

HUMAN IMMORTALITY VERSUS EXPENDABILITY

An Issue for 21st Century Social Science

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SOCIOLOGY: A LOOKING-GLASS OF THE SOCIAL

- The objective quest for social truth originated during the 19th century Enlightenment Era (Age of Reason) in response to the intellectual and social conditions of that transformative historical period
- The field of sociology was integrated into an intellectual movement emphasizing positivism (the scientific method) and thus rationalist thinking.
- The new science of society became a tool for the investigative efforts of humanitarianism, a reform movement which responded to the social problems generated by the Industrial Revolution with the intention of bettering society.
- Thus, sociology was a product of its time and a way of thinking for its time with the linkage of: positivism + humanitarianism within the context of the Industrial Revolution, mechanizing the mode of production and in the process changing the cultural way of living.
- **Sociology was the source of explanation and method for making sense of a modernizing world.**

CLASSICAL SOCIOLOGISTS: THEORIES FOR AN URBAN WORLD

- The interdisciplinary thinker and father of sociology, French philosopher Auguste Comte, placed sociology on the top of his hierarchy of sciences. He designated sociology as the “Queen of Sciences” since it addressed the most complex entity in existence – society.
- Most notably, Emile Durkheim, Max Weber, and Karl Marx were among the classical European theorists who generated perennial ideas regarding the social process of the urban-industrial era as it moved into the future.
- These masters of sociological thought generated grand theories, most of which focused on the structural formation of the community and the nature of social relationships as the places where people lived and worked transitioned from small towns to the vastness of cities during the Industrial Revolution.
- The social dimension of existence was under scrutiny: urbanization, bureaucratization, social classes, and social institutions (the economy religion, the family, education, the government, and groups of all kinds).
- Karl Marx, in particular, made reference to the negative human impact of worker oppression and inequality during urban-industrialism.
- **Emile Durkheim captured the notion of the social in his concept of “sui generis;” that is society as a “thing in itself” grounded in social facts (e.g., institutions, laws, customs) peculiar to that society and beyond the control of the individual.**

THE CHICAGO SCHOOL: A RESPONSE TO A CHANGING SOCIETY

- The foundation of American sociology was the so-called “Chicago School” at the University of Chicago with high precedence during the first four decades of the 20th century.
- Parallel to the European contingent, the University of Chicago responded to the city issues associated with the Industrial Revolution in the United States.
- The Chicago School was built on the European tradition of sociological conceptualization and urban focus. Its distinction was American pragmatism reflected in applied sociology, qualitative field research, and reform efforts. The Chicago theorists regarded the city of Chicago as their living laboratory.
- The legacy of the Chicago School became a treasury of classics using the field work research method with a major contribution to the study of immigration.
- **The Chicago theorists regarded the city of Chicago as their living laboratory for researching the urban experience and its associated pathologies such as delinquency, crime, gangs, and poverty.**

THE CHICAGO SCHOOL: STRUGGLES IN THOUGHT AND METHOD

- The Chicago School was faced with the professional development of sociology.
- In the process, it contended with establishing sociology as a valid social science.
- The issues debated in the Chicago School, at times with intense controversy, centered on:
 - the scientific-naturalistic tensions in modes of inquiry and research methods used
 - the objective-subjective schism in analytical thinking and scientific legitimation, an argument elaborated upon by Bruner (1986)
 - later, C. Wright Mills (1959), pointed to the limited focus of the sociological imagination with the missing ingredient of values
 - Mills went so far as to refer to social science as a “functionally rational machine” with an engineering imagination in the absence of human will and enlarged reason, both essential to value formation (p. 180).

THE CHICAGO SCHOOL AND BEYOND: CRITICISMS

- **CRITICISM:** The logical, analytic and objective thinking mode confined to left-brain thinking processes has been under critical review by social scientists and many of the world's greatest minds.
- For quantum physicist David Bohm (1980) who conceived of thinking as a free flowing dance of the mind, the confines of rational inquiry restricted reason to merely a “technico-practical instrument” (p. 16).
- Bohm advocated: “New forms of *imagination* and new orders of reason” (1981, p. 38).

THE CHICAGO SCHOOL AND BEYOND: RESULT

- **RESULT:** Another natural scientist, Erich Jantsch, an interdisciplinary astrophysicist and general systems theorist, who integrated sociology into his research alongside cosmology, biology, psychology, and consciousness speaks to the detachment of the human in the research process, something that Mills and Znaniecki (of the Chicago School) were sensitive to and uncomfortable with, in the search for social truth. Jantsch (1975) identifies the consequence:

The rational approach also removes “the environment” and its regulation from the world of humans and human activity. It deals with man’s world as being artificial and distinct from a “natural” world. The rational thus gives rise to a dualistic view, setting man against the world minus man (p. 85).

THE 21st CENTURY: A TECHNOLOGICAL EVOLUTIONARY POINT IN HISTORY

- The imbalances in conceptualization and methodology resulting from the predominance of logical-scientific rationalism have created a need for “reintegrating self and world,” certainly in the educational process and within the overall society (see Wilshire, 1990, pp. 187-200).
- Furthermore, it is this very thinking that paved the direction in obvious and subtle ways for the acceptability of the person’s place in super feats of technology taking the form of biotechnology, transhumanism, categories within the singularity, that is technology advancing at an exponential rate (Kurzweil, 2005).
- **The self may find itself reintegrating into the world but on *a different set of terms.***

REVOLUTIONS LEADING TO EVOLUTIONS

- Several overlapping technological revolutions are challenging the very definition of what it is to be human and for how long, and under what circumstances?
- The overlapping revolutions are the following:
 - longevity
 - nanotechnology
 - genetic
 - robotic
 - transhumanism
- **The most profound of these is considered to be the robotic or the artificial intelligence revolution.**

THE NEW MERGER: PERSON AND MACHINE

- According to Kurzweil (2005, p. 9).
- A key component of these technological revolutions is the merger between person and machine.
- There may no longer be a distinction between mechanical or biological or between physical and virtual reality.
- These emerging technologies can be used to augment the human body and mind and the entire life experience as we know it.

EXAMPLES FROM THE TECNO-HUMAN MOVEMENT

- For example, the use of neurochipinterfaces connected to the brain to enhance the capacity of the brain, making it a superbrain
- Nanotechnology: machines the size of molecules built at an atomic level to replicate chemical forms of matter leading to the production of organic tissue to prolong life
- Some experts predict that it will be possible to live forever.

'WONDERS' IN THE AGE OF BIOTECHNOLOGY

- WAKAMARU is a helper/communication robot manufactured by Mitsubishi with speech recognition of 10,000 words.
- Already robots aid in surgery. Drones are a war-related technology, but they are being channeled into mainstream society to assist the handicapped. Conservationists are now using drones as a weapon against poachers to save endangered species.
- Consciousness might be saved in a virtual reality whereby one's mind will merge with other minds to create one super-intelligent being (hive mind). So, one may die in the physical body but live forever in cyberspace.
- The Blue Brain Project under the direction of Dr. Henry Markham with the support of the Swiss government is working on developing an artificial brain with the capacity for human emotion.
- **When humans merge with machines, this leads to the creation of hybrid humans, part person and part machine, someone less than human.**

THE SINGULARITY IS NEAR: WHERE IS SOCIOLOGY?

- The 21st century is being called the Age of Biotechnology moving in the direction of “posthumanism.” In this new era, what it means to be human will be the question. The answer more than likely will be a radical redefinition.
- Kurzweil (2005) asks where to draw the dividing line between human and non-human when he gives these examples:
 -
 - **Is a human with a bionic heart still human? How about someone with a neurological implant? What about two neurological implants? How about someone with ten nanobots in his brain? How about 500 million nanobots? Should we establish a boundary at 650 million nanobots: under that, you’re still human and over that, you’re posthuman (p. 374).**
- The far reaches of the sociological imagination will be tested to include a new worldview in a new sense of timing in a new assemblage of social stuff which includes the human and non-human *integrated* into each other (Latour, 2005).

FUTURIST DIALECTIC OF THE BIOTECH AGE

- This assemblage of human and technological stuff appears to already be creating a set of conflicting forces or a dialectic between machines and humans.
- This entails the longevity of humans but also their expendability. The very machines that we created can perform our human tasks, even better than us in many cases.
- The futurist imagination needs to capture the reality that machines can think for us, speak for us, teach us, heal us, fight our battles, perform our jobs, and so much more. Their competencies can benefit us in many ways.
- On the other hand, the tension or opposing force in the dialectic is that it is at the expendability of humans performing these roles, especially when job creation is a major challenge.
- Interrelated with this dilemma is the concerns of domination and control. Will machines have power over us? Who will be the more intelligent – humans or machines?

FUTURE WAY OF LIFE: MACHINE CULTURE

- The sociological imagination will convert to a futurist imagination as social life is propelled by high-powered technology. The way of life will steadily change from a human-based culture to a human-machine interactive culture, the shadows of which already exist.
- Since culture is essentially a communication system, the avenues of communication will entail:
 - person to machine
 - machine to machine
 - what about person to person?
- **We can only imagine how supercomputers will affect our lives.**

NEW QUESTION FOR SOCIAL SCIENCE

- Steve Fuller (2006) who has conducted an extensive exploration into the so-called “new sociological imagination” through a complex weaving of historical ideas related to biology and sociology. He identifies the following as the fundamental question facing social science in this century: *“What is distinctly human that must be retained across episodes of social reproduction?”* (p. 204).
- In order for sociologists to address this question for the sake of the survival of *Homo Sapiens* and their bodily integrity, Fuller claims that there is a need for the reunification of biology and sociology. He finds justification “in the history of science that the body has been just as alien to biology as to sociology” given that the concept of the body was derived from physics preoccupied with structure and function (p. 91).

THE HUMAN AS A BIOLOGICAL PROBLEM

- The work of philosopher-anthropologist-sociologist Arnold Gehlen (1988) offers corresponding thoughts to Fuller when he recognizes “man as a special biological problem” (pp. 4-13).
- Humans are distinct from animals in their lack of instincts and the need to interpret their existence. Unlike animals, they live in “world-openness” lacking adaptation to a specific environment as in the case of animals (p. 27).
- Gehlen agrees with Nietzsche that the human person is “the not yet determined animal. That is, unfinished in the very definition of what it is to be a man or woman. They present a challenge to themselves (p. 4).

UNIVERSAL SCIENCE/SYSTEMS VIEW OF 'MAN'

- Gehlen seeks a universal science of man which takes into account his “totality” based on interdisciplinary thought. He emphasizes that that a “a biological approach can succeed only if it can discover specifically human laws, which can be documented in all areas of the human constitution” (p. 9).
- The anthropobiological that Gehlen proposes combines “the peculiar structure of man and his complex and complicated inner life” (p. 9). This approach extends beyond the boundaries of physiological reductionism . To address man in this version of biology is to take into account his body, mind, soul, language, imagination, and so much more that is human within his outer and inner life.
- Gehlen states his ultimate goal: “We would like to create a system of relationships encompassing all the essential features of man, from his upright gait to his morals (p. 11).
- **How would a systems view of man/woman within the sociological perspective identify the necessary conditions for their existence?**

LEAVING THE MIDDLE AGES

- The redesign of the scientific method becomes an issue as we grasp for an understanding of the technological reality permeating our lives.
- The beginning of modern science was initiated in classical thought by Galileo's Newtonian mechanics, a deterministic and reductionist method which came to permeate every field of analytical study.
- That is to say, science proceeded in accordance with a worldview or view of how the world exists, relying in the thought processes supportive of its perception of reality, which also permeated the culture.
- In the 1970's, a holistic scientist by the name of Ann Palm with a background in physical chemistry and physics wrote a relatively obscure article that made a bold conceptual outline for a holistic approach to science which could only take the scientific community into a territory of unprecedented reasoning through whole brain thinking, if taken seriously.
- Palm (1979) sends the message that it is time for science to get out of the Middle Ages, to forsake its obsolete beliefs, and to construct a worldview with corresponding metaphors adapted to the way we live now.

HOLISTIC SCIENCE: A WHOLE SCIENCE FOR A FRACTURED AGE

- According to Palm (1979), an innovative scientific worldview needs to align itself with a “human reorientation of society” responding to the serious considerations of social, communal, ecological, technological, and global issues and how they impact people, the environment, and survival, with implications for the quality of life (p. 19).
- The transformation of science proposed by Palm is based on holism, a concept introduced by the philosopher Jan Smuts (1926).
- Palm’s new version of science was inspired by an integration of creative imaginations including the social, the scientific, the moral, and Eastern philosophies.

THE MISSING INGREDIENT IN SCIENCE

- Palm raises an awareness to a critically missing ingredient in normative science: “Our awakening spirit that moral values and ethics be incorporated into the structure of science” (p. 19).¹
- The rethinking of science in these terms involves an integration of linkages between facts and values, of objective science and the subjective creative process.
- Palm speaks to the need for a greater balance between personal values (the subjective) and scientific rigor (the objective), coinciding with Mills’ (1959) arguments for a more humanistic science and the inclusion of values into the investigative process where facts and values are given equal weight, a catalyst to personal responsibility.

THE HOLOGRAM

- What may prove to be the key that moves science away from its all too frequent shallow assumptions and explanations is deeper insight into the human person far beyond the rigors of hard and mechanistic science. A new holistic image of the person and a rethinking of human nature is in order for the scientific community.
- Palm speaks of the hologram as the portal to holistic science. It is a holistic scientific model designed around interrelatedness.
- She discusses how the mosaic of thought networks, the crisscrossing of disciplinary domains, the weaving of thought with feeling, and prism reflections of opposites merging into oneness, are all possible within the hologram.
- As Palm explains, in the hologram, the part contains the whole and reality is viewed within a “perception of patterns” within an open system resembling the interconnectedness of the universe itself (p.19).
- In contrast to the hologram is the closed system of science with defined parameters of thought conveying a fixed world and objectified people, a feat social scientists modeled on the accomplishments of physics.

THE NEW SCIENTIFIC FORMULA

- Palm's greatest fear is the proliferation of fragmented findings generated under the guise of science for an already broken world in crisis.
- Whether a new science or the modification of an old one is on the horizon, a whole scientist for a whole world is the formula given for a whole science on the premise that nature and society are whole entities. The implementation of this formula could make all the difference in the world. As the gender variable in science is raised, both enhancement and complexity are added to the matter.
- What may prove to be the key that moves science away from its all too frequent shallow assumptions and explanations is deeper insight into the person beyond the rigors of mechanistic science.
- Latour (2005) adds to the dialogue of a new science, when he states the "the *second* empiricism doesn't look at all like the first: its science, its politics, its esthetics, its morality are all different from the past. It is still real and objective, but it livelier, more talkative, active, pluralistic, and more mediated than the other" (p. 115).
- Furthermore, he claims that this kind of science is not limited to matters of fact; it deals with matters of concern which changes the perception of the world.
- **A new holistic image of the person and a rethinking of human nature is in order for the scientific community.**

References

- Bohm, D. (1980). On insight and its significance, for science, education, and values. In D. Sloan(Ed.), *Education and values* (pp. 7-22). New York: Teachers College Press: Columbia University.
- Bohm, D. (1981). Insight, knowledge, science, and values. *Teachers College Record*, 82, 380-402.
- Bruner, J. (2004). *Actual Minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Gehlen, A. (1988). *Man: His nature and place in the world*. New York: Columbia University Press.
- Jantsch, E. (1975). *Design for evolution*. New York: George Brazalier.
- Kurzweil, R. (2005). *The Singularity Is Near: When Humans Transcend Biology*. New York: Penguin Books.
- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network Theory*. New York: Oxford University Press.
- Mills, C. (1959). *The sociological imagination*. New York: Oxford University Press.

References (con.)

- Palm, A. (1979). *A holistic to science: New directions in the study of man*, III (2), 17-23.
- Smuts, J. (1926). *Holism and evolution*. New York: MacMillan.
- Wilshire, B. (1990). *The Moral Collapse of the University: Professionalism, Purity, and Alienation*. Albany, NY: State university of Albany Press.