Articles 【研究論著】

Self-culture in the Electronic Age: the Perspective of Zhu Xi's Gewu Zhizhi 電子時代中個人自我修養之道 ——從朱熹對格物致知的觀點談起

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關鍵詞:電子時代、朱熹、格物致知、六藝、敬、理、明、貫通、網路泥巴 (多使用者區域)、聊天室

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Abstract

This article examines the conduct of self-learning and cultivation in the electronic age from the perspective of Zhu Xi's concept of "Gewu Zhizhi".

On the surface, our computers, internet and electronic media certainly facilitate learning. They provide instant communication, access to data banks, and text manipulation. They even provide chat rooms and online games for people to express themselves freely and to explore other aspects of self. On a deeper level, however, people do not read and absorb information with the same degree of concentration and depth as before. Learning is becoming increasingly streamlined, sporadic and-superficial.

From Zhu Xi's perspective, the problem is even more serious. For him, self learning and cultivation should be conducted in light of real life. Even the student's relationship with the teacher itself involves role modeling, understanding upright human relationships and practicing appropriate conduct. In Zhu Xi's "gewu zhizhi", one carefully observes phenomena (or reads texts), thinks about their significance and practical implications, and then incorporates this new knowledge into life practice. In this sense, "學者須是務實." By this standard, nowadays people's learning through electronic media lacks the concentration, depth and practical implications of genuine learning.

In conclusion, although our computers, internet and electronic media facilitate learning by providing instant communication, access to information, etc., Zhu Xi would argue—and most humanities scholars would agree—that people should use these gifts sparingly and carefully in support of their overall project of self learning and cultivation in the context of real life.

摘要

二十世紀末業電子科技的研發一日千里。其中尤以個人電腦的功能和應用更是日新月異。它固然提供了世人諸多利便,卻也造成了人類學習行為模式的丕變。本文則旨在從朱熹(1130-1200)對格物致知的觀點探討在電子時代中國人自我學習暨修養之道。

表面上看來,個人電腦、網際網路以及其他電子媒體對學習行為的確具 有促進的功能。它們對使用者提供了立即的傳輸作業、而使之接近資料庫獲 取所需的資訊並得以靈活運用有關的一應文獻。此外,它們更提供聊天場所 和線上遊戲,讓使用者得以毫無拘束地自我表達,從而探索自我的其他面 相。但是從更深的層面來看,這種學習模式並不能達到傳統學習模式所觸及 的深度,並甚而使學習淪為速食式的、零星式的以及淺碟式的。

若以朱熹的觀點來看此一課題,顯然問題要比想像中的更為嚴重。朱熹認為個人學習與自我修養必須是經由生活中的真實體驗孕育形成的。師生之間的關係更牽涉到角色的示範、適當人際關係的認知以及正確行為的履踐等。其格物致知的觀點強調一個人必須先審慎觀察一切現象(包括讀經),再思索它們的重要性與實際關連性,進而將這些新知和生活實踐結合在一起。準此而言,「學者須是務實」。就此標準來說,當下藉助於電子媒體的學習在集中度、深度以及實踐度上自然是有所欠缺的。

總之,筆者認為個人電腦、網際網路以及其他電子媒體對學習是有所助益的。然而如果朱熹活在當代,他必然會和多數人文學者一樣,同意人們應該謹慎地使用這些便利學習的資源,並支持個人學習與自我修養能在真實生活中確實履踐。

The age of electronic information and communication is at hand. Not only do we use email and surf the net, we access vast data banks *via* these media. Not only do we enjoy instant access to the materials we need, we command quick searches and text manipulations. In sum, our computer terminals provide virtual *crystal balls* that transform opaque, static paper texts into luminous manuscripts. Our modems are *radio crystals* providing instant access to websites and wired scholars worldwide. Still, increasingly immersed in the web, we start to question whether these *crystals* really provide the *viagra* we need to vitalize our humane learning: Is electronic learning destined to displace book learning? Will vicarious experience *via* multimedia simulacra displace veridical experience? Will people interact more through electronic media online than face-to-face in the flesh? Indeed, will we come out of the electronic age the same people we were when we got in?

With his notion of "investigating things to extend knowledge:(gewu zhizhi 格物致知)" Zhu Xi 朱熹 (1130-1200) envisions the enlightened life as one stirred by curiosity and animated by inquiry. For Zhu, learning as cultivation starts with filial and fraternal training in childhood, and develops into cultural learning through the study of basic texts and the "six arts (liuyi 六藝)" in youth. This formative learning serves to nurture the instincts and instill the concepts needed for entering the life of inquiry, as charted in the Great Learning (Daxue 大學), in pursuit of full personhood and self-realization.

Zhu regards this program of learning as directed toward interpersonal sensitivity, responsiveness and self-awareness. Having mastered the right instincts and concepts in childhood and youth, one gradually "comes out" and starts interacting in the larger community in wider spectrums of relationships. In the midst of this widening

¹ Qian (1971, II: 504-550) presents and discusses Zhu's principal discourses on gewu zhizhi.

² These "six arts" were considered essential constituents of good breeding: ritual action, music, archery, charioteering, writing, and ciphering.

³ Zhu established the *Great Learning* as a canonical text in its own right, emphasizing and expanding upon the method of *gewu zhizhi* it introduces. See Gardner's in-depth study (1986).

circle, one observes and ponders the words and behavior of others, emulating conduct which accords with one's sense of appropriateness and drawing lessons from behavior which doesn't seem right or apt. At the same time, one monitors one's inner feelings, impulses and desires to nurture the positive ones and redirect the negative ones. This is the start of one's pursuit of *gewu zhizhi*. For Zhu, these processes of observation, reflection, assessment and adjustment are lifelong cultivation practices. There are always new things to be seen, learned and pondered.

This is the spirit in which one is to engage in reading and book learning. Fundamental texts in the Confucian canon set forth the framework of a certain attitude and way of life, and provide an orientation for appreciating the basic family relationships. Other texts provide reflections on different aspects of life for each reader to combine in a unique way that reflects his or her personality, needs and situation. These texts provide culturally valid insights into self, perception, desire and moral impulse as well as guidelines for relating to family, friends, community and cosmos. Other texts discuss the tissue and sinews of that way of life. Literary texts, such as poetry and song, nurture one's sensibility and instill ways to express deeper sentiments. Of special interest to Zhu are the dialogues and classical commentaries which record the questions, perplexities and insights of eminent worthies in the context of their quest for realization. In Zhu's view, book learning is essential to advanced self-cultivation.⁴

Given the centrality of book learning to the life of inquiry, let us consider Zhu's thoughts on serious reading. The basic requirement for reading is to be in the right state of mind: concentrated, alert and receptive. Following the Cheng brothers, Zhu speaks of cultivating the attitude of jing 敬(reverence), which involves being focused and attentive. On this view, being jing entails being empty-minded (xu 虛) and tranquil (jing 靜), that is to say, free of idle concerns and preoccupations and,

⁴ Zhu discusses the process of reading extensively in general as well as with respect to specific texts. Gardner (1990) provides two chapters of Zhu's discourses on reading, pp. 128-62.

as such, not driven by impulse and desire. By preserving jing, one will be a receptive reader who is set to grasp and assess the writer's message for oneself. Most importantly, being jing prompts a clarity of mind such that one peers through apparent phenomena to grasp the inherent "patterns" ($li \not\equiv 1$) within them that ultimately structure everything—mind and conduct as well as phenomena and events. For Zhu, such li manifest definitive patterns of being and interaction such that "grasping li" yields both a cognitive and a practical awareness. Reading and reflection contribute to a cognitive understanding that supports the practical awareness gained through sensitive interpersonal observation and intercourse.

Zhu thinks that learning and comprehension take time, that there is a proper sequence in reading. One is to read books in the suitable order. And, in learning, one is to master each chapter of a text before going on to the next, that is, to read and reflect on, review and assimilate each portion of the text in turn. Zhu doesn't advocate rote learning or blind acceptance: one should be a charitable reader who gives the author the benefit of the doubt, but at a certain point one should begin to bring one's own critical resources to bear and raise reasonable doubts. After all, the point of learning is to cultivate oneself. Zhu himself was a reflective reader seeking insights into self, community and cosmos as well as guidelines for his own life conduct.⁶

Zhu encourages others to pursue the life of inquiry and reflection with the same *jing* attitude that illuminates their conduct of reading: by preserving *jing*, one can be sensitive yet objective, concentrated yet discerning, and responsive without being reactive.⁷ Most importantly, one can remain alert to the inner patterns (*li*)—the moral pivots—of human affairs and not easily get lost in complexities or hung up emotionally. To Zhu's credit, he encourages a life of inquiry in view of the inherent complexity of human affairs. He notes that, while the norms of conduct are ade-

⁵ Qian (1971, II: 298-335) presents and discusses Zhu's discourses on jing. See Gardner 1990 52f.

⁶ See Gardner (1990, 44-45).

⁷ In *Reflections on Things at Hand*, edited by Zhu and Lu Zuqian (Chan trans.), the majority of sayings collected in the chapter on *gewu* ("The Investigation of Things") concern problems in reading!

quate for assessing and acting in ordinary situations under normal conditions, in many instances the norm is not strictly applicable or might create undesirable side effects, so at times it is better to act on one's inner sense of appropriateness and powers of discretion than to follow the dictates of norm and principle (Thompson, 2002, 2007). The absorption, reflection and assessment involved in reading as well as in one's intercourse with others are basic to enlightened living in Zhu's sense. The perspicacity one nurtures thereby is, ultimately, one's surest guide to wisdom. Serious reading can, in effect, induce a deliberative clarity of mind that, when applied to life, yields a subtle perspective and rich repository of positive responses. This experience and faith set Zhu apart.

Zhu's notion of inquiry and realization is grounded in his cultural tradition. But, the emerging electronic media seem to promise a transcultural community and global vision that transcend limitations of any particular cultural space and time. Does this entail that the net opens a vantage that completely transcends Zhu's conception? Does Zhu have anything relevant to say anymore? In responding, we need to present Zhu's conception as concerning inquiry and self-realization in a somewhat broader sense. Taken in this light, Zhu's ideas about learning and inquiry bear significant parallels to Western notions of humanistic learning.⁸

Our contemporary widespread acceptance of electronic media has stirred humanistic thinkers in the West to reflect anew on the conduct of reading as well as of life. A Jeremiah in this regard has been Sven Birkerts, who contrasts the epiphanies, depth and wisdom to be gained by solitary, concentrated book reading with the flashes, shallows and poses associated with surfing and connecting on the net.

⁸ These are traditions that view learning largely in the context of achieving personhood and self-realization. One thinks of Greek and Roman philosophy, the Renaissance, Neo-Classicism and even in certain respects Romanticism and Modernism. One thinks of figures like Socrates and Plato, Epicurus and Seneca, Marcus Aurelius and Plutarch, Erasmus and Montaigne, Shakespeare and Goethe, Emerson and Thoreau, Kierkegaard and Nietzsche, and even Russell and Wittgenstein, to mention just a few.

Birkerts' voice is apt because his notions of serious reading and reflective living exhibit parallels with the view ascribed to Zhu Xi above. A lover of the sort of literature that burrows into the human heart and relationships, Birkerts speaks of concentrated reading in which the reader enters into the narrator and characters and feels inner resonance (and dissonance). He speaks of gaining insights and epiphanies into, not only life in general, but one's own life in particular things—one's friends, one's spiritual life or lack thereof, even one's dog (1996: 73f). Birkerts is less insistent on a proper sequence of reading than Zhu; he thinks that a reader will explore the books that spontaneously beckon. Nonetheless, over a period of time, one's steady activity of serious reading and reflective living will accumulate and ferment into a pattern of understanding that, one fine day, will mature into a sort of practical discernment, into what Zhu refers to as "a penetrating comprehension" (guantong 賈涵) in explaining the goal of gewu zhizhi (Birkerts, 1996: 75, 60).

Can one undertake Zhu and Birkerts' notion of serious reading on electronic media? After all, electronic media put attractive amplified, animated texts at our disposal. Aren't these just the crystal balls, the cyber-viagra, we need to vivify our reading? Observing students and colleagues over the past decade or more, Birkerts concludes that immersion in the net and electronic texts tends to weaken our concentration and shorten our attention spans. These media don't draw in our concentration in the way a traditional book does because they are inherently lacking in stability and sequence. They indeed lack their own existence: when the power goes out or the program crashes, one's electronic data enter *sunyata*. Moreover, the net, even our computers, present lures away from our work at hand. Thus, teachers find that students weaned on computers and electronic media tend to proceed in quick steps and make sporadic jumps back and forth, unlike the traditional reader who follows extended passages of carefully woven text and nurtures his or her own strains of thought and feeling. The reader in cyberspace increasingly deals in bursts of text and image that leave his or her mind filled with eclectic montages of impression and thought. Birkerts laments the loss of sensibility in computer-savvy contemporary students who are unable to catch the nuances of an artfully woven piece of modern literature (1996: 17-20). Reading on electronic media, while efficient for exploring background and secondary materials, cannot become the sort of depth reading by which one enters into the mind of a Proust, a Beckett, a Nagarjuna, a Zhuangzi, a Zhu Xi, the sort of depth reading that stirs personal growth.

Friendship and communication are traditional avenues of cultivation. Zhu Xi corresponded extensively with friends and even rivals on theoretical issues he took to heart. Similarly, today "wired" scholars and students thrive on email exchanges on lists and with peers worldwide. These channels provide pleasant feelings of connectedness and closeness, and offer convenience, but the lure of getting involved in rapid-fire exchanges on email has side effects. There is a rise in idle correspondence and unwanted obligations to reply to messages that otherwise would never have been sent. Even exchanges on academic topics easily become rapid, unreflective and ultimately useless. The attention paid to such quick-fire exchanges increasingly takes time away from family, friends, colleagues as well as from significant reading, reflecting and writing (Birkerts. 1999: 111f). Net advocates claim that online friendships can be richer and more intimate than traditional friendships in that we open up and share personal things online we wouldn't think of dredging up with family and friends. But, is this so important? Does it contribute to personhood and enlightened living? A traditionalist, like Birkerts (and Zhu Xi), would argue that real friendship involves the real-life involvement and care manifested in simple words and sincere action; these are not glue of urbane internet relationships. Ironically, despite the lack of practical traction in internet friendships, people often feel compelled to explore intimate online dialogue but impatient at playing with their own children or relaxing with their spouses. Still, in internet relationships, no matter the degree of confession and intimacy shown, one has to wonder to what extent the feelings expressed are real or fake, to what extent they have a side-show quality. Isn't the unre-

⁹ Laozi, too, would agree. See Daodejing, ch.8.

ality of internet relationships also making real-life personal relationships turn shallow and somehow less real?

At present, certain internet vehicles are touted as tools for exploring self and even for nurturing moral sensitivity. The most familiar of these vehicles are chatrooms and MUDs, both of which allow users to interact anonymously online through self-chosen tags or virtual proxies. A chatroom is something like a net "party line" that allows users who enter the chatroom to "converse" online with groups of other people by inputting dialogue (Bolter and Grusin, 1999: 261f). There are general chatrooms, topical chatrooms, and those for specially defined groups, such as "women". Each person who enters a chatroom has a tag or nickname for that occasion. Since the tag is the user's only identifying mark to the others, he or she is free to use any tag whatever, regardless of gender or other associations, and no matter how near or far it is from the "real" person. It isn't uncommon for males to use female tags or for females to use male tags, for seniors to use youthful tags or for youths to use senior tags. When chatrooms first came into fashion, portraying oneself other than one really is was usually considered deceptive and manipulative. Yet, users seemed to do it spontaneously, and psychologists eventually declared this behavior exploratory and therapeutic. By presenting themselves online through various personae, people find they can learn things, such as how gender norms determine self-expression, and have the experience of being flirted with or pursued, etc. People thus angle to get into others' shoes online to see how it feels to interact as a different sort of person or a person in different circumstances.

MUDs (Multi-user Domains) present online environments (Turkle, 1995: 181ff). They can be designed as a pub like "Cheers", as an adventure game, or as a virtual community. MUDs involve cyber-settings and figures through which the users interact. When users join a MUD, they select figures that will be "them" in that context. Logically, MUDs are just games, so the figure one chooses could be anything, as when one selects a piece when playing *Monopoly*. Psychologically, however, the user easily starts to project his or her feelings into the figure when guiding

its interactions, physical as well as verbal. Surprisingly, people can get deeply involved in MUDs. Some even enter several MUDs and divide their computer screens so as to engage in several MUDs simultaneously—using a different figure in each section. MUDs can offer challenging arenas for mediated exploring and interacting.

Psychologists note that many people spontaneously use MUDs to work through emotional problems. For example, a student who couldn't get along with her mother became a mother figure in a MUD to see things from a mother's perspective (Turkle, 1995: 187ff). A shy boy might create a bold figure to try doing things he daren't do in real life. Some users can translate the new interpersonal skills they develop in a MUD back into their life, but many do not or cannot. Some cruel people seek power over others on MUDs; for example, they might engineer an assault, not only by attacking another figure in the MUD, but by hacking in to control that figure from the inside, and thus terrorize another user. One person perpetrated virtual rape in a MUD setting. This caused an uproar in the MUD group: since MUD players tend to identify emotionally with their figures; in this case, the group members regarded the virtual rape as tantamount to actual physical rape and thought the perpetrator should be somehow punished. The perpetrator, on the other hand, said it was just a game and shouldn't be taken so seriously (Turkle, 1995: 251ff).

Chatrooms and MUDs indeed provide captivating new avenues for interacting with others and exploring oneself. But, do they qualify as tools or instruments to facilitate one's *gewu zhizhi*? Are the experiences one gains through a tag or figure as transformative as those gained in reading a good book? Are the insights as real and abiding? Proponents answer in the affirmative because in chatrooms and MUDs the user is actively engaged. Rather than passively absorbing materials prepared and arranged by someone else like a reader, the chatroom interlocutor or MUD player is creating and expressing an identity, a persona in emergent situations. And, since he or she is interacting with other people behind the scenes, there is a liveliness and challenge that cannot be delivered through books. Certainly, many chatroom inter-

locutors and MUD players feel more challenged online than they do in real life. Thus, the addiction. This argument persuades many people.

We might respond by saying that the psychological benefits of chatrooms and MUDs occur only in those who are sick and need them. Most users remain the same old person they always were in daily life; the personae they explore are just projections of their basic self and reflect all the limitations and flaws that were present from the beginning. Moreover, reading itself is not really so passive. The good reader actively deciphers the text and tries to understand and weigh the claims and contents of the text against his or her own knowledge, experience and beliefs. Moreover, in a great book, the author presents feelings, thoughts and insights that never would have occurred to the reader and that certainly wouldn't ever come up in a chatroom or MUD encounter. Self-improvement, thus, is far more likely to come from reading widely and facing real life challenges than from playing with tags and figures online.

In Zhu's view, the person intent on self-realization should cultivate *jing* (reverence) as the attitude in which mind is clear, open and receptive. But, *jing* is to be nurtured over time; it grows out of the feelings of filial piety and fraternity one develops for one's parents and siblings. By cultivating *jing*, one is indirectly purging the very emotional baggage and problems that people try to work out in chatrooms and MUDs. Consequently, people do not enter chatrooms and MUDs at the same cultivation level as implied in Zhu's notion of *gewu zhizhi*: they are operating at a much lower level of cultivation, and seldom with any thought of working toward any self-actualization or self-realization in Zhu's sense.

Net advocates claim that people's forays into chatrooms and MUDs and self-expressions through multiple tags and figures serve as proof that we are essentially "multi-selved", and indicate that the quest for self-realization in the sense of a unitary self is delimiting and illusory (Turkle, 1995: 178). Zhu would counter that, no matter how real or vivid these alternate selves might seem to the user, they are ulti-

mately just "game" selves. None of the binding responsibilities involved in real life relationships are rigorously applicable in those virtual settings. Moreover, when the users play at being other selves, there is no way to determine whether those "selves" are *bona fide* projections of alternative identities within them or simple role plays. And, if the psychological facts are so dubious and unclear, the philosophic point is moot. In any case, it is more rewarding to explore one's core self deeply than to spread oneself thinly among a variety of alternative shallow shadow selves.

Should a person who is engaged in Zhu's life of inquiry enter a chatroom or a MUD as an instrument of gewu zhizhi? Prima facie, he or she might as well try it. Zhu after all thinks that every situation, every encounter, every experience manifests li and offers food for thought and self-reflection. In addition, a person should be open and flexible and prepared even to try out alternative identities in the course of his or her cultivation process. On the other hand, a person might find him or herself challenged emotionally by the possibilities of intimate dialogue and behavior forbidden areas in Confucian learning. He or she might be tempted by the virtual forays into a normally forbidden and repressed emotional world. Hence, while there might be psychological value in exploring alternative identities for cultivating shu 標 (empathy)—empathy for others in different situations—(Bolter and Grusin, 1999: 245f), intimate dialogue and forays into volatile emotional worlds could stir up the very feelings one has been seeking to rein in by self-cultivation, for the very reason that such feelings obscure one's perspicacity and judgment, not to mention dedication and focus. This problem is not just academic: cases abound in contemporary society of ordinary, responsible people getting so emotionally involved with online chat partners that they one day lose their moral bearings and walk away from spouse, children and career.

In summary, do computers and electronic media provide suitable as well as viable tools for pursuing a life of inquiry in Zhu's sense? We must conclude that Zhu would prefer people to undertake their serious reading and reflection in solitude, concentrating on traditional printed text. He would consent perhaps to occasional

electronic correspondence and use of secondary materials, but he would urge keeping such correspondence to a minimum and counsel against getting too absorbed in secondary materials. In his own day, with the advent of mass publication and inexpensive books, he already feared that the widespread availability of books was leading people to be superficial and unfocused in their reading (Gardner, 1990: 21f). Nowadays, too, we tend to lose sight of the original texts for all the secondary materials in which we are awash. The net magnifies this tendency.

Ultimately, Zhu would prefer that people deal with others on the stage of real life and not indulge overly in online communications. Life is serious business; one wants to face the present day-to-day challenges and strive to be all that one can be on the stage of real life. Although intriguing and sometimes gratifying, online intimacies and emotional forays can be powerful distractions from the path of self-cultivation as well as real life responsibility. They should be entered upon with caution and clear purpose. Zhu Xi, after all, places utmost importance on the Confucian value of *cheng* 誠 (being sincere, authentic), which entails devotion to real life. The ideograph is composed of two elements, *yan* 言 (word) and *cheng* 成 (to complete, fulfill) and connotes having fulfilled or completed one's word (i.e., the code one has chosen to live by). The path to knowledge and realization for Zhu Xi clearly lies in concentration and devotion to the real, for, "the learner must devote himself to reality" (Zhu and Lu, 1967: 67).

What broader lessons should teachers, scholars and "advanced" students, particularly those in the humanities, in the present time draw from these reflections for our own learning and research? First, we should stay mindful of our priorities—in life as well as in academic work. Our study and research efforts to inform ourselves, to cultivate our knowledge, should always take place within the larger goals of understanding life, sharing with others in our life circles, and nourishing the quality of life in our respective domains. Second, we should distinguish between the fundamental study of original texts and secondary research, giving priority to the former. We should strive to master and be intimately familiar with the original texts of our

field and expertise. We should know the texts that define the roots of our disciplines and our specialization, which surely implies working with printed texts, texts we can hold in our hands and to which we can add marginalia. Now, it is a fact of academic life that we can easily access the latest secondary works online. There is nothing wrong with judicious reading of secondary works online or elsewhere, to note trends and fashions in the scholarship. However, there has been a disturbing twofold trend during the past several decades: 1) to give precedence to secondary materials and discussions over mastery of the original texts, causing reflection and discussion to become shallow and of uncertain relevance to the original text, and 2) to worship abstract methods and theories, thus denigrating and distorting the richly concrete contents of inquiry, humanities inquiry in particular. These two points are connected in the sense that many of the secondary discussions are driven by fashionable theories and methods, which quite easily become a distraction once one starts to confuse technical issues for the theory or method with the more significant issues emerging from the contents under study. Theory and method do have their proper place in humanities studies, but their application would be more judicious and significant if it were grounded in solid mastery of the original texts and related materials. Just as in the physical sciences, it is well-known that theories and methods in the humanities underdetermine the facts; for the facts are richer, more multidimensional and many-sided than any theory or method could possibly comprehend. Humanities studies should seek richer and more in-depth understandings; they should seek understandings that shed light into humanity, human self-realization, as well as humane living. Zhu Xi wished to capture these nuances in his notion of guwu zhizhi and would view the conduct of humanities scholarship in the internet age in this light.

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Bibliography

Ames, Roger, and Henry Rosemont

1998 *The Analects of Confucius: A Philosophical Translation* (New York: Ballantine Books, 1998)

Birkerts, Sven

- 1996 The Gutenberg Elegies: The Fate of Reading in an Electronic Age (London: Faber & Faber, 1996)
- 1999 Readings (St. Paul: Graywolf Press, 1999)

Bolter, Jay D. and Richard Grusin

1999 Remediation: Understanding New Media (Boston: MIT Press, 1999)

Gardner, Daniel K.

- 1986 *Chu Hsi and the Ta-hsueh: Neo-Confucian Reflection on the Canon* (Cambridge: Council on East Asian Studies Harvard University, 1986)
- 1999 *Chu Hsi: Learning to Be a Sage* (Berkeley: University of California Press, 1990)

Nunberg, Geoffrey ed.

1996 The Future of the Book (Berkeley: University of California Press, 1996)

Thompson, Kirill.

- ²002 "Ethical Suggestions from Chu Hsi," in Michael Barnhart ed. *Varieties of Ethical Reflection: New Directions for Ethics in a Global Context* (Lanham: Lexington Books, 2002), pp. 49-65
- 2007 "The Archery of Wisdom in the Stream of Life: Zhu Xi's Reflections on the Four Books," *Philosophy East and West*, 57, 2 (July, 2007), pp. 330-344

Turkle, Shery

1995 *Life on the Screen: Identity in the Age of the Internet* (New York: Simon & Schuster, 1995)

Zhu, Xi (Chu Hsi) and Lu Zujian (Lu Tsu-Chien) (comp.)

1967 Reflections on Things at Hand: The Neo-Confucian Anthology, translated with notes by Wing-Tsit Chan (New York: Columbia University Press, 1967)

錢穆 (Qian Mu)

1971 《朱子新學案》(New Case Study of Master Zhu),第 5 冊(臺 北:三民書局,1971 年)