

Universities As the Birthplace for the Entrepreneurial Human Being¹

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August 2000

forthcoming in: Reflections: The SoL Journal on Knowledge,
Learning, and Change (MIT Press)

¹ The term University is used here in the broader, European sense: it includes all institutions of higher education (universities, private and public colleges, community colleges, and the institutions of higher learning). The article was first published under the title of "Universität als Schauplatz für den unternehmerischen Menschen, in: Stephan Laske, Tobias Scheytt, Claudia Meister-Scheytt, Claus Otto Scharmer (eds.): Universität im 21. Jahrhundert, Mering: Rainer Hampp Verlag, August 2000.

What does society need universities for? This basic question, posed by Kappler (Kappler, 1992a, 1992b), is our point of departure. It is not our intention to deplore the state of higher education. Rather, we aim to point out innovations that are taking place, and their implications for a transformed educational system.

This paper reflects the knowledge we gathered through our experience as students at the University of Witten/Herdecke and at the FU Berlin during this 1980s. This includes a year spent visiting and studying at twelve universities around the world. We are also drawing on our experience as instructors at several European and U.S. universities during the 1990s. Our thinking has been particularly inspired by a variety of action research projects which we conducted in American and European organizations as a function of our work with the MIT Center for Organizational Learning and the Society for Organizational Learning (SoL) in Cambridge, Massachusetts. Through these projects – a few of which will be described in some detail below – we realized what is possible for institutions of higher education: Universities can grow from places for abstract reflection to dynamic sites that attract and propel new ideas into reality. In short, we envision universities as the birthplace and nurturer for ideas and practices that can change the world (Kahane 2000).

The paper is organized into three sections. Section One (Theses 1 – 3) will discuss the evolution of the concept of the university. While the scholastic university was characterized by the *unity of teaching*, and the classical concept of the university – as renewed by Humboldt – by the *unity of research and teaching*, the concept of the university is now expanding to include the *unity of praxis, research, and teaching* (Scharmer 1995). In Section Two, we present seven core criteria arising from our work to date that lend concreteness to the practical applicability of this expanded concept. In Part Three, we discuss its implications (Theses 4 – 7).

On the Path to a Different University

Thesis 1: The fundamental changes in economic, social, and cultural structures around the world present an unprecedented challenge for the traditional university.

“A new world is taking shape as this millennium ends,” writes U.C. Berkeley’s Manuel Castells at the end of his three-volume work on “The Information Age: Economy, Society, and Culture” (1996, 1997, 1998). According to Castells, three parallel fundamental changes are taking place: 1) the rise of a new, dominant social structure – the network society, 2) the rise of a new economy – the “informational economy”, and 3) the rise of a new culture – the culture of “virtual reality” (1998: 336).

While we know very little at this point about the way in which these fundamental changes will play out in detail, we can identify a number of generic ways these changes are challenging managers and policymakers in organizations (Senge/Käufer, 1999). These challenges, frequently grouped together under the term “new economy,” are fundamentally redefining the way business is done today:

1. Space: globalization of value creation, capital markets, and financial markets
2. Time: Internet speed as a *sine qua non* for competitive strength
3. Structure: primacy of networked structures and communities
4. Substance: digitalization accelerates the dematerialization of value creation
5. Competition: “winner takes all” markets (increasing returns) as the dominant form of competitiveness

These five developments redefine the basic assumptions regarding *time* (instantaneous, any time), *space* (anywhere), *structure* (network), *substance* (digitization) and *competition* (increasing returns) under which the agents of economic action – consumers, businesses, investors – proceed and operate.

Thesis 2: As knowledge disseminated by the University becomes less and less relevant to leaders in organizations, knowledge which is relevant is increasingly disseminated by institutions other than universities.

Today we are more aware of not only the decreasing half-life of knowledge, but the fact that the *kind* of knowledge which represents the core of teaching at universities (e.g., in a program of business administration) has less and less to do with the challenges characterizing praxis. The kind of knowledge needed for thriving in the “new economy” is almost absent from university classrooms or traditional curricula. Let us take the topic of knowledge management (KM) as an example, since it has been shaping management discussion since the early 1990s.

KM’s evolution during the 90s may be roughly divided into three phases. During the first phase, perception was still primarily guided by *Information Technology (IT)*. Knowledge was regarded as a thing – a piece of information capable of being digitally represented, stored, and manipulated with appropriate algorithms. The second phase began about the time of the 1995 publication of the book *The Knowledge Creating Company*. The authors, Nonaka and Takeuchi, deliberate on the distinction between explicit and tacit knowledge, and present the thesis that knowledge creation in companies is a continuously progressing *living process* which steadily alternates between tacit and explicit knowledge on the one hand, and between individuals and groups or organizations on the other. In short, the second phase of the KM discussion gravitates toward an entirely different concept of knowledge – one which is based not on explicit knowledge (K1) but on the continuous alternation between explicit knowledge and tacit knowledge (K2).

The problem facing many policymakers is that K1 and K2 types of knowledge do not furnish a real basis for improving the art of strategic leadership. Knowing that societies, industries, markets, and businesses are in the process of fundamental change, leaders

need to learn to recognize possibilities earlier, and to develop them into entrepreneurial initiatives faster. The conventional tools of organizational learning and knowledge management are of little help because they target reflection on *past* experiences. This is of little value, and can even be misleading, with respect to finding answers for the new economy. *The core of this challenge is to awaken and increase creative cognitive human ability as it relates to seeing, sensing, mobilizing and bringing to fruition future potentials.* The ability to visualize and enable creative imagination, inspiration, and intuition is the decisive factor in today's entrepreneurial development (Jaworski and Scharmer, 2000), and constitutes a third kind of knowledge described below as "self-transcending knowledge" (K3) (Scharmer 2000).

Table 1: Twelve Types of Knowledge in Organizations (from: Scharmer forthcoming)

Knowledge/Action Type	K1: Explicit Knowledge	K2: Tacit-Embodied Knowledge	K3: Self-Transcending Knowledge
A1: Performing	Know-what	Knowledge in-use	Reflection-in-action
A2: Strategizing	Know-how	Theory in-use	Imagination-in-action
A3: Mental Modeling	Know-why	Metaphysics in-use	Inspiration-in-action
A4: Intention and Identity	Know-who	Ethics/Aesthetics in-use	Intuition-in-action

The issue for many leaders today lies in the fact that their organizations require K3 types of knowledge for taking advantage of emergent futures (Table 1).

Teaching and transferring each of the three types of knowledge requires a different set of learning environments and infrastructures. Organizations and consulting firms currently have solid processes and practices for the transfer of K1 knowledge. The TQM/organizational learning/knowledge movement of the 1980s and '90s developed a number of practicable (though not always well-executed) methodologies for K2 knowledge, but these focused on reacting to problems of the past. That is their blind spot. They did not increase an organization's ability *to sense and seize emerging opportunities*. What is needed are methodologies and tools that help individuals and social systems realize and bring to fruition the knowledge of imagination, inspiration, and intuition (K3).

Judging by the map of the twelve types of knowledge in Table 1, most of today's departments of business administration operate in no more than two or three of the column one boxes (K1) – the dissemination of know-what (e.g., cases), know-how

(e.g., accounting), and know-why (e.g., theory of economics). Largely missing are the learning environments of column two (K2), which let students gather their own experience and learn from it. American business schools are frequently a few steps more advanced in this respect than their European counterparts. Finally, the learning environments of column three, which let students develop the most strategically significant type of knowledge for the new knowledge economy are completely absent from most business schools and courses of study.

Thesis 3: The radical re-creation of the university must go beyond the reform of structures and processes. It must aim for the re-creation of its core purpose by expanding the classical idea of the university – Humboldt’s “Unity of Research and Teaching” and endowing it with a new basis, the “Unity of Praxis, Research, and Teaching”.

During the past thirty years, university reforms have led to the implementation of new processes and structures, but they did not produce a new *concept* of higher education. Measured by the scale of the task facing us today – to reinvent the essence of the university – most of these reforms must be considered failures because they only treated the symptoms.

The evolution of the concept of the occidental university may be outlined in three phases of development (Scharmer 1995). Throughout these three phases, the *universitas magistrorum et scholarium* – the community of teachers and learners – changes from the scholastic into the classical, and from the classical into the postmodern university.

Central to the medieval-scholastic university was the teaching of a given canon of knowledge by professors, customarily by means of lectures. The scholastic university is primarily characterized by teaching, less by research or praxis.

Humboldt’s university reform brought with it an expanded idea of the university process. The postulated “unity of research and teaching” shifted the focus from the dissemination of a given body of knowledge to the research process that underlies the generation of the knowledge base. Thus, the subjective process of cognitive gain achieved by the researcher comes into view. The formula “in solitude and freedom” (Humboldt 1990, 274) illustrates this context. This expanded concept of the university opens the view toward the process of knowledge *genesis*. This change in perspective also changed the nature of university teaching. While the scholastic lecture involves the students as listeners (“co-listening,” “co-thinking”), the seminar-style class engages students as partners in dialogue and discussion, as “co-speakers” rather than mere “co-listeners” (Table 2).

In the currently unfolding third phase of the university’s evolution, another shift is occurring. The development of the modern university shifted the dominant perspective from knowledge dissemination to knowledge research. Now the focus is on the generative conditions of praxis which determine the contextual conditions of research processes. Examples are furnished by a multitude of praxis-oriented partnerships

between researchers and practitioners. Knowledge creation is no longer based on researchers reflecting in solitude and freedom, but on the co-creation of praxis.

Table 2: Three Phases of University Evolution

Concept of University	Teaching	Research	Praxis
Medieval scholastic university: "Unity of Teaching"	Study by lecture "co-listening, "co-thinking"		
"Humboldt's classical university: "Unity of Research and Teaching"	As above, plus seminar-style studies "co-speaking"	The individual researcher "in solitude and freedom"; Institutes	
21 st century university: "Unity of Praxis, Research and Teaching"	As above, plus infrastructures for "co-initiating", "co-creating", and "co-entrepreneurial"	Action Research; Research consortia Clinical Research, Community Action Research,	Strategic co-creation with companies, consortia, venture capitalists, business incubators

The postmodern change in the concept of the university as outlined above is not something that may take place some time in the future; it has already been happening for some time. Here are a few of the many examples we are aware of:

1. The symbiotic relationship between entrepreneurial start-up cultures in Silicon Valley and around Boston with their respective mother institutions, Stanford and MIT; the powerful penetration of the worldwide market of executive education by top ranking American business schools; strategic partnerships between corporations and individual universities (as, for example, between Ford and MIT); and the rise of a new class of intermediary organizations between universities and private industry in which researchers, practitioners, and consultants exchange experiences and develop joint research initiatives (as occurs through the Society for Organizational Learning, Cambridge, Mass.).
2. The tradition of Action Research, which established itself slowly during the second half of the 20th century, is an example of the shift in social-science research toward active participation in the process of change (Reason and Bradbury 2000).
3. The harbingers of the change outlined above appear to have been slowest to arrive in the realm of teaching. We will furnish a few examples in which students, acting as co-initiators and organizers of their knowledge acquisition, have more profound learning experiences than are possible through conventional teaching approaches.

In these examples we can see the beginnings of innovation, but some questionable elements as well. Let us summarize our thinking up to this point. The past 1000 years of university-based teaching and research can be encapsulated with the following images:

Image 1:

- _ Students go to their lectures, during which they listen and take notes;
- _ students go to seminar rooms, where they talk and debate;
- _ students sense future potential, they synthesize, initiate organize, review, describe and document.

Image 2:

- _ Individual researchers read, reflect, write, and present;
- _ researchers (within one institute) talk, discuss, read, research, request, interview, transcribe, encode, reflect, write, and present.
- _ Action researchers meet with practitioners and listen, sense, help, compress, initiate, agree mutually, accompany, coach, design, moderate, celebrate, transcribe, reflect, write, give initial presentations, absorb, and present.

The basic question which underlies these two images is this: How does the university as an institution involve the learners (Image 1) and the researchers (Image 2) in the process of generating knowledge and insight? In both cases, we encounter the same fundamental impetus, an impetus moving from a scholastic corpus of knowledge via participation in the research process to knowledge creation *qua* co-creation and dialogue.

Core Principles of a Future-and-Action-Oriented University

Many of the first successful new economy entrepreneurs are not university graduates. They often quit college in order to establish a company of their own. The competencies and the knowledge required for success in praxis are not acquired at universities (Littmann 2000).

How can the third phase of university evolution – which aims to open the university to the potential immanent in praxis – be enacted?

Even though every university and every context in praxis differs, the experiences we have gathered reveal a number of common principles. These may be summarized in seven core principles:

(1) Personal Embodiment

The basis of any process of learning and knowing in complex social systems is the primacy of personally embodied praxis.

Managing Change Course

One of the best examples we know of is a course developed by Edgar Schein at MIT's Sloan School of Management. Students in the course have done things like initiate and organize a series of seminars and lectures on the topic of entrepreneurship, introduce new recycling systems at the university, and initiate and organize the school's Web site. The ground rule for the "Managing Change" course is simple: Each participant defines and implements two projects – one entrepreneurial project of change (working as part of a team) and one personal change project. Examples of personal change projects include improving finances, physical and emotional health, parent-child relations, and time management skills. The specific goal is not important. What matters is whether the change can be achieved within the span of one semester, and the quality of self-knowledge the effort generates.

For the group project, the students form teams. In contrast with the individual projects, goals and strategies for achieving the goals are presented and discussed during weekly seminars. The teams set up their own meeting schedule outside of the seminars to implement their project. As with personal change projects, they write weekly progress reports and correspond regularly with instructors via email.

The course incorporates yet another essential element called the "empathy walk." Students in groups of two make contact with an individual "whom the two of you consider to be most different from the two of you" (Schein 1999, 69). The purpose of the "empathy walk" is to conduct a conversation with this individual in a way that allows the team to see the world through the other person's eyes. Examples include conversations with homeless persons, prostitutes, Republicans, a rabbi, a priest, prison inmates and so on. The goal is to have students learn to leave their own safe territory and to perceive what it means to engage with a wholly different kind of individual. Again, the students decide which individual to choose, make the contact, initiate the conversation, and are responsible for the course it takes.

Peace Studies Around the World – Worldwide Study Year for an International Group of Students

Confucius said: "A good student should read 1,000 books and travel 10,000 miles." Believing that travel broadens, a group of students organized a travelling university in 1989/90. Thirty-five students from six countries traveled around the world in nine months, studying together at a total of twelve universities in ten countries. Entitled "Peace by Peaceful Means," the program's objective was to study peaceful means for conflict resolution. The study year, initiated at the University of Witten/Herdecke in Germany, was organized by six students who were fully responsible for its execution. It was conceived and supervised by Professor Johan Galtung, one of the founders of the peace and conflict sciences, who is convinced that personal experience and direct confrontation with the world's problems should be the basis for learning and for higher education.

The students lived with local families or in student apartments. They talked with scholars, politicians, and with representatives of NGO's and international institutions. Some discussions and encounters were structured and scheduled, while others took place spontaneously. The overriding question, "How can peace be achieved by peaceful means?" guided the students in developing their own focus, e.g. the significance of religion and of cultural differences with regard to peace and conflict, the local economy, long-term development, or the status of women. The intercultural make-up of the study group itself furnished yet another level of experience and conflict.

(2) Building Learning Infrastructures

The second core principle is the support by parallel structures for learning. Any space, tool, or device which will help the members of an organization perceive experiences faster and better is an infrastructure of learning. In the case of Ed Schein's course on "Managing Change," the weekly progress reports constitute an important learning infrastructure, while the weekly sessions of the course itself provide another. The content and topics of the weekly sessions derive not from the syllabus, but from the tangible project work. The teachers' function is to provide the methodologies and learning environments needed for solving the challenges that emerge. Other examples for learning infrastructures include: a "learning room," web based communities, fora and bulletin boards, annual conferences of professional communities (Schein 1999; Scharmer 1999).

(3) The Power of Focus and Intention

The third core principle involves perceiving and realizing energies of willpower. The ability to mobilize individual and joint sources of energy and strength is a key component in any individual or collective achievement — but training in this ability is almost totally absent from learning contexts at the university level.

The achievement of bringing together "out of nowhere" a worldwide organization of twelve partner universities, thirty-five participants, 290 speakers on four continents, and a six-figure budget for which they were accountable, all within a few months' time, was a profound achievement for the six student organizers. Upon completion of the project, one of the student organizers wrote, "Focusing on the project implementation helped us mobilize a nearly unlimited amount of energy. With it, we were able to overcome any problem we encountered. The experience of being part of a team you know will achieve its goal no matter what opened up a whole world of experience and cooperation that was previously unknown to me."

Three other students of the University of Witten/Herdecke gained the same insight in the course of an action research project in Germany. On the first day of their project² the three university members attended a meeting of a local physicians' initiative to

² The results of the project are published in their diploma thesis (Jung, St./Petzenhauser, Chr./Tuckermann, H., 2000).

organize a more patient-friendly emergency care system within their county. The project, which had the support of many family physicians, had been dragging on for some time. As the evening progressed, all of the well-known problems associated with this project were aired, discussed, and lamented. The group's energy level – which was about thirty on a scale of one to 100 in the beginning of the meeting, dropped to twenty, fifteen, and finally to ten, in the course of the discussion. The longer the debate continued, the more insurmountable the problems facing the group appeared, and the more improbable the prospect of even thinking about solutions became. People glanced furtively at the clock. But then the unexpected occurred: One of the physicians told an incredible story of how he, with professional colleagues from Germany and India, had brought primary medical care to a gigantic slum region in India. Listeners were riveted. The entire project had begun as nothing more than a “crazy idea” and the will to make it happen. A few minutes into his tale, the energy level in the room jumped from ten to 100. Even before the story of this physician – who persuaded the Lufthansa and other corporate entities to donate medical equipment worth millions and transport them to India free of charge – had ended, the people attending the gathering on this evening knew what was wrong with their own project. *It lacked the visionary quality needed to mobilize the energy, excitement, and complete commitment from the individuals in the group, and the group as a whole.* This realization led to a complete regeneration of the work and its scope on the very same evening. It was a decisive turning point in the project's development.

(4) *A Core Process of Shaping Shared Knowledge and Will*

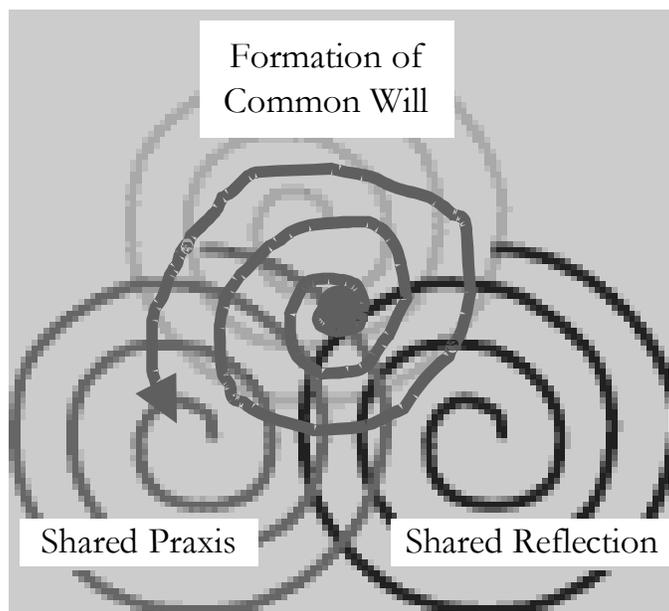


Figure 1: The Process of Shaping Shared Knowledge and Will

Principle number four focuses on linking the three above elements (action, reflection, formation of will) as components of a single process. The result is an emerging new core process that is based on both to *differentiate* and to *integrate* the following three areas of activity: The area of execution and value creation (praxis), of learning (reflection), and of shaping common will (intention) (see Figure 1) .

(5) *Dialogue: Accessing Collective Intelligence*

Quality of conversation and dialogue is the most important lever — and bottleneck— for improving social learning processes. Despite this, conversational skills are not effectively taught at today’s universities. Figure 2 shows four qualitatively different fields of conversation and communication: (1) *politeness* (talking nice), (2) *debate* (talking tough), (3) *inquiry* (reflective dialogue), and (4) *flow* (generative dialogue). It has been our experience that groups usually have to pass through the first three fields before arriving at the generative level of dialogue (Scharmer 2000, Isaacs 1999).

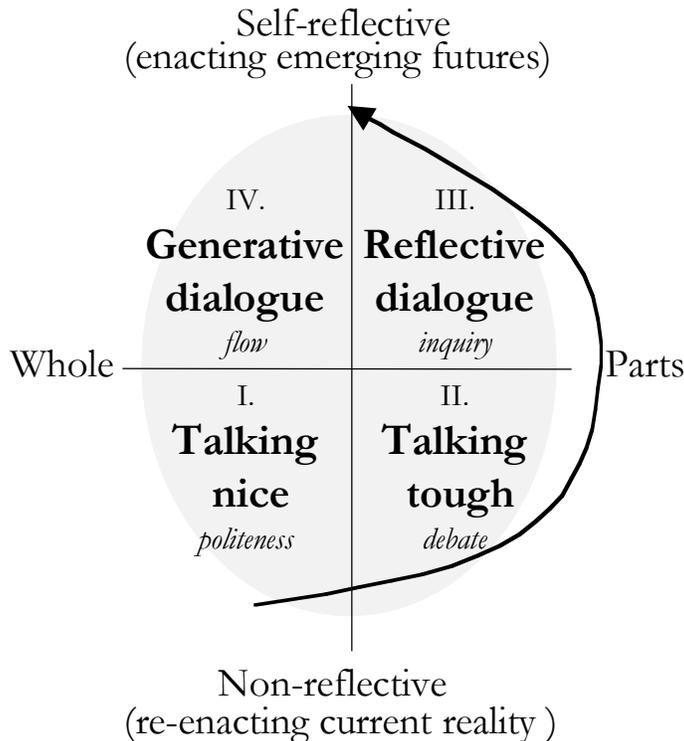


Figure 2: Four Field Qualities of Communication (Scharmer 2000)

The intervention techniques which allow a conversation to advance from Level 1 (*talking nice*) to Level 2 (*talking tough*), from Level 2 to Level 3 (*reflective dialogue*) and from Level 3 to Level 4 (*generative dialogue*) are not simple to master. Each threshold requires a different technique of intervention, and each is learned only through real confrontation in real situations. The art of generative dialogue ultimately strives to create an intersubjective “field intelligence” by mobilizing social resources of

strength and action potentials which go beyond atomized individuals (Isaacs 1999, Scharmer 2000).

(6) *Presencing: Bringing Your Full Self Into Reality (Birth of the Creative Core)*

A woman participating in the world study tour described her most important learning experience as follows: “We had an idea, and then we started working on its implementation. All of a sudden, there was this program. Then we sat on an airplane, surrounded by thirty-four other students. And it all had started with this idea that we talked about at breakfast.” The powerful experience of getting in touch with one’s own creative forces and willpower may be described as the birth of the entrepreneurial capacity. This may be the most important learning experience in a future-oriented and action-related university. Abraham Maslow expresses this as follows in his unpublished papers:

“The first great task is to search for one’s identity. Each person must find his or her true, active self, and after that task is accomplished, then life’s real problems lie ahead. Clearly, this task is related to finding one’s calling, or biological destiny. What is the mission that one chooses to love and sacrifice to? The person who has acquired a sense of self and direction can use all of these tools simply as tools. The tools serve rather than boss their user.”

That is the key point: First you must be a good person and have a strong sense of selfhood and identity. Then immediately all the forces in the world become tools for one’s own purposes. At once, they cease to be forces that cause, determine and shape but become instruments for the self to use as it wishes.

Essentially, if you know who you are, where you are going, and what you want, then it is not hard to deal with inane bureaucratic details, trivialities and constraints. You can simply disarm them and make them disappear by a simple shrug of your shoulders. I know that I am apt to become impatient with young people today who attribute so much power to social pressures and forces. I point out that all we need to do is pay these influences no attention, and then they vanish. *Persons who have achieved their identity are,causers’ rather than,caused.*” (Maslow, quoted from Hoffmann 1996, 176f.; italics COS/KK)

The development of a higher form of self-knowledge as described by Maslow is based on implementing a different form and source of knowledge. Above, we called it “self-transcending knowledge” (K3). The techniques and practices required to access these sources of knowledge have been kept alive in the creative arts and various spiritual traditions for centuries. Only in recent times has the boundary between scientific knowledge (K1, K2) and the higher forms of praxis knowledge or presencing (K3) become more transparent and open (Table 3).

One example of the growing relevancy of K3 techniques in U.S. business schools is the famed business creativity courses offered by Michael Ray at Stanford University. When asked how he helps the participants in his courses access the sources of their generative (K3) knowledge, Ray said that he builds environments which permit his course

participants to address the two key questions of creativity: “Who is my Self?” and “What is my Work?” (Jaworski and Scharmer 2000). In talking about the Self with a capital S, Ray is not referring to the Ego, but to the highest future potential of that individual. And when talking about Work with a capital W, he is not referring to “my job,” but to “my purpose in life, my function, my vocation in the world.”

Table 3: Three Forms of Knowledge (from: Scharmer 2000)

Epistemology	K1 Explicit Knowledge	K2 Tacit-Embodied Knowledge	K3 Self-Transcending Knowledge
Knowledge about	Knowledge about things	Knowledge about doing things	Knowing about thought-origins for doing things
Data	External reality	Enacted reality	Not-yet-enacted reality
Experience Type	Observation experience	Action experience	Aesthetic experience
Action-Reflection Ratio	Reflection without action	Reflection-on-action	Reflection-in-action
Truth	Matching reality	Producing reality	Presencing reality
Truth Criterion	Can you observe it?	Can you create it?	Can you actualize it?
Perspective	External: View on objective reality	Internal: View on enacted reality	Both internal and external: View on not-yet-enacted reality
Knower-known Relation	Separation	Unity (after action)	Unity (in action)

(7) Inversion: The University as Social Sculpture

The seventh principle relates to enhancing the university’s *field quality*. Let us begin by distinguishing between three relational qualities which connect the university with the societal environment of which it is a part. First, the university may be absolutely *cut off*: in this world, science operates as an autopoietic system which only revolves about its own ivory tower. Second, the university can establish *transactional* relations with its environment: In this world, scientists operate as service providers, courtesy expert

consultants, contract researchers, and market-oriented providers of their knowledge products. Third, the university can establish *transformative* relations with its environment: Here, scientists operate as kind of action researchers going through a rhythm of total immersion in innovating praxis on the one hand and deep reflection and writing on the other hand. In this world, universities create realms in which practitioners can both reflect on their experiences and theories in-use as well as dream up and co-create new worlds.

The more universities incorporate praxis in their philosophy, mission, and curricula, the more the core processes of higher education – research and learning – will move beyond the walls of academe and into societal and personal realms. For example, the three students who chose the medical network as the topic for their thesis considered their three-month action research project in that community their most important learning experience. Another example are the authors of the 15 or so management books, that really changed the way companies are managed and led over the past two decades. The authors of these books came, almost without exception, not from the traditional core of management or business school departments, but rather from their innovation generating periphery where a whole world of small and focused research centers, institutes, think tanks, and research consortia is taking shape and increasingly penetrates the traditional boundaries of research, consulting, and praxis.

In short: Universities based on the unity of praxis, research, and teaching, will tend to go through an institutional inversion that shifts the locus of action (learning and knowledge creation) from inside to outside its current institutional boundaries. We are now at the very beginning of this evolution, but the Internet revolution will probably dramatically accelerate the process.

Discussion: Perspectives and Limits of Opening for Praxis Renewal

We can now sum up and discuss the current status of our deliberations in four concluding theses.

Thesis 4: The Future of the University Lies Beyond Its Current Organizational Boundaries

The university fully comes into being when scientists cross into the territory of praxis by helping practitioners create new realities, and when practitioners cross into the territory of reflection to explicate the theory inherent in their praxis and make it available for research discourse.³ The way to prevent the decline of the university is to have it open up toward praxis and its immanent potential — toward the praxis of organizations, the praxis of individuals, and societal praxis.

Thesis 5: The Praxis-Inspiring Concept of University Is Happening Anyway – Whether Within or Outside of the Institutional Shell of the “University”

³ Based, in our own words, upon Konrad Schily and Ekkehard Kappler (Schily, 1993; Kappler, 1992).

The definition contained in the previous paragraph develops the concept of the university *as action in progress*, separating it from any pre-existing institutional context. As a result, there are two ways in which the updated concept of the university can become a reality: *within* or *outside* of its evolved institutional shell. In the former instance, universities would become significant arenas of public discourse, and midwives for economic and social innovation. In the latter instance, universities would be increasingly replaced by alternative institutions such as global Internet universities, and would thus continue to decline in relevance and reach.

Thesis 6: The More the Virtualization of Learning Progresses, the More Pressing the Need for High Quality Face-to-Face Dialogue.

Does the Internet University render the current university obsolete? Yes and no. Yes, in its present form of organization and existence. No with regard to its developmental potential. We do know that interacting on-line and face-to-face are complementary, not mutually exclusive, work modes in the business world. As the virtualization of jobs, learning, and life progresses, the need for quality face-to-face encounters keeps increasing. In this area, today's universities may acquire important new roles. In many organizations, there is a shortage of opportunities where practitioners can exchange ideas, support, and learn from each other." Organizing and setting up such dialogue spaces for practitioners from diverse institutions might become a prominent objective of future universities. Such a university would define itself less by means of its physical and legal limits, and far more by its relationship networks with alumni and praxis partners – networks which would continuously evolve and change. The ability to build quality dialogue spaces requires not only opening the university as described above, but nurturing of an inner quality in individuals and institutions (Senge, 2000). The quality of public dialogue spaces is a function of the quality of the inner space from which the participating actors operate.

Thesis 7: Universities as Birthplaces and Hubs for Communities of Creation

Thus, we have arrived at the end, which is to say at the beginning. We have attempted to paint in a few strokes the basic nature of a new concept of the university which we – and many others – have been experiencing in a variety of contexts. In this concept, universities do not strive for a type of science which merely reflects the world, but for a science capable of grasping reality by contemplating the underlying forces of its genesis. In such a university, learners and researchers shift from being distant observers to creative co-designers of a praxis in progress – to midwives assisting in the birth of innovation. In short, we see the university as a birthplace for entrepreneurial individuals and communities of creation who have learned to operate from a place where the human being is "causer rather than caused."

This kind of developmental perspective implies that universities must open in two fundamental ways: Outward, toward societal praxis, and inward, toward the creative resources of the processes of knowledge and will (K3). The processes of opening are

interdependent and, as we saw when examining the challenges of the new economy, can only evolve in conjunction. The outward expansion of the university (societal praxis) and inward expansion (creative praxis) are the heart of a revised concept of University, in which *research* becomes an art of co-creating reality, and *learning* becomes embodied freedom (Kappler, 1993). An university which invites the future in would not be a handmaiden to the replication of current praxis, but rather a partner in dialogue, a midwife, and a home for entrepreneurial individuals and communities of creation that change the world.

Literatur

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