Gender Representation in Primary English Textbooks in Mainland China 1978 to 2003

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Abstract

The study aims to investigate the gender representation in three sets of primary English textbooks published by People's Education Press (PEP) from 1978 to 2003 in China. Results suggested that during the past over thirty years, although progress was perceived, gender bias was still persistent in primary English textbooks, with female invisibility in texts and illustrations, gender stereotypes in occupational and domestic roles, and domestic and school activities, and inequality in utterances and instances of female and male firstness.

Keywords: China; primary schools; English textbooks; gender

Introduction

Education is a main way to achieve an equal, harmonious and reliable human development (UNESCO 1996). Biases in contents of learning materials are one of the four factors that matter in promoting gender equality in education (UNESCO2007). Textbooks are the most powerful instruments in shaping children's belief, attitudes and values (Sumalatha 2004). This study examines the changes of gender representation in three sets of primary English textbooks published and used in China during the past over thirty years.

The Status of Women in China

The status of women in China has improved during the last 30 years. In the educational aspect, the illiteracy rates of women aged 18-64 decreased from 30.1% in 1990 to 11.1% in 2000 (ACWF 2001). The rates of women received junior high and higher education increased from 37.0% in 1990 to 50.7% in 2000 (ACWF 2001), while in 2010 (ACWF 2011), the rate of women with senior high and higher education was 33.7% and the rate of those with junior college and higher education was 14.3%. The education years of women increased from 4.7 years in 1990 to 6.1 years in 2000 (ACWF 2001), and to 8.8 years in 2010 (ACWF 2011). In addition, China has eliminated the gender gap in primary and secondary education. According to UNESCO (2008), the gross enrollment ratio (F:M) in primary education is 0.98:1, and the ratio in secondary education is 1.01:1. In the labor force, in the urban areas, the rates of women in charge rose from 2.9% in 1990 to 6.1% in 2000, and the rates of female technicians increased from 17.4% in 1990 to 22.8% in 2000 (ACWF 2001). In 2010, the labor force participation rates for females aged 18-64 was 71.1% (ACWF 2011).

The Convention on the Elimination of All Forms of Discrimination against Women(UN 1979) called for "the elimination of any stereotyped concept of the roles of men and women at all levels and in all forms of education.... in particular, by the revision of textbooks and school programmes and the adaptation of teaching methods". In 1995, The UN Fourth World Conference on Women was held in Beijing China, which aroused unprecedented attention on women issues in China.

The 48article in the Constitution of the People's Republic of China(SCLAO2012) states that" women in the People's Republic of China are entitled to the equal rights as men in all life aspects including politics, economics, culture, society, and family". In 2001, the State Council passed the Programme for the Development of Chinese Women (2001–2010) (State Council 2001), which pointed out that gender awareness should be incorporated into teacher training. The Council also issued the Programme for the Development of Chinese Children (2001–2010) (State Council 2001) that called for incorporating awareness of gender equality into educational contents". In 2011, the State Council ratified the Programme for the Development of Chinese Women (2011–2020) (State Council 2011) which required gender evaluation in teaching contents and process, gender concept in teaching contents and methods, and gender experts in curriculum and teaching material related guiding institutions. The State Council passed the Programme for the Development of Chinese Children (2011–2020) (State Council 2011) calling for improving gender equality awareness among the society.

Previous Studies on Gender Representation in Textbooks

Textbooks are one of the most widely used educational tools in the classroom (Ruddick 2010). The time students spend on textbooks accounts 80-95% of classroom time (Sadker&Zittleman2007). Teachers spend 70-90% classroom time in textbooks (Baldwin & Baldwin 1992), and most of their instructional decisions are based on textbooks (Sadker & Zittleman 2007). Students usually give great authority to textbooks, and absorb all the details in textbooks without doubt. Therefore, they are easily influenced by textbooks (Lee& Collins 2008). Textbooks are significant in determining students' gender view (Kobia 2009). Not only does gender images in pictures(Briere & Lanktree 1983, Frasher & Walker 1972, Peterson & Lach 1990), but also the messages in texts can affect students' attitudes, values and behaviors (Lee & Collins 2008).

Gender bias in the society often leads to the unequal social status of women. For instance, men generally enjoy higher social status in occupations. However, people usually take these social inequalities for granted, which not only camouflage the gender bias in textbooks, but also restricts students visions of "who they are and what they can become" (Blumberg 2008). In addition, the gender bias in textbooks can form gender bias views among students. This can bring "conflicts" between women and men in the future (Mukundan & Nimehchisalem 2008).

In 1970s, the same time as the Second Women's Movement, studies to expose and reduce gender biases in textbooks began world-wide (Blumberg 2008). China's attention to textbooks culture started at 1980 (Tian 2008). In 1988, Wang and Cui (Wang & Cui 1988) studied gender representation in primary Chinese textbooks, which ushered in the era of gender representation research in textbooks in mainland China. Almost all the textbooks studied worldwide have not adequately reflected women's roles and occupations in the real world. And gender bias is persistent in these textbooks. Although some improvement is noticed after two or three decades, it's excruciatingly slow (Blumberg 2008).

In the following, some common analysis dimensions of gender representation in English textbooks will be reviewed.

Visibility

Invisibility is one most harmful bias forms (Sadker 1991). If there is not so many women as men in the textbooks, it implies that women are not important enough (Porreca 1984). Furthermore, girl students' capabilities understanding of the foreign language and its culture may be seriously damaged when girls and women are excluded from foreign language textbooks (Rifkin 1998).

Hartman and Judd (1978) reviewed a series of TESOL textbooks of the past 12 years in America, and found that in three textbooks, women only accounted for 37%, 36%, and 27% respectively. Hellinger (1980) investigated 131 passages in three ELT textbooks in German, and found that over 93% of the passages contained men, while not even 30% of the passages included women. Porreca (1984) studied 15 most widely used ESL textbooks in America, and found that the average ratio of females to males was 1:2.06. Gupta and Lee (1990) analyzed two sets of primary English textbooks published in 1985 in Singapore and found that women only occupied 29% and 30% respectively in the two sets. Zhao (1993) analyzed a set of Chinese EFL textbooks, and found that men were more than women in illustrations (F:M=238:249) and stories (F:M=6:28). Ansary and Babit (2003) analyzed two Iranian secondary English textbooks, and found that the female to male ratio was 1:1.5. Zhang and Yang (2003) analyzed three sets of Chinese primary English textbooks published in 2003, and found that the female to male ratios were 1:1.19, 1:1.39, 1:1.10respectively in the three sets.

Mineshima (2008) investigated a Japanese high school English textbook published in 2007, and found that women took up 46.8% of all the characters. Mukundanand Nimehchisalem (2008) investigated four Malaysian secondary English textbooks, and found that men outnumbered women in all four textbooks. Women only took up 37.6%, 37.3%, 33.8%, and 48.3% respectively in illustrations, and 38.7%, 37.1%, 41.5%, and 43.8% respectively in texts. Tian (2008) analyzed a set of Chinese senior high English textbook published in 2003-2005, and found that men outnumbered women in illustrations (F:M=41:126), leading roles (F:M=15:67), and public persons (F:M=6:50). Yang (2010) studied two primary one English language textbooks published in 2008, and found that female and male characters were presented almost equally often in illustrations (F:M=179:176) and close in texts (F:M=224:202). Jou (2010) investigated 1214 illustrations in 12 primary English textbooks published in 2005 and 2006 in Taiwan, and found that men outnumbered women (all characters: F:M=1246:1539; main character: F:M=442:522). Zhu (2011) investigated a set of junior high English textbooks, and found that men outnumbered women in illustrations (F:M=180:407) and public persons (9:58). Gharbavi and Mousavi(2012) examined four Iranian senior high English textbooks and found that males were far more than females in both texts (F:M=186:448) and illustrations (F:M=91: 284).

Occupational Roles

Occupational roles are another form of sexism in the representation of females and males (Porreca 1984). The sexism against women may be reinforced by the biased portrayal of women's occupations (Esen 2007). Occupational roles in textbooks serve as the models for students and have an impact on their life aspirations (Huang 2004).

Previous studies show not only do fewer females work than do males, but females also work in fewer occupations, and the social status of women's occupations is generally lower than men's. Hartman and Judd (1978) found that in a textbooks they reviewed, female leaders were far less than male leaders (F:M=3:15). Hellinger (1980) found that women were rarely engaged in any "demanding, interesting, or successful" activities, while male roles represented a broad range of occupational options. Porreca (1984) found thatthe ratio of total occupations for females to total occupations for males in the text is 1:5.87. The most frequently mentioned occupations for males were president (111), writer (59), teacher (43), policeman (41), and explorer (41). For females, the most common occupations were teacher (28), actress (22), doctor (16), and secretary (13). Gupta and Lee (1990) found that in a set of English textbooks only 13 women were working while 49 men were working. Ansary and Babit (2003) found that women's occupations appeared to be mostly restricted to student and nurse while men enjoyed a diversity of jobs such as policemen, soldier, dentist, farmer, doctor, and teacher. Zhang and Yang (2003) found that compared with men, women were mostly engaged in occupations with low social status. Mineshima (2008) found that about the same number of occupations was allocated to both genders (F:M=9:10) though males seemed associated with more paying and higher status jobs than females. Tian (2008) found that number of occupations was more for men than women (F:M=27:49). Men mainly took jobs with high social and economic status while women were manly housewives or service workers like nurse, and servant. Jou (2010) found that 57 men were working while only 11 women were working.

Domestic Roles

Traditional society tends to connect women with family and men with career. Females are more likely to be restricted to the kitchen than males (Gaff 1978) and more likely to be found at home (Deliyanni-Kouimtzi 1992).

Hartman and Judd (1978) found that females were usually assigned fixed and settled domestic tasks such as cooking, baking, cleaning, polishing, mending, sewing, and washing, while males do the painting, gardening, repairing, and takingout the garbage. Ansary and Babit (2003) found that women were shunted towards more traditional stereotyped roles such as doing the dishes, cooking, serving food, setting the dinner table and taking care of children. Zhang and Yang (2003) found that women almost undertook all housework while men nearly do no housework, only reading newspapers in sofa. Mukundan and Nimehchisalem (2008) found that among the four English textbooks, female domestic roles were more than male ones in three textbooks, with men only taking up 48.9%, 45.5%, and 38.6% respectively. Yang (2010) found that the number of family roles of both genders was similar(F:M=25:24). Jou (2010) found that in leading roles, most women were doing housework (F:M=151:41). Zhu (2011) found that female family roles were more than male ones (F:M=21:13); mothers were mainly shopping, doing housework and taking care of children, while males rarely did chores or tended children.

Utterance

Utterance means a series of words within a person's turn at talk in dialogues and monologues. It can be short as a word, or long as a paragraph (Mineshima 2008). Fewer female utterances will deprive female students of practicing language (Cincotta 2009). To count the whole number of words by males and females can more accurately show their speaking opportunities (Jones, Kitetu & Sunderland 1997).

Hellinger (1980) found that 80% of the speakers were males. Gupta and Lee (1990) found that in two sets of English textbooks, male speakers were more than female speakers (F:M=21:54, and11:76respectively); the average number of utterances per speaker was slightly higher overall for males than for females (F:M=6.1:8.5, and 3.2:3.9respectively); the average male utterance was slightly longer than the average female utterance (F:M=10.0:13.9, 11.6:12.0). Mineshima (2008) found that female characters uttered 245 times and male 247. Mukundan and Nimehchisalem (2008) found that in four textbooks analyzed, female speaker were less than male ones, accounting for 48.7%, 37.7%, 38.3%, and 48.4% respectively; women uttered less than men, accounting for 49.8%, 48.6%, 37.2%, and 33.3% respectively. Yang (2010) found that female speakers outnumbered male speakers (F:M=69:41).

Firstness

Firstness refers to the order of mention when both genders are mentioned at the same time. Placing the males first when females male are simultaneously mentioned indicates that males are supreme to females (Lee & Collins 2008), and it can reinforce that women are in the second-place status (Hartman & Judd 1978).

Previous research shows that when women and men are mentioned, instances of male firstness are usually more than women firstness. Hartman and Judd (1978) found that the masculine word was always mentioned first. Porreca (1984) found that the average ratio of female to male firstness was 1:2.96. Mineshima (2008) found that females appeared before males four occasions more often (F:M=47:43). Ruddick (2010) analyzed a set of Japanese senior high English textbooks, and found that males appeared before females more often (F:M=67:99). Yang (2010) found that there were 37 instances of male firstness but only 3 instances of female firstness.

The Present Study

We chose to analyze Primary English textbooks published by PEP because (1) According to literature review, there is only one study on gender representation in Primary English textbooks in mainland China. Zhang and Yang (2003) horizontally compared three sets of primary English textbooks published in 2003. This study was synchronic. We think it's important to carry out the diachronic research on gender representation in primary English textbooks in mainland China so as to investigate whether the changes of gender representation in these textbooks have been in pace with changes in the status of women. The beginning attention to gender in textbooks in mainland China in 1980s and the introduction of Programme for the Development of Chinese Women (2001–2010) and Programme for the Development of Chinese Children (2001–2010) in 2001 were considered to be significant landmarks for the purposes of the present study, which involved a comparison of three sets of textbooks published in 1980s, 1990s, and 2003. (2) English curriculum is important in mainland China where English is a compulsory subject in primary and junior high education (MOE 2011). (3) Textbooks published by PEP are wide used and very influence. Using the most common analysis dimensions in previous studies, this study attempted to:

- 1. Investigate representation of both genders, especially women, in primary English textbooks.
- 2. Enrich data in this research area.
- 3. Provide construction suggestions for better gender representation in English textbooks.

Method

Three sets of primary English textbooks were selected from PEP: (1) *English* (6 volumes), referred to as "Textbooks 1", and published in 1978-1980. (2) *Primary English for China* (4 volumes), referred to as "Textbooks 2" and published in 1992-1994. (3) *PEP Primary English Students' Book* (8 volumes), referred to as "Textbooks 3" and published in 2003. Textbooks 2 followed the beginning attention to gender in textbooks in mainland China in 1980s. Textbooks 3 were produced after the issues of the introduction of Programme for the Development of Chinese Women (2001–2010) and Programme for the Development of Chinese Children (2001–2010) in 2001.

The analysis ranges were: (1) Textbooks 1: all pages except cover, and word list, (2) Textbooks 2: all pages except cover, notice page, catalogue page, copyright page, and word list, (3) Textbooks 3: all pages except cover, copyright page, editor list page, notice page, preface, catalogue page, and word list.

The researchers made a systematic recording table and counted: (1) numbers of women and men (in pictures: women and men images except unidentified people and cartoons; in texts: names,e.g., Jenny, Tom, titles, e.g., Mr. Ms., personal pronouns, e.g., her, he, and other words referring clear gender, e.g., female, gentleman, queen, except words related to cartoon), (2) occupational roles (the number of working adults and their occupations in pictures, e.g., doctor, teacher. The occupation of the same person being checked once, regardless of the number of times she/he appeared in the textbooks), (3) domestic roles (number of people who appeared as family members in any occasions in pictures, e.g., mom, grandpa. The same family memberbeing checked once, regardless of the number of times she/he appeared in the textbooks, (4) adults' domestic activities (the activities of adults who appeared as family members, e.g., shopping with son, cooking), (5) children'sschool activities (the activities of children in schools in pictures, e.g., playing basketball, studying), (6) numbers of utterances and total words in utterances (Utterances uttered by more than one person at the same time were excluded from analysis. Utterances of unknown or unclear speakers, and animals were not considered if their speakers. The speaker of an utterance was determined by the direction the speech bubble was pointed to, and the structure of a direct speech), (7) firstness (instances of females firstness and male firstness when they are mentioned at the same time, e.g., she/he, boys and girls).

Pictures were the main analysis part of the analysis in this study because the primary English text books in mainland China were full of pictures. This can stimulate young students' learning motivation (Jou 2010). Pictures can leave deeper impression than words for students, especially younger students (Law & Chan 2004). The focus of the picture investigation was on: (1) the number of females and males, (2) occupational roles, (3) domestic roles, (4) adults' domestic activities, and (5) children' school activities. The focus of the texts investigation was on: (1) the number of females and males; (2) numbers of utterances and total words in utterances, and (3) firstness.

At first, one investigator analyzed all the three sets of textbooks for three times. Then the other investigator crosschecked the results by randomly examined 10% sample of all the textbooks. The second investigator agreed with the first investigator over 90%, which means the coding system was reliable. The inter-coder reliability for each category was: (1) number of females and males: 91%; (2) number of female and male occupational roles: 82%; (3) number female and male occupations: 94%; (4) types of domestic roles: 100%; (5) number of female and male domestic roles: 86%; (6) adults domestic activities: 84%; (7) children' school activities: 84%; (8) number of utterances: 98%; (9) number of words in utterances: 99%; (10) number of instances of female and male firtsness: 100%.

Results and Discussion

Visibility

According to the censuses of National Bureau of Statistics of China (1982, 1990, 2011), the female to male ratio in mainland China 1982, 1990, 2010 is 1:1.06, 1:1.07, and 1:1.07 respectively. Men have been outnumbering women during the past 30 years.

Table 1 showed that during the past over 30years, the ratio gap between women and men was generally narrowing. The ratio for the number of females to males is 1:1.29 for Textbooks 1 and then increased to 1:1.10 for Textbooks 2. But the gap slightly enlarged in Textbooks 3 (F:M=1:1.15). The data suggested that although these textbooks revealed the reality that men outnumbered women in Mainland China, but they all exaggerated the fact, the exaggerated ration ranged from 0.3 to 0.13.

 Male
 Female
 Ratio (F:M)

 Textbooks1
 1977 (56.24%)
 1538 (43.76%))
 1:1.29

 Textbooks2
 1598 (52.26%))
 1460 (47.74%))
 1:1.10

 Textbooks3
 3437 (53.60%))
 2992 (46.40%))
 1:1.15

Table 1: Number of Females and Males

Occupational Roles

Table 2 indicated the number of occupational roles of women and men in the pictures. Over 30 years ago in Textbooks 1, the number of working men is less than that of working women (F:M=1:0.76), while 10 and 20 years later in Textbooks 2 and Textbooks 3, working women outnumbered working men by over 20%. The female to male ratio was 1:1.26 in Textbooks 2 and 1:1.23 in Textbooks 3.

Table 2: Number of Occupational Roles

	Male	Female	Ratio (F:M)
Textbooks 1	26 (43.33%))	34 (56.67%)	1: 0.76
Textbooks 2	24 (55.81%)	19 (44.19%)	1:1.26
Textbooks 3	64 (55.17%)	52 (44.83%)	1:1.23

Table 3 displayed the number of occupations served by women and men. Over the past 30 years in these textbooks, both genders witnessed increases in their occupation types. Men's occupation type grew from 7 in Textbooks 1, to 9 in Textbooks 2, then to 20 in Textbooks 3, and women's went up from 5 in Textbooks 1, to 7 in Textbooks 2, then to 15 in Textbooks 3. The greatest rise was noticed between Textbooks 2 and Textbooks 3. However, the number of men's occupations was far more than that of women's. The female to male ratio is 1:1:40 in Textbooks 1, 1:1.26 in Textbooks 2, and 1:1:43 in Textbooks 3, with latest textbooks having the largest gap.

Table 3: Number of Occupations

	Male	Female	Ratio (F:M)
Textbook 1	7 (58.33%)	5 (41.67%)	1:1.40
Textbook 2	9 (56.25%)	7 (43.15%)	1:1.29
Textbook 3	20 (58.82%)	14 (41.18%)	1:1.43

Comparing the specific occupations of women and men, we can see from Table 4 that the social status of women's occupations has increased to a certain degree. Compared with Textbooks 1, women in Textbooks 2 began to serve as doctors. Women in Textbooks 3 could hold the posts of engineer, principal, police, and post person etc., which were not seen in Textbooks 2. But generally, the social status of women's occupations was lower than that of men's. Those traditionally male-dominated occupations were still taken only by men, like driver, chef, soldier, etc., and the traditionally female-dominated occupations were also only hold by women, like nurse, waitress, cleaner, etc.

With the social and economic development of Mainland China, more and more women are going out of family and participating in labor force, with increasing occupations diversity and social status. What presented in these textbooks did not accord with the actual changes of the society.

Table 4: Specific Occupations

	Male-only	Female-only	Female and male
Textbook 1	doctor, driver, soldier, scientist	nurse, farmer	teacher, seller, worker
Textbook 2	driver, principal, chef, police, farmer	nurse, singer	teacher, seller, worker, doctor
Textbook 3	doctor, driver, baseball player, journalist, chef, soldier, securityguard	waitress, cleaner	teacher, seller, nurse, airport staff, singer, farmer, post person, engineer, accountant principal, police, artist

Domestic Roles

As Table 5 showed, the unbalanced portrayal of females and males in these textbooks extended to their domestic roles representation. The frequency of men appearing as family members in textbooks was rising. Thirty years ago in the Textbooks 1, the domestic role ratio of females to males was 1:0.67. Then gap narrowed to 1:0.76 in Textbooks 2, and further to 1:0.79 in Textbooks 3.

This might indicate that textbooks writers were paying more attention to the connection between men and family. Nonetheless, much more women appeared as family members in these textbooks as men did, which reflects a Chinese traditional view in all ages that women should focus on family.

Table 5: Domestic Roles

	Textbooks 1		Textbooks 2		Textbooks 3	
Domestic roles	Men	Women	Men	Women	Men	Women
Dad	9		3		18	
Mon		16		13		29
Son	8		10		15	
Daughter		10		4		16
Grandpa	1				5	
Grandma		1				8
Brother					6	
Sister						6
Uncle					3	
Ant						3
Grandson					2	
Total number	18 (40.00%)	27 (60.00%)	13 (43.33%)	17 (56.67%)	50 (44.25%)	63 (55.75%)
Ratio (F:M)	1:0.67		1:0.76		1:0.79	

Domestic Activities of Adults

Table 6 demonstrated the number of domestic activities performed by adult women and men when they appeared as family members in these textbooks. Women were revealed with much higher proportions in the category of domestic activities than men in all these textbooks, and the gap was keeping enlarging during the past thirty years. The female to male ratio was respectively 1:0.60, 1:0.20, and 1:0.41 in Textbooks 1, 2 and 3.

When we look further at the specific domestic activities in Table 7, the gender stereotype was even clearer. Except that there was man cooking in Textbooks 3, all the other housework was undertaken by women, e.g., serving food, cleaning. Women were performing all the "nursing and caring" parts like waking up the son, asking the daughter to go to school, etc. In addition, women were presented as passive mothers, who were introduced by the son to his friends or listening to the son's introducing his friends. On the other hand, there were more men than women performing non-household activities, such as watching TV and reading, with the men being portrayed as more active than the women.

These textbooks presented women as traditional good mothers and wives, serving their family and children. This obviously met the expectation of oriental society in stereotypical female roles (Jou 2010). On the other hand, men were always showing their advantages in knowledge, capability and intelligence. Therefore, over the past thirty years, these textbooks have made little progress in gender representation in domestic activities.

Table 6: Number of Domestic Activities of Adults

	Male-only	Female-only	Female and male	Ratio (F:M)
Textbooks 1	3	7	3	1: 0.60
Textbooks 2	2	10	2	1: 0.20
Textbooks 3	4	21	8	1: 0.41

Table 7: Domestic Activities of Adults

	Male-only	Female-only	Female and male
Textbooks 1	watching TV, reading, checking daughter's homework	receiving guests, serving food and water, knitting, asking the son to go to bed, waking up the son, asking the daughter to go to school, writing a letter	drinking water, having meals, celebrating birthday
Textbooks 2	coming home after work, reading	serving water, knitting, trying to get a suitcase, finding the watch for the son, finding shoes for the son, answering the son's question, asking the son not to reading in bed, cleaning, carrying a basin, asking the son not to run to fast	celebrating birthday, phoning
Textbooks 3	taking daughter to the zoo, playing Santa Claus, holding a camera, reading	being introduced by the son to his friends, saying goodbye to the going-out son, carrying a basin of clothes, finding the toy for the son, listening to the son's introducing his friend, going home with son after shopping, hanging clothes, asking son's friends to have meals, serving water/food, asking the son to go to bed, waking up the daughter, ironing, finding socks for the son, showing the son clothes, telling the son what to wear, buying clothes for the daughter, asking the son about his class, asking the daughter what to eat, washing dishes, phoning, listening to the daughter's introducing herpen pal	visiting teacher, strolling in park with daughter, giving gift to daughter, cooking, having meals, attending family show, writing emails, picnicking with son

School Activities of Children

Table 8displayed that the number of school activities of boys was increasingly higher than girls' in these textbooks over the past thirty years. Thirty years ago in the Textbooks 1, girls and boys were enjoying equal numbers of activities at school (F:M=1:1). Ten years later in Textbooks 2, the number of boys' school activities was 33% higher than girls' (F:M=1:1.33) and even nearly 70% higher than girls' in Textbooks 3 (F:M=1:1.69).

When comparing the specific activities engaged by girls and boys, we can find, as Table 9 shows, boys were engaging more and more sports while girls were engaging less and less. The types of girls' sports decrease from three to two (Textbooks 1: playing ping pong, playing basketball, rope skipping; Textbooks 2: playing badminton, playing basketball; Textbooks 3: rope skipping, running), while the types of boys' sports increased from three to six (Textbooks 1: playing football, high jumping, play basketball; Textbooks 2: playing football, running, playing basketball; Textbooks 3: playing football, playing skateboard, playing basketball, playing ping pong, weight lifting, running). Moreover, nearly all the bad behavioral models were presented by boys, e.g., fighting in the library, wasting food in canteen, huddling each other in corridor.

Textbooks can influence students' values and aspirations by presenting characters with similar age and status as students (Zhao 2004). The representation of students' school activities did not correspond to the reality. As we can see from the Olympic Games and other international games, women and men can participate in almost the same types of sports, so does it in schools, where students, both girls and boy, are enjoying in richer and richer activities at school, girls can participate in almost the same sports boys do. One thing should be noticed that it's unfair to always use boys to present bad behaviors.

Table 8: Number of School Activities of Children

	Male-only	Female-only	Female and male	Ratio (F:M)
Textbooks 1	4	4	6	1:1
Textbooks 2	6	3	6	1:1.33
Textbooks 3	12	3	10	1:1.69

Table 9: School Activities of Children

	Male-only	Female-only	Female and male
Textbooks 1	playing football, rolling iron hoop, high jumping, borrowing books in the library	playing ping pong, playing ship model, rope skipping, making blackboard newspaper	studying, cleaning, doing eye exercise, doing morning exercise, playing basketball, playingplane model
Textbooks 2	playing football, playing ping pong, running, playing slide, stepping on students foot by accident, be late	playing badminton, playing on a swing, secretly eating snack in class	studying, cleaning, making blackboard newspaper, playing basketball, making windmill, playing hide and seek
Textbooks 3	Playing football, playing skateboard, playing basketball, playing ping pong, weight lifting, opening the door, turning on the light, using computer, fighting in the library, wasting food in canteen, huddling each other in corridor	rope skipping, hanging the picture, playing urheen	studying, cleaning, drawing, running, singing, watching TV, borrowing/returning books in the library, eating in the computer room, doing handwork, eating in the canteen

Utterance

Great progress was demonstrated in Table 10 and Table 11 in the utterances initiated by women and men in textbooks over the past thirty years. In Textbooks 1, men's utterances was 1.5 times of that of women (F:M=1:1.52), and the total words in utterances of men was 2 times of that of women (F:M=1:1.82). Ten years later in Textbooks 2, gap was narrowed, with men initiating more utterances (F:M=1:1.12) and speaking more words (F:M=1:1.32). In the present Textbooks 3, women were even enjoying slightly more speaking opportunities (F:M=1:0.97) and words than men (F:M=1:0.99).

This indicated that textbooks writers were attaching more importance to social status and rights of women's voice.

Table 10: Number of Utterances

	Male	Female	Ratio (F:M)
Textbooks 1	311 (61.90%)	205 (38.10%)	1:1.52
Textbooks 2	520 (52.79%)	465 (47.21%)	1:1.12
Textbooks 3	1046 (49.18%)	1081 (50.92%)	1:0.97

Table 11: Numbers of Words in Utterances

	Male	Female	Ratio (F:M)
Textbooks 1	2373 (64.55%)	1303 (35.45%)	1:1.82
Textbooks 2	2702 (56.82%)	2053 (43.18%)	1:1.32
Textbooks 3	5591 (49.71%)	5657 (50.29%)	1:0.99

Firstness

In the present study, given two nouns paired for sex, women were rarely mentioned first. As we can see in Table 12, instances of male firstness were much more than female firstness in all textbooks, with Textbooks 2 being the worst imbalance (F:M=1:26.00). Male firstness was presented in all respects, including nouns (e.g., Peter/Betty), possessive cases (e.g., his/her name), subject and object (e.g., he's/she's, him/her), and phrases and sentences (e.g., boys and girls, he's/she's at home)

Over the past thirty years, little progress has been made in the firstness, showing apparent gender bias toward women.

Table 12: Firstness

	Male N (%)	Female N (%)	Ratio (F:M)
Textbook 1	30 (83.33)	6 (16.67)	1:5.00
Textbook 2	26 (96.30)	1 (3.70)	1:26.00
Textbook 3	23 (74.20)	8 (25.80)	1:2.89

Conclusion

This diachronic study indicated that in the past 30 years, some efforts of reducing gender bias in textbooks have been noticed. Firstly, women were participating in more occupations, with higher social status. Secondly, the number of women's utterances and the total words in utterances were both increasing and slightly outnumbered men's in Textbooks 3.

In spite of the progress that textbook writers have made, much room is still there for improvement. Men greatly outnumbered women in all textbooks. Men were enjoying much more diverse jobs than women, with generally higher social status. Women continued to be connected with family, with women being much more than men in domestic roles, and taking almost all the housework in all the textbooks during the past 30 years. In addition, boys enjoyed much more school activities than girls, and the gap of school activities types kept enlarging during the past 30 years. Furthermore, gender stereotype was very serious with the instances of male firstness being much more than female firstness.

In general, the preset study corresponded to the fact that gender bias in textbooks is persistent with little or very slow progress (Blumberg 2008).

Although it will not be a short road for China to eliminate gender bias in textbooks and curricula (Blumberg 2008), but in our view, it would be helpful if a formal guideline for editors could be developed to appropriately presented females and males in textbooks in China. The guideline could include recommendations for accurate and equal descriptions of females of males in visibility, occupational roles and domestic roles, and utterances, etc. In addition, we suggest adding gender experts in the national teaching course councilso as to evaluate the gender representation in textbooks. According to the Ministry of Education in China (MOE2011), only subject experts are required in the council, not gender experts. Furthermore, we believe, gender equality training programs should be developed for teachers as suggested by the State Council (2011). These programs would improve teachers' sensitivity to gender issue in textbooks, help them to teach students from gender equality perspective, and tell them how to appropriately handle gender bias contents in textbooks so as to avoid from spreading this concept to students.

Teachers 'views on gender roles strongly affect their attitude towards teaching design (Abraham 1989). Teachers can either reinforce gender stereotypes among students, causing their poor academic performance, or help to eliminate gender bias and expand students' aspirations (USAID 2008). Thus, one topic that we did not touch in this study but consider it well worth investigating is the teachers' teaching in actual classrooms. We think it would be interesting to observe how teachers handle the gender biased contents in textbooks.

Appendix

Textbooks 1 (6 volumes)

- 中小学通用教材英语编写组Primary and middle teaching material writing group. (1978).英语第一册 (English Volume 1). 北京: 人民教育出版社(Beijing: People's Education Press).
- 中小学通用教材英语编写组Primary and middle teaching material writing group. (1978).英语第二册 (English Volume 2). 北京: 人民教育出版社(Beijing: People's Education Press).
- 中小学通用教材英语编写组Primary and middle teaching material writing group. (1979).英语第三册 (English Volume 3). 北京: 人民教育出版社(Beijing: People's Education Press).
- 中小学通用教材英语编写组Primary and middle teaching material writing group. (1979).英语第四册 (English Volume 4). 北京: 人民教育出版社(Beijing: People's Education Press).
- 中小学通用教材英语编写组Primary and middle teaching material writing group. (1979).英语第五册 (English Volume 5). 北京: 人民教育出版社(Beijing: People's Education Press).

中小学通用教材英语编写组Primary and middle teaching material writing group. (1980).英语第六册 (*English* Volume 6). 北京: 人民教育出版社(Beijing: People's Education Press).

Textbooks 2 (4 Volumes)

- 人民教育出版社, 泛太平洋出版有限公司 (People's Education Press & Pan Pacific Publishing Ltd). (1992). 英语第一册 (*Primary English for China*Students' book 1).北京: 人民教育出版社(Beijing: People's Education Press).
- 人民教育出版社, 泛太平洋出版有限公司 (People's Education Press & Pan Pacific Publishing Ltd). (1993). 英语第二册 (*Primary English for China*Students' book 2).北京: 人民教育出版社(Beijing: People's Education Press).
- 人民教育出版社, 泛太平洋出版有限公司 (People's Education Press & Pan Pacific Publishing Ltd). (1993). 英语第三册 (*Primary English for China*Students' book 3).北京: 人民教育出版社(Beijing: People's Education Press).
- 人民教育出版社, 泛太平洋出版有限公司 (People's Education Press & Pan Pacific Publishing Ltd). (1994). 英语第四册 (*Primary English for China*Students' book 4).北京: 人民教育出版社(Beijing: People's Education Press).

Textbooks 3 (8 Volumes)

- 课程教材研究所, 英语课程教材研究开发中心, Lingo Media国际集团 (Institute of Curriculum and Teaching Material, R&D Centre for English Curriculum and Teaching Material, & Lingo Media International Group. (2003). 英语(PEP)三年级上下册(PEP Primary English Students' BookGrade 3 Volume 1& 2). 北京: 人民教育出版社(Beijing: People's Education Press).
- 课程教材研究所, 英语课程教材研究开发中心, Lingo Media国际集团 (Institute of Curriculum and Teaching Material, R&D Centre for English Curriculum and Teaching Material, & Lingo Media International Group. (2003). 英语(PEP) 四年级上下册 (PEP Primary English Students' Book Grade 4 Volume 1& 2). 北京: 人民教育出版社(Beijing: People's Education Press).
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- 课程教材研究所, 英语课程教材研究开发中心, Lingo Media国际集团 (Institute of Curriculum and Teaching Material, R&D Centre for English Curriculum and Teaching Material, & Lingo Media International Group. (2003). 英语(PEP) 五年级上下册 (PEP Primary English Students' Book Grade 5 Volume 1 & 2). 北京: 人民教育出版社(Beijing: People's Education Press).

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