

Constructing Chinese Didactics

(Re)discovering the German Didactics Tradition

Abstract

The article traces the influence of the German didactics tradition on the development of didactics in China from a historical perspective and by analyzing the ways of constructing Chinese didactics in three contemporary didactics texts. It compares and contrasts the German didactics tradition with Kairov's didactics and American theory of instruction—two “didactics” traditions that have significantly determined and shaped how didactics is conceived and developed in China. The article argues for a (re)discovery of the German didactics tradition, and discusses the implications for constructing Chinese didactics within the current social, cultural, and educational context of schooling in China. It addresses how Chinese didactics can be constructed in a more thoughtful and better informed manner, in a way that embodies real Chinese characteristics.

Keywords

The German didactics tradition, Didactics, theory of instruction, China

The year of 2006 marked the 200th anniversary of the publication of Johann Fredrich Herbart's *General Pedagogy* (*Allgemeine Pädagogik*). To commemorate the occasion, *Journal of Educational Studies* published a special issue under the theme “Reopening a Forgotten History, Rediscovering a Misinterpreted Tradition.” The editor of the special issue wrote:

“In 1806, Johann Fredrich Herbart, the German philosopher, psychologist, and educational theorist, published his seminal book *General Pedagogy*. During different epochs over the 200 years and in a variety of ways, the theory of the book had profoundly impacted the development of education worldwide. Until today, we still can see the influence of Herbart's theory. The enduring influence of his theory does not lie in the specific concepts and principles he had offered, but in the profound analysis and interpretation of the issues and problems pertaining to educational development he had provided. From a historical perspective, Herbart's pedagogy has become an essential component of the tradition of modern education” (Zhang, 2006, p. 5; my translation).

The special issue consists of four papers that aim at re-discovering and reinterpreting Herbart's pedagogical theory and its influence on the development of educational theory and practice in China, written by different scholars from Beijing Normal University, Nanjing Normal University, Zhijiang University, and Hebei University.

To a certain extent, this article can be seen as a continuation of the effort of China's scholars to analyze the impact of Herbart's pedagogy on the development of educational theory in China. However, it attempts to go beyond their effort to (re)discover the influence and role of the German didactics tradition on the development of didactics in China. I bracket “re” in the word *rediscovery* to denote two meanings. One the one hand, it is a *rediscovery* in the sense that certain (historical) ideas of the German didactics

tradition (i.e., Herbart's and Herbartian theories) have long been introduced to China and are not foreign to Chinese educators at all. On the other hand, it is a *discovery* because the German didactics tradition is largely unknown in the educational community in China. Also called *the German didactics*, in this article this tradition refers solely to the human science didactics (*geisteswissenschaftliche didactics*) (cf. Gundem, 2000).

The articles addresses the following questions: In what way did the German didactics tradition have an influence on the development of didactics in China? How does the German didactics tradition compare with other "didactics" traditions in China? How might a (re)discovery of the German didactics tradition help inform the thinking about constructing Chinese didactics in the current social, cultural and educational context of China?

I start with a brief historical sketch of the development of Chinese didactics. This is followed by an examination of the ways of constructing Chinese didactics in three contemporary didactics texts. Then I move to compare and contrast the German didactics tradition with Kairov's didactics and American theory of instruction—two traditions that have significantly influenced and shaped how didactics is conceived and developed in China. Afterwards, I argue for a (re)discovery of the German didactics tradition and discuss the implications for the construction of Chinese didactics. I conclude by discussing how Chinese didactics can be constructed in a more thoughtful and better informed manner, and in a way that embodies real Chinese characteristics.

A brief historical sketch

The history of didactics in China began with the introduction of Herbart's and Herbartian pedagogical theories from Japan at beginning of the 20th century. Hereafter, didactics underwent a century of ups and downs as other traditions of pedagogical thinking found their way to China, and as China went through various political movements during different epochs. As the risk of omission and over-simplification, I present a brief historical sketch of five distinct historical periods characterized in terms of: (1) borrowing from Japan, (2) Americanization, (3) Sovietization, (4) Cultural Revolution, and (5) Reform and open-up (also see Lu, 2001; Ye, 2004a).

Borrowing from Japan (1901—1915)

The beginning of the 20th century saw the abolition of the over 1,300 years old imperial civil service examination (Keju) system,¹ and the replacement of China's time-honored education system centered on teaching Confucian classics² by a modern school system organized around teaching modern subjects (science, mathematics, etc.) adopted from Japan (Reynolds, 2001). Due to the urgent and immediate need for training teachers to teach in the new school system, pedagogical theories were translated and introduced to China from Japan. The theories of Herbart and Herbartians were systematically introduced by Wang Gu*W*i through translating texts written by Japanese scholars.

¹ Introduced in 603 CE, the imperial civil service examination system (Keju) was by which talented people were selected for positions in civil service based on their examination results in the tests of Confucian classics, Chinese literature, and so forth.

² The Confucian classics include Book of Poetry, Book of History, Book of Change, Book of Ri, and Spring and Autumn Annals.

Herbartian theories were also introduced through a compilation of lecture notes by Chinese educators who had attended accelerated teacher training courses offered by normal schools in Japan (Zhang, 2006; Zhou & Ye, 2006). Herbartian didactics, with its aims-means rationality and five-step teaching method, was found to be particularly relevant; it provided a practical answer to the questions of what to teach and how to teach it (Zhou & Ye, 2006).

Americanization (1919—1949)

The wave of borrowing from Japan lasted for about one and a half decade. During the New Culture Movement (1915—1919) and the May 4th Movement (1919) Chinese intellectuals called for the creation of a new Chinese culture based on Western standards, especially democracy and science. Initiated by American-trained Chinese scholars (such as Hu Shi, Jiang Menglin, Tao Xingzhi, and Chen Heqin), attempts were made to eliminate the remnants of feudalism and to move China toward democracy. Many American philosophical and pedagogical theories were introduced. This gave rise to the widespread influence of Dewey's pragmatic educational philosophy on the pedagogical discourse in China. Dewey was invited for a two-year visit, giving lectures at universities across the country. Texts written by Dewey, Kilpatrick, Thorndike, and other American educationists were commonly used in teacher training programs in Chinese universities. The project method, the Dalton Plan, and the Winnetka plan and other American methods were also experimented with in many provinces (Ding, 2001; Ye, 2004a). However, these theories and methods had to undergo a process of interpretation, adaptation and modification according to the situation and context of China (Ding, 2001).

Sovietization (1949—1960)

The influence of American educational thinking came to a halt after the establishment of new China in 1949. Isolated by the Western capitalist countries, headed by the US, China decided to imitate the Soviet model of education and borrow its pedagogical theories and methods. Political campaigns were carried out to purge American or Western influence from education. Following the Soviet model, a highly centralized education system was established, where the national ministry of education made decisions for all curriculum issues ranging from instructional plans, syllabi, textbooks and teacher guides to principles, method, and organization of classroom teaching. I. A. Kairov's *Pedagogy* was translated into Chinese, and Kairov and other Soviet pedagogical experts were invited to lecture at universities across the country. Kairov's pedagogy had since become the standard paradigm of pedagogical discourse and practice in China (Chen, 1998; Huang, 2010). Chinese scholars had also written didactics texts based on their interpretations of Kairov's theory in the light of Chinese educational traditions and the situation of that time (Li & Zhao, 2009).

However, after the Sino-Soviet split in 1960, all Soviet educational theories were under severe criticism. Kairov's pedagogy was completely repudiated during the Cultural Revolution.

Cultural Revolution (1966—1976)

The Cultural Revolution brought a catastrophe to China's education. The normal functions of schools were destroyed. This 10-year period "not only eradicated residual Western-style education and the earlier emulated Soviet Union education model, but also wiped out any trace of Confucian education" (Yang & Frick 2009, p. 31).

Reform and open-up (1977—2000)

The end of Cultural Revolution saw the reopening of China to the world. A huge quantity of Western pedagogical theories had found their way to China. Herbert's *General Pedagogy* and related work were translated into Chinese, together with a range of pedagogical texts from Europe. A variety of theories of curriculum and instruction from the US and UK were introduced. Kairov's pedagogy was revisited and reevaluated, and the works of Soviet educationists like L.V. Zankov, and A. Makarenko were re-introduced and became well received among Chinese educators. As pedagogy developed into a field of multiple disciplines, didactics gained its independent status (Huang, 2003). This was signified by important events like the inaugural conference of the National Association of Didactics and the publication of Wang Ce-san's *Didactics Manuscript* in 1985. Many scholars had endeavored to construct Chinese didactics—or didactics with Chinese characteristics—through writing their own didactics texts (Cai, 2000; Wang, 2011).

This brief historical sketch shows that over the past century three traditions of educational thinking had been imported to China, German pedagogy (as represented by Herbart and Herbartians) (via Japan), American curriculum and instruction theory (as represented by Dewey, Kilpatrick, Thorndike, and so forth), and the Soviet pedagogy (as represent by Kairov, Zankov, and others). However, these three traditions were treated as three "discontinuous" and "mutually exclusive" schools of thought; the acceptance of one tradition entails the rejection of another tradition (Zhou & Ye, 2006). Consequently, the German tradition had receded to the background, overshadowed, and confused by acceptance of the American and Soviet traditions which had been rather influential in the development of educational thinking in China. This is indeed evident in the contemporary efforts to construct Chinese didactics to which I now turn.

Constructing Chinese didactics: Three paradigmatic texts

To further explore the impact, or lack of impact, of the German didactics tradition on pedagogical discourse in China, I examine the ways of constructing Chinese didactics in three paradigmatic texts on didactics written by eminent professors in China, including Wang Ce-san's (1985) *Didactics manuscript*, Li Bing-de and Li Ding-ren's (2001) *Didactics*, and Si Liang-fang and Cui Yun-huo's (1999) *Theory of instruction*. They are *paradigmatic* in the sense that they represent three distinct schools of thought on didactics respectively housed in Beijing Normal University, Northwest Normal University, and East China Normal University—three academic headquarters of pedagogy in China (Wang, 2011). Each school of thought has its two spokesmen, its own adherents, and its own classics. Note that in China theory of instruction is conflated with didactics. More will be said about this later in the article.

The analysis of each of the texts examines how didactics is defined and conceptualized (i.e. definition and content structure), and how the three essential aspects of didactics—goals, content, and methods (cf. Künzli, 2000)—are delineated.

Wang Ce-san's "Didactics Manuscript"

Wang (1985) aimed to develop a “Marxist didactics with Chinese characteristics” (p. 2). Marxist dialectical materialism was used as the ideological and methodological base for theory development. The writing of text was said to be built upon his thirty-year experience of teaching and researching didactics and informed by Chinese educational traditions (e.g., Confucianism). The content of the book consists of *an overview, basic concepts of teaching, curriculum, instructional processes, instructional principles, teaching methods, instructional organization, and evaluation*. As will be made plain later, the book was largely written in the tradition of Kairov's didactics.

Didactics is viewed as a sub-discipline of the field of pedagogy—consisting of basic educational theory, didactics, moral education theory, and school administration. It is a science dealing with “the general principles of teaching,” with the aim to reveal the “objective laws” of instructional processes (p. 2). Wang made no distinction between (European) didactics and (American) theory of instruction. In the text a brief survey of key didactics thinkers was provided, including John Amo Comenius (Czech), Johann Friedrich Herbart (Germany), I. A. Kairov (Soviet Union), and L. V. Zankov (Soviet Union), John Dewey (the U.S.), Jerome Bruner (the U.S.), and B. F. Skinner (the U.S.), among others. The two words *didactics* and *theories of instruction* are treated as identical.

Purposes. The ultimate aim of teaching is the all-round development of individual students, intellectual, emotional, moral, and physical. This development is achieved through the process of acquiring and mastering the systematic knowledge and skills in academic disciplines and fields of study. The basic tasks or purposes of teaching include: (1) the transmission and mastery of basic knowledge and basic skills; (2) the development of cognitive abilities and physical strengths; and (3) the cultivation of the communist worldview and moral character.

Content. Content means the knowledge and skills contained in instructional plans, syllabi, and textbooks. Wang's text does not provide an explicit discussion on content; it only presents an overview of curriculum and instructional materials (i.e., instructional plans, syllabi, and textbooks) used in primary and secondary schools in China.

Methods. Methods refer to student-teacher activities planned and organized for achieving instructional purposes, informed by instructional principles and enabled by instructional strategies (e.g., lecturing, demonstration, and discussion) and means (e.g., overhead projectors and computers). Instructional principles include, namely, theory-practice principle, teacher-led and student-active principle, systematic principle, intuitive principle, and consolidation principle.

Li Bing-de and Li Ding-ren's "Didactics"

Li and Li's (2001) text was written based on what they called “a systematic analysis of the phenomenon of classroom teaching” (p. 10). Viewing teaching as a system, they identified seven interrelated elements: (1) students, (2) goals, (3) curriculum, (4) teachers, (5)

methods, (6) teaching environment, and (7) feedback. Accordingly, the main content of the book includes *introduction, instructional process, goals/objectives, instructional principle, student-teacher relationship, curriculum, instructional methods, organization and media, instructional environment, and instructional evaluation and management*. This conception of didactics is largely influenced by the tradition of Kairvor. This will be more evident in the ensuing section.

Like Wang, Li and Li view didactics as an important sub-discipline of pedagogy. The two basic tasks of didactics include: (1) "an exploration of the nature and principles of classroom teaching" and (2) "a search for optimal means and methods of teaching for the purpose of preparing individuals needed of the society" (Li & Li, 2001, p. 7-8). This bears a resemblance to aims or goals of American theory of instruction—to be discussed in the next section. Like in Wang's text, *didactics* and *theories of instruction* are treated as synonymous in the text.

Purposes. The central purpose of school education is to prepare socialist "new men" through fostering all round development for all students. Like Wang, Li and Li define the basic purposes of teaching in terms of three basic tasks: (1) the transmission of systematic cultural and scientific knowledge and skills, (2) the development of cognitive, creative and practical abilities, moral and esthetic values or dispositions, and (3) the formation of all personalities suitable for the development of the society (p. 3). Li and Li further discuss how the purposes and objectives of teaching are classified with reference to classification schemes developed by American educational researchers like Benjamin Bloom, Robert Gagné, and David Ausubel.

Content. Like Wang, Li and Li do not provide any explicit discussion of curriculum content. The text provides some basic knowledge of curriculum theory (including definitions, history, curriculum planning and organization), and of curriculum materials used in primary and secondary schools.

Methods. As an essential component in the instructional process, methods are defined as "means and modes of teaching and learning employed by a teacher and students for achieving teaching goals/objectives and instructional tasks" (p. 183). They include instructional strategies, techniques, and organizations. The selection of methods is required to take into account teaching goals/objectives, and content characteristics in teaching materials, students' characteristics, instructional principles, and so forth.

Shi Liang-fang and Cui Yun-huo's "Theory of Instruction"

Shi and Cui's text is viewed by Chinese scholar as a unique text on contemporary didactics because it can provide direct guidance to classroom teachers (e.g., Yu, 2009; Wang, 2011). The text was written in the American tradition of curriculum and instruction. In addition to this text, Shi and colleagues at East China Normal University have written texts on curriculum theory and learning theory.

Theory of instruction is defined as "a theory about teaching or teacher behaviors" (p. 2). Written particularly for teachers, the text provides a framework of interpreting and prescribing the behaviors of classroom teachers. The essential issue the text deals with is: How can teaching be conducted effectively?

The text provides no specific discussions on the purposes and content of teaching—topics that are supposed to be dealt with in educational philosophy and curriculum theory. Methods are the primary focus of the book. The book consists of three components: *instructional principles* (definitions, history and development, and basic issues of instructional theory), *instructional strategies* (preparation or planning, instructional methods, classroom management, and assessment and evaluation), and *classroom research* (action research and teachers as researchers). In the text Shi and Cui survey various “theory of instruction” schools represented by thinkers like Comenius, Herbart, Herbartians, Kairov, Zankov and American, Dewey, Bruner, Skinner, and so forth. Didactics and theory of instruction are conflated to mean to the same thing.

In view of the above analysis, several general points can be made about the construction of contemporary didactics in China:

- The construction of contemporary Chinese didactics largely follows the tradition of Kairov's didactics. In fact, as mentioned earlier, Kairov's pedagogy has long been the standard paradigm in China (Chen, 1998). In varying degrees, most contemporary didactics textbooks have been influenced and shaped by the theoretical framework and content structure of Kairov's didactics (Lou & Lin, 2008; Wei & Cai, 2002).
- American theory of instruction is equated with didactics. No distinction is made between these two traditions. Ding (2009) also observed that scholars in China tend to treat *didactics* and *theory of instruction* as synonymous. In many didactics texts the ideas and topics of American instructional theory are more or less straightforwardly assimilated to the categories of didactics.
- The construction of contemporary Chinese didactics largely employs the method of deductive theoretical reasoning. Scholars work from a theoretical framework or model—be it Kairov's, Gagné's, or someone else's—to deduce or formulate concepts and principles pertaining to instructional processes. Insufficient attention has been paid to the real world practice of school in China (Lou & Lin, 2008; Yu, 2009).
- Largely because of this, the field of didactics is currently under strong criticism; it has been attacked for its tendency to separate theory from practice and from the reality of school and classroom, and for its lack of originality, ingenuity, and real Chinese characteristics (Li & Zhao, 2009; Lou & Lin, 2008; Yu, 2009). How to construct Chinese didactics in a way that can overcome these tendencies and issues thus becomes an essential task for Chinese didacticans in the 21st century.

Kairvor's didactics and American theory of instruction, then, are two primary theoretical sources from which Chinese didactics are developed or constructed. The German didactics tradition seems to have no influence at all. However, one might argue that the German influence has been exerted rather indirectly, or in a very subtle way, mainly through the Kairov's didactics and American theory of instruction traditions—as both of which have a root in the ideas of Herbart and/or Herbartians. This argument begs two questions: How might Kairov's didactics relate to and differ from the German didactics tradition? How might American theory of instruction relate to and differ from the German didactics tradition? I now turn to compare and contrast Kairov's didactics and American theory of instruction *with* the German didactics tradition.

Kairov's didactics and the German didactics: Similarities and differences

The basic ideas of Kairov's didactics can be found in *Pedagogy*—a book edited by Kairov and associates under the auspices of the Academy of Pedagogical Science³ within the Ministry of Education. The book was published in the Soviet Union in 1948 and then translated into Chinese in 1951 (cf. Chen, 1998). The content of the book consisted of five components: (1) foundation (nature, aims, and basic concepts of Soviet schooling), (2) didactics; (3) moral, physical, and esthetics education, and (4) school administration. It was intended to be a textbook for teacher education and an official guide used by classroom teachers to implement the Soviet national curriculum (Kairov et al, 1953).

Kairov's didactics deals with issues pertaining to five aspects of teaching, *content, instructional process* (nature and principles), *methods, instructional organization*, and *evaluation*. Obviously, these five categories are used by Wang as the organizing framework in his didactics text, and also found in Li and Li's text.

In Kairov's theory the aim of schooling is to produce all-round developed persons required of the communist society, or, the "active builders of the communist society" (p. 21). The theoretical underpinning for the aim and purposes of teaching is Marxist theory of all-round development of individuals. Three essential purposes of teaching are: (1) the mastery of basic knowledge of physical, social, and human sciences, (2) the development of cognitive skills and abilities, and (3) the cultivation of the communist dialectical worldview (Kairov, et al, 1953). Evidently, these three goals and the theoretical underpinning are adopted in Wang's and Li and Li's texts.

Content refers to the systematic knowledge, skills, and abilities that students are required to acquire during the process of teaching. The systematic knowledge provides an essential basis for the all-round development and formation of the communist dialectical worldview, attitudes and behaviors. Content is prescribed and specified in instructional materials (instructional plans, syllabi, and textbooks) developed by the Ministry of Education; it needs to be conveyed through the medium of instructional materials. This conception of content is evident in Wang's and Li and Li's texts.

Methods are an important component of Kairov's didactics, referring to the means or ways through which the teacher helps students master knowledge and skills. The selection of methods are supposed to be informed by seven instructional principles, namely (1) students' self-awareness and self-activeness, (2) intuitiveness, (3) theory-reality connection, (4) systematicness and continuity, (5) consolidation, (6) receptiveness, and (7) individualized guidance. Furthermore, teachers are supposed to employ what is called the *five-step teaching method* when planning and conducting a lesson, consisting of: (1) reviewing old material, (2) introducing new material, (3) explaining new material, (4) consolidating newly learned material, and (5) giving assignments.

Like German didacticians, Kairov viewed didactics as a theory of teaching and learning in relation to the implementation of a national or state curriculum in school and classroom.

³ This is a national centre responsible for articulating the theory and history of Soviet education, developing curriculum materials (curriculum frameworks, textbooks, and teaching guides), and conducting educational research (Little, 1968).

The content of Kairov's *Pedagogy* is organized in a way that follows the ends-means organizing framework in Herbart's *General Pedagogy* (Chen, 1998). However, the five-step teaching method is in essence Herbartian, and the center stage of teaching is given to the teacher and curriculum materials (instructional plans, syllabi and textbooks).

There are fundamental differences in how purposes, content, and methods are conceived in the German didactics tradition and Kairov's didactics. In the German tradition purposes of teaching are centered on Bildung—i.e., on the formation of mind, the cultivation of liberty and human dignity, and the development of individuality (cf. Hopmann, 2007). This is markedly different from the purposes of acquiring knowledge, skills and the worldview required of a socialist society. In Kairov's didactics the notions of individuality, liberty and freedom are virtually nonexistent.

Furthermore, whereas in the German didactics tradition content is held as an important cultural resource for Bildung, with educational potential to be disclosed and realized in a classroom (Klafki, 2000; also see Deng, 2011), in Kairov's theory content is taken as knowledge and skills for transmission, which meaning and values are already prescribed and specified in instructional materials. Accordingly, whereas in the German tradition the teacher is centrally concerned with interpreting and actualizing the educational potential embedded in content (Klafki, 2000; also see Deng, 2011)—a point that will be further discussed in the ensuing sections—in Kairov's theory the teacher is preoccupied with instructional strategies and techniques for the transmission of content.

These differences reflect two distinct philosophical or ideological underpinnings upon which Kairov's didactics and the German didactics tradition are based. The philosophical or ideological base of Kairov's didactics is Marxist-Leninist theory—the Soviet interpretation of Marxist theory. Essential to this theory is a concept of a new man in a socialist society who has mastered systematic scientific knowledge and skills and been instilled with the communist beliefs and attitudes (Little, 1968). On the other hand, the philosophical underpinning of the German didactics involves the thinking of European Enlightenment associated with Kant, Herder, Goethe, Schiller, Pestalozzi, Herbart, Schleiermacher, Fichte, Hegel, Froebel and Diesterweg. Central to that thinking is the image of "the responsible and socially aware person contributing to his or her own destiny and capable of knowing, feeling, and acting" (Gundem, 2000, p. 242).

Furthermore, it is important to point out that Kairov's didactics was developed under Stalin's regime (1924-1953) where school education became "the planned development of physical and mental abilities to form a scientific-materialistic outlook and to inculcate communist traits of personality" (Rogers, 1959, p. 61). Kairov's theory was intended to be an instrument that served to steer the activities of teaching and learning toward the political aim of Soviet schooling—that is, as it were, toward socialist Bildung—by prescribing approaches to teaching, and by specifying the knowledge, skills and attitudes for teaching (Hopmann, 2011). While influenced by the framework of Herbart's pedagogy, Kairov's didactics is essentially Herbartian. It encourages dogmatism and prescriptive practice of teaching; teachers are required to adhere to instructional principles and employ the five-step method in planning and conducting every lesson.

In contrast, the German didactics tradition arose from criticism and repudiation of Herbartianism for its simplistic, mechanistic application of Herbart's thinking, and by looking back at the original thinking of Herbart and Kant. This led to a new

conceptualization of didactics that represents the (renewed) German didactics tradition (Hamilton, 1999; see also Hopmann & Riquarts, 2000; Kansanan, 1999). In this tradition the state curriculum framework, the *Lehrplan*, only lays out school subjects and their contents to be taught in schools; it does not specify the meanings of contents which are to be interpreted by teachers in their classroom situations (Hopmann, 2007). Teachers have a high level of professional autonomy to interpret the state-mandated curriculum; they are viewed as reflective professionals “working within, but not directed by” the state curriculum framework, informed by the idea of Bildung and the didactics way of thinking (Westbury, 2000).

American theory of instruction and the German didactics: Similarities and differences

In American literature *theory of instruction* refers to a body of theoretical principles or models concerned with optimizing learning processes, with the intention to prescribe effective classroom methods (events, activities, strategies etc.) (Atkinson, 1972). These principles or models are mostly derived from empirical studies of classroom teaching, grounded in psychological theories of how people learn. Robert Gagné's (1985) *The conditions of learning and theory of instruction* provides a classic explosion of what theory of instruction entails. All of the essential elements of American theory of instruction can be identified in the text.

The purposes of teaching are defined in terms of learning outcomes classified by various classification schemes. Five major categories of learning outcomes are used in Gagné's book: (1) verbal information, (2) intellectual skills, (3) cognitive strategies, (4) attitudes, and (5) motor skills. Other classification schemes are, for example, Bloom's taxonomy and Gardner's seven intelligence types.

Content is conceived in terms of learning outcomes. In Gagné's book the five categories are used to represent what is taught and learned. Teachers are required to identify and select “content” in view of the types of learning outcomes to be achieved. In other words, content is merely the means for achieving the learning outcomes.

Methods are the central component of instructional theory, referring to techniques and strategies that can enhance the outcomes of learning. The examples of teaching techniques are: activating attention and presenting a meaningful context (for verbal information), stimulating retrieval of previously learned components (for intellectual skills), providing opportunities to solve novel problems (for cognitive strategies), insuring feedback (for teaching attitudes), and arranging practice (for motor skills). In addition, Gagné (1984) identified eight phases of instructional processes which teachers need to consider in instructional planning regardless of the type of outcome, including (1) activating motivation, (2) informing learner of the objective, (3) directing attention, (4) stimulating recall, (5) providing learning guidance, (6) enhancing retention, (7) promoting transfer of learning, and (8) eliciting performance and providing feedback (p. 285). Furthermore, methods also include strategies and techniques for instructional planning, classroom management, and evaluation.

On the surface, theory of instruction can be seen as “didactics” for it provides “a science of instruction” (cf. Künzli, 2000). However, it is fundamentally different from the German

didactics. Theory of instruction deals with issues of teaching and teaching in an instructional setting (e.g., a classroom) which are treated as if *independent* of the larger institutional and curricular context of schooling (see Doyle, 1992). In contrast, the German didactics examines issues of teaching and learning as embedded in the social, cultural and institutional context of schooling, with a particular concern for the interplay of state curriculum making and local enactment in school and classroom (Hopmann, 2007; Hopmann & Riquarts, 2000).

There are fundamental differences in how purposes, content, and methods are conceived in the German didactics and American theory of instruction. As already mentioned, the purposes of teaching in the German didactics tradition are centered on Bildung, that is, on a process of formation that is far beyond mere knowledge and skills. In contrast, the purposes of teaching in theory of instruction are largely defined in terms of acquiring or mastering knowledge, skills, and competences. In addition, as already mentioned, in the German didactics content are viewed as a cultural asset for Bildung, with educative meaning and significance to be interpreted and realized by a teacher in a classroom (Künzli, 2000). In contrast, in theory of instruction content is viewed as the knowledge, skills, and competences for delivery in a classroom, represented or defined by predetermined measurable outcomes.

Accordingly, in the German didactics tradition, content, its educative meaning, and significance are given a dominant position over the technical aspects of teaching. The teacher is centrally concerned with interpreting and analyzing content for educational meaning and significance in view of Bildung, when engaged in instructional planning (Klafki, 2000). As Künzli (1998) explained:

"A didactician looks for a prospective object of learning...and he asks himself what this object can and should signify for the student and how student can experience this significance.... All other questions and problems—other than the significance of the learning content—such as class management, individual and social learning, learning control, individual learning speed, appropriate representation, etc.—are subordinate to this central concern and gain significance only when the question of educative substance (*Bildungsgehalt*) is at issue" (p. 39- 40).

In other words, content, educative meaning, and significance predominate and methods (strategies and techniques) become secondary or marginal. By contrast, in theory of instruction methods are the primary concern and content is of marginal or peripheral importance (Kansanen, 2002).

The differences reflect two distinct theoretical and methodological backgrounds or underpinnings on which American theory of instruction and German didactics are based. The theoretical underpinning of the former is the scientific tradition of educational psychology where teaching is conceived in terms of learning outcomes, tests, tasks, activities, strategies, etc.. The fundamental interest is *practical* in nature, driven by the need to identify effective instructional strategies and approaches. Issues about aims, educational values, content, etc. seldom enter into conversations on teaching.⁴ Alongside educational psychology is the empirical-analytic mode of research, with relatively little

⁴ In American literature these are normative issues that are normally discussed in philosophy of education and in curriculum studies.

philosophical thinking and theorizing involved (Kansanen, 2002). In contrast, the theoretical underpinning of the latter is the philosophical tradition of the humanistic science pedagogy—where teaching is thought of as human practice having to do with issues of human formation through participating in the world and culture (Humboldt, 2000; also see Lüth, 2000). While there is an empirical component, the German didactics has always been “a form of philosophical thinking, theorizing, and the construction of theoretical models” (Kansanen, 1999, p. 22).

One general point can be made about didactics in general. Didactics stands for a tradition of thought deeply rooted in European philosophical and ethical thinking, which construes the issues of teaching and learning as embedded in the broad context of society, culture, and schooling as an institution. Then, to conflate didactics with theory of instruction is to reduce it to mere a theory of methods (strategies and techniques) which constitute only a secondary and marginal aspect of didactics. There is far more to didactics than a body of teaching methods. Scholars in China, Ding (2009) observed, have long “misread” the (European) didactics and American theory of instruction traditions.

In fact, there is no didactics (in the German sense) in the US since state-based curriculum making virtually doesn't exist (Hamilton, 1999). Although educational psychology (the base of American instructional theory) has its root in Herbart, what American educators like Dewey and Hall had taken from Herbart was not the “whole” of didactics but only the “grounding” of it (i.e. psychology) (Hopmann, 2007; Hopmann & Riquarts, 2000). Furthermore, that earlier form of psychology was developed into a scientific, behavioristic psychology by Thorndike, Judd, and others (see Lagemann, 1989)—which is the actual theoretical underpinning upon which American (traditional) theory of instruction is based.⁵ The German didactics tradition is virtually unknown in the US and other English-speaking countries (Westbury, 2000).

(Re)discovering the German didactics tradition

The comparison and contrast reveals how Kairov's didactics and American theory of instruction are fundamentally different from the German didactics tradition. Kairov's didactics at most stands for a special kind of Herbartianism—a distorted, mechanistic application of Herbart's theory for socialist political purposes. American theory of instruction provides merely a theory of methods of teaching and learning—only a secondary aspect of didactics—without a serious concern for the meanings of purposes and content—which are at the heart of the German didactics tradition (Weniger, 2000).

To reveal the fundamental differences is to call for a (re)discovery of the German didactics tradition in China's educational community. This re-discovery is rather important if scholars in China are to fully recognize the problems, issues and pitfalls involved in using Kairov's didactics or American theory of instruction as a model or framework for constructing Chinese didactics. It can facilitate the thinking of how Chinese didactics can be constructed in a better informed and more thoughtful manner as well. In what follows I outline three basic tenets of the German didactics tradition and discuss

⁵ In this article theory of instruction mostly refers to the traditional kind. Contemporary theory of instruction is based on constructivist and/or social constructivist theory of learning.

their significance, issues and limitations, before finally addressing what can be learned for the construction of Chinese didactics.

The three basic tenets discussed are: (1) the notion of Bildung, (2) a theory of content, and (2) a model of pedagogical reasoning. Bildung encapsulates what it means to be educated in the German didactics tradition. It encompasses a set of educational aims and values centered upon the formation of mind, the development of powers or capabilities and sensitivity, and the cultivation of liberty, dignity and freedom of the learner (cf. Hopmann, 2007; Humboldt, 2000). Acquiring Bildung entails seeking to “grasp as much [the] world as possible” and making contributions to human mankind through developing one’s own powers and faculties (Humboldt, 2000).

As a vital issue of teaching and learning, content is “solidly elaborated” in the German didactics tradition (Menck, 1995). The tradition provides a special way of selecting, organizing, and conceptualizing content which can be seen as a theory of educational content (*Theorie der Bildungsinhalte*). It consists of four interrelated concepts: *contents of education*, *educational substance*, *essential* and *fundamental*. The content, characteristically defined by curriculum designers as the contents of education (*Bildungsinhalt*), is the result of special selection and organization of the wealth of the conceivable knowledge, experiences, and wisdom for Bildung. Furthermore, the content is construed as comprising *educational substance* (*Bildungsgehalt*)—*essential* elements, aspects or structures—that could contribute to Bildung (Klafki, 2000). The content, by virtue of its educational substance, has the “formative potential” or the “possible value-laden impact” on the mind of the becoming person. In other words, it can lead to *fundamental* experience (Krüger, 2008).

Associated with the theory of content is a special model of pedagogical reasoning centred on didactics analysis. In the German didactics tradition teaching is viewed as a “fruitful encounter” between content and the learner (Klafki, 2000). Teachers are supposed to understand the contents—more precisely, the theory of content—embedded in the Lehrplan; they “must reenact the pedagogical decision made by the curriculum designers and embedded in the curriculum contents, must reflect which considerations must have led to the inclusion of a particular item or a particular basic issue” (Klafki 2000, p. 144). They are to disclose the educational potential contained in the content through conducting didactics analysis from the perspective of Bildung. By discerning the essential elements of the content and elucidating their possible manifestations or aspects, Didactics analysis unlocks the “organic power” contained in the content that could give rise to fundamental experience leading to Bildung. This implies what Herbart called *educative teaching*. The search for methods (e.g., pedagogical representations and instructional strategies) is the final step—the “crowning” moment in the instructional preparation (Klafki, 2000).

The three tenets of the German didactics tradition carry important implications for thinking about the aim, content, and practice of teaching in China. The idea of Bildung virtually doesn’t exist in the pedagogical discourses in China. Bildung is essentially different from “Jiao Hua” (the Chinese translation of Bildung)—a notion that refers to the cultivation of good manners through internalization of moral norms and values (Zhang, 2012). It is rather different from the Marxist notion of all round development of individuals widely adopted in didactics texts in China. Bildung is inextricably associated

with the notions of human dignity, self-determination, freedom from indoctrination, and moral accountability (Prange, 2004). It captures something very significant yet largely lacking in the Chinese culture, where education and schooling are largely driven by examinations and are valued in terms of social mobility, utility, and material rewards (Cheng, 2011a, 2011b).

The theory of content in the German didactics tradition offers a new way of thinking about curriculum content in China—where content is viewed as merely a body of knowledge and skills for mastery. Some scholars in China are aware of the transformative educative potential inherent in school subjects and interested in its realization (e.g., Ye, 2004b). However, a theory or a framework that could assist curriculum developers and classroom teachers to ascertain the educative potential of content is yet to be articulated.

Furthermore, the German didactics tradition can challenge Chinese educators to rethink the current lesson planning models adopted in popular didactics texts—models that construes teaching and learning as a process of transmitting and acquiring the knowledge and skills in textbooks and instructional materials (e.g., Wang, 1985; Li & Li, 2001 Shi & Cui, 1999). As in many other countries, schooling in China has been undergoing a transition from the transmission of academic knowledge and skills to the development of cognitive capacities, problem solving, communication skills, and desirable attitudes and dispositions (see Ryan, 2011). What could be the lesson planning models that can serve the development of those capacities and attributes?

Let no one be deceived. The German didactics tradition is not without issues and problems. Historically, the notion of *Bildung* has long been “charged” with the interest and sentiment of the middle class, the utopian hopes of enlightenment and the realization of those hopes (Hansen, 2008). It a version of liberal education centered on the cultivation of intellectual and moral capacity of individuals, with a strong tendency to overlook the extant social, cultural, and political expectations and demands on schooling, as well as the translation of those expectations and demands into curriculum content and into classroom practices. Furthermore, the lesson planning model centered on didactics analysis has been questioned, as there is a serious concern for the relatively low performance of German students in the Third International Mathematics and Science Study (TIMSS) and Program for International Student Assessment (PISA) (see Hopmann, 2008).

However, these issues and problems can be addressed if Chinese didactics is constructed in a way that centers on practice within the social, cultural, and institutional context of schooling in China, with reference to a variety of pertinent theories and discourses.

On constructing Chinese didactics

The *practice-context-theory* nexus essential to good curriculum inquiry, articulated by Connelly & Xu (2010), is rather useful for thinking about constructing Chinese didactics. In curricular or pedagogical inquiry reflecting the practice-context-theory nexus, issues and problems concerning practice (policymaking, curriculum development, classroom teaching, etc.) are taken as the starting point for theory development. Practice is viewed as situated or embedded in the context of schooling—broadly conceived—which, in turn, provides an important “interpretive frame” for understanding issues and solutions.

Further, theory is drawn upon to help account for the practice in question, and thus assist in generating new theory. To a large extent, this is in the spirit of the hermeneutic approach to theorizing adopted in the German didactics tradition. “[O]nly legitimate approach to theory building,” according to Gundem (2000), “is to examine the educational phenomena as they exist in the practice of teaching and schooling” (p. 241). And, practice needs to be viewed as embedded in context where practice occurs—past, present, and future. Furthermore, theorizing needs to recognize the complexities embedded in the complex interplays of schooling, teaching and learning.

Then, it is imperative to identify issues and problems pertaining to practice within the societal, institutional and instructional context of schooling in China—issues and problems that provide an important point of departure for an attempt to develop didactical theories. For illustration, I look at China’s new curriculum reform initiated in 2001, which was a national response in the educational arena to the challenges of globalization and to the rapid development and changes in China’s social, economic and political context over the past twenty years. The reform vision is encapsulated in the notion of *quality education*—a term that is used to foreground the importance of education for the all-round development of students rather than for examination preparation (Dello-Iacovo, 2009). Three types of issues can be identified which, to varying degrees, have a bearing on classroom practice.

The first type of issues concerns the aim and purposes of quality education. According to the Ministry, the ultimate aim of quality education is to help students achieve broad and balanced moral, intellectual, physical and aesthetic development, and a high level of character building in order to meet the needs of the 21st century. And the purposes of teaching include:

- (1) enabling the development of a new, well-educated, idealistic, moral and patriotic generation who will love socialism and inherit and cherish Chinese tradition;
- (2) helping students develop an awareness of socialist democracy and laws as well as respect for state laws and social norms;
- (3) helping students cultivate desirable worldviews, values and attitudes;
- (4) helping students develop a sense of social responsibility;
- (5) helping students developing an innovative spirit, practical skills, a knowledge base of sciences and humanities, and an awareness of environmental protection issues; and
- (6) helping students develop good physical health and psychological qualities, healthy aesthetical tastes and lifestyles. (MOE, 2001)

This set of purposes places an emphasis on not only the mastery of academic knowledge and skills, but also the development of cognitive capacities, moral attitudes, desirable worldviews, and social responsibility. They signify, as it were, a special kind of Bildung in the 21st century context of schooling in China. I would suggest the set of purposes to be extended to include the cultivation of human dignity, self-determination, freedom, and moral accountability—attributes or dispositions which, as mentioned above, are highly important yet largely lacking in education in China.

The current set of purposes cry out for clarification, unpacking, and revision in view of the changing social, cultural and educational landscapes of China. What are the social, economic, and cultural challenges China is facing? What are the economic, social, and educational needs and aspirations? What sort of knowledge, skills, abilities and dispositions do students need to develop in order to participate in the current social and culture orders? What should constitute “desirable worldviews, values and attitudes” and under what conditions could those worldviews, values and attitudes be cultivated? What could be the implications of those new demands, challenges, aspirations, and requirements for curriculum content, teaching, learning, assessment and examination? These are some important questions concerning the aim and goals of teaching and learning for quality education. Inquiry into these questions requires, on the part of scholars in China, a thorough, realistic, and well-informed understanding of the social, economic, and cultural situations and circumstances of China—past, present, and future. It requires bringing to bear curriculum theories (concerning the interplay between schooling, culture and society) and other theories and discourses (e.g., globalization and knowledge-based economy) on analysing issues or problems and coming up with meaningful understandings and solutions. This, I believe, can give rise to the development *a theory of quality education*—an essential component of Chinese didactics.

The second type of questions has to do with the content of teaching and learning for quality education. The current curriculum structure divides the school timetable of nine-year compulsory education into five domains: (1) academic learning (history, geography, science, Chinese, mathematics and foreign languages), (2) moral education, (3) arts and music, (4) physical education and health, and (5) integrated studies and elective subjects (community service, information technology, inquiry/project-based learning, and vocational and technical education). In addition, there are certain integrated practical and elective subjects (MOE, 2001). Given this existing curriculum structure, what should constitute the content of a particular domain or subject in view of the aim and purposes of quality education, as well as those new demands, challenges, and aspirations? What might constitute various kinds of knowledge or ways of knowing—in addition to those embedded in academic disciplines—that could be potential sources of content? What elements of Chinese traditions (e.g., Confucianism and Buddhism) can contribute to quality education? How might the different kinds of knowledge, ways of knowing, and aspects of culture and tradition be selected, organized, and framed in a way that can, on the one hand, serve the need for mastering basic academic knowledge and skills, and on the other, allow the rich educative potential inherent in the content (knowledge, ways of knowledge, or cultural aspects) to be disclosed in classrooms? These are some challenging questions about curriculum content—questions that Chinese scholars must address if they are to develop a theory of content for quality education in the current context. Addressing these questions requires conducting research (empirical or conceptual) and drawing on relevant theories and discourses from both the curriculum and didactics traditions.

The third type of issues deals with the nature of pedagogical practice in classroom. In the curriculum reform teachers are supposed to interpret and transform curriculum materials (curriculum frameworks guidelines, and textbooks) into learning experiences that contribute not only to the mastery of academic knowledge and skills, but also to the development of cognitive capacities, moral attitudes, and desirable worldviews. However,

what constitutes learning experiences in a classroom has to do with classroom enactment of curriculum materials which, in turn, is largely influenced and shaped by the teacher and students within a particular instructional context. What do teachers need to know and be able to do in the enactment process? What sort of questions can a teacher ask during instructional planning that can enable him or her to not only effectively teach basic academic knowledge and skills, but also disclose the rich educational potential in the content? What might be the structures and conditions that need to be in place in support of this kind of teaching? To ask these questions is to call for inquiry and research into classroom practice, informed by pertinent pedagogical models and theories. This is essential for the development of a model or theory of pedagogical reason in the current reform context of China.

I have identified a number of questions pertaining to aim/purposes, content, and classroom practice within the current social, cultural, programmatic and instructional context of China's new curriculum reform. These questions are in no way complete and exhaustive; there are, of course, many other important questions. The point of these questions is that identifying important questions and issues pertaining to practice provides a useful starting point for developing didactics theories with real Chinese characteristics. Inquiry into these important questions and issues calls for a thorough, well-informed understanding of various societal, institutional and instructional aspects and issues of schooling in China. It requires an eclectic use of theories and discourses—Western, Eastern or Chinese—in the process of inquiry and theory development. And the (foreign) theories and discourses employed need to be interpreted and modified according to the specific situation and context of China. This way of constructing Chinese didactics, on the one hand, takes account of the insights of the German didactics tradition, and on the other, avoids its inherent issues and limitations.

Furthermore, when didactics is constructed in a way that reflects the practice-context-theory interplay, theories and models would not be derived from a Western pedagogical tradition or theoretical paradigm; they are developed in the “contextual frames” that surround the practice of classroom in China (Connelly & Xu, 2010). This way of constructing didactics, I believe, has the potential to overcome the strong theoretical inclination and theory-practice divide inherent in various versions of didactics developed by scholars in China. It makes room for originality, creativity, and ingenuity in theory development as well.

This approach to constructing Chinese didactics finds support from many scholars in China. The development of Chinese pedagogical theory, according to Lu (2001), entails the need to study educational problems in China as well as the need to study theories and models from other countries. The “indigenous knowledge” gained from the investigation of problems needs to be used to frame the development of pedagogy in China, and to modify and transform “exotic” theories or models according to the situation and context of China. In a recent article, Zhou (2011) argued that the development of educational theory needs to be grounded in the educational reality of China rather than based upon Soviet or Western theories or models. He provided examples of theory building in China that begins with and is based upon “domestic experience” to construct pedagogical theories rooted in the social and cultural context of China. Furthermore, the discovery and study of local problems, according to Liu and Lin (2008), can enhance self-consciousness

and local awareness, allow “the emergence of new ways of thinking and new perspectives” and make “initiation and originality possible” (p. 169).

Conclusion

This article examines the influence and role of the German didactics tradition on the development of didactics in China. The line of argument can be summarized as follows: Herbart and Herbartian theories of pedagogy found their way to China—albeit through an indirect, secondary source (Japan)—at the beginning of the 20th century. However, that earlier form of the German didactics tradition had faded into background as China borrowed first the American tradition of curriculum and instruction, and then, the Soviet tradition of pedagogy. As a result, didactics in China has been developed largely based on the framework of Kairov’s didactics, and/or influenced by American theory of instruction. A (re)discovery of the German didactics tradition is important if Chinese scholars are to recognize the problems, issues, and pitfalls involved in using Kairov’s didactics or American theory of instruction as a model for constructing Chinese didactics. It can facilitate the thinking of how Chinese didactics can be constructed in a more thoughtful and better informed manner as well. The construction of Chinese didactics needs to be grounded in the social, cultural, and educational realities of China, with an eclectic use of a variety of pertinent theories and discourses—Chinese or international.

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