
The making of dialogic learners: A Chinese teacher of English reports on her classroom

YONGWEI BIAN

University of International Relations, Beijing, PRC¹

Email: tongbianca@163.com

This is an action research report about the making of three dialogic learners, Cindy, Yori, and Leo at an arts-oriented university in China. It draws inspiration from Gao's dialogical communicator (2014), which is constructed on Bakhtin's dialogic theory (1981). These students, with their struggles and efforts, will hopefully become open-minded dialogical communicators (Gao, 2014) with the possibility of engaging in life-long self-education (Gao, 2001).

This paper intends to apply the theoretical concept of "dialogic learner" to the teaching practice of English for college education in China. The concept of a dialogic learner is formed by integrating a modern theory of dialogue (Bakhtin, 1981), which is a current concept of language learning (Gao, 2014), and a contemporary concept of language competence (Norton, 2013). This combination creates a learning environment for the open exchange of ideas, jointly undertaken inquiry, engagement with multiple voices and perspectives, the interpretation and collaborative co-construction of understandings, and respectful classroom relations (Haneda, 2017). Such class practice intends to prepare students to be more open and receptive to cross-cultural and interdisciplinary communication and collaboration in this rapidly changing world.

THE CONCEPT OF DIALOGIC LEARNER

The central concept of dialogic learner is "dialogue," which is, in a Bakhtinian sense, both "external (between two different people) and internal (between an earlier and a latter self)." According to Bakhtin, "a word, discourse, language or culture undergoes 'dialogization' when it becomes relativized, de-privileged, and aware of competing definitions for the same things" (Bakhtin, 1981, p. 427).

Bakhtin's theory of dialogue is particularly appealing and attractive in language learning for its encouragement of possible collaboration and participation. While working with other learners and having discussions, language learners develop external and/or internal dialogues, immersed in everlasting struggles between or among the "authoritative discourse" of teachers (Bakhtin, 1981, p. 342), the convincing discourse of peers and one's own discourse. Different possibilities open up when someone else's ideological discourse is "internally persuasive" for learners and "acknowledged" by them (p. 345). We grow "by taking in more voices as 'authoritatively persuasive' and then by learning which to accept as 'internally persuasive'" (Bakhtin, 1984, xxi). Learners may then demonstrate a reconfiguration and re-signification of knowledge and a change in their relationship to the world. And it is in dialogue that the cultural, the situational, and the personal merge, which "offers a possibility for realizing our potential for changing ourselves and our surroundings" (Kramsch & Steffensen, 2008, p. 19).

The concept of dialogical communicator

The concept of dialogic learner is emphasized by a current concept of language learning – dialogical communicator (Gao, 2014). Rooted in Bakhtin’s theory of dialogue, dialogical communicator, together with three other learner identities – faithful imitator, legitimate speaker, and playful creator – was developed as the ideal L2 user/learner identity. In this conception, communication occurs in two ways: one is inter-subject communication, i.e. the dialogue between different dialogical communicators for communicative purposes; another is intra-subject communication, i.e. the dialogue between different kinds of consciousness or internal voices that might even be conflicting, the positive part of which will develop “a reflective sensitivity, ready to discern, expand, deepen and reorganize various kinds of consciousness within him- or herself” (p. 10).

The notion of “dialogical communicator” is exemplified in an ethnographic study on Chinese student volunteers for the Beijing 2008 Olympic Games (Gao, 2014). The study observed a positive and receptive change of a slogan proposed by the volunteers on the office wall in a competition venue: The monologic slogan – “We speak, and the world will listen” was replaced by a dialogic diagram that included the names of different nations and languages represented by the competing teams in the venue. This change was congruent with the transformation the student volunteers underwent throughout their service in the Games. They became dialogical communicators, more proficient in delivering messages and information as required, more capable of solving different kinds of conflicts, factual or emotional, in the man-made game-focused circumstances. This progressive change from a focus on one’s own center to a focus on the needs of others might not have happened without the “caring” environment of the help-seeking-help-offering circumstances like the Olympic Games. Additional examples of dialogic communication came from studies on international activities, like the 2010 Asian Games in Guangdong, the 2011 Universiade in Shenzhen, and the 2010 World’s Fair in Shanghai (Gao et al., 2021).

For the development of such dialogical communicators in the educational field (Gao et al., 2021), the concept “dialogic learner” has been proposed to make the tentative, but hard task of providing the needed nurturing and supportive environment.

The concept of identity

A dialogic learner may be viewed through the lens of the poststructuralist concept of “identity” (Norton, 2013) – the way a student understands his/her relationship to himself/herself and to the class community in the past and at present, how that relationship is structured across time and space, and how he/she understands possibilities for the future. The role of “investment” in language competence, with its focus on social power (Darvin & Norton, 2021) was developed to understand the complexity of identity, as always “multiple, changing and a site of struggle” (Norton & Toohey, 2011, p. 414). It replaced the construct of motivation in the field of language learning and teaching. “(O)nly by acknowledging” that, can we “gain insight into the myriad challenges and possibilities of language learning” (p. 191). “(I)f learners ‘invest’ in the target language, they do so with the understanding that they will acquire a wider range of symbolic resources (language, education, friendship) and material resources (capital goods, real estate, money) which will increase the value of their cultural capital and social power” (p. 6). Investment in second language acquisition has become synonymous with “language learning commitment” and is based on a learner’s intentional choice and desire (Kramsch, 2013, p. 195).

This study integrates the above three concepts to form “the dialogic learner” and put it into practice in a course called “Intensive English Reading” at an arts-oriented university in China, where I worked both as instructor and researcher. Becoming a dialogic learner may be understood as a training stage for becoming a dialogical communicator (Gao, 2014), both of which are based on Bakhtin’s theory of dialogue (1981). The investment (Norton & Toohey, 2011) made by an invested learner forms the essential basis for the progress of a dialogic learner.

This project lasted two semesters with 18 freshmen² of 11 women and eight men, from September 2020 to June 2021. There were 10 compulsory essays forming 10 units to be learned in one academic year, five in each semester and 10 more supplementary essays³ after each unit respectively, likewise five in each semester.

In this course, I guided the students to make more investments as dialogic learners in class. At the outset of the school year, I introduced them to Bakhtin’s concept of dialogue, and the dialogic style of learning. I also pictured for them the consequential effects – multi-awareness and increasing competence as a learner in autonomous learning, language output, and critical thinking etc..

The class nurturing dialogic learners encouraged both independent and cooperative work. The students were expected to preview texts on their own, including background information and understanding of the text, contextual meaning of new expressions, and relevant grammar and structure. They were then encouraged to compare notes in a group with two women and two men or three women and one man, five groups in total, arranged by the monitor in her negotiation with the class. I split the compulsory text into three parts, and supplementary one into two in each unit, and each group took their turn to give 20-minute presentations in five class sessions, and then respond to queries or challenges from the class. The class would end with my presentation in response to the students’ presentation and discussion.

RESULTS OF THE STUDY⁴

The three informants in this study constructed different life stories in their first year of English learning at university. Upon their entrance to the university, even after a fairly long period of time, Cindy, Yori, and Leo⁵ were not accustomed to the dialogic style of English learning. Each demonstrated different ways of consciously or unconsciously rejecting the identity of becoming a dialogic learner.

Rejecting the identity of dialogic learner

Cindy, an obedient English learner who was not self-assured

Cindy was observed as silent throughout the first semester. She once said to me during the break that she did not have any ideas or feelings after reading any text, which she expressed in her English writing as well: “In the past, I was a dependent English learner. When I was reading an article in which the author expressed his opinion, I would accept and agree with the statement without thinking twice” (2020, composition in a quiz on Unit 5). She wanted to participate in the class session of Q-&A, discussion, and sharing of ideas, but she simply did not have anything to say (1st semester class observation). She “suffered” because she “could not learn anything if she continued to learn the way she was taught in high school.” Back then, she was a good, test-oriented English learner, memorizing vocabulary and the structures of composition only for the examination (1st term interview, 2021.1.2).

Yori, a deliberately voiceless English learner with an uncooperative attitude

Yori was not interested in any opportunity to voice her opinion. She did not participate in any group activity for exchanging thoughts in class. For at least two times when I asked her a question, she responded “I don’t know” without even saying “sorry” (1st semester class observation). She said that “English was not my first choice for university, even the least expected one. Not that I did not like it, though... I enjoyed a course on reading and writing as it was more traditional, like the way I learned in high school, with a focus on analyzing sentence structure...” She was not attracted by the dialogic style of the class, rendering it meaningless, and was untouched by any different viewpoints and perspectives (1st semester interview, 2021.1.1).

Leo, a daring speaker and active participant with weak language preparation

Leo presented himself as a rather active English speaker in class. Every now and then when I posed a question to the class, he was frequently the one who broke the silence in class. His English, however, was broken, and his vocabulary seemingly not adequate to support his ideas. He could still make himself understood, though (1st semester class observation). Amazed at his own progress, he said, however, “I did not learn much in the dialogic style, unlike when in high school,” He was worried and retreated into silence from time to time (1st semester interview, 2021.1.1; 1st semester class observation).

Perhaps because of the flow of the class, and other students who distinguished themselves either as having interesting things to say, or as making great efforts to participate, the three students grew in different ways, and each of them demonstrated a trajectory towards becoming ever-evolving dialogic learners.

Turning into a dialogic learner

Cindy, becoming a dialogic learner in various ways

It’s been a struggle for Cindy to turn into a dialogic learner, but she did find herself “encouraged by the learning community” – “Some student (e.g. Leo, another informant in this study) was not good at speaking, but still volunteered to voice his opinion.” Cindy “would wonder why” she “couldn’t.” And “many students shared their independent thoughts, and brilliant ideas,” which Cindy “appreciated and admired so much” that she “wanted to be one of them.” During the Q-&-A session, particularly, Cindy felt her classmates “were shining while bravely expressing their ideas.” She “reveled in the atmosphere where many students were participating in the discussion” (1st semester interview, 2021.1.2; 1st semester reflection, 2021.1.1).

Acting on the impetus from the class, Cindy began to boldly join the “construction” part of English learning by responding actively and well to the questions either from the teacher or from classmates (1st semester class observation). She felt she could take pleasure in expressing her thoughts in English and walked further away from her comfort zone. Though, many times she still found herself having nothing to say. She listened to the teacher and other students attentively so that she could think through some points once perplexing or beyond her imagination (1st semester interview, 2021.1.2). Gradually she made changes (1st semester reflection, 2021.1.1). I noticed several times that Cindy sat on her chair swinging cheerfully. Even one time some other students followed suit and swung their chairs together with her (1st semester class observation). Cindy said she was pleased with the arrangement of the moving table-chair, the relaxing atmosphere and room for discussion (1st semester interview, 2021.1.2).

Upon entering the second semester, Cindy retreated back into her former silence, possibly because the supplementary texts became more difficult and profound thus further away from her reality. There were also fewer opportunities for class discussion so, Cindy

lost the link with the class that was temporarily established in the first semester. She dozed more in the second semester while I lectured after student presentations (2nd semester class observation). In her interview at the end of the second semester, Cindy reported that she “thought very slowly, much slower than the first semester.” When she “eventually figured out what to say, the discussion on that issue already finished,” so, more often than not, she “listened more to the other students rather than getting involved” herself (2021.7.2). However, after the class, she was rather active as a group leader, facilitating their group discussion: “within the group, I was more like a leader when throwing out a question/s. I played the role of facilitator while all members were involved in the discussion” (2nd semester interview, 2021.7.2).

Anyway, after a period of hibernation in class, Cindy came alive with questions or responses/comments with elevated quality. “Though the duration of thinking was prolonged, I could state my opinion in a better way, not a prompt one anymore (2nd semester class observation; 2nd semester interview, 2021.7.2).

Cindy summarized her transformation from passive and uncritical acceptance to the accretive development of critical thinking while interpreting a text: “...After reading an article, I will have a judgment on it. I consider the writer’s idea a good one or I don’t quite agree with him. I continue to think deeply why I agree and why I don’t agree. I will use the author’s ideas to expand mine, and sum up what I’ve thought of and what ideas he’s brought to me. This process, in the past, I omitted it directly. No expansion of my views from the author’s... I tend to take other people’s views as authority. Then I gave it to myself mechanically. I feel I used to be like that. Now, there is one more process” (2nd semester interview, 2021.7.2).

This self-discovery in her interview was echoed in her reflection at the end of the second semester: “My critical thinking was cultivated—I will no longer immediately accept all the opinions expressed by the author in the article. Only after consulting relevant information and thinking repeatedly will I selectively agree or disagree with the author’s opinions. About my own opinion, I will record it first, and then try to find arguments to support myself” (2021.6.16).

In her one year of study, the learner identity of Cindy circles around dialogic learner in the sense that she tried to prepare herself independently in learning English, though at times not well. She was stimulated by other students’ thoughts so much that she began to set a good example for the class, though it was not quite consistent. She underwent a thorough change from following authority to acting as an independent and critical thinker, though she still desired detailed guidance for her preview especially when faced with dense texts.

Yori, still some way to go, but On the way to rejoicing in being a dialogic learner

Yori never imagined she would enjoy becoming a dialogic learner. Basically she “focused on the structure of a text, the grammar and its vocabulary.” She “seldom prepared” her “preview seriously in terms of the meaning and significance of the text for class participation.” Yori found herself “absent-minded” once she “couldn’t see any connection with either the teacher’s lecture or response or other students’ presentations.” She “therefore,” following her logic, “avoided eye contact with the class” while doing her presentation, “not to be embarrassed by other students’ distraction.” Amazingly, she found herself an invested learner in many ways: She was “delighted at the process of doing presentation itself,” and she was also “comfortable with the group discussion” as she believed that was for her “improvement of multiple competence.” Approaching the end of the first semester, Yori was “amazed to find” that she was “touched by a short story written by O’Henry” (1st semester interview, 2021.1.1). Yori’s passion for the theme of

the literary text then continued into the second semester, particularly with the supplementary essays that required more profound thinking (2nd semester class observation).

Until then, Yori's state of being a dialogic learner centered more on her inner development via the bond with some literary work, the sense of achievement in terms of knowledge in English, and her increased ability in group discussion and her presentation.

In the second semester, Yori appeared livelier in her presentation, and she responded actively to other groups' questions or challenges to their presentations. Occasionally she even volunteered to answer my questions in class (2nd semester class observation). She said in her interview at the end of the 2nd semester that her group mates tended to be "more direct and forthright" when expounding their views "rather than hiding them." They "even quarreled at the differences," and Yori "took the quarrel as a kind of intimacy" (2021.7.1). That was rather different from her habitual way of thinking in the previous entire semester: "People think differently. There is no point of exchanging ideas or arguing against each other" (1st semester interview, 2021.1.1).

Throughout the whole year of study in the atmosphere that nurtured dialogic learners, Yori slowly stepped out of the traditional learner identity - a knowledge seeker, towards the newly-ever-emerging identity - a dialogic learner. She worked with me, a teacher who she considered having "great tolerance," and her group mates and classmates, in a friendly, relaxing, and unrestrained environment. Through the interaction as such, Yori grew in her own way: "It was kind of training in personality, rather than emotionless knowledge;" "becoming more adaptive, and less difficult" (2nd semester interview, 2021.7.1).

Leo, from enacting a dialogic learner to becoming a dialogic learner

Leo once approached me at the beginning of the first semester, his spirit almost broken, and complained about his poor foundation in English. I encouraged him to continue gathering momentum through his active participation in class. He seemed to follow my advice and carried on enacting his identity of a dialogic learner. Indeed, Leo found himself frequently inspired by a classmate's idea: "Previously I felt very bored and had no idea after reading the article, but Ann's question made me generate a lot of ideas," especially "along with the preview and my relevant reflection" (WeChat communication, 2020.11.11). Increasingly Leo enjoyed communicating his innermost thoughts to the class. He believed that he did "not just convey a point," but "transmitted some good values," which "his classmates might not realize" (1st semester interview, 2021.1.1).

At various times Leo was withdrawn (1st semester class observation). This was partly explained in his interview: "I was not satisfied... I did not get much from the class... There was not so much traditional way of text analysis nor acquisition of language points" (1st semester interview, 2021.1.1). The intermittent dissatisfaction might lead to his poor preview for the class, which possibly in turn resulted in his occasional silence. On the other hand, perhaps partly because he was afraid of being confronted with objections - he was "not confident" whether his point was "well-grounded or complete," or whether he "could take it" if he was "challenged" (1st semester interview, 2021.1.1). Sometimes, Leo failed to catch up with the flow of the conversation or the argument and from time to time he seemed to abruptly initiate a brand-new topic for the discussion (1st semester class observation). He either did not understand the previous speaker/s, or he wanted to divert the conversation to another topic (1st semester interview, 2021.1.1).

However, Leo made some slowly visible progress, on which he reflected at the end of the first semester in his interview: "...at first I didn't feel like I had learned anything, but after reflection, I found that what I've learned was more of an invisible ability. After a semester, although I was in a state of ups and downs, my oral English and my presentation

were greatly improved. At the beginning, I stammered and blushed, but after some time, words jumped into my mind and flew out naturally. It was quite amazing” (2021.1.1). Leo realized that it was the characteristics of the class that enabled him to be a better English speaker: “Opportunities for speaking in English are already rare, not to mention those to be listened to” (2021.1.1). Leo’s progress in speaking was rather noticeable such that students expressed many times their respect and admiration for him (1st & 2nd semester, class observation and interviews).

Leo’s role as a dialogic learner did not only stimulate the growth of presenting his thoughts, but his passion for learning the language itself. Leo invested more in the course of Intensive English Readings. He “took it more as a systematic study, including not merely words, grammar and structure,” but “the logical connection in between paragraphs and even sentences,” the awareness of which he developed in the discussion within his group and in class. Leo was “committed more to the learning assignments - the preview, including checking the background information,” and “group discussion and presentation.” He “attached even greater importance to making an appealing power point, presenting” himself “in a succinct way,” and “getting feedback from the class for improvement” (2nd semester interview, 2021.7.13). Leo even volunteered to participate in another group’s presentation of another learning unit (2nd semester class observation). Due to the overall investment he made in his English learning, Leo himself sensed the “enhancement” of his “reading comprehension” (2nd semester interview, 2021.7.13). Receiving messages from the class that nurtured dialogic learners, which encouraged a comprehensive, developmental way of perceiving English learning, Leo started to “develop a set of plans, learning methods and objectives” (We-chat communication, 2021.3.19). He changed his attitudes toward English learning, knowing more about himself, as an English learner, his advantages and disadvantages: “I would not feel I had no hope as I temporarily lagged behind. I did not feel inferior because of my weakness anymore, for I know my way to make an effort. I’m getting better” (2nd semester interview, 2021.7.13).

Leo as an English learner was empowered by enacting the role of a dialogic learner, and occasionally he became a dialogic learner in the real sense, emboldened by his awareness and ability in negotiating differences, and integrating the ideas of others into his own through the discussion. With the identity of a dialogic learner, he even practiced his leadership in organizing group discussion for the class presentation. Usually, he would express his opinions to get others involved, and inspired by their active participation, he would generate more new ideas (2nd semester interview, 2021.7.13). This was proved by Yori, one of his group members: “...our group leader (Leo) had brilliant ideas... He always guided us to think beyond the details... he held the keynote of our presentation” (Yori’s 2nd semester interview, 2021.7.1). When Leo became more confident in discussion, he chose to be or he believed more himself to be a listener in the group discussion: “I will first listen to other students’ ideas. I then express my views, to see if mine could be integrated with theirs. Or we will choose a rather moderate perspective, or in some cases, I will actively raise my point... if there is no new idea from them, I will speak a little bit more” (2nd semester interview, 2021.7.13).

Leo, in his one-year learning as a dialogic learner, did not seem to be ready for the commitment to a dialogic learning practice, especially at the earlier stage when he longed for the traditional way of implanting knowledge, which he might have tried to avoid in his high school. Leo employed, however, possibly newly discovered strengths in active thinking as he explored the meaning of the text further and deeper and his learning of the language. More relevant and persevering investment will help him to become a real dialogic learner, if conditions permit.

DISCUSSION

This study has explored a new way of English learning in China, focusing on the development of learner identity – becoming a dialogic learner. The three cases demonstrated different trajectories of becoming a dialogic learner. While in high school, the ultimate goal for all students was basically to pass exams for college. Upon entrance to the university, all three students seemed to be strict followers of the traditional style of teaching, with the teacher lecturing mostly and the student listening silently and focusing entirely on the study of words, grammar and sentence structure.

During the year of this study, Cindy seemed to have accepted the ideology in the dialogic class very early on. She was troubled and silent from time to time, but could always find her way back into the class in an animated manner. Cindy enjoyed the atmosphere for free discussion both physically and mentally. Consequently, she steadily developed the awareness and ability to communicate critically with the authors of the texts, organize group discussion tactfully, speak up in class to share her opinions, and support her classmates, or sometimes challenge the previous speaker. She made rather bold progress as a dialogic learner, though the process seemed very tough.

Yori at first rejected the identity of a dialogic learner, and turned a blind eye to the class unless the class was on the instruction on grammar and sentence structure. But her ideology established in high school eventually gave way to the one prevailing in the class. In particular, Yori appeared as a dialogic learner, if temporarily, in her turn doing the class presentation near the end of the second semester.

Still holding on to the once-accepted ideology of high school, Leo at first was disoriented and frequently disturbed, without a traditional sense of authority to follow. He desired more of my lecture, however lively he was when contributing questions or comments in the class. Later, however, Leo became more determined in his English study. He seemed to step out of the previously familiar ideology, with more confidence accumulated in class participation and better awareness of how to target his efforts, into the ideology of dialogic learning in class.

CONCLUSION

This study described how three students developed into three dialogic learners of a foreign language. As whole persons with reflective sensitivities to one another and to the reading, they were meant to exchange viewpoints and constantly step beyond their personal and cultural boundaries. In so doing, they would gradually learn to solve disagreements peacefully, reexamine problems with a brand-new eye, and gather an ever fuller perspective on reality. The three students, Cindy, Yori, and Leo, each in their own way, followed a trajectory from students simply acquiring language knowledge, to becoming more self-confident individuals, with ever-better language competence, ever-growing independent thinking, and with lively and animated thoughts. They engaged in communicating and sharing sparkling, inspiring and sometimes incompatible views. Ultimately, these students may find themselves more sensitive, expansive, inclusive, and comprehensive in their life-long path for personal and social growth.

ACKNOWLEDGMENTS

I am deeply indebted to Prof. Claire Kramsch for her wise guidance, invaluable revision and pertinent editing of my paper. I also appreciate greatly Prof. Bonny Norton and Prof. Yihong Gao for their treasurable suggestions for this paper!

NOTES

¹ I appreciate my postgraduate student Xue Zhang for collecting the data, which she applied to her graduate dissertation with a different title.

² The students have learned English since elementary school or at least from the 3rd grade. They passed the College Entrance Examination, including English, to enter university as English majors. For the majority of them, it might take some time to participate in a class conducted in English, though some were already skilled English speakers upon admission

³ To address the newly adjusted time arrangement in this academic year, two more hours were given each week.

⁴ Other than in the quiz, all views in either WeChat communication or interviews were in Chinese, of which I give an English translation.

⁵ Pseudonyms were given to the informants to protect their privacy.

REFERENCES

- Bakhtin, M. M. (1981). *The dialogic imagination* (J. M. Holquist, Trans.) The University of Texas Press.
- Bakhtin, M. M. (1984). *Problems of Dostoevsky's poetics*. University of Minnesota Press.
- Darvin, R. & Norton, B. (2021). Investment and motivation in language learning: What's the difference? *Language teaching*, 1–12.
- Gao, Y. H. (2001). *Foreign language learning: "1+1>2"*. Peking University Press.
- Gao, Y. H. (2014). Faithful imitator, legitimate speaker, playful creator and dialogical communicator: shift in English learners' identity prototypes. *Language and Intercultural Communication* 14(1), 59–75.
- Gao, Y. H., Yan, J. L., Chen, J. P., Liu, Y., Xu, H.C. & Zheng, X. (Eds.). (2021). *Language attitudes and identities among Chinese users of English: Focusing on intercultural volunteers of international events*. Peking University Press.
- Haneda, M. (2017). Dialogic learning and teaching across diverse contexts: Promises and challenges. *Language and education*, 31(1), 1–5.
- Kramsch C. J. (2013), "Afterword". In B. Norton, *Identity and language learning: Extending the conversation* (2nd ed., pp. 192-201). Multilingual Matters.
- Kramsch, C. & Steffensen, S. V. (2008). Ecological perspectives on second language acquisition and socialization. In N. Van Deusen-Scholl and N. Hornberger (Eds.) *Encyclopedia of language and education* (pp. 2595-2606). Springer.
- Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.). Multilingual Matters.
- Norton, B. & Toohey, K. (2011). Identity, language learning, and social change. *Language Teaching*, 44(4), 412-446.