

Creativity in the Twenty First Century

Ai-Girl Tan

Christoph Perleth *Editors*

Creativity, Culture, and Development

 Springer

Creativity in the Twenty First Century

Series editor

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Aims and Scope

“Creativity in the Twenty-First Century Book Series” repositions “creativity” as a boundary-crossing discipline that is essential to learning and teaching, social-economic dialogues, academic discourses and cultural practices, as well as technological and digital communications. The series serves as a timely platform, bringing together like-minded scientists and researchers around the world to share their diverse perspectives on creativity and to engage in open and productive inquiries into promoting creativity for a more peaceful and harmonious world. Researchers and practitioners from all continents are invited to share their discipline-specific insights, research orientations and cultural practices, as well as to pose new questions on what creativity is, how to promote it, which directions to pursue, who should participate, and so on.

The book series is led by emerging eminent and senior scientists, researchers, and educators in the fields of creativity, psychology, the cultural sciences and education studies. They create networks of sharing and spread innovative publishing opportunities within the communities of practice. They invest considerable time and effort in deepening creativity expertise, structuring creativity programs, and organizing creativity activities for the communities of interest. The book series aims not only to “glue together” like-minded scientists (community of practice) to share benefits of creativity theorizing, research and practice, but also to encourage non-experts (community of interest) in all societies to become supporters and spokespersons of positive engagement in creative learning, teaching and dialogues.

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*This volume is dedicated to W. Stern
(1871–1938) and Anna Craft (1961–2014)
for their excellent contributions to developing
human creativity*

Foreword I

Once Jean Piaget (1896–1980) was asked to say why he neglected the topic of creativity, which was an emergent research issue in that period. He claimed that creativity was just an “American question” in which he was not interested, because in that field, investigators failed to give reasons of the core problems of mental development, which instead he aimed to address. According to Piaget, development is, in a certain sense, always “creative,” since children’s thinking changes continuously by transforming preexisting mental schemata into new ones in order to face the problems rising from the environment (see, e.g., Piaget 1962). Thus, it seems that, in Piaget’s view, the title of a Shakespearian play could be associated to the topic of creativity: “Much ado about nothing.”

It is true, as it has been often acknowledged, that the first impulse to investigate creativity through a scientific approach came from North American researchers (see e.g., Guilford 1950), who also drew the conceptual coordinates underlying the subsequent attempts to assess and improve creative skills and personality traits. So, the “American question” became a “Western question” since also most European investigators shared the same assumptions underpinning the original concept of creativity. Also nowadays in experimental studies about creative processes, the definitions of creativity and the instruments which are applied to measure it and the tools which are devised to improve it are based on that concept. It is worth noting, for example, that in one of the most advanced research field about creativity—that is, the investigation of the neurobiological correlates of the creative act—the traditional tests devised by Joy Guilford (1897–1987) and Ellis Torrance (1915–2003) are still employed.

Can theorizing and investigating about creativity become a “global question”? Yes, if some emerging challenges are seriously taken into account. The classical views of creativity are focussed on individual characteristics and on the “inner work” of the mind. In this perspective, indeed, radical new theories failed to emerge

in the last decades. It seems rather that the novel frameworks which have been presented in recent years are refinements, variations, or integration of previous theories and that no revolutionary paradigm has been proposed. May be that innovation in the conceptualization of creativity can be prompted by starting from very different assumptions as the traditional ones. For instance, in some non-Western cultures what we connect to creativity, even though in those contexts the term “creativity” does not exist or has different meanings and connotations, is linked to the environment—or to the system of relations between the individual and the environment, intended both as physical/technological and social—and to body experiences. Definitions and concepts concerning creativity might be revitalized if broader perspectives, encompassing also the interaction with the environment and the embodied nature of cognition and affects, will be developed.

As far as the assessment of creativity is concerned, it is a widespread feeling that the well-established ways to measure divergent thinking and personality dimensions are inadequate. However, it is not easy to find alternative procedures which are reliable and viable. Also in this case, a contamination of insights coming from different cultures and the criteria of validity based on a long-lasting history of improvements of scientific standards might be beneficial.

Lastly, quite early, in the investigation of creativity, the acquired knowledge about the mental mechanisms involved in the generation of new ideas and artifacts was applied in order to devise tools and training programs aimed at enhancing the creative potential of persons and groups. Most of these techniques failed to reach their goals since their alleged efficacy was not supported by empirical evidence. Moreover, they need, in order to be implemented properly, some conditions (commitment, time, financial resources, and so on) which are not available in current instructional or work settings. Different approaches appear to be needed. It is so understandable why methods grounded on very different backgrounds, apparently “exotic,” are successful, at least at the level of the enthusiasm which they can elicit in the trainees. This is another field in which the hybridization of suggestions coming from endeavors outside the traditional training frameworks and the common ways to conceive creative education might be productive.

Research about creativity is faced to a series of challenges, which concern theories, assessment procedures, and training programs. The present book may be meant as an attempt to address such challenges. It is remarkable since it tries to raise crucial questions about both some fundamentals of the conceptualization and investigation of creativity and the practices which have been developed to foster it. The volume is intriguing because of the intention to prompt the cross-fertilization of different traditions of research. It is insightful since it encourages to be flexible in thinking about what creativity is and how it can be cultivated. For these reasons, at the end the reader should be convinced that creativity is no more only an “American question.”

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Foreword II

Sea of Learning

Upon the face of the deep,
The Sea of Learning knows
No bounds. No shore in sight,
To return to land.
We drift on, lost
In her bosom—only
To be awakened, to taste
The Creative Spirit that moves
Upon the face of the waters.

To write a foreword for the present volume is as much an honor as a challenge: honor, because the editors have invited me to be counted among knowledgeable contributors to their volume; challenge, because the title of the volume is rather intimidating. Creativity, culture, and development are three encompassing domains of knowledge, each of which demands volumes to cover. Imagine the challenge that the editors face in bringing together these three domains in a single volume. They conclude that “creativity, culture, and development represent a unified triad.” But what does this unified triad entail? The present volume is devoted to answering this question.

By development, the editors mean “human development.” This, of course, delimits the scope of the volume immensely and renders my task of writing the foreword less intimidating. However, this delimitation raises an issue: As noted by the editors, “cultural systems themselves develop as well”; thus, the concept of development applies also to culture. The implication is that human beings are both the products and the creators of culture. In line with Bandura’s (1978) concept of reciprocal determinism, the relation between individual behavior and culture is best

conceived as one of the continual interactions. There is no intrinsic reason why culture has to be treated as the cause, and individual behavior as the effect. If culture is defined as that part of environment created by human beings, then we create environments that, in turn, make us human. Creativity plays a key role in this process of continual interaction.

The concept of development should encompass socioeconomic aspects as well. Economic viability in the twenty-first century depends on knowledge as a human resource. Nations that invest in this resource will thrive; nations that fail to do so imperil their own survival. Thus, reforming education is a key for moving ahead in international economic competition; it is essential for national transformations toward a knowledge economy. In Singapore, for instance, the need for educational reform in response to economy-driven imperatives is explicitly and repeatedly articulated. In particular, impressive is the commitment to back policy with massive investment of resources (e.g., treating student teachers as employees of the Ministry of Education, thus enabling them to receive remuneration starting from the beginning of training). Common to calls for education reform in Confucian heritage cultures is the stress on promoting creativity dictated by economic imperatives. Demanded in the new knowledge-based economy are not just the acquisition, but the generation and innovative application of knowledge.

The path to creativity, however, is laden with difficulties and contradictions (Ho et al. 2013). Four of these deserve special attention. In the first place, we note an inherent paradox: A knowledge-based economy requires creativity and ingenuity; it is also driven by avarice that threatens to destroy civil society, social bonds, and state education. Ingenuity and invention are thus in tension with what Hargreaves (2003) has called an irresponsible “hunger for profit.”

Second, scientific, technological, and problem-solving innovation is universally welcomed by political authority, not so for innovation in artistic, literary, philosophical pursuits, and the like. The utilitarian or practical value of these pursuits is in doubt—hence endangered? Moreover, they thrive on individualistic values of the free thinker and have thus the propensity to cause “trouble”—hence dangerous?

Third, we may trace the difficulties and contradictions to the ideological conservatism in Confucianism. There is a basic contradiction between creativity promotion and authoritarian social control. Those ideologically bent on control may be tempted to restrict the definition of creativity to mean innovation in the service of a knowledge-based economy, exclusive of innovation that goes counter to societal order. The trouble is that a tightly controlled society does not foster creative entrepreneurs, let alone creative scholar-teachers. Hence, loosening control is a precondition for fostering creativity. A study of Chinese history substantiates this statement, when we compare the creative Tang dynasty, a period of openness, receptivity, and cross-cultural fertilization, with the uncreative Ming and Qing dynasties, during which China turned inward and shut itself from foreign influences.

Fourth, creativity, ingenuity, and invention can hardly be promoted in educational systems where examinations are the preoccupation of educators, parents, and students. A popular saying in mainland China states “Exams, exams, exams, the magic weapon of teachers; marks, marks, marks, the lifeblood of students.”

The Japanese term *examination hell* expresses similar sentiments of awe. In Japan, Taiwan, and South Korea, the socioeconomic importance and fierce competition related to secondary school and university entrance examinations have led students and their parents to seek spiritual support through prayer and religious rituals. Japanese students leave donations and written prayers and promises to the gods at Shinto shrines specifically dedicated to academic success. All these are manifestations of what I and my colleagues have characterized as “examination superstition” (Ho et al. 2001). In short, examinations constitute the focus of academic anxiety, which rob students of the joy of learning, throughout Confucian heritage cultures. I end this paragraph with a prompt for the long-suffering Asian students: Of what use is a pen to a student, if he cannot beguile examiners *creatively* with it to win high marks?

I dwell upon formidable barriers to creativity for a good reason. It is ironic that programs aimed at promoting creativity are often singularly uncreative in their approach. Under pressure to meet economic imperatives, teachers and educators charged with the promotion of creativity often confuse *creative* teaching with *teaching* creativity through direct instructions on how and what to think creatively. Teaching creativity degenerates all too easily to a cookbook approach, in the manner of “An Idiot’s Guide to ...” or providing formulaic answers in the form of do’s and don’ts. Witness how bookstores hungry for profit are flooding the market with books aimed at gullible Tiger Moms bent on “*making* their children more creative.” Hopefully, the present volume will restore creative teaching and counter these pernicious trends.

Creative teaching and teaching creativity rest on fundamentally different views of human development. Teaching creativity assumes that creativity has to be instilled or inculcated from without. In contrast, creative teaching places trust in the human propensity toward creativity: For adults, creativity begins with undoing most of what we have internalized in our educational history. For young children, creativity is as natural as breathing; all that educators and parents need to do is to respect the Dao of human development, provide the milieu to foster its growth, and above all refrain from crushing it (see Sundararajan and Raina 2014).

The editors have invited “like-minded researchers” to share their views and their fruits of labor. In all likelihood, however, researchers can be like-minded in only in a broad sense, to promote the realization of the human potential for creativity. Beyond that, there is no necessity to be like-minded in their conceptualization and research methodology. A case in point is the expansion beyond the traditional conception of creativity as a matter of personality development. I discern a counter voice to conceptualizing creativity as within persons in the notion of “societal creativity” (Chap. 12, this volume). According to the editors, “Creativity is conceptualized within the persons, their sociocultural and developmental milieu.” This milieu is clearly more encompassing than that of the school or family.

In the introduction to the volume, the editors make clear that creativity is a potential to be cultivated for all persons; it is not an asset of the privileged few, geniuses and artists. A perusal of its table of contents reveals a sizable coverage of diverse topics. The book is addressed, therefore, to a wider audience than teachers

and educators; it appeals also to providers of human services (as in Chap. 13, this volume) as well as business managers.

Contributors to the volume cannot be held solely accountable for how it will impact the development of creativity. Readers must also bear responsibility for how they will apply the knowledge they glean from the book creatively in actions.

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