and Tellegen, 1990), for example, when there is an IQ disparity within a pair, extensive training given to both members of the pair increases the IQ of only the lower IQ individual. Education's effect on stratification is instantiated in the experience of graduate school. Graduate school makes a clear distinction between graduate students, who enter relatively equal. But they leave clearly distinguished by capability, some operating at the systematic stage. A few operate at the metasystematic stage. Hence, some students benefit more from graduate school than others. Graduate school probably brings students close to their maximum stage of performance. The less advanced students may have already reached their inherited performance ceiling. Hence, the continuation of education further stratifies individuals by stage performance and increases the variability among them—again, not what is hoped for by those who view education as an equalizer of opportunity.

This is especially disheartening for the 10–15 percent of people who have disabilities such as low IQ, severe mental illness, addiction, and criminal behavior that reflects a low stage of social understanding. These people do benefit from training, education, and supervision rather than punishment—the traditional way of dealing with them. But these people will remain at the bottom of society even with great improvements. It will take genetic engineering to change the situation drastically. An expectation of an equal-ability society wreaks havoc with these

people due to the inability to meet such demands. Many of them require varying degrees of supervision and support to compensate for the absence of equal ability.

The point of this parable is to show that all social policy, no matter how well guided by good moral and ethical principles, has unintended consequences. These unintended consequences are quite often antithetical to the original goals that led to the adoption of the social policy in the first place. Sonnert and Commons (1994) have argued that this is inherent to all social systems. There are too many good principles available to coordinate them all. Contradictions among them are inevitable. Only at the Paradigmatic stage 13 is there the necessary open discourse among all stakeholders that leads to a framework for making a muddled decision. There are no solutions, just better ways of muddling through.

Implications and further discussion of these realities are in this issue's closing article, "A Future Society Functioning at the Paradigmatic Stage?"

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