Part and Wholes. The seven-dimensional approach of Roland Benedikter to the analysis of globalization – and its predecessors in the history of the interdisciplinary Social Sciences. An affirmative reading

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I.

Much of modern science has been based on breaking or dissolving the subject under investigation into its component parts. The assumption is that once the detailed task of doing so is accomplished, and the part subject to investigation, these parts can then be reordered into a meaningful whole. The achievements of this form of scientific method in investigating nature have been quite extraordinary. The term "positivism" has frequently been used to describe this procedure.

The equivalent of this procedure in history appears to be the production of monographs. Here, generally, a "local" subject is chosen, say, the county in a given state. Similar studies can be done in other counties. Eventually, a monograph dealing with the whole of South Carolina, incorporating the various smaller subjects, may be written. That, in turn, forms part of the corpus of work on slavery in general.

How these parts, whether in natural or human science, is combined remains a problem. Various attempts at a solution followed. For example, Linnaeus in his *Systema Naturalis* sought the answer in classification, relating all parts of the world of natural history by means of this arrangement. In the human sciences, what is called "hermeneutics" arose as a possible answer. Described as a "hermeneutic circle," by the German thinker, Schliermacher, it meant that one must understand the whole in order to understand the parts—thus reversing the usual flow.

For the German thinker hermeneutical understanding meant a continuous going back and forth between text and context (the texts were generally those to be found in theology and jurisprudence). As he put it, "Complete knowledge always involves an apparent circle that each part can be understood only out of the whole to which it belongs, and viceversa. All knowledge that is scientific must be constructed in this way."[1]

The organic whole was contrasted with the mechanical part. It was the German biologist Ernst Haeckel who coined the term "ecology" and gave it currency in the 1860s. The greatest exponent of investigating nature in these terms was Charles Darwin. Though he never used the term "ecology" (anymore than he did "evolution") in his writings, he obviously had the concept in mind when in his *Voyage of the Beagle* he writes of the possible effect of the destruction of a forest: "Yet if in any country a forest was destroyed, I do not believe nearly so many species of animals would perish as would here, from the destruction of the kelp. Amidst the leaves of this plant numerous species of fish live, which nowhere else could find food or shelter; with their destruction the many cormorants and other fishing birds, the otters, seals, and porpoises, would soon perish also; and lastly the Fuegian savage, the miserable lord of this miserable land, would redouble his cannibal feast, decrease in numbers, and perhaps cease to exist."[2]

[1] For a fuller treatment of positivism and hermeneutics see the chapters under those headings in my book, *The Uncertain Sciences* (Yale, 1998; paperback ed. with a new introduction, Transaction Press, 2007). The quotation from Schleiermacher is on page 91.

[2] Charles Darwin, *Voyage of the Beagle* (London. J. M. Dent & Sons, 1939), 229.

In his great work, *The Origin of Species* (1859), Darwin gave ecology a memorable dynamism, endowing it with an existence stretched over eons and epochs. In lovely prose—Darwin had read Wordsworth's Excursion to good advantage—he showed ecology's inner workings according to the theory of evolution by natural selection. In his following work, *The Descent of Man* (1871), he sought to demonstrate how the human species had come to acquire morality and self-consciousness.

The next step to be taken is to look at Ludwig von Bertalanffy and his work in systems analysis. Bertalaffy, too, was a biologist. In the 1920s in Vienna Paul Weiss first proposed a systems theory view. It was taken up and furthered by Bettalanffy. In his systems theory the emphasis was on the relations between the parts which connect them into a whole. It is an integrative approach, stressing holism.[3]

As Wikipedia in an excellent entry reminds us, the term does not have a well-established or precise meaning. It is intended to apply to all fields and levels of analysis, but especially to self-correcting systems though feedback. Thus, we need to say more about feedback and its development as theory by Norbert Wiener.

Whereas Bettalanffy moved from biology to system theory, in the case of Norbert Wiener the move was from mathematics to biology. Cybernetics was the name he choose for his exposition of feedback mechanisms. We are all familiar with a prosaic version of this occurrence: driving a car or a boat we need to move the steering wheel to one side and then the other to hold a steady course. Feedback is the term that Wiener used to describe this procedure in larger systems. An ordinary example of feedback mechanism is the thermostat in a house.

Very suggestive is Wiener's observation that "The degree of integration of the life of the community may very well approach the level shown in the conduct of a single individual, yet the individual will probably have a fixed nervous system, with permanent topographic relations between the elements and permanent connections, while the community consists of individuals with shifting relations in space and time...." What becomes crucial then is the "intercommunication of its members."[4] As can be seen cybernetics is not the same as system theory, but should be viewed as having an affinity with it.

II.

In his seven-dimensional approach - a very interesting model - presented in concise form and in easily accessible dialogic style in this volume, as well as - much more elaborated - in his upcoming book on the "Global Systemic Shift", Roland Benedikter employs a classic version of system theory in order to understand globalization. He examines six core fields of societal transformation (politics, economics, the so-called cultural turn, the "renaissance of religions," technology and demography); these can be seen as the "parts." Then he turns to the resulting "change as a whole," ordering the six core fields into an overarching (seventh) "whole".

It is an impressive performance. Benedikter's approach offers a nuanced account: each of the core fields can be the leading edge of change at different times. His view obviously points in the direction of interdisciplinary work, to deal with the six fields. Benedikter is also suggesting that a historian's emphasis should be on process rather than event.

III.

This approach has some important predecessors. A particular example of the call to multidisciplinary wholism can be found, for example, in Timothy Snyder's lengthy book, *Bloodlands.* Europe Between Hitler and Stalin. The title obviously invites comparison with the term "borderlands." Equally obvious is that Snyder intends to cross them willfully, as of lesser importance. As he informs us, "attention to any single

[3]His major work is *Global System Theory: Foundations, Development, Applications* (George Braziller, 1968).

[4]Norbert Wiener, *Cybernetics.* Or Control and Communication in the Animal and the Machine (The Technology Press, MIT, 1948), 182. I had the honor of being a colleague of Wiener at MIT. His book on cybernetics is well-written, though also filled with mathematical formulae. Wiener prided himself on his writing and tried his hand at novels. If I may share a personal memory, it is of my esteemed colleague walking past the offices of people in the humanities and social sciences, waving a ms. and saying, "I want you to read this and tell me what you think."

persecuted group... will fail as an account of what happened in Europe between 1933 and 1945. Perfect knowledge of the Ukrainian past will not produce the causes of the famine. Following the history of Poland is not the best way to understand why so many Poles were killed in the Great Terror. (...). A description of Jewish life can include the Holocaust, but not explain it. Often what happened to one group is intelligible only in light of what has happened to another."[5]

This call to wholism requires a command of many languages—which Snyder has—and many other historians may not have. Hence a further reason for interdisciplinary work. Parts can be handled by single hands; wholes generally require many such hands. The "mechanical" approach must give way to the "organic."

This is true in all fields. Economics is a field in which this has not yet happened in terms of the dominant establishment. There a "mechanical" view of a rational, profit-making actor with perfect knowledge in a closed system still prevails. It is also reflected in the division into micro and macro economics, with scant integration. It is being challenged, however, increasingly by new approaches, especially that under the heading of contextual economics. Foreshadowed by the historical school of economic thought at the end of the 19th century, contextual economics goes further in its placement of economic activity in the world of politics, sociology, anthropology, and philosophy as well as history proper.

In political science, for example, we can see the parts-wholes problem given one sort of solution by the establishment of a Federal system. Here, a balance is sought between the need for centralized government and the desire for state autonomy. The two drives are in constant tension. The European Union is another example, although it seems not yet to have solved its problems via a working Federalism.

IV.

One last example in regard to the political is enshrined in the words of the former British Prime Minister, Margaret Thatcher. As she famously remarked, "There is no such thing as society. There are individual men and women." Obviously she was unaware that a similar sentiment had been voiced a few centuries earlier by the arch conservative Joseph de Maistre. Reacting to the Declaration of the Rights of Man by the French Revolution, the savoyard/italian thinker remarked, "I know Germans, Frenchmen, and such others. Man I have never met."[6]

Aside from not knowing the ancestry of her words—certainly forgivable—Thatcher has forgotten her own training in chemistry. Here, hydrogen and oxygen exist as parts, but them combine into the whole of water. As in all good science, we must gain knowledge separately of the parts and then equal knowledge of their integration into a whole. What is true for chemistry is equally true for sociology: we seek for knowledge both of the individual and of the society in which he acts and by which he is shaped. "No man is an island unto himself," as John Donne put it so well.

V.

I want to conclude by applying what has been discussed above to the immediate present and to one country as it figures in globalization. That country is China. Its economic surge and its attendant cultural effusion has been sufficiently commented on elsewhere that there is no need here to repeat those facts and their details.

China is a 5000 year-old civilization whose constant concern has been unity over a vast country that until recently was based on agriculture. Its culture has been marked by Confucianism and related philosophies, with an emphasis on a "mandarin" class installed in bureaucracies and supposedly selflessly ruling the country. The military was given limited respect. An intellectual bureaucracy was given more honour.

Classical Chinese thought saw everything in terms of historical relations, not essences. Yin and yang may be viewed as symbolizing this attitude. Many scholars see the Chinese approach as very different from

[5]Timothy Snyder, *Bloodlands.* Europe Between Hitler and Stalin (Vintage, 2011), xix.

[6]Incidentally, this view has been echoed by the French "radical" thinker, Michael Foucault. In his view, Man does not exist except as a word coined during a particular period of time.

Greek thought with the latter's notion of appearances and reality. There appears no such divide in Chinese thought. As one scholar of China puts it, "the Asian worldview sees parts always in the context of the whole that they form together."[7] He then instances different approaches to medicine taken by Chinese and Westerners. Given this situation, there seems to be no parts/wholes problem to be encountered in that vast land. Does this mean that systems theory would play little or no role in China?

Yet China is playing an ever greater role in our globalized world, both acting upon the process and being acted upon by it. It can be subjected to systems theory as done so suggestively by Roland Benedikter. Many other approaches, of course, can also be fruitful. The fact is that the integration of China, its economy and its values into an increasingly globalized world is one of the central challenges of our time. So, too, for China is the effect of globalization upon its millennia-old civilization. Cause and effect, of course, are interrelated and part of an on-going dynamic. Or to put it in terms of the Chinese worldview, globalization, like every other human phenomenon must be seen in terms of historical relations.

The Chinese example is simply one among many of the problem facing our time: that of understanding and dealing well with the challenges posed by the eternal-seeming opposition of individual/community, diversity/universalism, freedom/stability and similar supposed dichotomies. It is here that the parts-wholes discussion becomes so relevant. We must understand and transcend this perceived division and realize that while they may always be in tension, that tension is part of the grandeur of human life.[8] In short, the Chinese is a microcosmic example of that problem which is faced by humanity at large.

[7]Alan T. Wood in an e-mail to me, January 24, 2012. On Chinese thought I have also found Wood's work in progress, "All Under Heaven," (unpub.) of great inspiration. Other works to be consulted are the Introduction by Roger T. Ames to the Folio Society edition of *Sun-Tzu. The Art of War* (London, 2007), and Martin Jacques, *When China Rules the World* (The Penguin Press, 2009). Jacques' catchy title is misleading, for as his subtitle "The End of the Western World and the Birth of a New Global Order," indicates he is really studying China's role in a globalizing world.

[8]Those who know their Darwin will recognize the echo here