In this issue

Richter and Calenbuhr's "Bunshaka"

The authors use the theory of self-production (autopoiesis) to characterize the devolution of enterprises known as bunshaka in Japan. This process of corporate division reminds us of the biological cell division according to autopoietic principles.

Biological model for economy, business and management is on the rise, especially in the US, where the Network economy and network corporations are most advanced due to IT/S revolution. IT/S era networks do behave as spontaneous social orders and autopoiesis appears to be the most natural model for studying them.

It is well known that spontaneous social and economic systems do behave autopoietically. In fact, it can be argued, most social systems are autopoietic, as was clearly understood by von Hayek. They maintain their identity through the continuous turnover of components, through cycles of production-degradation and reproduction of components – as do biological systems.

So, the question is not whether social systems are autopoietic, but why biological systems are not treated as social systems rather than machines?

While the devolution, interconnected development of subsidiaries and the renewal of their networks are autopoietic, traditional corporate fusion is allopoietic, i.e., not self-producing, artificially engineered and not self-sustainable. The acquisition of small enterprises, fusions with competitors and engineered takeovers and leveraged buyouts are non-biological, non-network, non-autopoietic. For example, DaimlerChrysler has not created its corporate units through internal self-reproduction within the company, but through taking external, foreign bodies and incorporating them into an existing organizational structure by feats of social engineering. Although well engineered, they are not self-sustainable, but only sustainable. RJR Nabisco and its current devolution is a good example of the unsuitability of corporate allopoiesis for the New Economy of the IT/S era.

Clearly, Richter and Calenbuhr have taken a very important step in remaking autopoiesis into theoretical basis for network economy. Much more work still remains to be done, but Human Systems Management is

determined to remain in the forefront of the biological and autopoietic understanding of network business behavior in the 21st century.

Corporations are not machines and mechanical contrivances, even if some handle them as such. Corporations are exquisite *social organisms*.

Linstone and Zhu's "West–East synergy"

The authors are attempting to find common grounds between Western multiple perspective approach TOP and Eastern Wuli-Shili-Renli (WSR) approach to management. TOP essentially refers to Technical, Organizational and Personal perspectives. What is similar and what is different about American and Chinese management practices, philosophies and concepts, other than economic and business performance?

The communications, perceptions and worldviews are significantly different between Chinese and Americans, often on the brink of misapprehension and conflict, so that derived management and business models are similarly incompatible. Teaching American business management in China is as challenging as teaching Chinese practices to Americans.

Yet, in the era of Global management paradigm (GMP), the convergence of practices and systems brought about by global IT and hypercompetition, both sides would clearly benefit from a more profound understanding of their differentiated business premises. Businessmen and managers surely do not wish to follow the continued simplistic misapprehension of their politicians.

It is our conviction at HSM that although the East–West differences and conflicts have a prepaid space in the sphere of politics, in the sphere of business and management no such misunderstandings are bound to persist. One of the outcomes of globalization is the increasing autonomy and independence of business, as the political meddling fades away into dangerous, destabilizing but increasingly irrelevant fadeaways.

Linstone and Zhu analyze the *wuli*, relations within and of the world; *shili*, relations between the world and its observer's mind; and *renli*, relations between the observers themselves. In terms of western autopoiesis, there are relationships and interactions "out there",

perceived and brought forth by human observation and interpretation, grasped and understood through human language and communication. So, the wuli-shili-renli is a perfect model counterpart of western autopoiesis or self-production of systems, rather than mechanical, multiperspective TOP.

The problem in comparing Western and Eastern approaches seems to be the selection of representative models when both outlooks and traditions are clearly multifaceted and multidimensional. Are TOP and WSR the best and most typical representatives of the West and East philosophies, or are they just authors' favorite paradigms? Stay tuned.

Rastogi's "Knowledge management"

Professor Rastogi has provided a brief synopsis of what does it mean to manage knowledge in organizations. He has summarized current literature and practice and referred to knowledge management as business process, without attempting to draw a distinction between information and knowledge.

Knowledge management (KM) is the most abused management phrase in the business-management lexicon. It does not have a definition. These days, the term knowledge management is applied to everything from a simple phone call to a multimillion-dollar data-warehouse project to the exotic indexing habits of librarians.

Something about the subject makes normally lucid people – not to mention academics and consultants – sound as if they've stuck their tongue in a meat grinder. One "definition" from the Web: "KM embodies organizational processes that seek synergistic combination of data and information-processing capacity of information technologies, and the creative and innovative capacity of human beings." Go figure.

It is impossible to define KM without knowing the difference between data, information and knowledge. It is impossible to define KM without defining knowledge first, operationally and precisely.

The best definition is as follows: "If HP (or Siemens) knew what HP knows, it would be three times as profitable." Companies do not have a clue what it is they really know and if you don't know what you know, how can you manage it?

Clearly, knowledge refers to the purposeful coordination of action and not to its description. Describing or encoding action transforms knowledge into information. Corporate ability to coordinate its action (pro-

cesses of value chain) is its knowledge. That knowledge has to be identified and managed. All the rest is information.

Rastogi uses IT/S as an infrastructure for KM: i.e., information for managing knowledge. It is not easy. Yet, developing *corporate human capital* is clearly the most desirable aspect of corporate key competency and thus of its competitive advantage. KM management can clearly help in this process, especially after defining its own subject matter, i.e., knowledge or, even better, the *process of knowing*.

Knowledge is all about action itself, not about symbolic description of action. The latter is well covered and handled in IT/S, the former is still being left fallow. Only the networks, people relating to each other in purposeful coordination of action, will bring forth human action (knowledge) to its full fruition. Prof. Rastogi has certainly provided a sensible evaluation of where we currently stand on KM, in spite of its media and consulting hype, scrambling for the millions of dollars pried loose by KM fashions.

Wang's "Organizational aspects of EC"

Electronic Commerce (EC) is not just on-line selling or shopping, but represents a new organizational paradigm of business. EC is a challenge to organizational design and it is precisely here that the traditional organizational designs fail. Prof. Wang reviews five leading organizational design approaches, concluding that neither of them has foreseen or is suitable for the EC and IT/S era.

Network organization design is still very inadequate, wedded to the mathematical idea of fixed and static graphs and "networks", incapable of capturing the dynamics, self-production and autopoiesis of modern IT/S based networks.

EC is not just another medium of commerce for traditional organizations: EC requires new, self-producing networks based organizational design, extending the traditional notions of re-engineering (BPR), through E-engineering and to autopoietic networks.

The desperate scramble of businessmen, searching for the appropriate organizational design, usually ends in a choiceless doldrums of conventional organizational design models. If the organizational design community does not wake up to these desperate calls of business, it could go the ways of operations research, management science, cybernetics and systems approach – courting the oblivion.

Network economy, business networks and self-producing networks have nothing to do with graph theory, Fulkerson's networks, transportation models or other fixed infrastructures of the past. Network alliances and partnerships are dynamic, continually building, degrading and rebuilding themselves: with the exception of Bat'a-system, there is no management system in existence which could be at least compatible with this challenge.

Prof. Wang concludes that network organizations can barely survive without the support of EC, bringing forth an interesting case of mutual environment coupling: EC needs and requires networks, but networks need and require EC.

He correctly identifies processes and subprocesses, not outcomes and structures, as keys to network organization "design". It seems that most dynamic networks are significantly self-designing and self-organizing; the notions of external designer and design are themselves quite inadequate for understanding the IT/S era. The notion of "implementation" is correspondingly final and not self-organizational: the key is a self-renewing cycle of self-producing processes leading to continuously changing and self-adapting structures – analyze this!

Assimakopoulos' "Viable System Model"

Professor Assimakopoulos has resurrected the old Viable System Model (VSM) of Stafford Beer and built a methodology, a Structured Total Systems Intervention MEthodology of VIable Systems and Metasystems (STIMEVIS), attempting to better grasp intracompany processes at all levels and across all sizes.

The effort uses the field of ISPs (Internet Service Providers) as a practical paradigm for studying networks, network infrastructure and network behavior. This is a useful undertaking to identify and address the various issues emerging in the diverse market of Internet-related services.

The effort is admirable at the time when organizational hierarchies are crumbling down and are being replaced by networks of intracompany markets, strategic planning and organizational charts and diagrams are on their way out, being replaced by the self-organization and autopoiesis of dynamic networks. The notions of design, control and feedback are similarly being replaced by customer/market integration, process orientation and self-management of increasingly autonomous teams. Instead of analyzing infor-

mation feedback, modern corporations react directly to customer action. This lies behind the shift from information to knowledge, i.e., from the description of action to action itself.

Continuous restructuring and self-production of modern organizational networks is a hostile environment for static divisional interconnections through an unwieldy web of information and control loops. Like Linus operating system development, modern corporations are not about control.

However, if Beer's five general subsystems are conceived as minimum production processes, defining the *organization* of the enterprise in the sense of autopoiesis, then a variety of corporate *structures* can be derived from the same organization principles. As soon as the fundamental distinction between organization and structure is established, the self-production of an enterprise can become understood.

The problem is when these fundamental core processes (functions) are assigned to specific "departments", like marketing, finance, personnel, etc., because it is precisely the functional silos of traditional departments that our breaking down and even disappearing in a modern corporation. That represents the challenge and potential pitfall for this kind of modeling. The author is accepting the challenges by concentrating on *Internet Service Providers* rather than on a more traditional line of business.

Can VSM be saved and resurrected? Is it relevant to the New Economy and its network-based businesses? Is diagramming an efficient tool in the era of continuous dynamic restructuring? Is not STIMEVIS rather a tool for business process re-engineering? Should not more emphasis be given to people, human knowledge, cooperation and trust?

The author is right: No business plan, procedure or methodology can succeed, if people feel miserable.

Nodoushani's "Epistemology of management theory"

Professor Nodoushani offers an excellent overview of the rise and decline of behaviorism and positivism in management "sciences". The very label "management science" has all but disappeared into the land of oxymorons. Nodoushani calls for the separation of state from science similar to the separation of state and religion.

The danger of positivism is in denying access, in the name of unity and unanimity, to control the evaluation

of scientific research through democratic means. A science that insists on possessing the only correct method and the only acceptable result – *is an ideology*. As ideology it must be separated from the state and its educational functions.

The whole baggage of positivism – careful sampling, precise measurement, and sophisticated design and analysis in the test of hypotheses derived from tentative general laws – has failed in business and management areas. Such approaches only fixate and conserve reigning paradigms of theory while ignoring those of practice. In management, practice drives the evolution of methodologies and theories, not vice versa. This is different from nature where "practice" is more or less given and so both physics and biology are essentially dis- and un-covering the world.

The world of business and management cannot be so "uncovered": it is a rapidly changing and moving target, with no permanent laws and no positive truth. Practice of network economy, e-business, global strategies, just-in-time systems and e-engineering have totally and radically transformed the object of study, within a few short decades. Behavior, criteria, rules of conduct, knowledge and "laws" have changed profoundly, sometimes even reversing to opposites or emerging *de novo*.

To study such a rapidly evolving world of action by antiquated means and tools of physics and biology is of course predestined to failure. At this point, management theory does not lead or offer alternatives but has great difficulties in even explaining or conceptualizing what is actually happening. It does not understand the rules of Internet, it studies knowledge without defining it, and it classifies information technology without integrating it.

Management theory still uses separate and disconnected functions, like accounting, economics, finance and statistics, while the world of practice has already re-engineered itself towards process and integrated value chains. Integrated process management integrates all functions, incorporating them naturally and seamlessly into a new management paradigm of the Network Economy. Nodoushani's essay should contribute to the discussion about the new and more fitting paradigm of business and management theory and research in the new, practice and knowledge oriented era of rapidly evolving and changing human action.