IV-29 Greed and Grab

I have a rule for this situation too, which is absolute: You can not extrapolate any series in which human element intrudes. History, that is the human narrative, never follows and will always fool the scientific curve. I can not tell you what twists it will take, but I expect that like our ancestors, we too will muddle through.

- Barbara Tuchman

Guns, Germs and Steel: The Fates of Human Societies by Jared Diamond is a perceptive book (III-15) with broad implications. In a thought-provoking way, with a human touch and intuitive continuity, it discerns patterns of human and technological evolution since the end of the last Ice-Age. The premise of the book, "Why many are called, yet few are chosen," explores biological variables as the basis for the development of technologies. Important among the factors that shaped the evolution of complex human societies and their technological innovations were the environmental and biological constraints. Effects of broader patterns of interactions of different human groups, with each other and with plant and animal species resulting in domestication and depletions, are identified and judged.

Primarily, the book identifies the expansion trajectory of a group of Eurasians, whose descendants now dominate the consumption of virtually all non-renewable resources at an unsustainable rate. As with any important lesson from the past, the arguments in the book bear on broader contemporary issues. A more provocative and perhaps compelling case emerges if one

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takes the liberty of extending to our present situation these patterns of behavior from the past. From this point of view, resource constraints and geopolitical borders that shape pressing problems of development and survival in the form of economic and market forces become almost invisible. When selectively used as guises for rationalizations, these forces lead to subjugation and *de facto* genocide.

Diamond points out that until about the beginning of the 16th century, people from areas north and west of the Alps contributed little technology of significance; they were mainly recipients of developments made in the regions bordered by Ethiopia, India, China, and the shores of the Caspian and Eastern Mediterranean sea. Examples of such basic technologies include domestication of plants and animals, coupled with the use of the plough and the wheel to harness animal power, permitting the transition from hunter to herder and from gatherer to farmer. About 6000 years ago people from these areas had developed the basics of urbanization, trade, social and administrative organizations, metallurgy, written language and mathematics. Unique factors contributing to this burst of innovation so soon after the end of the Ice Age included a fertile land mass with a climate favorable for agriculture, generous availability of a genetic stock of seeds and animals suitable for domestication, and human migratory patterns that promoted continuous development through exchange of materials, ideas and experiences. Not surprisingly, there are very few other instances of independent or parallel developments because such a confluence of factors was not to be found elsewhere at that time. As if to attest to the critically fundamental role such factors played in the initial surge of innovations, such a confluence did not come to northern Europe until about 500 years ago.

Innovations from the East, such as horses and carts, were brought to central and western Mediterranean shores by the Persian invaders. Phoenicians introduced ships to this region. Attracted by the riches and knowledge, and inspired to eliminate once and for all the threat of the Persian Empire to Greece, the army of Alexander swept through Central Asia to the borders of India. These events accelerated a westward transfer of technologies, funneled through Greece that transformed the hunters of Europe into organized seafaring societies during the last millennia. By the middle of the current millennium, transfer of the Arab libraries also resulted in the translation and reinterpretation of the compilations and libraries that fell into the hands of Jesuit monks and European universities. Without this interpretation, and grand synthesis of the events spanning the last four millennia, the achievements of the ancient Greek world, to which modern European civilization owes its roots, stand in isolation as a discontinuity.

It is intriguing that many of the technological innovations have been turned into means of exploitation. The Steel from South India was used by the Assyrians to make Damascus sword used by the top-brass. Romans armed their colonial armies of peasants with short swords. The black-powder technology from China was turned into guns and cannons. Technology of paper in combination with printing was first used to proselytize the masses.

To put it simply, innovations rarely thrive in isolation. As the simpler technologies beget more complex ones, useful technological innovations are cumulative synthesis from independent innovations. Collectively developed technologies create value, and markets make the intellectual property available to the society at large. However, narrow and stifling profitoriented innovations stifle incremental motivations from the parallel technologies and empirical observations from the public commons. Insights into development and transfer of technologies squarely demolish theories perpetuated in terms of the genetic, philosophical, or cultural notions of superiority of a sub-group. Although such arguments have never withstood critical scrutiny, self-serving sound-bites promoting mis-measures of man maintain and mobilize the structures for the subjugation and exploitation.

Unquestionably, human interventions that lead to largescale technological innovation and implementation not only unleash forces of greed and grab, but also lead to biological catastrophes and environmental disasters. During the last 500 years, the Europeans, physically armed with "guns, germs and steel," and blessed with missionary zeal under the garbs of halfbaked rationalizations, have moved far beyond their borders to occupy three other continents. Many more continue to be subjected to the market, political and cultural imperialism.

Colonial mind set very much part of globalization. It relies on the knowledge, labor and resources of others assimilated by market forces. The pattern of unprecedented exploitation continues as "progress" defined by aggression, control and subjugation. From this point of view, rationales for protracted geopolitical and economic policies are not fundamentally different from those that motivated "winning the American West" by destruction of the food-supply (buffalo herds) and infection of the native populations by sending them blankets pre-used by smallpox patients. In a short period the guns and germs of the U. S. Whites destroyed 95% of the native North American population of over 20 million. They also eliminated the diversity and genetic viability of these human populations, as well as a large number of other species deemed necessary for progress at the time. Sinister methods, motives and point of view were perpetuated in the name of bringing civilization, religion, and culture to the barbarians.

In many cases, given the late transition from a huntergatherer society to one of farming and production, there has not been enough time to develop less violent means for conflict resolution. In this sense, the European grab for land and power by exploiting serendipitous accumulations of useful technologies at the right time is not unique in world history. Armed with divine blessings, Pharaohs, Mongols, Incas, and the like in their own ways also terrified large groups of people for the benefit of a few who over-consumed resources. Even in the 20th century, the colonial powers, Nazis, Soviets and Chinese with their own agendas have subjected large populations to plunder and murder. What are particularly threatening about this latest march of history that we are being swept along with are the unprecedented rate of dissipation of international non-renewable resources and the degradation of the global environment in order to maintain an unsustainable way of life. Ominously, without being even aware of the consequences, a growing percentage of the world population is being subjected to the onslaught of technologies controlled by the few. Of course, once the problem is recognized in earnest, the hope is that solutions will be found before it is too late.

Coming to an agreement and striking a balance is a collective task. Like evolution, although on a somewhat different time scale, democratic and market approaches maximize the potential of most individuals in a group by increasing the wealth of a sub-group - defined as success.

Technologies help in fulfilling the promise of this premise by permitting more people to perform skilled tasks. For example, a considerable amount of skill is needed to use a bow and arrow. Guns, requiring far less skill, turn more people into effective hunters - and possibly indiscriminate killers. Like evolution, technological, market and democratic processes also lead to distortions and dead-ends. So a key question emerges: what ends are to be achieved by the powerful means at hand? Can individuals and smaller groups be protected from the meaner edge of such tools, methods and institutions, which are increasingly more powerful, distant and broader in scope?

Human-friendly technologies make up for lack of talent. Material progress promoted by technologies helps in controlling the drudgeries of life for most people. One may wonder what factors contributed toward the rapid development of technologies led by the Europeans during the last 500 years, and what we can learn from this experience. New energy sources and machines have opened new territories, improved productivity, and ostensibly freed a greater fraction of the population for innovations. The ideal of democracy extends the promise of such prosperity to "all." Yet a lack of political will promotes unsustainable consumption patterns for a chosen few. The failure of the self-regulatory aspects of the market forces is also obvious in the experience of the last 50 years with tobacco, asbestos, DDT, and the arms industry. Other time-bombs with global implications are ticking away in the form of excessive use of fossil fuel and antibiotics. While for-profit industries transfer social costs to the society-at-large, the environmental costs are being increasingly transferred far away from the consuming nations.

To promote consumption, mechanisms have evolved to

control marketing and distribution. The social and environmental costs of over-consumption are transferred across international boundaries without benefit of the checks that a functional democracy can implement internally. As a result, the reality of the damaging consequences of open international markets is virtually dissociated from concerns for the international community. With the realization of this fundamental contradiction, the forces of greed extract value by exploiting local in-equilibrium (niche), rather than by creating value in harmony with broader interests. Treatments prescribed by the international agencies for the economic ills are often formulated by banks and institutions with an indoctrinated faith in their own efficacy - that may be as misplaced as that attributed to the usefulness of blankets pre-used by smallpox patients. It is not surprising that the international cure-alls are not well received by the naives.

Rational ideals of democracy and markets can and do degenerate into schizophrenic world-views that are at dissonance with itself. The reasons for this are quite fundamental: democratic solutions within national boundaries cannot control international and global exploitation by the consumer markets. Even under the best of conditions markets privatize the profit and socialize the risks of an enterprise.

From this remarkable inquiry by Jared Diamond emerges a lesson, which, without blaming the victim, interprets long-term developmental events and patterns in terms of the biological, environmental, and resource variables. Many were "killed, infected or driven off" for the technological progress claimed by the few. As we sit back, it is reasonable to ask, can short-term market forces governed by instincts of grab and greed be trusted to promote the wide-spread use of technologies, especially the ones that impact all of us by promoting an unsustainable consumption behavior? Or if time is here to more actively balance the interests of all? Obviously, an acceptable answer must have something to do with the well-being and survival in the broader biological context of live and thrive by letting others live and thrive.

Room for Doubt

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