White Paper

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Hayek vs. Asimov: Spontaneous Order or Failed Foundation by Edward L. Hudgins

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In the September/October issue of *Renewing American Civilization,* Frank Gregorsky, while suggesting that Gingrich probably has read some Hayek, maintains that other books offer a better understanding of the professor turned-Congressman's mind. At the top of the list: science fiction author Isaac Asimov's epic Foundation trilogy. Since the top Republican is quick to pass out reading lists to college and Congressional freshmen alike, this battle of the books merits serious attention.

Hayek's Order

F.A. Hayek was perhaps this century's greatest classical liberal thinker. His insights into the nature of free societies helped to preserve the West as it indulged in socialist and welfare state policies, and are key to restoring it to healthy freedom.

A first crucial insight of Hayek and other classical liberal thinkers is that the actor and unit of analysis for any study of human history, society, or institutions is the individual. Society is constituted by aspects or priorities in the action of individuals that are shared with others. There is no collective entity, be it material, dialectic, Weltgeist, or historical wave apart from individuals.

A second Hayekian insight concerns the nature of order. Most people conceive of order in the world as falling into one of two categories. First trees, mountains, and solar systems arise and evolve naturally. Second, watches and tables, statues and rockets result from intentional human planning and action. This latter conception gives rise to the belief among socialists and statists that all-wise, caring bureaucrats can plan and benevolently guide economies to prosperity, and among social conservatives that censors and vice squads can create civil societies.

But Hayek identifies a third type of order: spontaneous order that arises from human action but is not specifically planned by men. A classic example of this type of order is money. In primitive societies, individuals might need to travel long distances to trade with one another. But it is difficult and costly to tote four cows, seven bales of hay, and a slab of copper over a mountain, all to be exchanged for a dozen sheep, six large jars of barley, and a handful of gold nuggets. Many merchants hit on the strategy of trading their goods simply for those small yellow pieces of metal rather than sheep, which tend to wander off, and the rest of it. Gold is easy to transport, difficult to counterfeit, durable, rust-resistant, and easily divisible. Traders can take the metal home to exchange for what they really need. Thus as individuals sought to exchange goods more efficiently, the institution of money emerged and became an economic institution as an unintended

consequence. No one invented it.

A third Hayekian insight, best seen on the market, concerns the limits of individual knowledge. It is impossible for any individual to know what mix of goods and services will best satisfy consumer needs, what prices goods, services and labor should fetch, and which individuals are most efficient at performing particular jobs. As with science and other human institutions, the market is a discovery process with workers and owners, merchants and manufacturers— entrepreneurs all—experimenting to determine what they can offer in trade to others to maximize their own values.

What Hayek's insights imply is that at best men can glimpse the probable outcomes of proposed public policies. For example, a welfare system that pays people not to work and punishes productive people will produce a lazy and unproductive population. Attempts to use political power to manipulate entire systems will result in adverse, unintended consequences; most certain, political power rather than mutual consent and free exchange will become the social coin of the realm

Hayek thus maintains that individuals in a society would do best to establish very general rules, protecting individuals from assault, theft, fraud and the like, and leave individuals free to work out the best ways to meet their various needs and the challenge of life.

Foundation and Fallacies

Hayek's views can be contrasted with some of those presented in fictional form by Isaac Asimov. Asimov is one of the all-time greatest science fiction authors. At his best he is highly imaginative, with an intelligent style and well-integrated plots.

The first three Foundation novels, written in the early 1950s, trace the decline of the Galactic Empire. To save humanity, the brilliant Hari Seldon develops the science of psychohistory, which can predict the behavior of masses of human beings. Seldon engineers the establishment of a Foundation on the planet Terminus, isolated at the edge of the Galaxy, to serve as the core of a second Galactic Empire a thousand years in the future. After various crises over the ensuing centuries, the prerecorded image of Seldon appears to explain what had just occurred and to ensure them that history was preceding according to the Seldon Plan.

The events in the first three Foundation novels contain aspects of spontaneous order and unintended consequences. For example, Asimov's description of an Empire growing stagnant, corrupt and repressive, weighted down by heavy bureaucracy, certainly rings true.

In another example, after the periphery of the Galaxy breaks away from the Empire, the region's strongest planet seeks domination over defenseless Terminus. But other, weaker armed worlds in the region also fear attack. A clever Terminus mayor plays the planets off one another in a classic balance-of-power strategy to preserve his planet's freedom. Terminus, over centuries of history predicted by Seldon, at various times uses religion and economic manipulation to stave off attacks and rise to dominate its sector of the Galaxy.

But in his fictional universe, Asimov conceded that perfect prediction was not possible. He hides in the Galaxy a Second Foundation of psychohistorians as guardians of the Seldon Plan. They possess powers to detect and manipulate human emotions, and intervene to place the Plan back on course when it strays.

Asimov's fiction reflected two fundamental premises of 1950s liberalism: (1) social and economic sciences can predict the future of a society; and (2) philosopher-kings with knowledge of how societies can or should work should rule. Hayek calls such premises fatal conceits.

Starting in the early 1980s Asimov added four more Foundation novels to the original trilogy. In these he shows the Seldon Plan collapsing and a nascent collective galactic consciousness as the only hope for a peaceful human future. This reflects the New Age mysticism that is still festering in popular culture. From a

science fiction perspective the device had its place in Asimov's work. But clearly it provides no useful insight into political and social reality.

Toffler's Constitution

Asimov's faulty premises are also found in part in the works of Gingrich's favorite futurists, "Third Wave" theorists Heidi and Alvin Toffler. The Tofflers maintain that human history's first great wave of advance was the agricultural revolution some 10,000 years ago, with the second wave, the industrial revolution, beginning some 250 years ago. Men are now moving into the third wave, the information revolution. So far, so good.

But the Tofflers maintain that futurists such as themselves were able to predict this coming wave, and will be able to accurately predict about tomorrow. Yes, some have glimpsed trends 20 or 30 years out. Some have seemingly seen centuries ahead. Da Vinci attempted to invent a submarine and flying machine. Jules Verne saw men traveling to the Moon. Yet just as many predictions have been wrong as right. Perhaps one could argue that the head of IBM who, in the 1950s. maintained that the country would never need more than five or six computers, was not, after all, a college trained "futurist." But surely a capitalist has a strong incentive to predict correctly.

Even granting that some futurists are better than others, how do men in society separate the best from the worst or, to put it in contemporary parlance, a good operating system from a computer virus? The only way, as with products, ideas, or institutions, is through competition in a free, open society—Hayek's way.

This does not suggest that it is a useless enterprise to try to determine, however imperfectly, what the future will bring. It does, however, call into question the role that the government should play in helping the third wave along. While the Tofflers openly distinguish themselves from Gingrich on a number of issues, the futurists seem to accept a more active role for government than would others on the right of the political spectrum.

The Tofflers, for example, would amend the U.S. Constitution, which they say is a second-wave document. They are not clear about just what must be changed. But which Constitution are they talking about? The one we study in high school has long since been eroded. The tenth amendment which states that "the powers not delegated to the United States by the Constitution, nor prohibited to it by the States, are reserved for the States respectively, or the people" has been inoperative for many decades. Article I, which lists the limited powers given to the federal government, also gives the U.S. Congress the exclusive power to make federal laws. But for decades Congress has abrogated this power, giving broad and open-ended mandates to un-elected bureaucrats in federal agencies who then, in effect, make laws. America has a government of would-be philosopher kings, the kind of which the Tofflers might approve.

A Hayekian approach suggests that the country return to the original Constitution of limited federal powers, with more responsibilities left to the states, localities and, most important, most freedom left to individuals. Such a system is best able to deal with the future complexities.

Connecting Technologies

Those who are intrigued by the future but who want a Hayekian perspective on things to come would do well to consult the popular science works of James Burke. In his television series and accompanying books "the Day the Universe Changed" and "Connections," Burke traces the development of television to telecommunications, aircraft and atomic weapons. He shows how seemingly unrelated events and inventions build on one another to produce unpredictable results. He shows how the silk loom and the 1890 U.S. census helped give birth to the computer, how gaslights and the American Revolution were responsible for raincoats, and hoe Italian Renaissance water gardens contributed to the invention of the internal combustion engine.

Consider an example of Burke's connections. In Florida in the 1830s John Gorie experimented with curing

illnesses believed to be caused by "bad air," from whence we get the word malaria. Since tropical diseases do not occur in winter or in cold climates, he reasoned that cold air was the answer. (It wasn't) To avoid the high costs of obtaining ice cut from lakes and stored in New England during winters for shipment South in the summer, he used the fact that compressed air heats up and reducing compression cools air to produce air conditioning.

Later in that century, Germans sought a way around the fact that their bottom-vat brewing of beer required very cold temperatures and thus could only be done in the winter. Using Gorrie's piston approach, as is found in Von Linder compressed ammonia. The result: refrigeration as is found in nearly every kitchen today.

But to refrigerate and keep liquefied large quantities of ammonia and other gasses for industrial use, James Dewar, knowing that a vacuum does not transmit heat or cold, invented a flask with two walls containing a vacuum in the space between. The resulting thermos bottle is found in millions of lunch boxes.

Finally, Robert Goddard in the United States, and in Germany Herman Oberth with his young protégé Werner von Braun essentially burned huge quantities of liquid hydrogen with oxygen, both stored in what amounted to giant thermos bottles, to produce the type of rockets that eventually lifted off from Florida and landed on the Moon.

Burke's review of the actual history of science and technology confirms the basic Hayekian insights. First, knowledge is always uncertain. Experimentation best facilitates progress. Predictions about the unintended consequences of particular discoveries are impossible. Second, advances usually come as individuals, doing their best in the face of uncertainty, trying to solve a particular challenge facing them, build on the works and discoveries of the past.

Future Philosophy

The fascination on the part of Gingrich and others with the future and with science and technological innovation is in keeping with the American tradition. But equally part of this tradition is the freedom of individuals to act in entrepreneurial manners.

While it is not possible to predict specifics of the future, it is possible to determine which institutional arrangements best allow for change in the face of uncertainty and innovation in the face of needs. The genuinely forward-looking policy-maker should look to Hayek. This thinker, born in the last year of the 19th century, is a true philosopher of the 21st.

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