# Gender Representation in Hong Kong Primary English Language Textbooks: A Study of Two Widely-used Textbook Series 

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## Declaration

I declare that this thesis represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

Signed:


#### Abstract

Gender equality has long been an issue for gender and language research from as early as the 1970s to the contemporary era in the 2010s, and gender stereotyping in textbooks is an issue in many different countries (Davis, 1995; see also Blumberg, 2007, 2008). While secondary English Language textbooks published in Hong Kong have already been investigated by Lee and Collins (2008), primary English Language textbooks have rarely been investigated (but see $\mathrm{Au}, 1992$; $\mathrm{Au}, 2004$ ). Therefore, the present study investigates gender representation in two widely-used primary English Language textbook series, Step $U p$ and Primary Longman Express, by examining two subgenres that can be widely found in all language textbooks: reading passages and dialogues, and visuals. In other words, textual (lexis and grammar), discourse and visual representations of gender are analysed. A combination of different methods is used in this study. First, to answer the research question of how gender is represented in the reading passages in the Step $U p$ and Primary Longman Express series in terms of lexis and grammar (Research Question A), content, linguistic and discourse analyses are conducted. Then, pragmatics and conversation analysis are used to analyse how the discourse of male and female speakers is represented in the dialogues in the two textbook series (Research Question B). Finally, to analyse the representation of gender in the visuals in the two textbook series (Research Question C), the method of visual analysis is used. To make sure that the quantitative results obtained are significant, the chi-square test is also used and log-likelihood values are calculated. The results of this study are encouraging in that males and females are represented similarly and fairly, and show an improvement over previous textbook


studies in gender representation. In textual representation of gender, at the lexical level, though males were represented more often than females in terms of having a higher frequency of occurrence of node words, nomination, and pronouns when counted as 'tokens' in the two series, both males and females were portrayed as having jobs outside home and engaging in household chores (even if only playing a supportive role for males). At the formal grammatical level, the 'generic' use of masculine pronouns to refer to human beings in general could not be found in the two textbook series either. As regards gender representation in dialogues, the results vary between the two textbook series and across different dialogue subgenres. Male/female invisibility and domination in dialogues do not exist, and there are no instances of gender stereotyping in the analysed dialogues of the two series. Finally, in visual representation of gender, though males were represented more than females in the illustrations in the two textbook series, the phenomenon of gender stereotyping in terms of occupations and activities engaged in the illustrations in the selected books of either textbook series is not prominent.

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## Chapter 1

## Introduction

### 1.1 Background to the Study

Gender equality is a relatively recent policy concern in Hong Kong. The Equal Opportunities Commission (EOC), a statutory body in Hong Kong, was set up in 1996. One of its responsibilities is to implement the Sex Discrimination Ordinance to promote the attitudes and behaviour of "equality" and "equal opportunities for all" (Equal Opportunities Commission, n.d.). The Sex Discrimination Ordinance was enacted on 14 July 1995. Under this Ordinance, "it would be unlawful to discriminate against a person because of his or her sex" (Constitutional and Mainland Affairs Bureau, 2007). Despite this, people in Hong Kong still have strong perceptions of stereotypical gender differences: according to a 1997 survey conducted by the Equal Opportunities Commission, based on the masculine and feminine traits in the Bem Sex Role Inventory (BSRI) (Bem, 1981), in which a cross-sectional household of 2,020 Hong Kong Chinese were interviewed, people perceived being willing to take risks, having leadership abilities, possessing a strong personality, defending one's own beliefs, independence, being willing to improve, being aggressive and assertive as stereotypical personality traits of males. For females, the respondents considered being "fond of children, shy, sensitive to the needs of others, gentle, compassionate, affectionate, sympathetic, and understanding" as their personality traits (Equal Opportunities Commission, 1997, p. 13). (I discuss the notion of stereotype in Chapter 2.) The BSRI used in this survey may be problematic because it is based on a list of sixty fixed personality traits to determine one's degree of masculinity or
femininity. However, Holt and Ellis (1998), in assessing the validity of the masculine and feminine adjectives in the Inventory, suggest that the BSRI may still be a valid measurement for assessing gender roles, though its validity is decreasing because of the changing roles of males and females in modern society. In another survey conducted more recently by Women's Commission (WoC) (2009), through interviews with 1,530 Hong Kong people ( $53.5 \%$ were female and $46.5 \%$ were male), it could be found that about half of the respondents (50.1\%) strongly agreed and somewhat agreed that women should put more emphasis on family than career. Based on the results of the EOC and WoC surveys, it seems that gender stereotypes still exist in Hong Kong people's minds. Therefore, one of the key focuses of the present study is to investigate if gender stereotyping can still be found in the analysed textbook series.

Law and Chan (2004) argue that people's internalised views of gender stereotypes are formed by different socialisation agents (e.g. schools) and other social processes. Though different contemporary media (e.g. television, films, music, video games, and Internet) may play a role here, in schooling, textbooks "represent the everyday for children" (Kereszty, 2009, p. 3) because textbooks provide content that is delivered to pupils at all but the earliest levels of their learning (Kobia, 2009). They may be one source of influence on people's values and attitudes, and an important socialisation agent that shapes people's view of gender in society (Kereszty, 2009). Scott (1980) claims that books may have a considerable impact on children's attitudes, values, and behaviour as children spend a great deal of time reading them at school. Kızılaslan (2010) claims that sexism and gender stereotypes which exist in textbooks may impact on children's affective and cognitive development. More cautiously, Sunderland (1992, p. 86)
highlighted that representations of gender in textbooks "potentially affect students as language learners and users" in three different ways: 1) as socialization agents which influence the learners unconsciously; 2) students become demotivated and their learning is adversely affected, if, for example, the female students find that only a few characters in their textbooks are female who have only limited roles; and 3) models of language are used as classroom practice. More strongly, Kereszty (2009) suggests that gender-specific expectations, norms and behaviours portrayed in textbooks may contribute to social inequalities in the society. Lastly, children's reading materials are more broadly a widely available resource through which children can learn positively about how a male or a female should be like or behave (Jackson \& Gee, 2005). For example, the Curriculum Development Council (2004) considers that students can develop positive values (e.g. equality) and attitudes (e.g. open-mindedness) with the use of quality textbooks. The attitudes learnt within their own cultures will then be "reinforced and/or transformed with what is conveyed in textbooks" (Luk, 2004, p. 3). (See also Section 2.4.2 for texts, textbooks and their potential influence)

Of course, children do not only read textbooks at schools but also readers/books from reading schemes, as well as (children's) fiction more generally, and there are issues with gender representation here too. First, there was a phenomenon of underrepresentation of females in children's readers. In examining gender representation in a sample of thirty Caldecott Medal and "honours" books for the period 1984-1994, Turner-Bowker (1996) found that male characters were mentioned significantly more often in titles and were seen significantly more often in illustrations than female characters. Also, Hamilton, Anderson, Broaddus, and Young (2006), who analysed gender
representation in 200 top selling children's picture books in 1995-2001 (including 30 Caldecott award-winning books), found that males outnumbered females as title characters or main characters, with a ratio of 1.8:1 in these two measures, and more males were represented than females in pictures, with the mean number of pictures for each book being 42.9 and 28.1 respectively for males and females. Females were thus again underrepresented, and there was not much change in the gender representation in the books published in this 7 -year period compared with those published in the 1980s and 1990s

Apart from the underrepresentation of women/girls, gender stereotypes are also present in children's readers. Turner-Bowker (1996) found that the adjectives used for describing female and male characters in the analysed children's picture books were different, with female characters being most commonly described as beautiful, frightened, sweet, weak, and kind, and fat, big, fierce, brave, and proud more commonly used to describe male characters. Evans and Davies (2000), in investigating the portrayal of masculinity and femininity in first, third and fifth grade reading textbooks in the United States, in particular the personality traits of the main characters in the stories, found that males were portrayed as significantly more aggressive, argumentative and competitive than females, and significantly less likely to be described as affectionate, emotionally expressive, passive or tender. In a study of illustrations specifically, Jackson and Gee (2005), in analysing children's early readers used in New Zealand, found that there was not much change across 50 years (from 1950 to 2000) in the way males and females were represented, with boys being visually positioned mainly "within a discourse of traditional masculinity" (p. 126) as adventurers or sportsmen, despite the significant social changes
of the past 50 years. Crabb and Bielawski (1994), in examining how gender is represented in the illustrations in Caldecott Medal and 'honors' picture books published from 1937 to 1989 for preschoolers, found that a larger proportion of female characters was shown using household objects (e.g. cooking utensils), but a larger proportion of male characters was shown using production artifacts (e.g. plow), suggesting that females are more often illustrated engaging in household chores. Hamilton et al. (2006), apart from discovering underrepresentation of females in the analysed Caldecott awardwinning books, found that female main characters were more than three times more likely than males to be pictured performing nurturing and caring behaviours, and more female than male characters ( $59 \%$ and $41 \%$ respectively) were found in indoor scenes. Regarding occupations, both female and male characters were usually portrayed in stereotypically feminine and masculine occupations, but it was the female characters who were significantly more likely than the male characters to be shown with no occupation outside the home.

However, in another study in which the content of a set of picture books listed in The Horn Book ${ }^{1}$ for the years 1967, 1977 and 1987 was analysed, Peterson and Lach (1990) found the prevalence of gender stereotypes decreased somewhat. Girls were as likely to have adventures as to be shown in a domestic setting, and boys and girls were equally likely to be the main characters in both socially-oriented and family stories. Peterson and Lach (1990), however, point out that this apparent shift in trends was not statistically significant. Gooden and Gooden (2001), in their examination of eighty-three Notable Children's picture books from the period 1995-1999, in which they looked at the

[^0]gender of the main character, illustrations and titles, however, suggest that while gender equity has greatly improved, with an increase in females represented as the main character, gender stereotypes are still prevalent.

As shown above, underrepresentation of females, gender stereotypes, and differential gender representations exist in readers and children's literature (including picture books). While some primary schools in Hong Kong do use storybooks as English Language teaching materials and students are also exposed to stories in different reading schemes, e.g. Primary Literacy Programme - Reading (Key Stage 1) (Education Bureau, 2007a), textbooks are still the most commonly used teaching materials and hence are the focus of this study.

### 1.2 Purpose of the Study

The purpose of this study is to examine two recently published textbook series which are used in most primary schools in Hong Kong in English Language teaching, specifically to examine the extent to which gender representations in the textbooks are consistent with social ideals of equality and equal opportunities, and whether the textbook writers and illustrators differentiate between male and female characters more or less. The analysis of gender representation includes content analysis, linguistic analysis (including nouns, adjectives and verbs), and visual analysis, as well as an investigation of the use of genderbiased language (i.e. sexist language) in the textbooks. This is because it has been found that the key vocabulary presented in textbooks plays an important role in influencing ESL/EFL learners' language usage and may make a strong impression even in their first encounter (Maehara, 2010).

Over the past decades, there have been increasing educational and job opportunities for females in Hong Kong, along with greater awareness of gender equality. According to the figures of Census and Statistics Department (2013a), the labour force participation rate for females in Hong Kong continued to increase from 2010 to 2012 ( $51.9 \%, 53.0 \%$ and $53.6 \%$ for females in 2010, 2011 and 2012 respectively, compared with $68.5 \%, 68.4 \%$ and $68.7 \%$ respectively for males). Also, among all the people engaging in different industry sectors, the number of females and males engaging in professional and business services in 2011 was similar, 165,338 females and 163,455 males (Census and Statistics Department, 2012a). Nevertheless, the Hong Kong Federation of Women (2006) claims that "gender stereotyping and gender-based biases are still in existence, and ... gender stereotyping is commonly found in teaching materials and textbooks". Most teaching aids used from kindergarten to tertiary education, including textbooks, have been found to show gender bias, with the representation of females not being an accurate reflection of their many social and economic activities in Hong Kong society (Community Development Division, 1997).

Though teachers are advised to use a wide range of teaching resources to broaden students' learning experiences (Curriculum Development Council, 2004), textbooks, including "commercially produced course books" (Chien \& Young, 2007, p. 155), are the major source of teaching materials used in most primary and secondary English classrooms. Textbooks are still used in a majority of English classrooms nowadays, despite digital materials (e.g. e-books) being more commonly used than previously. And, of course, language textbooks are important for their provision of language models for ESL/EFL learners (Sakita, 1995), and the models of discourse may be gendered. Given
the centrality of textbooks in teaching and learning, in the present study, I analyse gender representation and gendered discourse (Sunderland, 2004) in the two chosen Hong Kong primary English Language textbook series, Step Up and Primary Longman Express.

### 1.3 The Importance of English in Hong Kong

English Language textbook series were chosen in this study because of the important role and high status of English in Hong Kong and because it is one of the core and major subjects in Hong Kong schools, with pupils having at least one English lesson (of about 35 minutes) every day. The importance of English in Hong Kong can be traced back to 1841 when Hong Kong became a British colony. Because of colonialism, English came to be considered as a key to economic prosperity and therefore, a language for international business communication and academic study (Kan \& Adamson, 2010). In Hong Kong, the majority of the population are ethnic Chinese who speak Cantonese (a Chinese dialect) and Chinese is used in a range of domains in Hong Kong such as family and social activities (Bolton, 2000). However, it does not have an equal status to English. English (British English) was the sole official language of the government and law until 1974 (Education Commission, 1995), with Chinese only functioning as a co-official language (Bolton, 2000). English is seen as an essential tool for study, career and economic success (Education Commission, 1995), and a 'lingua franca' for cross-cultural communication. Chinese, as an official language, in contrast, is reportedly under-valued by many Hong Kong people and lags behind English, especially in education and business correspondence (Pierson, 1998). From the mid-1970s to late-1990s, English was the language of textbooks and the medium of instruction in the majority of secondary
schools in Hong Kong. Many schools were only in fact so-called English-medium schools, although 'code-switching' and 'code-mixing' (Bolton, 2000) were common phenomena in those classrooms. In most primary schools, however, Chinese has long been used as the medium of instruction, except for the subject of English Language, which is taught as a second language.

With the provision of the nine-year free, compulsory 'mass education' from the 1970s, there were a large number of students whose English standard was inadequate to cope with English-medium secondary education. Therefore, in 1997, the government announced firm medium of instruction guidance and published the document Medium of Instruction Guidance for Secondary Schools. Secondary schools then had to teach in the mother tongue of most Hong Kong students, which for most schools was Cantonese. Only 114 chosen schools could continue to use English as the medium of instruction (MoI) because they could satisfy the following requirements set by the Education Department (1997, p. 5) for the effective use of English as MoI:
(i) student ability to be an average percentage of not less than $85 \%$ of Medium of Instruction Grouping Assessment (MIGA) of Groups I and III students in Secondary $1^{2}$ intake for the past three years;
(ii) teacher capability to be based on the principal's assessment and certification; and
(iii) support strategies and programmes (such as bridging courses) to give sound schoolbased assistance to students.

[^1]However, many schools used English as the MoI only in the upper forms. English is the main medium of instruction in most tertiary institutions (So, 1989).

From mid-2008 onwards, the Government conducted an extensive public consultation about the MoI policy to solicit views from stakeholders, that is, teachers, students and their parents. Consensus on formulating an effective framework for finetuning the MoI was reached and arrangements for fine-tuning the medium of instruction for secondary schools were then announced in May 2008 (Education Bureau, 2010). Under the fine-tuning arrangements, starting with Secondary One from 2010/2011 academic year onwards, secondary schools may choose to supplement mother-tongue teaching with English as the MoI in up to $25 \%$ of total lesson time (excluding the subject of English Language) across different subjects, in consideration of teachers' readiness to teach in English. Again, the ultimate goal is to enhance students' English proficiency and to prepare them to meet the new challenges for Hong Kong as an international city (Education Bureau, 2010).

The Education Commission (1984, p. 35), in its Report No 1, suggests that "(f)or Hong Kong to retain its position as a leading international centre of finance, trade and industry", students must be educated to be competent not only in Chinese but also in English. It is believed that the mastery of English can provide students with opportunities for career and educational advancement in the future. Thus, in addition to education in the mother tongue, students in Hong Kong are offered the right to study a second language, English, to enable them to meet the changing socio-economic demands in the twenty-first century (Curriculum Development Council, 1999).

### 1.4 Significance of the Study

The present study is significant as a contribution to the study of gender representation in textbooks specifically, and hence the field of gender and language more broadly.

First, gender stereotyping in textbooks is an issue in many different countries (Davis, 1995; see also Blumberg, 2007, 2008) but primary English Language textbooks published in Hong Kong have rarely been investigated (see Au, 2004). Au (2004) analysed three primary English Language textbook series used in Hong Kong. The main focus of her study was student and teacher responses to the dialogues of the textbooks which she found to be sexist. This study, however, investigates gender representation in the selected monolingual primary English textbook series by examining two textbook subgenres, reading passages and dialogues, and the visuals in selected units.

Being comprehensive in scope in analysing the reading passages, dialogues, and visuals in the present study, corpus analysis (Meyer, 2002; Stubbs, 1996) was used to analyse the written texts. Besides conducting frequency counts of male and female terms, the collocates used for males and females, which tell us how gender is represented, were also examined by the use of a corpus method. Aspects of van Leeuwen's (2008) Social Actor Network, Social Action Network, and Visual Social Actor Network were used for analysing textual and visual representation of gender in a selection of textbooks from the two textbook series. To the best of my knowledge, van Leeuwen's networks have never been used to analyse textbooks.

### 1.5 Research Questions

As indicated above, in this study I investigate gender representation in the two English

Language textbook series used in most primary schools in Hong Kong, Step Up and Primary Longman Express, with content, linguistic, and visual analyses. To achieve the research purpose, i.e. to investigate if the phenomena of gender representation and of gender stereotyping found in earlier textbooks and textbook studies (e.g. Cincotta, 1978; Stern, 1976), still exist in the two analysed recently published Hong Kong primary English Language textbook series, the following research questions, which are divided into three groups, with each group of research questions focusing on the analysis of one subgenre, were addressed:

## A. Textual representation of gender

How is gender represented in the reading passages in the Step Up and Primary Longman Express series in terms of lexis and grammar ${ }^{3}$ ?

1. Are males and females comparably represented in terms of:
a) frequency of occurrence (both 'types' and 'tokens');
b) names and titles, or 'nomination ${ }^{4}$;
c) pronouns;
d) 'categorization' (family relationship and occupational roles);
e) associated adjectives; and
f) associated verbs, or 'social action'?
2. What is the frequency of (a) the 'generic' use of he, man and man-compounds and
(b) the 'generic' use of she, woman and woman-compounds when the sex of the

[^2]referent is not specified, and are there any patterns here?
3. What is the frequency of 'male/female firstness', and are there any patterns here?

All the reading passages of the two selected textbook series were analysed, with a corpus method together with content analysis, to investigate textual representation of gender (in terms of lexis and grammar).

## B. Discourse representation and gender

How is the discourse of male and female characters represented in the dialogues in the Step Up and Primary Longman Express series?

1. How many dialogues are (a) between males, (b) between females, and (c) mixedsex?
2. How many male and female speakers are there in the single-sex and mixed-sex dialogues?
3. How many utterances are there in the single-sex and mixed-sex dialogues?
4. How many words are uttered by male and female speakers in the single-sex and mixed-sex dialogues?
5. Who initiates and who concludes the mixed-sex dialogues?

In a sample of mixed-sex dialogues in the Step Up and Primary Longman Express series:
6. Are the speech acts of the dialogues related to speaker gender?
7. Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) overlapping speech, and (c) hesitations and other non-fluency features, related to speaker gender?

The dialogues, as a major 'subgenre' in English Language textbooks, from the two textbook series, were analysed by using content analysis, linguistic analysis (pragmatics)
and notions borrowed from Conversation Analysis.

## C. Visual representation of gender

How is gender represented in the visuals in the Step Up and Primary Longman Express series?

1. Are male and female characters comparably represented in the illustrations in terms of frequency?
2. What are the different visualised occupations of the adult male and female characters?
3. How are male and female characters represented in selected illustrations in terms of involvement in activities?
4. How are male and female characters represented in selected illustrations in terms of:
a) size/height;
b) hair length; and
c) clothing?

As well as conducting content analysis of the visuals, aspects of van Leeuwen's (2008) Visual Social Actor framework were used to analyse the visual representation of gender in the selected textbooks.

### 1.6 Structure of the Thesis

With an understanding that the English Language textbooks used in Hong Kong primary schools have rarely been investigated, the purpose of this study is to examine two widelyused and currently published English Language textbook series, Step Up and Primary Longman Express, to find out how gender is represented in these two textbook series to
see if it mirrors the social reality of Hong Kong as far as possible. Gender representation in this study is analysed from different perspectives: textual, discourse, and visual representations. The remaining chapters of this thesis cover the following:

## Chapter 2 - Literature Review

In this chapter, I first distinguish between 'sex' and 'gender'. I then review two concepts relevant to the study of gender and textbooks: gender representation and gender stereotyping. The next part of this chapter is about sexist language, and different forms and levels of linguistic sexism. The third part of the chapter is about textbooks and their influence, and EFL/ESL textbooks. Then, I review frameworks used for evaluating gender representation in the past. The last two sections of this chapter are reviews of previous EFL/ESL textbook studies on gender representation and gender stereotyping, and gender and language studies in Hong Kong.

## Chapter 3 - The Present Study: Research Design and Methods

This chapter starts by reviewing the main focus and the research questions of the study. Then, I explain how and why the data of the study were selected, the preparation of data for subsequent analysis, and the ethical issues involved in the study. The major part of this chapter is devoted to explaining the methods of data analysis used in the study. The last two parts of the chapter concern the reliability and validity of this study, and the insights of the pilot study for the main study.

Chapter 4 - The Main Study: Textual Representation of Gender - Lexis and

## Grammar in Reading Passages

This chapter presents the findings of the analysis of textual representation of gender in the reading passages of the two selected textbook series. I present the results in two
aspects: (1) lexis: the frequency of occurrence of males and females, names and titles (or 'nomination'), pronouns, 'categorization', adjectives, and verbs (or 'social action') associated with males and females; and (2) formal grammar: the 'generic' use of he, man and man-compounds and the 'generic' use of she, woman and woman-compounds, and frequency of 'male/female firstness'.

## Chapter 5-The Main Study: Discourse Representation - Gender in Textbook Dialogues

First, the results of the pilot study regarding gender representation in the dialogues are reviewed. Then, the number of between-male and between-female (i.e. single-sex) and mixed-sex dialogues, and the number of speakers in these dialogues are reported. After that, I count the number of utterances and words produced by male and female speakers, and male or female 'firstness' in dialogues is determined by who initiates and concludes the mixed-sex dialogues. In the last two parts of the chapter, a selection of mixed-sex dialogues are analysed to examine the functions of the utterances, and features of conversation between male and female speakers (adjacency pairs, overlapping speech, and hesitations and other non-fluency features).

## Chapter 6 - The Main Study: Visual Representation of Gender

As in Chapter 5, the relevant results of the pilot study are reviewed first. Then, I present the numbers of human and non-human males and females illustrated in the visuals in each book of the two textbook series, followed by frequency counts of the number of different occupations and activities engaged in by the males and females in the illustrations. I also analyse how males and females are represented in selected textbooks in terms of size/height, hair length, and clothing.

## Chapter 7 - Discussion

After presenting the results of the main study in Chapters 4-6, I discuss this study by comparing the results of this study with previous studies on gender representation in EFL/ESL textbooks. After that, some possible explanations for the findings are suggested, and the significance and contributions of this study to the field of gender and language are suggested.

## Chapter 8 - Conclusion

In the last chapter of the thesis, I start by summarising the major findings of the study, according to the research questions. Then, implications for teachers, teacher educators and textbook writers are drawn. There are limitations in all research studies and this study is no exception. Therefore, the limitations of this study are identified and implications for further study are suggested.

## Chapter 2

## Literature Review

### 2.1 Introduction

Gender and language is an interdisciplinary field of study originating from a wide range of academic disciplines, including sociology, education, anthropology, psychology, women's studies, and linguistics (see Tannen, 1994). There are three important past approaches of gender and language, which focused on language use: deficit, dominance, and difference approaches. The 'deficit' approach considers that women's language is deficient when compared with that of men's (Jespersen, 1922). The second approach, the 'dominance' approach, is based on the belief that "the male is the superior sex" (Spender, 1985, p. 1), which leads to "women's powerlessness and subordinate status" (Speer, 2005, p. 32). For the 'difference' approach, Tannen (1991, p. 18) found that there are differences in the styles of language use in conversations for males and females, because males and females "grow up in what are essentially different cultures". As the field of gender and language developed, more consideration was given to written texts (e.g. textbooks and children's books), and gender representation in those texts. Before accounting for the focus and design of this study in detail, some key concepts involved in the study, and relevant literature on representation and textbook studies are reviewed.

### 2.2 Gender

### 2.2.1 Sex and gender

The term 'gender' needs to be defined first, before I define gender representation (see

Section 2.2.3). 'Sex' and 'gender' are frequently considered as synonyms and used interchangeably by the general public. However, conceptually, these two terms are different, with the former concerning the biological differences that distinguish men and women (Butler, 1990; Eckert \& McConnell-Ginet, 2003; Holmes, 2001; Litosseliti, 2006; Talbot, 1998), whereas the latter is "a cultural or social construct" or "the traits assigned to a sex" (Litosseliti, 2006, p. 10-11). To put it another way, people are considered as either male or female (i.e. sex) based on their sex organs and genes (Basow, 1992; Talbot, 1998), while gender is "culturally constructed" and is the means by which a 'natural sex' is produced (Butler, 1990, p. 6). This view of gender reflects the notion of sex roles being "learned" (Sunderland, 2006, p. 29; Talbot, 1998, p. 7), through a process in which an individual learns how to become a 'boy' or a 'girl' (Yule, 2006) and acquires characteristics which are considered as masculine or feminine. Therefore, in contrast with 'sex', 'gender' is "not binary" (Talbot, 1998. p. 7). Besides being socially constructed, Eckert and McConnell-Ginet (2003, p. 10) claim that 'gender' "exaggerates biological difference".

The term gender is also used when someone makes judgment about 'masculinity' and 'femininity' (Manstead \& Hewstone, 1995) within a particular context. Mills and Mullany (2011) emphasise the expectations in certain contexts about what a boy or girl or man or woman should be like. Gender was previously seen as something acquired by an individual through the socialization process (e.g. Tannen, 1994). However, the contemporary perspective has changed to consider gender as something which is 'performed’ (Mills \& Mullany, 2011). Mills and Mullany (2011) add that this kind of 'performed' act is not fixed but varies according to different contexts.

In linguistics and social sciences，there are different uses of the word＇gender＇ （Hellinger \＆Bußmann，2001；Yule，2006）：lexical gender，grammatical gender，and social gender．For lexical gender，Hellinger and Bußmann（2001）suggest that it can be reflected in the different human nouns for males and females，for example，boy and girl， father and mother，son and daughter in English，or 男 and 女，他 and 她 in Chinese． Swann（1992，p．35）believes that such kind of linguistic distinction may＂highlight the importance of gender as a social category＂．Grammatical gender，which exists in languages such as Spanish and German but not in English，is a fixed property of nouns which determines the articles and adjectives that can agree with the gender of the nouns （Hellinger \＆Bußmann，2001；Yule，2006）．Lastly，social gender is the classification of individuals based on their social roles（Yule，2006）．Hellinger and Bußmann（2001） suggest two situations to illustrate this in language．One of these is the use of the masculine pronoun he to refer to the＇high－status＇occupational terms such as lawyer or doctor when the sex of the referent is unknown．Another situation is related to the ＂stereotypical assumptions about what are appropriate social roles for women and men＂ （p．11），and any deviation from these expectations will be＇marked＇．Examples of this are male nurse，female doctor（see more about sexist language in Section 2．2）．

Regarding social gender，Sunderland（2011，p．22）writes that it can be understood in different ways and proposes two models：one is＇people－based＇and the other is＇ideas－ based＇．＇People－based＇refers to the differences between men and women or boys and girls（i．e．the＇who＇of gender）．She proposes that gender is considered as＇social＇．That is to say，any biological differences of men／boys and women／girls are＂mediated by social considerations＂．For example，literacy practices（such as the books boys and girls read）
may reflect and shape one's gender socially (i.e. social construction). Gender is however always a matter of tendencies instead of absolute differences between men and women or boys and girls. Such gender-differential tendencies also vary with different cultures, contexts, or communities of practice. 'Ideas-based' gender refers to ideas about men/women or boys/girls. These can be expressed in spoken language about gender, or an individual may be linguistically constructed (i.e. represented) in a certain way in written texts, for example, Peter's behaviour is unlike a man. Related closely to 'ideasbased' gender are the concepts of 'agency' and 'constructing gender' (Sunderland, 2004). The sense of 'agency' implies an active role to 'perform' being masculine or feminine which varies in different contexts and such kind of 'performances' may be intentional/unintentional or conscious/unconscious. For example, a man might 'perform' being a gentle father of his young children at home but being an aggressive manager in his workplace. Constructing gender, which is related to gender representation, means using language to 'position' oneself to be masculine/feminine (Sunderland, 2011).

### 2.2.2 The origin of gender: Theories

There are two related key theories for understanding the origin of gender: social learning theory and social construction of gender.

Social learning theory is a psychological theory which focuses on observable behaviours (Lindsey, 2011) and considers gender development as a kind of "learned behaviour" (Brannon, 2011, p. 112). It emphasises the influence of social environment (including media) and observation in the development of gender-related behaviours. In this social environment, there are examples of male and female models (e.g. parents and
siblings) who influence a child and let the child know which behaviours are genderappropriate.

The concept of social construction of gender, from a sociological perspective, refers to the idea that gender is "learned" (p.51), and the expectations in a society about how a male or a female should be like are acquired through different sources, for example, parents, media (Andersen \& Hysock, 2009). While some sociologists (e.g. Lindsey, 2011) who hold a more traditional view believe that children develop an awareness of gender stereotypes through a 'socialization process', Sunderland (2004) points to the theoretical shift in the social sciences from 'social learning' to 'social constructionism'. That is, gender (for example, gender identities and gender relations) is shaped to some extent by language and discourse, or by "what people do with language as regards gender" (Sunderland, 2004, p. 17). In other words, discourses we use and hear/read can construct gender in all aspects of our lives. 'Discourses' can be distinguished from 'discourse'. According to Sunderland (2004), 'discourse' is a broad term to refer to an extended piece of written or spoken text, whereas 'discourses' are "ways of seeing the world" (p. 6). Put another way, language users 'draw on' discourses in their talk (Sunderland, 2004). However, particular forms of social construction can be resisted as people can 'resist' becoming a 'stereotypical' man or woman in a given culture, given a measure of "agency", which means people are able to 'perform' (Sunderland, 2004, p. 22; Sunderland, 2011, p. 26) or display gender differently in different social contexts.

Etaugh and Bridges (2010) point out the importance of gender stereotypes (see Section 2.2.4) in the social construction of gender. They mention that widely shared beliefs about what a certain sex should be like and what behaviour a certain sex should
have make us have different expectations about people of different sexes. This in turn affects someone's choice of behaviours which is made according to social expectations. For example, because of social expectations, more females than males might look for babysitting experiences in order to develop more feminine traits such as nurturance. In other words, gender, as Paltridge (2006, p. 31-32) mentions, is a "socially constructed category", which is partly determined by stereotypes.

After defining gender and reviewing two theories for understanding the origin of gender above, I look at two key concepts relevant to the study of gender and textbooks, and to this study, i.e. gender representation and gender stereotyping, which will be presented in Sections 2.2.3 and 2.2.4.

### 2.2.3 Gender representation

As mentioned in Section 1.2, the purpose of the present study is to investigate how gender is represented in the two selected textbook series. Representation, in general, is referred to as talking (or writing) about something (Montgomery, 1995) by using language (Hall, 1997). Sunderland (2004, p. 24) suggests that the term 'representation' is usually used when "the subject is 'other' rather than self" (that is, of someone/something, by someone).

Montgomery (1995) proposes that language is "a capacity for representation" which allows a person to "talk about something" (p. 171). There are three approaches suggested by Hall (1997) that can explain how representation of meaning works through language: reflective approach, intentional approach, and constructionist approach. In the reflective approach, Hall (1997, p. 24) assumes that language is "like a mirror", which
reflects the meanings which have already existed. The second approach, the intentional approach, refers to the fact that a speaker or writer's intention is expressed through language. However, these two approaches are problematic because they assume that the speaker or writer is the only source of meanings in language. Therefore, the third approach, the constructionist approach, emphasises the co-construction of meanings through language.

Representation occurs (and can be seen) in spoken, written and visual texts. In spoken and written texts, gender can be represented by the choice of words, for example, adjectives, nouns/noun phrases, and verbs. Apart from vocabulary, representation in language can be achieved by the different arrangement of linguistic items in a sentence or a clause, as in 'transitivity', which means assigning either an 'agent' or a 'patient' role for an entity in the sentence or clause in an active or a passive construction (Montgomery, 1995; see also van Leeuwen, 2008). For example, in the sentence $A$ woman was saved by a strong man, the strong man is an 'agent' who saved the woman and the woman played a 'patient' role to be saved. For gender, a male or a female may be assigned an agent or a patient role in a sentence. In my study, it means that gender representation can be explored by looking at the words used to refer to and describe males and females, and the assignment of active or passive roles to males and females in the textbooks.

Representations are often based on stereotypes and gender representations, thus often involve stereotyping (Sunderland, 2004, 2006).

### 2.2.4 Gender stereotyping

A stereotype is not simply a label (Kite, Deaux, \& Haines, 2008). It is an idea
underpinned by "a set of beliefs" (Blaine, 2007, p. 27) or an assumption about the traits and behaviours people from a certain group possess (Kite et al., 2008). Turner-Bowker (1996, p. 461) writes that stereotypes are "powerful and enduring". She also claims that stereotypes may either "oversimplify" or "exaggerate" distinctions between social categories, and differential use of descriptors in language for women and men may even serve to maintain social inequalities between them.

Gender stereotypes have been identified as "beliefs about the characteristics and behaviour of each sex" (Manstead \& Hewstone, 1995, p. 256) which are "widely shared" among members of a culture (Etaugh \& Bridges, 2010, p. 28). People from different cultures tend to have different gender stereotypes, that is, in particular, beliefs about how males and females differ in terms of personality traits, interests, and behaviours (Kail, 2007) and an understanding of what 'masculine' and 'feminine' mean (Blaine, 2007). Someone's ideas about gender are thus influenced by his/her culture. The same ideas are not held universally; nevertheless, many gender stereotypes have a familiar quality to people worldwide and can be readily recognised as a list of characteristics used to describe either men or women (Kite et al., 2008). These gender-stereotyped beliefs tell people not only "what men and women are like" but also "how men and women should be" (Kite et al., 2008, p. 208).

Some sociologists (e.g. Lindsey, 2011) believe that children develop an awareness of gender stereotypes as early as the first year of their lives through different 'socialization agents' such as their parents, the clothes they wear, the toys they play with, or the characters of the books they read, and the most important socialization agents for children are their families and schools (Cheung, Lai, Au, \& Ngai, 1997). The sex role
behaviours which are conventionally considered 'appropriate' for one's gender are then often internalized (King, Chipman, \& Cruz-Janzen, 1994).

### 2.2.4.1 Different theories explaining the origin of gender stereotypes

Different (social) psychological theories that explain the source of gender stereotypes are presented in this section:

First, the 'kernel of truth' theory assumes that gender stereotypes just "exaggerate" real differences among males and females in their behaviours (Basow, 1992, p. 9). In other words, gender stereotypes not just simply reflect but also overemphasise the existing differences between males and females.

Another theory is the social-role theory. Eagly and Steffen (1984) hypothesise that women and men are separated into different groups in a society, at different hierarchies and assigned different roles (e.g. it is more likely for women to hold positions of lower status or to be homemakers than men), and gender stereotypes arise from people's general observation of such kind of differences between men and women. The 'social-role theory' assumes that stereotypes arise from the different social roles typically held by males and females, and it is "conformity to gender-role expectations" that leads to different behaviours of males and females (Eagly, 1987, p. 126). Therefore, males and females tend to do different things, for example, woodwork is done by males but changing diapers is usually done by females. This in turn leads to the formation of gender stereotypes.

One other theory is the 'social stratification' theory. In this theory, it is suggested that gender roles are actually status roles, and stereotypical behaviours and traits that appear gender-linked are actually status-linked. Therefore, any person (either male or
female) who is assigned to play a dominant role will become more dominant, while the one who is assigned to a subordinate position will show more passive character traits (Bascow, 1992).

### 2.2.4.2 Gender stereotyping in classroom materials

For all the theories presented above, gender stereotypes arise from perceived differences between men and women. These perceived differences may then manifest themselves as stereotypes in materials used in classrooms, including textbooks in general, and therefore, gender stereotyping is also an aspect to be focused on in the present study. Wolpert (2005) broadly classifies some types of gender stereotypes for evaluating teaching materials as below:

1) Lexical choices related to gender

This type of stereotyping involves males and females usually being described differently, with adjectives used for males being more positive while those for females being more negative, for example, active being used for males and passive for females. Other examples include the case that men are usually described as strong or brave whereas females are described as weak or frightened, men are independent whilst women are dependent. Gender stereotyping can also be found in nouns, with men playing the role of leaders but women only as followers (Wolpert, 2005), and verbs, for example, men are more often associated with verbs referring to physically demanding activities such as dig and race (Pearce, 2008) (see Section 2.3 for more on sexist language).
2) Gender stereotyping related to occupations

This type of stereotyping occurs when females are seen in traditionally 'feminine'
occupations such as nurse, teacher, flight attendant, whereas males are represented as doctors, principals and managers, more traditionally 'masculine' occupations (Wolpert, 2005).
3) Gender stereotyping in illustrations

In textbook illustrations, males may be portrayed as taller than females; males and females may wear clothes of different colours (Wolpert, 2005).

Based on the broad types of gender stereotypes suggested by Wolpert (2005) for evaluating teaching materials presented above, gender representation in terms of nouns, verbs, and adjectives used for males and females, male and female occupations, height, and colours of clothing of males and females in the chosen textbook series were analysed.

For language textbooks, in particular, to explore if gender stereotyping exists in language textbooks, Bisaria (1985) suggests the identification of "specificities" (p. 14), that is, the specific categories or types of stereotypes involved, instead of pinpointing just one or two instances of the use of the generic $h e$, for example. She argues that a language textbook is 'sex stereotyped' if either males or females are given a negative image in terms of their emotions and behaviours.

### 2.2.4.3 The potential influence of gender stereotyping

Gender stereotypes in books and textbooks may influence people as children, as readers, or both. Hamilton et al. (2006) argue that stereotyped portrayals of the sexes contribute negatively to children's development, and influence their career aspiration and personality development. Blaine (2007) also suggests that gender stereotypes influence the way people evaluate the behaviour of males and females. This in turn promotes the
idea that some occupations can only be done by either males or females and may then be valued differently. The portrayal of males and females engaging in stereotypical occupations or activities, especially if, in a given context, this is, in fact, contradictory to reality, may then lead to contradictions in children's gender identity (Kereszty, 2009). It has also been argued that gender stereotypes can have a great impact on one's behavior (Matlin, 2008) through self-fulfilling prophecies: people's gendered expectations about how someone should behave may lead him or her to act in certain ways to confirm these expectations. For example, if females are considered as being more emotional than males, they may view themselves in this way and then develop these characteristics. Similarly, gender stereotypes may shape people's 'impression management' (Bascow, 1992). Given that most people presumably want to be socially accepted, we may engage in impressionmanagement strategies in order to be so. In other words, we present ourselves in the ways that are acceptable to others (Bascow, 1992). These presentations may correspond to social stereotypes of desirable gendered behaviour. The way that gender stereotypes function may then be "to define expected gender behavior and thereby shape people's self-presentations" (Bascow, 1992, p. 12).

However, the influence of gender stereotypes portrayed in books or textbooks is unpredictable. Reader-Response theory, which focuses on "the role of the reader in the creation of meaning", emphasises "the reader's consciousness in relation to a text" (Castle, 2007, p. 174). In other words, rather than suggesting the passive role played by a reader during the reading process, for the same piece of text, there can be a variety of interpretations made by different readers (see also Section 2.3.2 on texts, textbooks and their potential influence).

### 2.3 Sexist Language: Invisibility, Asymmetry, Male Firstness, and Derogatory Language

Representation of males and females in texts can sometimes be seen in the use of sexist language. Before discussing sexist language, the term 'sexism' should be defined. Sexism has been defined as "stereotyped attitudes" or judgement towards people that are formed merely based on their sex (Cincotta, 1978; Holmes, 2001, p. 305), and characterised as "an unconscious cultural bias" people learn from their childhood (Florent \& Walter, 1989, p. 180). Etaugh and Bridges (2010, p. 37) suggest that sexism is "stereotypes and/or discriminatory behaviours" through which the roles of females are trivialised whereas male dominance is maintained. Mills (2008) believes that sexism is an issue which can have an impact on males and females, as it affects how they perceive their identities and their positions in society. Such attitudes can be reflected in language.

Holmes (2001, p. 305) defines sexist language as "the way language expresses both negative and positive stereotypes of both women and men". It is also seen as a means by which sexist attitudes in a given culture or wider society, or the societal attitudes to gender roles, are formed (Holmes \& Sigley, 2001; Mills, 2008; Sigley \& Holmes, 2002). More specifically, sexist language refers to the language use which "unnecessarily" differentiates between males and females, and members of either sex (usually females) are excluded or trivialised (Etaugh \& Bridges, 2010, p. 52). Sexist language has been argued to reinforce sexual discrimination in society through distinguishing males and females linguistically, with one as the norm whereas another marked as the "other" (Litosseliti, 2006, p. 13).

Overt sexism, meaning that what sexism is intended is clear to hearer/reader
(Mills, 2008), is evidenced in a number of different language forms used. These include:

1) Adding a suffix to signal 'female'

Many words in English arguably reflect a view of females being trivial (Parks \& Roberton, 2004), "deviant, abnormal or subordinate" (Holmes, 2001, p. 306) by taking the male form as the base form and adding a suffix, such as -ess, -ette, to make the female term, especially in occupational nouns. Examples include actor/actress and usher/usherette. The addition of a suffix makes females "marked" (Graddol \& Swann, 1989, p. 100; Pauwels, 2003, p. 553) in language and, potentially, undermines females' professional status (Sigley \& Holmes, 2002), but the males as the norm (Miller \& Swift, 1988).
2) 'Generic' masculine pronouns and man

Another common type of sexist language is the 'generic' use of masculine pronouns (e.g. he) (Mills, 2008; Mills \& Mullany, 2011), the word man to refer to males and human beings in general (Swann, 1992), and 'generic' man in the names of occupations such as fireman or policeman to include both sexes (Rovano, 1991). Holmes and Sigley (2001) and Sigley and Holmes (2002, p. 138) consider such kind of generics to be "pseudogenerics" because of their 'double' meaning, which may make people think they have male referents. Also, some generic expressions are not true generics, for example, Man being a mammal that breastfeeds his young (Litosseliti, 2006) because it is females but not males that breastfeed. The use of 'generic' masculine pronouns he, him, and his, and man, to refer to both males and females, promotes the image of males (Litosseliti, 2006) and makes females "invisible" (Holmes, 2001, p. 307; Sigley \& Holmes, 2002, p. 138; Pauwels, 2003, p. 553) in such language because they are included in generic expressions
using masculine forms. Such 'invisibility' makes the male referent the norm (Davis, 1995; Mills, 2008) but a marked form for the female referent (Mills, 2008). The 'generic' use of he and man is not acceptable to many English speakers for this reason, and also because it may lead to ambiguity and misunderstanding between a 'false' generic and the masculine meaning (Hellinger \& Bußmann, 2001).

## 3) Adding a modifier to an occupational noun

This form of linguistic sexism involves adding a gendered premodifier to an occupational noun (e.g. woman doctor or male nurse), which makes us pay particular attention to that person's sex (Litosseliti, 2006). It also makes it normal for one sex to have that particular job but exceptional for another sex.
4) Asymmetrical gender items

Asymmetrical gender items are some 'pairs' of lexical items for males and females, with the equivalent for females carrying sexual connotations (Mills \& Mullany, 2011), being pejorative (Mills, 2008; Swann, 1992), more negative, and/or having a lower status than the male equivalent (Etaugh \& Bridges, 2010), but the male terms still keep their meanings which show someone's status (Montgomery, 1995). Examples include host/hostess, master/mistress (with hostess and mistress carrying sexual connotations because hostess can also mean a woman whose job is to entertain men at night clubs, apart from meaning a woman who invites guests to a party, while mistress is a woman who is in a position of authority but also a woman who has a sexual relationship with a married man), bachelor/spinster, wizard/witch (with spinster and witch being more negative, and spinster is also used pejoratively to refer to a woman who is still unmarried even though she has reached the usual age of marrying, implying that "she is old
unwanted goods＂（Lakoff，1975，p．33）），king／queen（with queen having the meaning of an effeminate male homosexual，apart from the meaning of a female ruler），and governor／governess（with governess having the meaning of a female teacher who teaches children at home）．

One other example of the use of negative terms for females is that it is more common for people to refer to adult females as girls than adult males being boys （Hartman \＆Judd，1978）．

There are also more derogatory vocabulary items to refer to females．These include bitch，slag（Montgomery，1995）．This aspect can also be found in other languages， for example，蕩婦 and 淫娃 in Chinese．

5）Titles for males and females
The title $M r$ is used for males no matter if they are married or unmarried，whereas Miss and Mrs are traditionally used for females to show their marital status，with Miss being used for females who are single and Mrs for those who are married（Mills \＆Mullany， 2011）．In other words，that means females＇marital status is＂asymmetrically marked＂by the number of terms available（Sigley \＆Holmes，2002，p．139）．Rovano（1991，p．61） adds that the use of Miss or Mrs implies a＂male－connection＂，meaning＂the daughter of＂ or＂the wife of＂respectively．

To achieve linguistic equality，some measures have been attempted by feminists and feminist linguists．One of these is a kind of＇gender－neutralization＇strategy，and whether such kind of strategy is used in the analysed textbook series was investigated in this study．One illustration of gender neutralization is the elimination of female occupational terms with－ess or－ette suffix（Pauwels，2003）．Another example involves
selecting alternative forms. For example, the word chairman is replaced by chairperson (attaching a different morpheme) or chair, policeman is replaced by police officer, fireman is replaced by fire fighter. Analysing the patterns of gender-marking in the texts drawn from five million-word corpora of edited written English in 1961-1991 (the Brown Corpus of American English, the Lancaster-Oslo-Bergen (LOB) Corpus, the Frown and Freiburg-LOB Corpus of British English (FLOB) corpora, and the Wellington Corpus of Written New Zealand English (WWC)), Holmes and Sigley (2001) found a general decrease over time in the range of occupational terms using the -man suffix. However, Mills (2008) mentions that the generic form of some words already has another restricted meaning that cannot be used for general reference. For example, the word worker cannot be used as an alternative form of workman because they do not have totally equivalent meanings, with workman being used to refer to someone who does physical work such as building and repairing things, whereas worker is used to refer someone who does a particular job e.g. factory worker.
'Gender-neutralization' also involves replacing the generic he with you, he or she, $s / h e$, she or he, the indefinite pronoun one (or one's for possessive) or singular they when the sex of the referent is unknown (Davis, 1995). Sentences in which a singular masculine pronoun is used can be rewritten in the plural form so that the singular masculine pronoun can be avoided (Davis, 1995; Rovano, 1991). However, the structure he or she will make the sentence rather clumsy (Mills, 2008).

Regarding the female title, Ms can replace Miss or Mrs (Davis, 1995) Nevertheless, Graddol and Swann (1989) do not think that Ms is a neutral term for females because while $M s$ can be an option for women to represent themselves as married
or not, it may cause other people's suspicion of their status as being divorced, a lesbian, or living with men without being married. In conversation, it is difficult to distinguish the pronunciation of Ms from Miss. Lakoff (1975) also believes that the title Ms can be fully accepted only if the society changes first and considers whether a woman is married or unmarried as unimportant as that for a man. Therefore, the introduction of the term Ms has not been as successful as feminists expected (Mills, 2008).

While nouns and pronouns are important aspects of sexism at the language level, there are also instances of linguistic sexism in verbs and at the grammatical level (Mills, 2008). For example, some verbs, such as shout, tend to be associated with boys more often than girls in subject position. At the grammatical level, Mills (2008, p. 69) points to the importance of 'transitivity', which refers to "who does what to whom in texts", in which female characters are usually represented as playing a passive role as recipient of someone's action. For example, the lady was saved by a strong man.

However, current feminist perspectives (e.g. Mills \& Mullany, 2011) consider that sexism does not only manifest itself at the level of the word but also at the discourse level and the context, in which negative meanings tend to be associated with women. In fact, we cannot just simply say whether a word is sexist or not without considering the context because the meaning of the word will vary with context. Swann (1992) also believes that it is not the language itself but language use that reinforces gender inequalities.

### 2.4 Teaching Materials

After discussing overt sexism on a linguistic level (i.e. sexist language) in Section 2.3, which is one of the aspects I looked at in my own textbook study, in this section, two
broad types of teaching materials, print and non-print, will first be distinguished. Then, textbooks and the potential influence of texts and textbooks will be focused on, followed by a review of the different frameworks for evaluating gender representation in textbooks and previous studies on gender representation in EFL/ESL textbooks.

### 2.4.1 Print and non-print teaching materials

Both print and non-print teaching materials are available in contemporary classrooms. As a kind of medium, print materials have the advantage that they do not require any equipment and they are easily portable.

Print materials still function as the main medium for teaching in most face-to-face education settings. In most primary English Language classrooms in Hong Kong, print textbooks form the basic learning materials to support learning and teaching. Workbooks, which are usually sold together with textbooks, are another type of printed materials that are used in many classrooms in Hong Kong; their content parallels that of the textbooks and provides exercises for students' mastery of certain skills.

However, teachers do not have to limit themselves to textbooks. They can develop their own teaching materials to meet their students' needs, or make use of a wide range of other learning and teaching print resources to arouse the students' learning interest and broaden their learning experiences. Magazines and encyclopedias for children, picture dictionaries, children's books or storybooks and other authentic materials are all examples of print teaching materials for students at primary level (Curriculum Development Council, 2004).

With the advancement of information technology in a modern era, teaching
materials do not only include print materials. Non-print materials, which include multimedia resources such as audio-books, e-books, and other computer-assisted language learning programs, often provide good resources for enhancing learners' motivation (Curriculum Development Council, 2004). However, although multimedia resources are commonly used in modern classrooms, they still only act as supplementary teaching materials. Print materials are still the major teaching materials used in primary classrooms. Therefore, print textbooks were focused on in the present study.

### 2.4.2 Texts, textbooks and their potential influence

Textbooks, as a kind of print teaching materials, can be defined as books produced primarily for instructional purposes (see, for example, Flanagan, 1981). Johnsen (1993), however, pointed out the inadequacy of this definition as those books whose authors did not intend to produce for this purpose will be excluded. He suggests that the definition of a textbook should be more general to include all books that are published for instructional purposes, or even any books used in the classroom. In this study, however, textbooks are referred to as coursebooks. Of course, in classrooms nowadays, as shown above, digital media are also used for instructional purposes

Textbooks have been claimed to represent the authority of knowledge in education (Cheung et al., 1997) and to play an important role in teaching. They are a ubiquitous part of most classroom instruction (Woodward, 1993) and the major source of materials used by teachers in their teaching (Curriculum Development Council, 1997; Richards, 2001). The importance of textbooks can be explained by the fact that they are arguably the most convenient means of providing a structure for classroom teaching and
learning. They also make the lives of teachers easier because they provide inputs for lessons in the form of texts, exercises, activities, and so on (Hutchinson \& Torres, 1994; Richards, 2001). In English Language teaching, Hutchinson and Torres (1994, p. 315) even consider textbooks as an "almost universal element". However, noted that Hutchinson and Torres (1994) suggested this about twenty years ago and the importance of textbooks may have been changed. Also, the value of textbooks arguably depends on how they are used by teachers (Curriculum Development Council, 1997). If the textbooks are not effectively used, lessons will be over-rigidly controlled by them. Moreover, students in a single class may have a range of different language levels such that a textbook simply cannot be published to suit the needs of each of them (Flanagan, 1981; Hutchinson \& Torres, 1994). Therefore, teachers are often advised to apply their judgment to use textbooks flexibly according to the needs, abilities and interests of their students (see, for example, Curriculum Development Council, 2002).

Flanagan (1981, p. 12) identified three major ways of using textbooks. One is to use the textbook as the primary source of instruction which allows the structure and content of the textbook to determine the instruction. Another method is to use textbooks as supplementary materials and expand upon concepts previously presented through other instructional materials. The third approach, relatively uncommon, is the "multi-text" approach, which is to use two or more textbooks together but select contents from each of them according to what seems to be more effectively presented. Among these three approaches, the first method is the most common approach of using textbooks in Hong Kong classrooms.

Textbooks may have an influence on children as they have been argued to have
the potential to change children's minds (Chambliss \& Calfee, 1998). Turner-Bowker (1996) also mentions the importance of books (children's literature) on children. She suggests that children learn about what behaviour is appropriate or inappropriate from books and in particular that such texts have served as a source from which children acquire gender stereotypes. (One of the guiding principles for quality textbooks suggested by the Education Bureau (2003) is that "(a)ppropriate values and attitudes are nurtured".)

### 2.4.3 Second/Foreign language textbooks and ESL/EFL textbooks

In English Language teaching and learning, if English is not studied as a native language, then it is studied either as a second language or a foreign language. In Hong Kong, English is in some ways a second language and in some ways a foreign language (Luke \& Richards, 1982). Therefore, the English Language textbooks used in Hong Kong are ESL/EFL textbooks.

English Language textbooks are useful for both teachers and learners. For teachers, textbooks provide accurate language inputs which are helpful to their teaching (Richards, 2001). Otlowski (2003) who considers the importance of textbooks for language learners, especially English as a Foreign Language (EFL) learners, mentions that language textbooks are one of their main reference sources for proper language use because they may have limited or no contact with native speakers of English.

Apart from their different functions, Dendrinos (1992) pointed out a distinctive feature of EFL textbooks, compared with other textbooks: that EFL textbooks include a variety of different texts and text types, or genres, which are defined by Swales (1990) as distinctive types of discourse (either spoken or written), with the aim of exposing learners
to different text types that they may come across in authentic communication so that they know how to use language appropriately in different contexts, and presenting learners with different associated target language patterns and vocabulary. EFL textbooks also include visuals (drawings and photographs). The purpose of adding drawings and photographs is to contextualise the language used in the textbooks, and, in dialogues, to introduce the interlocutors involving in the communicative events introduced in the textbooks.

### 2.5 Gender Representation in Textbooks and Subgenres within Foreign Language (FL) and English as a Foreign Language (EFL) Textbooks: Past Frameworks of Evaluation

Before presenting the findings of previous studies on gender representation in EFL/ESL textbooks, different frameworks of evaluation which have been used should be reviewed, as they are relevant to my study of gender representation. Different categories have been used. For example, Schmitz (1984) suggested 'omission', 'stereotyping', and 'linguistic bias' when reviewing gender representation in foreign language textbooks. Omission refers to a tendency for certain groups to be either "underrepresented or omitted from consideration in textbooks" (p. 7). Stereotyping occurs when the image of the members of certain groups is either distorted or degraded. Linguistically, one way gender bias towards females occurs when generic masculine nouns and pronouns are used to refer to everyone (see also Section 2.3). Another form of linguistic bias which may lead to a kind of 'sexual hierarchy' is when the male form is consistently placed in the first position and the female
form the second within a single phrase of two pronouns paired for sex, for example, he or she and him/her. This phenomenon is known as 'male firstness'.

Hellinger (1980), Sunderland (2000), and Willeke and Sanders (1978) also identified three types of gender bias based on the results of content analyses of EFL textbooks published in the 1970s and 1980: 'exclusion', 'subordination and distortion', and 'degradation'. Exclusion refers to the phenomenon of females being relatively 'excluded' while males are over-represented (Sunderland, 2000). Hellinger (1980, p. 268), relatedly, defined exclusion in terms of "the quantitative proportion of female and male referents in the textbooks", with males being significantly favoured in the texts of German secondary English Language textbooks. Subordination can be seen as "a measure which ranks women on lower positions on most social hierarchies associated with power or prestige" (Hellinger, 1980, p. 270), that is, female characters are assigned a range of occupations that are of lower levels of social prestige than those assigned to men (Willeke \& Sanders, 1978). Distortion, on the other hand, is a form of "stereotyping" that assigns certain personality traits to men only while others to women (Willeke \& Sanders, 1978, p. 63). For instance, while males are characterised as active, independent, strong, and logical, females are described as passive, dependent, emotional, and illogical. The last category, degradation, is present if women's personal, intellectual or other achievements are "ignored, down-graded or described as exceptional" (i.e. unusual) (Hellinger, 1980, p. 273).

Kingston and Lovelace (1977-1978), in their reviews of 78 articles analysing sexism in basal readers, texts (including textbooks), and children's literature, identified a number of categories used by different authors. These include frequency counts of males
and females in texts and illustrations. The analysis of texts included counting the frequency of male/female nouns and pronouns, and male/female names in occupations. For the illustrations, both male/female appearances in occupations and male/female social roles were also considered.

Graci (1989) reviewed twenty studies conducted between 1975 and 1984 on sexism in foreign language textbooks based on seven categories of analysis: 1) number of male and female pronouns; 2) number of male and female appearances in illustrations; 3) stereotyped male and female social roles; 4) number of occupations for males and females; 5) number of males versus females identified with occupations; 6) number of male and female names in titles; and 7) number of males and females appearing throughout the text. These different categories were the features of analysis in a number of textbook studies (see Section 2.6) and have all been used in my own study.

It should be noted that these are rather dated studies and relied mainly on frequency counts of male and female characters linguistically without analysing if and how male and female characters were represented and distributed differently in different subgenres, for example, reading passages or dialogues. Therefore, in my study, not only were linguistic and visual analyses conducted, but also gender representation in dialogues was analysed.

### 2.6 Findings of Previous Studies on Gender Representation in EFL/ESL Textbooks

In this section, the findings of previous studies on gender representation in EFL/ESL textbooks, which offered me insights into methods for analysing my data, are reviewed.

They will then be compared with the results of my study in Section 7.1. It is organised based on the methods of analysis used: content analysis, linguistic analysis, discourse analysis, and visual analysis (see also Appendix 1 for the summary of the findings).

### 2.6.1 Content analysis

Content analysis is a kind of quantitative method which involves the counting of frequencies (Franzosi, 2008). It is the most common method of textbook analysis used in previous studies. These studies involved quantitative analyses of the frequencies of occurrence of certain selected features. Occurrence is determined by frequency counts of characters in texts and images, and uses of certain words or phrases (see Equal Opportunities Commission, 2000, 2001, and also Section 3.6.1). These include frequency of occurrence of male and female characters, occupational and domestic roles, and characteristics/traits. Each of these aspects will be reviewed as below:

### 2.6.1.1 Frequency of occurrence of male and female characters

The first aspect of content analysis done in most previous studies on gender representation in EFL/ESL textbooks concerns the frequency of occurrence of male and female characters, and it is nearly always the case that male characters outnumbered female characters. Hellinger (1980) used the term 'exclusion' to describe the phenomenon of the unbalanced proportion of male and female characters in three English Language textbooks used in German secondary schools, Learning English Edition A Part 3 (LE A3), the new edition of Learning English Modern Course (LE MC4), and English for Today 5/6 (EFT 5/6), with female characters being always less visible. For example, if
the headnouns in the titles of the textbook texts include human referents, over 75 per cent are male but less than 10 per cent are female; over 93 per cent of the stories' events have male participants but female participants occur in about 30 per cent of the texts; and the occurrence of female protagonists in all the three textbooks is just less than 8 per cent. Then, Gupta and Lee (1990), in their analysis of two basal reader series used in primary schools in Singapore, the Primary English Programme and Reading 360, found that male characters (both human and non-human) outnumbered female characters in both series. Even in the studies conducted in the late 2000s and 2010s, the results are the same. For example, Lee and Collins (2009) found that males outnumbered females (1.35:1) in the ten analysed English Language textbooks used in Australia. When comparing twenty English Language textbooks in Australia and Hong Kong, there were also more male than female characters ( $57.5 \%$ and $53.2 \%$ of the characters respectively), though the male and female characters were not evenly distributed across the textbooks (five of the textbooks have an excessively high number of male characters and mentions, but three of them have much more female than male mentions) (Lee \& Collins, 2010). Barton and Sakwa (2012), again, found that the percentage of females and males in the analysed English textbook (English in Use) used in secondary schools in Uganda (35.7\% and 64.3\% respectively) does not correspond to the actual proportion of females to males in the community. Other EFL/ESL textbook studies (e.g. Amini \& Birjandi, 2012; Bahiyah Dato’ Hj. Abdul Hamid, Mohd. Subakir Mohd. Yasin, Bakar, Yuen, \& Jalaluddin, 2008; Equal Opportunities Commission, 2000; Gharbavi \& Mousavi, 2012a; Hamdan \& Jalabneh, 2009) also show a higher visibility of male than female characters.

However, things may be changing, compared with the earlier textbooks. Lee and

Collins (2008) found that the difference in the number of male and female characters in recent textbooks has become smaller (the ratio of female to male characters is 1:1.48 and 1:1.14 and the ratio of female to male 'mentions' is $1: 1.69$ and 1:0.96 for early and recent English Language textbooks used in Hong Kong secondary schools respectively). Sakita (1995) even found that females were slightly more visible than males in the introductory EFL textbooks used in Japan (but less visible in more advanced textbooks), and Pihlaja (2008) found an equal number of male and female characters in the text in his content analysis of a Japanese English textbook entitled Planet Blue.

### 2.6.1.2 Occupational and domestic roles

In previous studies on gender representation in English textbooks, females were not only portrayed as having different occupational roles from males, but also in a narrower range of roles. In an early study of ESL texts, Hartman and Judd (1978) found that women were mainly portrayed engaging in housework or child care. For the studies conducted in the 1980s-1990s, the results are similar. For example, Hellinger (1980) found that males were involved in a wide range of occupations such as engineer, scientist, while women were involved in less prestigious occupations such as waitress, office lady, maid, and housewife (that is, 'subordinated' female roles) in English textbooks used in secondary schools in Germany. Gupta and Lee (1990), in their analysis of two basal reader series used in Singaporean primary schools, also found that males were portrayed in a wider range of roles than females, and women were mostly portrayed in the nurturing professions such as teaching and nursing. For domestic roles, housework is the main job for females in the EFL textbooks used in Japan (Sakita, 1995). In Hong Kong, the
situation is similar. Women in secondary English textbooks have occupied such 'feminine' positions as secretary, receptionist, and typist over the past two decades (Lee \& Collins, 2008). Even the studies conducted in the 2000s or after show few changes. Females were still portrayed in fewer (Barton \& Sakwa, 2012) or a narrower range of occupations (Bahiyah Dato’ Hj. Abdul Hamid, et al., 2008; Barton \& Sakwa, 2012; Gharbavi \& Mousavi, 2012a; Lee \& Collins, 2008), and females were often portrayed engaging in domestic duties such as household chores (Lee \& Collins, 2008, 2010).

### 2.6.1.3 Characteristics/Traits

In the third aspect of content analysis, males and females are often represented as having stereotypically different characteristics or personality traits. In the ESL materials they reviewed, Hartman and Judd (1978) noticed the phenomenon of women often being assigned stereotypically emotional reactions, in which they were emotionally unstable (e.g. they were easily frightened or angry about something). Similarly, in her survey of Japanese EFL textbooks, Sakita (1995) found being emotional, crying and complaining as characteristics of women. Besides, Evans and Davies (2000), in a content analysis of two elementary reading textbook series (Spotlight on Literacy and Literature Works), found that males were more often portrayed with 'traditionally masculine' characteristics than females: males were notably more aggressive, argumentative, and competitive than females, but less likely to be described as affectionate, emotionally expressive, passive, or tender.

Males and females have also been found to be described with different numbers of positive and negative traits. Males were depicted with more positive traits (e.g.
hardworking, creative, knowledgeable) than females (47 and 37 respectively) in the analysed primary English textbooks, 4 selected textbooks of the Let's Learn English series, used in Kenya (Kobia, 2009), but the opposite was found in four analysed secondary English textbooks used in Malaysia, where negative qualities (e.g. aggressive or naughty) were more often associated with males, and only four negative qualities were attributed to females (Mukundan \& Nimehchisalem, 2008).

### 2.6.2 Linguistic analysis

Another way of analysing gender representation in previous textbook studies is to conduct linguistic analysis. Linguistic analysis of EFL/ESL textbooks has involved the analysis of linguistic features, including male and female referents (i.e. nouns and pronouns for males and females), adjectives used, and sexist language, which will be reviewed as follows:

### 2.6.2.1 Frequency of occurrence

At the linguistic level, females are usually less visible than males in texts. Hartman and Judd (1978) looked at the representation of women by counting the total number of sexlinked nouns (e.g. men, girls), proper nouns, titles, and non-generic pronouns in the reviewed ESL texts and found that male referents outnumbered the females in many cases. The Equal Opportunities Commission (2000) in Hong Kong found that there were more male than female referents in the form of pronouns, possessive pronouns, reflexive pronouns, nouns, titles and first names in the analysed textbooks and teaching materials used in Hong Kong. The ratio of male to female references was about 3:2, that is, 2591
male references to 1685 female references. Bahman and Rahimi (2010) also found that the total percentage of nouns, names, pronouns, and adjectives referring to males was higher than those referring to females in all three examined volumes of the English textbook used in Iranian high schools ( $79 \%$ and $21 \%, 78.7 \%$ and $21.2 \%$, and $71.5 \%$ and $28.5 \%$ for referring to males and females respectively).

In contrast, in counting the number of pronouns used in the texts of a modern EFL textbook titled Touchstone Book 2, Healy (2009) found that there were more female than male pronouns (159 female pronouns and 143 male pronouns).

### 2.6.2.2 Adjectives

Differential gender representation has also been found in the use of adjectives. For example, the adjectives used for females have been found to be related to attractiveness (e.g. beautiful, pretty) (Porreca, 1984; Sakita, 1995), whereas those within the categories of reputation (e.g. famous) and intellect (e.g. intelligent) (Porreca, 1984), or related to height or size (Sakita, 1995) may be used to describe males. Similarly, Carroll and Kowitz (1994) found that statistically significantly different adjectives were used to describe men and women, with women being described as beautiful or pretty but never as important or busy. Sakita (1995) noted that even if the women's intellect is described, the accompanying adjectives, and the use of but (e.g. She may be clever, but she is too selfish) may give the impression that women's intellect is unusual.

### 2.6.2.3 Sexist language

Gender representation and gender stereotyping in previous EFL/ESL textbook studies can
also be evidenced in the use of different forms of sexist language, including 'generic' masculine pronouns and man-compounds, and order of mention (see also Section 2.3 about sexist language):

### 2.6.2.3.1 'Generic' masculine pronouns and man-compounds

One further manifestation of linguistic sexism that can be found in textbooks is the use of masculine pronouns he or him when the sex of the referent is not specified (Lee \& Collins, 2008) and the generic use of man and man-compounds (e.g. fireman). In the analysed EFL textbooks used in junior and senior high schools in Japan published in 1989-1992, Sakita (1995) found that except for the job of secretary, the masculine pronoun he was used when the sex of referents was not specified. The Equal Opportunities Commission (2000) in Hong Kong also found that the generic pronoun he was frequently used in the analysed English Language textbooks with the professions such as President, sportsperson, farmer, and thief, implying that these professions are more associated with males. Even in the 2010s, for an English textbook used in a developing country, Uganda, the use of 'generic' masculine pronoun he when the sex of a referent is not specified can still be found (Barton \& Sakwa, 2012).

However, in more currently published textbooks, the 'generic' male pronoun he was not exclusively used (Ferguson, 2004), or less frequently used than in the earlier textbooks (Lee \& Collins, 2008, 2010). The expressions he/she, s/he, him or her, his or her, and they were used instead (Lee \& Collins, 2008, 2009, 2010), which implies a growing public awareness of gender issues, at least in Australia and in Hong Kong. In addition, no 'generic' man-compounds but only gender-neutral terms (e.g. police,
firefighter) were used for occupational terms in the examined English Language textbooks used in Hong Kong (Equal Opportunities Commission, 2000; Lee \& Collins, 2009, 2010). Gender-specific terms (e.g. businessmen, chairmen) were used only when it is necessary to specify the sex of referents (Ferguson, 2004).

### 2.6.2.3.2 Order of mention

Regarding order of mention, Lee and Collins (2008, 2009, 2010), in their analysis of English Language textbooks in Hong Kong (both earlier and recent ones) and Australia, found that it was more likely for males to be mentioned first when two nouns are paired for sex (e.g. Ben and Mary, males and females), except for the fixed expression ladies and gentlemen. This may reflect the subordinate and 'secondary' position women have traditionally been assigned, and may "(exemplify) a widespread perception of male supremacy" (Davis, 1995; Lee \& Collins, 2010, p. 133), even though both the male and female terms were included. Nevertheless, interestingly, the same number of cases of male and female firstness (e.g. Mr. and Mrs. Jones, Ladies and gentlemen), including the order of paired nouns and pronouns, was found by Healy (2009).

### 2.6.3 Discourse analysis

While linguistic analysis focuses on the language itself, in the form of linguistic features, discourse analysis (DA) focuses on the contents expressed through language (McEnery, Xiao, \& Tono, 2006). The textbook studies reviewed in Section 2.6.2 mainly concern isolated linguistic features. However, some studies have investigated gender representation in textbooks at the discourse level, including dialogues.

For the analysis of gender representation in discourse in the sense of represented talk, male speakers have been shown to have higher visibility than female speakers, with more male than female speakers in dialogues (Gupta \& Lee, 1990; Mukundan \& Nimehchisale, 2008). In Hellinger's (1980) study, about 80 per cent of the speakers were male. Male speakers have been found to produce more utterances, and average length of utterances uttered by males to be longer than that by females (Gupta \& Lee, 1990). In other words, the words spoken by male speakers exceeded those spoken by female speakers (Mukundan \& Nimehchisale, 2008). In terms of speech acts, the study of the Equal Opportunities Commission (2000) in Hong Kong found that in dialogues, women were more likely than men to give information and men to seek information, but that men also tended to take on a more "pro-active conversational role" than women (p. 12), in that they elicited interactions more than women but women tended to respond to elicitations more than men.

However, Jones, Kitetu, and Sunderland (1997) found an encouraging level of gender fairness in two of their analysed textbooks for the teaching of English as a foreign language, Headway and Look Ahead, in that females initiated conversation slightly more often than males in mixed-sex dialogues and there were a higher number of female turns than male turns. Nevertheless, they suggest that the occupational and social roles in dialogues should also be looked at to see if the gender fairness is related to these because if, for example, all textbook female characters are secretaries and all male characters are managers, it would not be surprising for the male characters to speak more because of their higher status. Pihlaja (2008) also found that female speakers speak more than male speakers in dialogues (in over $60 \%$ of the dialogues).

In her study of discourse and gender in ESL textbooks, Lesikin (1998) dealt with 'extended discourse' (that is, 'continuous discourse' or prose) by interpreting language content and quantifying language items. 'Language content' includes identifying whether the character is in the position of 'theme' (i.e. the first element of a clause (Halliday, 1994)) or the last stressed element in a clause, and the participant role of a noun or pronoun in a clause (e.g. Ann as an actor is in the theme position in the sentence Ann telephoned someone). In one analysed chapter in an ESL textbook, males were presented with more social prominence than females, with $67 \%$ of male nouns and pronouns (but only $33 \%$ of female nouns and pronouns) being placed in the theme and rheme (i.e. the remaining part of a clause (Halliday, 1994)) position (including the last stressed element) of a clause. Also, males were presented as "actors" and "sayers", i.e. "doers" and "verbalizers", three times and two times more often than females respectively, i.e. 100:27 and 100:40 (Lesikin, 1998, p. 91). Similarly, Gharbavi and Mousavi (2012b), by using Halliday's (1994) systemic-functional approach to analyse four EFL textbooks used in high schools in Iran, English Book 1, 2, 3 and Learning to Read English for Preuniversity Students, found that there are more males than females in the positions of Theme (e.g. He in He spent the day working), Rheme (e.g. her in The man gave her a reward), and last stressed element (e.g. Oliver Twist in The boy's name was Oliver Twist), with male-female ratios of $80 \%$ to $20 \%, 71 \%$ to $29 \%$, and $74 \%$ to $26 \%$ in Theme, Rheme, and last stressed element respectively. Males were also presented as actors (i.e. doers) more than twice as often as females. In other words, there are more male than female mentions at the discourse level.

### 2.6.4 Visual analysis

Visual analysis is a method of analysing gender representation which has been used in several EFL/ESL textbook studies. Males have been found not only to have higher visibility than females in written texts in textbooks but also in the visuals of textbooks (Amini \& Birjandi, 2012; Gharbavi \& Mousavi, 2012a; Kobia, 2009; Lee \& Collins, 2008, 2009; Levine \& O'Sullivan, 2010; Mukundan \& Nimehchisale, 2008). For example, women have been underrepresented in the visuals of the analysed Hong Kong English textbooks over the last 20 years (Lee \& Collins, 2008), and of the 489 visuals in the Australian English Language textbooks analysed, 56.9\% depicted male characters only but $19.2 \%$ depicted female characters only (Lee \& Collins, 2009). Even in an English Language textbook study conducted in Uganda in the 2010s, females were still underrepresented in the illustrations: $20.7 \%$ were females compared with $79.3 \%$ of males (Barton \& Sakwa, 2012).

Apart from the higher frequency of occurrence of males and females in visuals, males and females have also been shown as engaging in different activities or in different spheres. First, Giaschi (2000) analysed the visuals in two selected ESL textbook series, Headway and $4^{\text {th }}$ Dimension, by using the technique of critical image analysis, an adapted version of Critical Discourse Analysis (CDA). In the analysed 35 images, males were generally portrayed as the manager, leader, or protagonist, while females were usually depicted in the sphere related to fashion. Also, in $76 \%$ of the analysed images, males were portrayed in an active role and females in a passive role in $75 \%$ of the images. In the analysis of an EFL textbook for senior high school students in Japan (Expressways A), Otlowski (2003) found that men were included in twelve of the seventeen illustrations
depicting working situations but women were included in only five. Lastly, males were portrayed as more active and sporty than females (Lee \& Collins, 2008, 2010), and engaging actively in work and social activities (e.g. outdoor activities) (Lee \& Collins, 2009).

### 2.7 Gender and Language Studies in Hong Kong

After reviewing the findings of previous studies of gender representation in EFL/ESL textbooks, I review the gender and language studies in Hong Kong to show the significance of my study. As can be found in the review of literature, only a few gender and language studies in Hong Kong context can be found. Nearly all of these are related to gender representation in Hong Kong textbooks. These studies include the analysis of primary (Au, 2004) (see Section 1.4) and secondary (Lee \& Collins, 2008) (see Section 2.6) English Language textbooks, and textbooks of other subjects (e.g. Au, 1992; Law \& Chan, 2004; Luk, 2004). One study involved the analysis of gender stereotyping in children's cartoons in Hong Kong (Chu \& McIntyre, 1995). The gender and language textbook studies are summarised as follows:

Au (2004), in analysing gender representation in the dialogues of three selected English Language textbook series used in primary schools in Hong Kong, New Welcome to English (2 ${ }^{\text {nd }}$ edition), Integrated Primary English (TOC edition) and New On Target, found that males and females were portrayed with traditional images, with the husband/father being the decision maker whereas the wife/mother being more passive in most conversations with her husband. Apart from analysing the textbook dialogues, Au (2004) also observed and interviewed teachers and students, and found that many of them
reinforced the gender stereotypes shown in the textbook dialogues by role-playing the same sex characters in classrooms.

Lee and Collins (2008) analysed twenty English Language textbooks published and used in Hong Kong secondary schools in the 1980s-2000s, and found the following: the ratio for the total number of female to male mentions in recent and earlier textbooks was 1:0.96 and 1:1.69 respectively; women were often involved in a limited range of social roles and portrayed as housewives in both earlier and recent textbooks; in visual images, women were underrepresented, and males were portrayed as more active and sporty than females; and there was a higher tendency for men to be mentioned first when two nouns were paired for sex, except in the fixed phrase, in both earlier and recent textbooks.

For textbooks of other subjects, Au (1992) investigated gender roles in primary school textbooks of three subjects: Chinese Language, Social Studies and Health Education. Two sets of the most popular textbooks were selected from each subject and samples were randomly drawn from each textbook for the analysis of texts and illustrations. The results showed that gender representation in the analysed textbooks did not reflect the reality in Hong Kong society accurately: the ratio of males and females was 1.9:1, but 1.038:1 for the general population in 1991; $70 \%$ of the characters engaging in the labour force were males which was higher than the actual figure of $62 \%$ of male workers; females were not included in the sphere of sports for leisure activities; the family roles of males and females corresponded to the traditional concepts of "male external, female internal" (p. 49); and most of the world-famous figures mentioned were male. The small number of famous female figures were simply listed (as, e.g. Founder of

Mother's Day) without their names given.
In a more recent study, Law and Chan (2004) analysed gender stereotyping in six Hong Kong primary Chinese Language textbooks published in 1995-2000 by conducting a content analysis. The results show that among the 14,488 characters in the 5,180 visuals analysed, $48.73 \%(7,060)$ were males but $32.19 \%(4,664)$ were females; a higher proportion of male than female characters ( $77.94 \%$ versus $68.67 \%$ ) were found in public settings, but an opposite ( $31.33 \%$ and $22.06 \%$ for females and males respectively) was found in household settings, and more females than males were portrayed engaging in various kinds of housework ( $5.63 \%$ and $2.86 \%$ respectively); and males were always portrayed in occupations that have a higher status (e.g. doctors, managers and executives).

Luk (2004) analysed gender roles represented in Secondary One (i.e. Grade 7) Chinese History and Social Studies textbooks by using the same instrument as his earlier study conducted in the late 1980s regarding gender roles in social subjects textbooks used in junior secondary schools in Hong Kong. While males still dominated in the Chinese History textbooks published in 1999-2000 and women were most often wives in the two sets of textbooks, there was an improvement in gender representation in the newly published Social Studies textbooks. For example, there were 281 situations in which males were represented as active and 202 situations for females being represented as active in the 2003 Social Studies textbook; both males and female were equally portrayed in different kinds of activities; and both parents were portrayed as having jobs outside homes and doing household chores. In other words, females were not underrepresented and were not engaged in gender-stereotyped occupations as in the 1984 textbook.

Lastly, the content analysis of children's TV cartoons shown in Hong Kong by

Chu and McIntyre (1995), a study which is also about gender representation as the textbook studies reviewed above, found that male characters outnumbered female characters (a ratio of 2.4:1). Male and female characters were also portrayed genderstereotypically, with males being associated with the personality traits of being aggressive, tough, sloppy, and strong, and females being emotional.

### 2.8 Conclusion

To briefly conclude, in this chapter, I started by distinguishing between 'sex' and 'gender', followed by reviewing two related concepts: gender representation and gender stereotyping. Then, I reviewed different types of sexist language. Before reviewing the findings of previous studies of gender representation in EFL/ESL textbooks, I reviewed some past frameworks of evaluation. The review of previous studies showed that gender stereotyping and gender imbalance in language textbooks for different grade levels exist around the world. Though some improvement has been shown in recent studies (e.g. Lee \& Collins, 2008) and some textbook writers even explicitly mention the changing roles of women (for example, in a discussion of sport and women (Lee \& Collins, 2009)), women are still often portrayed in subordinate positions and a narrower range of roles and activities than men. This may not reflect the reality in much of the 'real' world (Blumberg, 2008) and indeed reality should be reflected in textbooks as much as possible.

Building on the research gap of previous gender and language studies in Hong Kong, and the methodology used in previous studies on gender representation in EFL/ESL textbooks, in the next chapter, I will explain the data needed and the methods of data analysis for this study.

## Chapter 3

## The Present Study: Research Design and Methods

### 3.1 Introduction

Primary textbooks are different from secondary textbooks in which they include not only age-appropriate visuals (including line drawings and cartoons), but also non-human characters (animals, fairies, etc.), and the characters included can raise further issues of gender. In order to investigate gender representation and if the phenomenon of gender stereotyping still exists in recently published primary English Language textbooks used in Hong Kong, I conducted a study of textual representation of gender in two textbook series, and analysed dialogues and visuals in selected books of the series. To achieve the research purpose, the following research questions were addressed:

## A. Textual representation of gender

How is gender represented in the reading passages in the Step Up and Primary Longman Express series in terms of lexis and grammar?

1. Are males and females comparably represented in terms of:
a) frequency of occurrence (both 'types' and 'tokens');
b) names and titles, or 'nomination';
c) pronouns;
d) 'categorization' (family relationship and occupational roles);
e) associated adjectives; and
f) associated verbs, or 'social action'?
2. What is the frequency of (a) the 'generic' use of he, man and man-compounds and
(b) the 'generic' use of she, woman and woman-compounds when the sex of the referent is not specified, and are there any patterns here?
3. What is the frequency of 'male/female firstness', and are there any patterns here?

To answer Research Questions A1-3, all the reading passages of the two analysed textbook series were compiled for subsequent corpus analysis.
B. Discourse representation and gender

How is the discourse of male and female characters represented in the dialogues in the Step Up and Primary Longman Express series?

1. How many dialogues are (a) between males, (b) between females, and (c) mixedsex?
2. How many male and female speakers are there in the single-sex and mixed-sex dialogues?
3. How many utterances are there in the single-sex and mixed-sex dialogues?
4. How many words are uttered by male and female speakers in the single-sex and mixed-sex dialogues?
5. Who initiates and who concludes the mixed-sex dialogues?

In a sample of mixed-sex dialogues in the Step Up and Primary Longman Express series:
6. Are the speech acts of the dialogues related to speaker gender?
7. Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) overlapping speech, and (c) hesitations and other non-fluency features, related to speaker gender?

For Research Questions B1-5, and 7(b) and (c), all the dialogues in the speech bubbles, the self-contained dialogues (existing only in Primary Longman Express), and those
embedded in all the reading passages in all units of the two textbook series were analysed. For Research Questions B6-7(a), only the dialogues in twelve selected textbooks (Step Up $1 B, 2 A, 3 B, 4 A, 5 B$, and $6 A$, and Primary Longman Express $1 A, 2 B, 3 A, 4 B, 5 A$, and, $6 B$ ) were analysed (the sampling method used for selecting these twelve textbooks will be explained in Section 3.6.4.2).
C. Visual representation of gender

How is gender represented in the visuals in the Step Up and Primary Longman Express series?

1. Are male and female characters comparably represented in the illustrations in terms of frequency?
2. What are the different visualised occupations of the adult male and female characters?
3. How are male and female characters represented in selected illustrations in terms of involvement in activities?
4. How are male and female characters represented in selected illustrations in terms of:
a) size/height;
b) hair length; and
c) clothing?

While all visuals in the two textbook series were analysed to answer Research Questions C1 and C2, only the visuals in Step Up $3 A$ and 5B, and Primary Longman Express $2 A$ and $4 B$ were analysed in detail (see Section 3.6.5 for the explanation of the sampling method used) to answer Research Questions C3 and C4.

### 3.2 Data Needed: Primary EFL/ESL Textbooks in Hong Kong

In some previous textbook studies (e.g. Amini \& Birjandi, 2012; Bahman \& Rahimi, 2010; Healy, 2009), the decision behind choosing certain textbooks for analysis was not clearly mentioned. For the present study, I felt the ideal data needed to address my research questions were the textbook series used in most primary schools in Hong Kong. Therefore, at the beginning of the study, these textbook series had to be identified. I then needed to select particular textbook subgenres and particular units.

### 3.2.1 Data selection I: Textbooks

The Education Bureau in Hong Kong publishes the List of Recommended Primary School Textbooks in English and it is updated every month. The textbooks listed have been examined by the appropriate Reviewing Panels of the Bureau's Textbook Committee and are recommended for use in primary schools, as they are considered as acceptable to Hong Kong students in terms of "coverage, content, sequence, exercises, language, illustration and format" (Education Bureau, 2007b). According to the Bureau, schools can use the List as a reference when selecting textbooks for their students, but this is not compulsory.

As explained in Chapter 1, the purpose of this study is to examine gender representation in currently published English Language textbooks used in Hong Kong. 'Currently published' textbooks are defined as those published since 2005 because The English Language Curriculum Guide (Primary 1-6) was published in 2004, an updated edition of the syllabus for English Language (Primary 1-6), which aims to provide details of the Learning Targets and Objectives at primary level and elaborate on
pedagogical principles to facilitate students' English Language learning (Curriculum Development Council, 2004). Based on this criterion, I identified eight different textbook series: English to Enjoy, Step Up, My Pals are Here! English for Hong Kong, Longman Welcome to English, Primary Longman Elect, Primary Longman Express, New Magic, and Pop Up Now (Hong Kong Edition).

Instead of analysing all eight textbook series, I decided to analyse two series which are used in most primary schools in Hong Kong because a research project needs to be manageable. To identify these, I sent out questionnaires to a principled selection of primary schools. According to Primary School Profiles 2010 (Committee on HomeSchool Cooperation, n.d.), there are five hundred and thirty primary schools in Hong Kong. It would have been very time-consuming and costly to send out questionnaires to all of them. Therefore, a 'systematic sampling' approach was adopted in which every tenth school on the list of the Primary School Profiles 2010 was chosen. The major strengths of using systematic sampling are its simplicity of drawing the sample (McMillan, 2000) and it is easier than simple random sampling when selecting a sample from a list (Johnson \& Christensen, 2008) because every $\mathrm{X}^{\text {th }}$ school on the list was selected to be included in the sample. As a type of random sampling technique, systematic sampling also provides unbiased samples because the samples tend to be representative of the populations from which they are drawn (Johnson \& Christensen, 2008). Fifty-three primary schools were thus selected and the questionnaire (see Appendix 2) was sent out to the English panel head of each of these schools to find out which textbooks were used in his/her school (either as core texts or supplementary texts) at different grade levels (Primary 1-2, Primary 3-4, and Primary 5-6). All eight textbook
title series were listed and the respondents only had to tick the appropriate boxes to indicate which of these textbooks were used in their schools. With a self-addressed envelope, the relevant teacher could return the completed questionnaire conveniently.

The response rate in the systematic sampling was however disappointedly low. Only 21 schools returned the questionnaires, $39.6 \%$. In order to achieve the purpose of having information from at least one-tenth of all the primary schools in Hong Kong about the English textbooks used in their schools, so as to identify the most commonly used English textbook series, non-probability 'convenience sampling' was therefore also adopted. McMillan (2000) suggests that a non-probability sample can be used in situations when obtaining a probability sample is not possible. 'Convenience sampling' is a type of sampling method in which a group of participants are selected because of their availability (McMillan, 2000). McMillan (2000) suggests that convenience sampling can assure a high response rate and it is less time-consuming than other types of sampling method (e.g. quota sampling). Generalisability can be a problem as the selected population may not be a representative sample. However, combined with 'systematic sampling', it is believed that a more representative sample could be obtained. The same questionnaire was thus also sent out to fifty primary school English teachers from different schools I know personally, through email. Forty of them returned the questionnaire. Among these forty teachers, the school of only one was the same as the original sample and so the questionnaire was omitted. With this combination of systematic and convenience sampling, information about the use of English textbooks from 60 different primary schools was obtained (21 and 39 schools obtained from systematic and convenience sampling respectively): five from Hong Kong Island,
nineteen from Kowloon and the rest (thirty-six schools) from the New Territories.
Among these sixty schools, two did not use any of the textbooks suggested by the Education Bureau in its List of Recommended Primary School Textbooks in English 2010/11 School Year, because the CECES (Hong Kong Council of Early Childhood Education and Services) English Learning programme is adopted from Primary 1 to Primary 6 in these schools. (The CECES programme aims to help children develop their English language ability in an interesting and creative way by using their own published well-illustrated storybooks (Hong Kong Council of Early Childhood Education and Services, 2009-2010)). Four of the schools used textbooks only from Primary 4 to Primary 6 and, in two schools, textbooks are used only in Primary 5-6. In this study, I was only interested in the schools in which textbooks were used throughout the school years to make the counting of the number of schools using different textbook series more accurate.

Excluding those schools and/or grade levels in which the eight commercially produced textbooks were not used, the data collected from the returned questionnaires showed that Step Up, published by Educational Publishing House in 2005, with Dr. Arthur McNeill and Dr. Vivienne Yu as the consultants, is the textbook series used by most schools, followed by Primary Longman Express, published by Longman Hong Kong Education in 2005 and written by Alison Wilson and Katy Clarke (1A to 3B) and Alison Wilson, Katy Clarke, Ella Hall and Mabel Sieh (4A to 6B). (Figures 3a, 3b and 3c below show the details of the use of different textbook series in Primary 1-2, Primary 3-4, and Primary 5-6 respectively). However, the differences among different schools in the use of the different series cannot be tested for significance because the data size is small.


Figure 3a The use of different titles of English textbooks in Primary 1-2


Figure 3b The use of different titles of English textbooks in Primary 3-4


Figure 3c The use of different titles of English textbooks in Primary 5-6
As can be seen, the patterns shown in the three Figures are consistent. The number of schools using the different English textbooks in Primary 1-2 and Primary 3-4 was similar. However, in Primary 5-6, slightly more schools used New Magic than Primary Longman Elect.

The two series Step Up and Primary Longman Express were then chosen to be the main data set because these two textbook series were used in most primary schools among the sixty surveyed at all levels (Step Up is always the most popular and Primary Longman Express the second in Primary 1-2, 3-4 and 5-6). Step Up is written for Hong Kong primary EFL/ESL students and the two consultants are based in Hong Kong (one previously taught in the teacher-training institute while the other is currently teaching English in a university). The Primary Longman Express series was also written according to the requirements set in The English Language Curriculum Guide (Primary 1-6), so it
can be considered to be suitable for primary school students in Hong Kong. The whole series of Step Up and Primary Longman Express comprise twenty-four textbooks, twelve textbooks for each series (1A, 1B, 2A, 2B, ... 6B). In Step Up, with eight units in each textbook, a task-based approach is adopted "to encourage integrated language use and enable pupils to see the relevance of language learning" (Educational Publishing House Limited, 2009). A reading text in each unit provides a context for the integrated learning of grammar items and vocabulary. Besides that, pupils are provided with opportunities to develop the four language skills (listening, speaking, reading and writing). Therefore, in addition to the reading text for developing reading skills, each unit also has a listening exercise and a writing task. With a section on phonics, listening and reading aloud abilities can be developed as well. Also, pupils' speaking can be developed from the dialogues in different units and the speaking task. For Primary Longman Express, there are seven units in 1A-3B and eight units in 4A-6B. It is a textbook series which includes a wide range of text types to help learners fully develop their English language skills, expose them to different aspects of English language, and teach grammar and phonics in context (Pearson Education Asia Limited, 1997-2013).

### 3.2.2 Data selection II: Textbook subgenres

After selecting the textbook series to be analysed, prior to the analysis of gender representation, different subgenres within the textbooks were identified because one major assumption of my study is that different textbook subgenres may show different forms of gender representation. 'Genre' is a French word which means 'type' (English, 2011). Talking about the genres of texts means referring to the fact that texts can be
classified into different types (Paltridge, 2006), or, in a broader sense, either spoken or written texts. Texts are distinguished into different genres based on the convention of what a certain type of texts is like and the linguistic elements included in the texts to achieve their intended communicative purposes (e.g. to promote reading comprehension for written texts), that is, the 'generic coherence' suggested by English (2011). Based on the suggestion of the Curriculum Development Council (2004) that a variety of text types should be introduced to learners at primary level for Key Stage 1 (Primary 1-3) and Key Stage 2 (Primary 4-6), in the whole series of Step Up and Primary Longman Express, pupils are exposed to and expected to produce different types of genres. In Primary 1-3, the genres of rhymes, songs, stories, poems and posters can be found, and biographies, myths, plays and expositions are introduced in Primary 4-6 (see Tables 3-1 and 3-2 in Appendix 3 for details of the different text types included in different sections of each unit, including the reading text and the writing task, of the whole series of Step Up and Primary Longman Express, with the labels of these different text types given in the teacher's edition).

Each genre can be further divided into different subgenres (Conjecture Corporation, 2003-2013). Subgenres are important to language textbooks, especially for EFL textbooks, because one major task of the EFL textbooks is to show learners a wide range of different uses of the language in different text types (Lähdesmäki, 2009) and to achieve different pedagogical purposes. The different subgenres found in the two textbook series are presented in Table 3-3 in Appendix 3, in order of frequency.

### 3.2.2.1 The importance of reading passages

One of the subgenres within the textbooks selected for analysis in this study was the reading passage, for example, Ben's Family in Step Up $1 B$ Unit 1 and Talented People in Primary Longman Express $5 A$ Unit 7 (see also Tables 3-1 and 3-2 in Appendix 3 for the titles of different units ${ }^{5}$ of the two textbook series). In the two selected textbook series, the reading passage of a unit can be easily identified as it is always the first part of a unit, and is indicated with an instruction "Read about ..." (in Step Up) or a section label "Reading" (in Primary Longman Express). The contexts of the reading passages of Step $U p$ are often school (e.g. $3 A$ Unit 5 is about a fashion show at school) or home (e.g. $2 A$ Unit 1 is about visiting Grandpa and Grandma at their new house, and $4 B$ Unit 6 is about moving to a new flat). Other common themes of the reading passages include jobs, shopping in a supermarket, and people we admire. In Primary Longman Express, the topics of the reading passages are also varied. These include good and bad behaviour (2A Units 1 and 2, and 5A Unit 1), classmates (3B Unit 2), new friends (4A Unit 1), and school events (3A Unit 1 and 3B Unit 5).

The rationale behind choosing the reading passages is that, in my experience as a school teacher for a number of years, teachers in Hong Kong usually spend a great deal of time teaching reading passages. Besides, the reading passages are of a variety of different text types (subgenres) to which primary school pupils are expected to be exposed and they provide pupils with "meaningful contexts for the integrated learning of grammar, vocabulary and language use" (Educational Publishing House Limited, 2009). The vocabulary used in reading passages also plays a crucial role. As mentioned in

[^3]Chapter 1, the first exposure to the key vocabulary used in textbooks can leave a strong impression on learners and influence their usage in the future (Maehara, 2010).

### 3.2.2.2 The importance of dialogues

Apart from the reading passages, dialogues (both single-sex, i.e. between-male and between-female, and mixed-sex) for teaching pupils speaking skills can be found in nearly each unit of the two textbook series. Wong (2009) suggests that dialogues in language textbooks provide learners with models so that they know how to communicate in real contexts. Thus, dialogues were another subgenre selected for analysis. In the two textbook series, three types of dialogues can be identified: speech bubbles (see Figures 3d from Step Up $1 A$ p. 5 and 3e from Primary Longman Express $1 A$ p. 2), self-contained dialogues in speaking tasks (outside speech bubbles and not embedded in reading passages, and this type of dialogues can only be found in Primary Longman Express) (see Figure 3f from Primary Longman Express 3 A p. 3), and dialogues embedded in reading passages (see Figures 3g from Step Up 3B p. 29 and 3h from Primary Longman Express $5 A$ p. 33). They all match the reading passages in contexts or themes, for example, greeting new classmates (Step Up $1 A$ Unit 1 and Primary Longman Express $1 A$ Unit 1), asking for directions (Step Up 5A Unit 3 and Primary Longman Express 4B Unit 4), and asking for someone's permission (e.g. Step Up $2 B$ Unit 4).


Figure 3d Speech bubbles in Step Up


Figure 3e Speech bubbles in Primary Longman Express


Figure 3f Self-contained dialogues in Primary Longman Express

Nurse Arny is asking Cindy about her habits. Read what Nurse Amy and Cindy say.


Figure 3g Dialogues embedded in a reading passage in Step $\boldsymbol{U p}$

## Reading

Tim's family are planning a surprise for his birthday. Read the passage to find out what happens.
1 It was Tim's birthday. His brother, sister and cousins wanted to give him a nice surprise. 'Tim and Mum will be home from the supermarket later,' said Andy. Is everything ready?' 'Tve already called Tim's friends. I've already spoken to Billy. Sam and Ricky.' said Sarah. 'Have you called Jason yet?' asked Emma. 'Oh no! I haven't rung him yet. I forgot to put him on the list. I'll ring him now, replied Sarah.


Figure 3h Dialogues embedded in a reading passage in Primary Longman Express

### 3.2.2.3 The importance of illustrations

Almost all language textbooks include visuals because illustrations play an important role in textbooks, especially primary textbooks, presumably to enhance students' learning interests (Hibbing \& Rankin-Erickson, 2003; Lee \& Collins, 2010). Also, students can understand the text easily if the accompanying illustrations match with the text (Hibbing \& Rankin-Erickson, 2003). In Step Up and Primary Longman Express, the visuals include line drawings drawn by illustrators and photographs, and can be found in nearly every page of textbooks. Therefore, they were analysed in this study.

### 3.3 Data Preparation

The two analysed textbook series were available in their entirety in the library of The Hong Kong Institute of Education (a teacher training institution). Since soft copies of Step Up and Primary Longman Express could not be accessed, I typed out all the reading passages of the twenty-four textbooks, which consist of one hundred and eighty-six units, for subsequent textual analysis (Research Questions A1-3). Also, conversion done by the optical character recognition (OCR) software which works with a scanner to convert the printed characters in the textbooks into computer-readable texts in any case is not 100 per cent accurate. The twenty-four textbooks of the two series were also borrowed from the library for the later analysis of dialogues and illustrations to answer Research Questions $B$ and C.

### 3.4 Building and Analysing a Small Specialised Corpus

As twenty-four textbooks were to be analysed to answer Research Questions A1-3, which include all the reading passages (one reading passage for each unit) and the dialogues embedded in the reading passages of one hundred and eighty-six units, manual analysis would have been very time-consuming and involve an enormous amount of work. There might also have been problems concerning reliability and validity if a large amount of text had been analysed manually (Yuen, Yasin, Bakar, Jaludin, \& Hamid, 2008). Therefore, all the reading passages were, as indicated, typed and then saved as .txt files so that they could be analysed with AntConc, a kind of corpus analysis software developed by Laurence Anthony. AntConc was used because it is freeware, simple to use, and offers a number of tools for corpus analysis for this study including the Word List, Concordancer, and Concordance Plot tools.

The whole corpus includes all the reading passages of Step Up and Primary Longman Express, comprising 37,364 word tokens (19,674 words for Step Up and 17,690 for Primary Longman Express). Although the corpus size may be small, corpus size is not an issue if the texts are representative enough of the type of language under investigation (Reppen, 2010; see also Handford, 2010) and allow a researcher to answer his/her research questions (Koester, 2010). In fact, Leech (1991, p. 10) writes that "(t)o focus merely on size, however, is naïve", and that a small specialised corpus also has the advantages of allowing a researcher to examine the contexts in which a certain word occurs in the corpus easily because of its small size, and can better represent a particular genre or text type the corpus is built of than can a large general corpus (Koester, 2010). In order to compare how gender is represented in the two textbook series, the reading
passages of these two series were saved separately as two different folders. All the words in the corpus, with their frequency (i.e. the number of occurrences), are listed by using the Word List tool. The Concordance tool shows users how a search item (i.e. a 'node' or 'node word') is used in the corpus by showing all the instances of the node in the corpus in the form of text lines, but where a search item appears in the corpus can be found by using the Concordance Plot tool, with each box representing a file and the multiple lines inside the box representing the relative positions at which the search item can be found in the file (Anthony, 2004). The version used in this study is AntConc 3.2.2.1w for Windows.

Similar to Hellinger's (1980) method to identify if distortion of females (i.e. representing females in a more negative sense) is present by analysing the collocation of predicates with female headnouns, one way to find out how male and female characters are represented linguistically in this study is to look at collocations of gendered terms (Research Questions A1(c)-(e)). Collocation refers to the tendency of two or more words to associate with each other (McCarthy \& O'Dell, 2005-2008; O'Dell \& McCarthy, 20052008). It is another major area of investigation in corpus linguistics (Schmitt, 2000) and Collocates in AntConc was used to compute the collocates automatically, for example, she might collocate with short, or man might co-occur with active. By using the AntConc program, it is also possible to calculate the statistical significance of each co-occurrence of collocation by measuring either the MI (Mutual Information) or the T-score (Hunston, 2002). McEnery and Wilson (2001) note that the higher the MI score, the more associated a given node word is with its collocate.

### 3.5 Research Ethics

For most research studies involving publicly available written texts, prior to the analysis of data, ethical issues of handling the data have to be considered. Since the data of this study consists solely of two English Language textbook series, a kind of published materials, no ethical dilemma arises from the use of these data. In terms of copyright, based on the Copyright Ordinance in Hong Kong, "fair dealing with a work for the purposes of research ... does not infringe any copyright in the work or, in the case of a published edition, in the typographical arrangement." (Intellectual Property Department, 2004) Therefore, there were no ethical problems using the two English Language textbook series for the compilation of my textbook corpus. However, as all the reading passages of the two series were typed and saved to be analysed by AntConc program and some selected visuals were scanned to be inserted into this thesis, letters were sent to the two publishers to obtain their permission, because it is clearly stated in the textbook series that "no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, ... without the prior written permission of the Publishers". The permission of both Educational Publishing House Limited (the publisher of Step $U p$ ) and Pearson Education Asia Limited (the publisher of Primary Longman Express) was obtained successfully.

### 3.6 Methods of Data Analysis

After explaining what data were needed and how the textbook corpus was compiled, in this section, I explain the methods of data analysis used, with reference to the methods of previous studies on gender representation in EFL/ESL textbooks.

### 3.6.1 Content analysis

The first method used for analysing textual representation of gender is content analysis. Content analysis involves a "systematic" study of the content of a text (Sunderland, 2011, p. 39), which provides a 'background' for subsequent linguistic analysis (Sunderland, 2011). The simplest form of content analysis of gender representation involves identifying particular categories such as different 'types' of protagonists and their different social and occupational roles. Content analysis also often includes frequency counting to find the quantitative information such as whether the number of male and female characters is equal (Clark, 2002). It may take the form of quantitative visual analysis (see Section 3.6.5).

Content analysis was conducted in this study because it can provide "an objective, quantified description" (Equal Opportunities Commission, 2001, p. 64) about the frequency of occurrence of male and female characters in the reading passages of the two analysed textbook series to answer Research Question A1(a), that is, 'Are males and females comparably represented in terms of frequency of occurrence (both 'types' and 'tokens')?'

### 3.6.2 Linguistic analysis

Gender can be represented in a subtle, non-obvious way in a text through various linguistic devices and this can be explored by conducting linguistic analysis. Gender representation in textbooks can be explored by analysing linguistic features such as reference to characters in terms of noun phrases and adjectives, and verbs used in association with male and female characters' activities and processes, both which they
carry out and are subjected to, together with discourse roles in dialogues, as a type of textbook subgenre (see Section 3.6.4.2).

One other form of linguistic gender representation is 'firstness' (Winter, 2010) or order of mention (Lee \& Collins, 2008), when both male and female nouns are mentioned within a single phrase, for example, boys and girls ('male firstness') or ladies and gentlemen ('female firstness'). Similar to Winter (2010), order of mention (i.e. Research Question A3 'What is the frequency of 'male/female firstness', and are there any patterns here?') was examined by counting how often males or females were placed first within the mixed-sex phrases.

### 3.6.3 Corpus analysis

Corpus analysis is a form of linguistic analysis, and corpus linguistics is a methodology that uses a corpus (or corpora for its plural form) for analysing language from the perspective of discourse analysis (Paltridge, 2006). A corpus is usually a collection of a large quantity of "sampled" (p.4) texts, though it can also be a small specialised corpus as in the present study, which can be processed with a computer. Corpus analysis has an advantage that the collected data can be analysed quickly and accurately (McEnery, Xiao, \& Tono, 2006), and corpora can be tools to analyse gender (Baker, 2014).

Carroll and Kowitz (1994, p. 74) pointed out that the frequency of occurrence of a certain item shows its "salience" or "prominence" in a text. With the use of corpus linguistics, particular words occurring in a textbook series can be displayed in frequency order and the linguistic contexts these words occur investigated by analysing 'concordance lines'. To find out whether male or female characters are represented more
frequently in Step Up and Primary Longman Express, instead of counting male and female references in nouns, pronouns, titles, and first names manually, corpus software was used to ensure accuracy of the frequency counts (Research Questions A1(a)-(c) 'Are males and females comparably represented in terms of frequency of occurrence (both 'types' and 'tokens'); names and titles, or 'nomination'; and pronouns?'). The first step of my own corpus analysis was to compile a wordlist to conduct frequency counts of different gendered terms (e.g. He, mother). The frequencies of the male and female terms were then converted into ratios to show the "relative prominence" of representation of either males or females (Carroll \& Kowitz, 1994, p. 75), and the calculated ratios of male to female terms were presented as " $1: X$ " (i.e. " 1 to X ").

However, word frequencies alone might not tell us much about how males or females were represented across the two series because they only tell us how often the different gendered terms occur in the series. Thus, following Carroll and Kowitz's (1994) suggested method, I conducted a distributional analysis to find out whether certain gender items were evenly distributed throughout the different units.

Corpus studies in gender and language do not confine themselves to counting the frequency of lexical items but also focus on the analysis of collocation (Pearce, 2008). Therefore, another way to find out how gender is represented linguistically is to conduct an analysis of collocation. Collocation refers to the fact that some words have a tendency to co-occur with other words in certain contexts (Baker, 2008; Hunston, 2002; Kennedy, 1998), or to mean "the habitual co-occurrence of two (or more) words" (Stubbs, 1996, p. 176), and collocates are words that co-occur with nodes/node words or target searched items (Stubbs, 2002). Caldas-Coulthard and Moon (2010) suggest that collocational
patterns reveal societal attitudes, especially in terms of gender stereotypes. Sunderland (2011) also points out the potential of identifying gender stereotypes, for example, pretty girls, strong man, through analysing collocation. Baker (2008) suggests that corpora are useful tools in gender and language research because they can show not only how males and females use language differently (if they do), but also how they are represented differently in texts. Hunston (2002) mentions that to be reliable, collocation should be measured statistically to make sure that pairs of words are likely to constitute significant collocations rather than occurring together by chance (see also McEnery \& Wilson, 2001). Corpus software (e.g. AntConc) can do this.

To investigate how male and female characters are represented in terms of their associated adjectives and verbs (or 'social action'), and 'categorization' (both family relationship and occupational roles) (see Section 3.6 .4 below for a detailed explanation of these terms) to answer Research Questions A1(d)-(f) ('Are male and female characters comparably represented in terms of 'categorization' (family relationship and occupational roles); associated adjectives; and associated verbs, or 'social action'?'), the collocations of gendered terms (e.g. He, She, man, woman) were analysed. In order to obtain a statistically significant figure for given collocations, the MI score was calculated (but not the T-score, another commonly used measure of significance of collocations). The reasons are as follows: First, the T-score is more statistically significant only if the corpus size is large enough. In the corpus data for this study, including the words from the reading passages of only two textbook series of twenty-four books published by two publishers, which may be relatively small in corpus terms, the value of an MI-score is more helpful because it is not affected by the size of the corpus. Another reason is that the
top collocates (i.e. those collocates which are statistically more significant and are ranked in the higher position) obtained from computing the T -score tend to give information about the grammatical behaviour of a word (e.g. girl collocates with the, a), but the top collocates from the point of view of the MI-score give information about a word's lexical behaviour (e.g. boy collocates with naughty, watching) (Hunston, 2002). The span length chosen for this study is four words in either side of the node (that is, from 4L to 4R). The reason for choosing this span length is that collocation maybe most likely to occur in a span of up to four words in each side of the node (Kennedy, 1998).

Finally, through analysing the concordance lines, cases of the 'generic' use of he/she, man/woman and man/woman-compounds (e.g. policeman, firewoman) in Step Up and Primary Longman Express could be found and their frequency of use could be counted (Research Question A2 'What is the frequency of (a) the 'generic' use of he, man and man-compounds and (b) the 'generic' use of she, woman and woman-compounds when the sex of the referent is not specified, and are there any patterns here?').

### 3.6.4 Discourse analysis

Simply speaking, discourse analysis can be defined as the study of language beyond the sentence, which focuses on the relationship between language and the contexts in which the language is used (Paltridge, 2006; Trappes-Lomax, 2004). van Leeuwen (2008, p. 6) defines discourse further as the 'recontextualization of social practice', which means using discourses as "resources for representing social practices in text". This can be achieved by including or excluding certain participants in the text and, if the participants are included, assigning certain roles and actions to the participants.

Categories from van Leeuwen's (2008) sociosemantic inventory were used in this study to analyse how males and females are represented in the reading passages and visuals (see also Section 3.6.5) of the two textbook series. To the best of my knowledge, this has never been used to analyse gender representation in textbooks. The sociosemantic inventory, influenced by Halliday's (1985) functional grammar, includes the Social Actor Network, Social Action Network, Visual Social Actor Network, and Representation and Viewer Network (see also Section 3.6.5).

The Social Actor Network presents how 'social actors' can be represented in discourse (see Figure 3i). van Leeuwen (2008) uses the term 'social actors' to refer to 'participants' of social practices who can be represented to have 'agency' to 'perform' social roles in discourse. In textbooks, the 'participants' include the characters (Sunderland, 2011) in reading passages, dialogues, and visuals. van Leeuwen (2008) proposes the concept of 'exclusion', that is, whether given characters and their activities are included or excluded in a given text. 'Exclusion' includes 'suppression' if there is no reference to a certain character anywhere in the text. Suppression can also be realised through non-finite clauses, for example, infinitival clauses, which function as a "grammatical participant" (p. 29) and render the character(s) (or 'social actor(s)') excluded, e.g. To maintain this policy is hard. 'Exclusion' also includes 'backgrounding' which refers to when excluded social actors are not mentioned in relation to a certain action, but are mentioned elsewhere in the text which allows readers to infer who the social actors are (van Leeuwen, 2008). van Leeuwen's concept of 'exclusion' was used in this study to find out if it is still the case that females were underrepresented in the reading passages of the two textbook series, as in previous textbook studies (e.g.

Hellinger, 1980).
Included social actors can be 'determined' (i.e. 'determination'), which means specifying their identity (instead of making them anonymous), or 'personalized' (i.e. 'personalization'), as realised by personal or possessive pronouns, proper nouns or nouns (van Leeuwen, 2008). 'Personalized' social actors can be represented as generic classes, realized by the plural form, or the singular with the definite article or indefinite article, or specific individuals (i.e. 'genericization' and 'specification'). Reference to the characters can be identified by 'nomination' (that is, the characters' unique identity, typically realised by proper nouns) (Research Question A1(b) 'Are male and female characters comparably represented in terms of names and titles, or nomination?') and 'categorization' (that is, identities or functions shared with others, or their functional roles, e.g. father and sister) (Research Question A1(d) 'Are male and female characters comparably represented in terms of 'categorization'?'). Nomination can be formal (realised by surname only), semiformal (with given name and surname, e.g. Dwight Harris), or informal (with given name only, e.g. Dwight). van Leeuwen (2008) suggests that items other than proper nouns can also be used for nomination if, in a certain context, only one social actor occupies a certain position or performs a certain function. In a children's story, this character can be represented as, for example, the Little Boy, the Rabbit. Besides these, social actors can be 'categorised' through 'functionalization' and 'identification'. Functionalization means that social actors are referred to "in terms of ... an occupation or role" (p. 42). One way this can be realised is the "compounding of nouns" denoting an activity and "highly generalized categorizations" (p. 42) (e.g. man, woman, person), as in fireman and chairperson. Identification, on the other hand, means
that social actors are referred to "in terms of their personal, kinship, or work relations to each other" (p.43) and is realised by means of a possessive pronoun (e.g. her mother), a genitive (e.g. the child's mother), or postmodifying phrase with of (e.g. a mother of three).


Figure 3i Social Actor Network
van Leeuwen's $(1995,2008)$ Social Action Network is a descriptive framework for analysing how social actions are represented with grammar in English discourse (see Figure 3 j ), which categorises social actions as either 'actions' or 'reactions', with the former being processes that represent actions and the latter some 'mental processes'. He draws on Halliday's (1985) work on functional grammar and distinguishes three types of reaction: 'affective' (e.g. want, like), 'perceptive' (e.g. hear, see, perceive), and 'cognitive' which can take propositions as their object, that-clauses (e.g. believe, think). 'Affective' processes can combine with perfective non-finite clauses with 'to' (e.g. want to) or infinitive non-finite clauses with the '-ing' participle (e.g. like being). Actions can be 'material', which can be interpreted as 'doing' (e.g. resist, attacked) or 'semiotic' as
'meaning' (e.g. say, tell, described).
The concept of 'social action' was used to answer Research Question A1(f) ('Are male and female characters comparably represented in terms of associated verbs, or 'social action'?'). First, the verbs associated with different node words for males and females were identified by computing the collocates with AntConc. Then, these associated verbs were classified by using the categories in van Leeuwen's $(1995,2008)$ Social Action Network regarding how 'social action' is represented in discourse.


Figure 3j Social Action Network

After analysing the textual representation of gender in reading passages, I analysed the representation of gender in the dialogues, a kind of represented discourse, in both textbook series. To begin with, I analysed gender representation ('discourse roles') in all the textbook dialogues to answer Research Questions B1-5. First, the number of single-sex and mixed-sex dialogues (Research Question B1), the number of male and
female speakers in the single-sex and mixed-sex dialogues (Research Question B2), the number of utterances in the single-sex and mixed-sex dialogues (Research Question B3), and the number of words uttered by male and female speakers in the dialogues in the speech bubbles, self-contained dialogues (in Primary Longman Express only) and those dialogues embedded in the reading passages (Research Question B4) were counted. Then, who initiates and who concludes the mixed-sex dialogues were identified (Research Question B5).

### 3.6.4.1 Pragmatics

In communication, we not only need to understand the meaning of words in an utterance but also the speaker's intended meaning. The study of what speakers mean in utterances, i.e. Pragmatics (Yule, 2006), considers how people perform 'speech acts’ (Paltridge, 2006). A speech act refers to the function of an utterance uttered by a speaker. A speaker's intended meaning in an utterance can be identified by recognising its speech act (Yule, 2006). To answer Research Question B6 ('Are the speech acts of the dialogues related to speaker gender?'), a sample of mixed-sex dialogues in the two selected textbook series were selected and analysed.

Leech (1974, p. 47-48) suggested five communicative functions of language for speakers: informational (conveying information), expressive (expressing one's feelings and attitudes, e.g. exclamations), directive (aiming to influence others' behaviors or attitudes, e.g. commands and requests), aesthetic (the use of language for the sake of the language itself), and phatic (aiming to keep good social relationships, e.g. greetings).

There are two influential scholars in pragmatics who proposed Speech Act Theory.

They are John Austin and his student John Searle (Paltridge, 2006; Schiffrin, 1994). Three key terms are suggested by Austin (1976): locutionary, perlocutionary, and illocutionary acts. 'Locutionary acts' simply refer to the acts of 'saying something' and "the study of utterances" or "units of speech" (Austin, 1976, p. 94). 'Perlocutionary acts' refer to the acts performed by the different 'uses of language' (Austin, 1976, p. 100). The third related concept is 'illocutionary act'. When we perform a locutionary act, we actually also perform an illocutionary act, if it is performed in an appropriate context (Cruse, 2000), that is, "performance of an act in saying something as opposed to performance of an act of saying something" (Austin, 1976, p. 99-100). Austin (1976, p. 151-162) then classified five general classes of speech acts according to their illocutionary force: verdictives (the delivering of a finding upon evidence or reasons to a fact, which include the examples of estimate, describe, analyse), exercitives (the exercising of power, rights, or influence, for example, appoint, order, advise), commissives (committing the speaker to a certain action, for example, promise, intend, guarantee), behabitives (including the reaction to others' behaviour and expressions of the attitudes towards someone's conduct, for example, apologise, thank, criticise, welcome), and expositives (involving the expression of views or arguments, which include the examples of state, affirm, illustrate, answer).

Searle (1979, p. 12-17) suggested a taxonomy of illocutionary acts (i.e. the acts of producing utterances in a certain context) to classify speech acts: assertives (committing the speaker to the truth of the expressed proposition, achieved by 'performative verbs' such as describe, call, identify), directives (getting the hearer to do something, by using verbs such as ask, request, order), commissives (committing the speaker to some future
action, by a verb such as promise), expressives (expressing a psychological state, achieved by verbs such as apologise, congratulate, thank), and declarations (performing an act which brings about a reality, e.g. I declare your employment terminated). Though the illocutionary force of an utterance can be shown explicitly by a 'performative verb' used (i.e. 'explicit performativity'), it is not always linguistically explicit (Cruse, 2000; Goddard, 1998) (i.e. 'implicit performativity' or indirect speech act).

To answer Research Question B6 ('Are the speech acts of the dialogues related to speaker gender?'), both Austin's (1976) and Searle's (1979) classifications of speech acts were adopted.

### 3.6.4.2 'Conversation analysis'

Sunderland (2011) argues that a complete linguistic analysis of a children's book should also include 'discourse' analysis, in terms of dialogues. Therefore, I analysed the mixedsex dialogues of the two analysed textbook series to answer Research Question B7 ('Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) overlapping speech, and (c) hesitations and other non-fluency features, related to speaker gender?').

CA, an important form of discourse analysis which is usually used to analyse 'talk-in interaction' (Liddicoat, 2007; Seedhouse, 2004), is used by applied linguists as an analytical tool because it is focused on the detail of how people use language to achieve their purposes of social interaction (Wong, 2009). Though CA was originally developed to analyse only naturally occurring talk (Sert \& Seedhouse, 2011), it can still give us some insights into the language of invented textbook dialogues. Indeed, Seedhouse (2004,
p. 228) suggests that "CA is well positioned to portray the similarities and differences between invented dialogue and naturally occurring interaction". CA has been used to analyse textbook dialogues. Wong (2002), for example, used CA to analyse a corpus of thirty telephone dialogues collected from eight ESL textbooks published in the 1990s (this study, however, is not related to gender representation) and found that the features of naturally occurring telephone conversations were absent or incomplete. Therefore, in my study, the mixed-sex dialogues of the two textbook series were analysed by borrowing certain concepts from Conversation Analysis (CA).

CA recognises the "orderliness" of talk in interaction achieved by the production of utterances by co-participants in a particular context in order to achieve a certain outcome (Liddicoat, 2007, p. 5), as in the formation of 'adjacency pairs' (Research Question B7(a)). In conversation, many speaking turns occur as pairs and these paired utterances in CA are called adjacency pairs. Examples of adjacency pairs are greetinggreeting, question-answer, and offer-accept/decline (Schegloff, 2007). Common features of adjacency pairs are that they include two turns produced by two different speakers, one following another (i.e. adjacently placed). The turn which initiates an action is called the 'first pair part' (FPP) and the turn which follows the action the 'second pair part' (SPP) (Liddicoat, 2007; Schegloff, 2007). For instance, the utterance "How are you?" as an FPP initiates the action of another speaker to utter "Fine! Thanks" as an SPP. Schegloff (2007) notes however that the two turns of an adjacency pair can sometimes be separated by intervening talk, including an 'embedded’ adjacency pair.

Another feature of conversation, overlapping speech, was also analysed in this study. In a normal situation, when a speaker finishes talking, there is often a short pause
or silence before the next speaker's talk, a 'transition space'. If the pause is prolonged, it may result in a lapse in the talk and is called a 'gap' (Liddicoat, 2007). However, if the transition space is non-existent, i.e. the current speaker and the next speaker talk simultaneously, this is an 'overlap' (Liddicoat, 2007). This often happens in friendly talk but may be problematic, e.g. if the first speaker's talk is 'cut off'.

Lastly, I analysed if there are hesitations and other non-fluency features in the mixed-sex dialogues of the two textbook series. Dialogues in textbooks are similar to those features in fictional texts in that they are also invented. However, textbook dialogues are even more 'invented' than dialogues in novels because they are written for the purpose of developing students' speaking skills. Myers-Scotton and Bernsten (1988), in their comparison of natural conversations of native speakers of American English and TESOL textbook dialogues, and Gilmore (2004), in the comparison of dialogues in English Language textbooks published between 1981 and 1997 with comparable authentic dialogues, identified a number of differences, which were used to answer Research Questions B4 and 7:

- Terminal overlap: Gilmore (2004, p. 368) suggests that 'terminal overlap' occurs when "two interlocutors try to speak at the same time". While this feature is common in authentic conversation, it rarely occurs in textbook dialogues.
- Hesitation devices such as er, erm are common in natural conversation to allow speakers to think about what to say while keeping the 'floor'. Few hesitation devices can be found in textbook dialogues (Gilmore, 2004).
- Length and structure of dialogues: Gilmore (2004) found that the dialogues in authentic interactions were more lengthy than those in textbooks, and the
authentic conversations were generally more complicated in their structures. In terms of gender difference, Myers-Scotton and Bernsten (1988), in their studies of natural conversations of native speakers of American English in asking for directions on the street and making requests in service encounters, noticed that men generally produced slightly longer responses than women in their exchanges in natural conversations.

To ensure that there are enough examples of the different types of speech acts suggested by Austin (1976) and Searle (1979) and adjacency pairs for analysis and both books A and B from the six grade levels were selected from the two textbook series, I selected twelve textbooks (half of the total number of textbooks from the two textbook series), Step Up 1B, 2A, 3B, 4A, 5B, and 6A, and Primary Longman Express 1A, 2B, 3A, $4 B, 5 A$, and $6 B$, to answer Research Questions B6 and 7(a). Based on the context and the theme of different units, the functions (i.e. speech acts) of the dialogues initiated by the male and female speakers in the selected textbooks were identified. Finally, Research Questions B7(b) and (c) on gender and overlapping, hesitations, and other non-fluency features (i.e. those features that interfere with the fluency of speech) suggested by Leech and Short (2007) were answered by analysing all the mixed-sex dialogues in the two textbook series.

### 3.6.5 Visual analysis

The last method of data analysis used in the present study is visual analysis. Content analysis is not always separated from quantitative visual analysis (Sunderland, 2011). Quantitative visual content analysis was used in this study to answer Research Questions

C1 ('Are male and female characters comparably represented in the illustrations in terms of frequency?') and C2 ('What are the different visualised occupations of the adult male and female characters?'). It can answer the questions of who and what is represented in the visuals and the number of occurrences of different visualised characters (Bock, Isermann, \& Knieper, 2011). As a form of content analysis, it is possible to run frequency counts on visuals. One way that gender representation in visuals can be explored is by counting the number of characters to find out if one sex outnumbers the other. Furthermore, it is possible to record each visual image as 'male dominant', 'female dominant' or 'balanced', with 'dominant' meaning that one character is the main focus of the visual (Schmitz, 1984). Gender stereotyping can be identified if men and women are portrayed engaging in certain traditional activities (Research Question C3 'How are male and female characters represented in selected illustrations (both line drawings and photographs) in terms of involvement in activities?'), or with certain physical images (including hair length, and their size or height relative to each other) or dressed in certain ways (Research Question C4 'How are male and female characters represented in selected illustrations in terms of size/height; hair length; and clothing?') (Women in EFL Materials, 1991; see also Sunderland, 2011). This can be explored by analysing all or a sample of visuals in a given data set. Four textbooks from the two series were selected by systematic sampling: every fifth book was selected from a list of twenty-four books, twelve from the whole series of Step $U p$ and twelve books from Primary Longman Express. Step Up $3 A$ and $5 B$ and Primary Longman Express $2 A$ and $4 B$ were then chosen.

In addition to frequency counts of visuals, van Leeuwen (2008) has proposed two 'networks' for exploring the visual representation of 'social actors', Visual Social Actor

Network, and Representation and Viewer Network (this network was not used in this study). Within the Visual Social Actor Network (see Figure 3k), there are different strategies for representing people visually. First, there is always the possibility of inclusion or exclusion (i.e. including or not including certain people). Machin (2007, p. 118) relatedly uses the term "non representation" when somebody is not represented in an image (i.e. someone is not depicted in an image, and not depicted doing any action). The people who are included in the visuals may be depicted as involved in action or not.


Figure 3k Visual Social Actor Network
van Leeuwen's (2008) Visual Social Actor Network was used for visual analysis in this study because it is useful to answer Research Question C3. To the best of my knowledge, it has only to date been used to analyse gender representation in picture books (Sunderland \& McGlashan, 2012).

The first step of the visual analysis was to determine the kinds of visuals in the textbooks to be examined, i.e. line-drawn illustrations and photographs in the two textbook series. Quantitatively, to determine whether male and female characters were comparably represented in the illustrations of the two textbook series (Research Question C1), all characters appearing on each page of each textbook of the two series were
counted. However, for the purpose of analysis, those characters in the line-drawn illustrations and photographs which are either too small or did not clearly allow identification of biological sex were excluded from analysis. A tally was made of the number of male and female characters. First, the actual character was tallied once no matter how many times this character appeared in the unit. That is, the number of 'tokens' was counted. When there are non-gendered non-human characters, I determined the sex if a name was given. Whether the characters were human or animal, they were considered as either male or female if they were portrayed as wearing conventionally male or female clothing. Cases in which it was hard to determine if a visual was intended to depict a male or female were classified as 'unclear cases'. Other coding categories for visual analysis were the size ('larger' or 'smaller') and height ('taller' or 'shorter') of the male and female characters, their hair length and clothing (colour) (i.e. Research Question C4).

### 3.6.6 Statistical analysis: Chi-square test and log-likelihood

Statistical analyses were also conducted in this study. Simply counting frequencies of occurrence of node words (i.e. search words) for males and females in the reading passages and the total number of males and females in the illustrations of the two analysed textbook series is not enough because we cannot determine if any observed differences have just happened by chance. Therefore, significance tests need to be conducted to determine "if a relationship is statistically significant" (Sweet \& GraceMartin, 2012, p. 106), which means that an observed relationship would likely to happen if the whole population were studied (Sweet \& Grace-Martin, 2012).

In the present study, a chi-square test was used to calculate significance levels, i.e.
"the probability that a relationship appears in the sample" (Sweet \& Grace-Martin, 2012, p. 108) for Research Questions A1(d)-(f). The chi-square test is the most appropriate significance test for data in the form of frequency counts in different categories (Kasayira, n.d.; McMillan, 2000), or to be more specific, 'categorical variables’ (Sweet \& GraceMartin, 2012), for example, node words for males and females. The chi-square value, often written as $\chi^{2}$ (Butler, 1985), was calculated by using the following formula:

$$
x^{2}-\sum \frac{(O-E)^{2}}{E}
$$

A degree of freedom ( $d f$ ), which is a number used to "approximate the number of observations in the data set for the purpose of determining statistical significance" (Urdan, 2010, p. 60), is needed to interpret the chi-square value (Vogt, 1999). It is obtained by the number of analytical categories minus one (Spatz, 1993). Therefore, if there are two categories, it will be $2-1=1 d f$. With $p<0.05$ (i.e. probability value of less than 0.05 ), a rather commonly used probability level in linguistics (McEnery \& Wilson, 2001), chosen as the significance level, the $p$-value (i.e. probability value) can then be obtained by checking a chi-square distribution table. If the calculated $\chi^{2}$ is greater than the $p$-value, the null hypothesis (or no significant difference or relationship (McMillan, 2000)) is rejected (Butler, 1985).

Nonetheless, the chi-square test only tells us whether there is a relationship between two variables (Spatz, 2011). In other words, the level of significance in the chisquare test does not describe the strength of the relationship (Corder \& Foreman, 2009; Spatz, 2011). Therefore, the 'effect size' also has to be obtained to analyse the degree of relationship. The phi $(\varphi)$ coefficient is an effect size index for a $2 \times 2$ contingency table,
and is calculated with the following formula:

$$
\phi=\sqrt{\frac{\chi^{2}}{N}}
$$

A $\varphi$ value of 0 means that there is no relationship between the two variables, whereas a value that is close to 1 means there is a nearly perfect relationship (Spatz, 2011). Cohen (1992) also suggests that $\varphi$ values of $.10, .30$, and .50 mean the effect size is small, medium, and large respectively.

Log-likelihood was also calculated. Chi-square tests assume that data follow a normal distribution, but the occurrence of words in a text is not random. In corpus linguistics, it is common to find frequencies of words across any two texts, or two similar-sized corpora (Rayson \& Garside, 2000). This can be done by using 'frequency profiling', which can be achieved by compiling a frequency list for each corpus and then calculating the log-likelihood (LL) of a certain word in the two frequency lists (Rayson \& Garside, 2000). The log-likelihood value is calculated with the following formula:

$$
-2 \ln \lambda=2 \sum_{i} O_{i} \ln \left(\frac{O_{i}}{E_{i}}\right)
$$

In this study, the log-likelihood values were calculated for Research Questions A1(a) and (c) by using the log-likelihood calculator (Rayson, n.d.), a user-friendly method involving typing in the frequency for a certain word and the corpus size from which that word occurs and then pressing the 'Calculate LL' button. According to Rayson (n.d.), the loglikelihood value of 3.84 or higher is statistically significant at the level of $p<0.05$.

### 3.7 Reliability and Validity of the Study

After introducing the methods of data analysis used, in this section, I explain the methods used to ensure reliability and validity. The issues of reliability and validity are important because credibility of research depends on reliability and validity of measurement (McMillan, 2000).

First, Riffe, Lacy, and Fico (2005) suggest the importance of reliability to a research study because, to a certain extent, the quality of data is determined by the reliability of the measurement used in the study, and if a study is not reliable, then it is not valid. Reliability refers to the measurement in a study being "highly consistent over time, place, and circumstance" (p. 122). In other words, the study should produce similar results if it is replicated following the same methodological procedures. In this study, because all the reading passages in both textbook series, which include a total number of 37,364 words, were analysed to answer Research Question A1(a), corpus software AntConc was used so that the number of 'tokens' and 'types' of node words for males and females could be counted accurately. To find out the total number of human and nonhuman males and females in the visuals of the two textbook series (Research Question C1), I counted the number of visualised males and females twice. The second count was done a few months after the first, and done independently without referring to the findings obtained in the first count. The difference in the results of counting the number of visualised males and females on each page of the textbook series obtained from the two counts was less than 3 , which means the intra-rater reliability (or the test-retest reliability) is rather high. One more practice that ensures reliability is the calculation of MI (Mutual Information) scores by using the 'Collocates' tool of AntConc (see also

Section 3.4). I did this when analysing how males and females are represented in terms of their family relationship and occupational roles, and associated adjectives and verbs in the reading passages (Research Questions A1(d)-(f)), because I could then determine if pairs of words are significant collocations, not occurring together by chance, and in this study I considered only those collocates which have an MI score of 3 or above when associating with node words for males and females.

For validity, it concerns the "quality of a data-gathering instrument or procedure that enables it to measure what it is supposed to measure" (Best \& Kahn, 1998, p. 276). As the purpose of this study is to analyse gender representation of two recently published English Language textbook series used in Hong Kong primary schools, content validity was achieved by focusing only on those textbooks published since 2005 in the List of Recommended Primary School Textbooks in English (Education Bureau, 2007b). Riffe, Lacy, and Fico (2005) suggest that generalisability, or external validity (Dörnyei, 2007), can be achieved if an appropriate sample is collected for analysis. External validity was also achieved in this study because the two textbook series used in most primary schools in Hong Kong were identified by sending out questionnaires to the English panel heads of about one-tenth of all the primary schools in Hong Kong and analysed. With sixty different primary schools being surveyed, it is expected that the sample is representative of primary schools in Hong Kong. It may also be that the findings of this study can be generalised to other Hong Kong primary English Language textbooks, because the findings of the two textbook series regarding gender representation are similar in many ways (see Section 9.1 for a summary of the major findings).

### 3.8 Insights of the Pilot Study for the Main Study

Bloor and Wood (2006, p. 130) define piloting precisely as "the conduct of preliminary research, prior to the main study". Before conducting the actual study, I conducted a pilot study of selected mixed-sex dialogues and visuals in Step Up. The aim of a pilot study is "to assess the quality while it can still be revised and improved" before the actual study is conducted (Seliger \& Shohamy, 1989, p. 195). Through conducting the pilot study, I could check if the methodology (chosen data and data analysis) was effective in addressing the research questions (RQs) and if any methodological aspects of the study had to be modified.

Based on the results of the pilot study, insights could be gained for the data needed, the operationalisability of the research questions, and the categories of data analysis adopted in the main study.

First, all research questions about gender representation in dialogues and illustrations were operationalisable and productive, often with interesting results, except for RQ B7 ('Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) overlapping speech, and (c) hesitations and other non-fluency features, related to speaker gender?') because no non-fluency features, which are common in natural conversations, could be found in the selected dialogues. The analysed dialogues, in speech bubbles, are contrived and written to help beginner students of English practice speaking. However, other dialogues may be different, so it is worth analysing different data: those dialogues (both single-sex and mixed-sex) from Step Up embedded in the reading passages, together with the analysis of the dialogues in Primary Longman Express, including those in the speech bubbles, the self-contained dialogues
and those embedded in the reading passages.
In the pilot study, the number of between-male and between-female dialogues (single-sex dialogues) and mixed-sex dialogues was not counted but was analysed in the main study (RQ B1), as this is also one source of evidence of male or female visibility in dialogues, as well as the number of utterances and words produced by the male and female speakers (RQ B3-4). In both textbook series, non-human characters, including animals, monsters and a robot, can also be found to be involved in speaking. Therefore, the dialogues involving both human and non-human male and female characters should be analysed in the main study (RQ B2).

For the analysis of speech acts (RQ B6), Leech's (1974) communicative functions of language and Searle's (1979) taxonomy of illocutionary acts were used in the pilot study. However, it was not always easy to classify the speech acts, for example, whether a question (e.g. Does he play the piano?) should be classified as informational in Leech's (1974) classification or directive in Searle's (1979) taxonomy. Also, some wordings of the two sets of categories are slightly different but they are in fact the same categories: expressive and directive in Leech's classification and expressives and directives in Searle's (1979) system. Thus, in the main study, Austin's (1976) classes of speech acts (instead of using Leech's classification again) and Searle's (1979) taxonomy of illocutionary acts for classifying speech acts were used together to analyse the speech acts of the dialogues in selected textbooks.

Lastly, in visual analysis, the concept of the doers of the action for the category of involvement in action in van Leeuwen's (2008) Visual Social Actor Network (RQ C3) was focused on to analyse the activities engaged in by visualised males and females in
the main study.

### 3.9 Conclusion

This chapter started by reiterating the research questions of the present study. Then, I explained how and why the two currently published primary English Language textbook series (Step Up and Primary Longman Express), and particular textbook subgenres (reading passages and dialogues) and visuals were selected for analysis. The major part of this chapter was devoted to explaining the different methods of data analysis used in this study (content analysis, linguistic analysis, including corpus analysis, discourse analysis, pragmatics, 'conversation analysis', and visual analysis) and how they were used to answer the different research questions (see Table 3-4 below for the summary of the data and methods of data analysis to answer different research questions). After that, I discussed the reliability and validity of this study. The last section was a brief explanation of the pilot study: what data was piloted and why, and what implications could be drawn from the pilot study for data collection and analysis in the main study. In the next chapter, and Chapters 5 and 6, the findings of the main study will be presented. First, Chapter 4 will present the results of textual representation of gender (lexis and grammar) in the reading passages of Step $U p$ and Primary Longman Express. Then, discourse representation and gender in the dialogues of the two selected textbook series will be analysed and reported in Chapter 5. In Chapter 6, how gender is represented in the visuals (line drawings and photographs) of the two textbook series will be presented.

| Research Questions | Data | Methods of Data Analysis |
| :---: | :---: | :---: |
| A. Textual representation of gender <br> How is gender represented in the reading passages in the Step Up and Primary Longman Express series in terms of lexis and grammar? |  |  |
| 1. Are males and females comparably represented in terms of: <br> a) frequency of occurrence (both 'types' and 'tokens'); <br> b) names and titles, or 'nomination'; <br> c) pronouns; <br> d) 'categorization' (family relationship and occupational roles); <br> e) associated adjectives; and <br> f) associated verbs, or 'social action'? | All reading passages of the two textbook series, Step $U p$ and Primary Longman Express | Content analysis, linguistic analysis, including corpus analysis, and discourse analysis |
| 2. What is the frequency of (a) the 'generic' use of he, man and man-compounds and (b) the 'generic' use of she, woman and woman-compounds when the sex of the referent is not specified, and are there any patterns here? | All reading passages of the two textbook series, Step $U p$ and Primary Longman Express | Linguistic analysis, including corpus analysis |
| 3. What is the frequency of 'male/female firstness', and are there any patterns here? | All reading passages of the two textbook series, Step $U p$ and Primary Longman Express | Linguistic analysis, including corpus analysis |
| B. Discourse representation and gender <br> How is the discourse of male and female characters represented in the dialogues in the Step $U p$ and Primary Longman Express series? |  |  |
| 1. How many dialogues are (a) between males, (b) between females, and (c) mixed-sex? | All the dialogues (both single-sex and mixed-sex) in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series | Discourse analysis |
| 2. How many male and female speakers are there in the single-sex and mixed-sex dialogues? | All the dialogues (both single-sex and mixed-sex) in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series | Discourse analysis |
| 3. How many utterances are there in the single-sex and mixed-sex dialogues? | All the dialogues (both single-sex and mixed-sex) in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series | Discourse analysis |
| 4. How many words are uttered by male and female speakers in the single-sex and mixed-sex dialogues? | All the dialogues (both single-sex and mixed-sex) in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series | Discourse analysis |
| 5. Who initiates and who concludes the mixed-sex dialogues? | All the dialogues (both single-sex and mixed-sex) in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series | Discourse analysis |
| 6. Are the speech acts of the dialogues related to speaker gender? | Only the mixed-sex dialogues in Step Up $1 B, 2 A, 3 B, 4 A, 5 B$, and $6 A$, and Primary Longman Express 1A, $2 B, 3 A, 4 B, 5 A$, and, $6 B$ | Pragmatics |
| 7. Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) | Only the mixed-sex dialogues in Step Up $1 B, 2 A, 3 B, 4 A, 5 B$, and $6 A$, | 'Conversation analysis’ |


| overlapping speech, and (c) hesitations and other non-fluency features, related to speaker gender? | and Primary Longman Express 1A, $2 B, 3 A, 4 B, 5 A$, and, $6 B$ (RQ 7a) <br> All the mixed-sex dialogues in the speech bubbles, self-contained dialogues, and those embedded in the reading passages of the two textbook series (RQs 7b-c) |  |
| :---: | :---: | :---: |
| C. Visual representation of gender How is gender represented in the visuals in the Step Up and Primary Longman Express series? |  |  |
| 1. Are male and female characters comparably represented in the illustrations in terms of frequency? | Illustrations (both line drawings and photographs) on each page of the two textbook series | Visual analysis |
| 2. What are the different visualised occupations of the adult male and female characters? | Illustrations (both line drawings and photographs) on each page of the two textbook series | Visual analysis |
| 3. How are male and female characters represented in selected illustrations in terms of involvement in activities? | Illustrations (both line drawings and photographs) on each page of Step Up $3 A$ and $5 B$, and Primary Longman Express $2 A$ and $4 B$ | Visual analysis |
| 4. How are male and female characters represented in selected illustrations in terms of: <br> a) size/height; <br> b) hair length; and <br> c) clothing? | Illustrations (both line drawings and photographs) on each page of Step $U p 3 A$ and $5 B$, and Primary Longman Express $2 A$ and $4 B$ | Visual analysis |

Table 3-4 Data and methods of data analysis used for the research questions of this study

## Chapter 4

## The Main Study: Textual Representation of Gender - Lexis and Grammar in Reading Passages

In this chapter, textual representation of gender (in terms of lexis and grammar) in the reading passages of Step Up (SU) and Primary Longman Express (PLE) were analysed to address Research Questions A1 to 3. The results are presented as follows: Section 4.1 concerns gender representation in lexis, and gender representation in formal grammar is reported in Section 4.2.

### 4.1 Gender Representation in Lexis

4.1.1 Frequency of occurrence (number of 'tokens' and 'types') of males and females (Research Question A1(a))

The first and most basic step in analysing data in corpus studies is to conduct a frequency analysis (Evison, 2010; Schmitt, 2000) to find out how frequently a particular word occurs in a corpus. The frequency of occurrence of male and female 'node words' (or, as mentioned in Chapter 3, search words) in the reading passages of the whole series of $S U$ and PLE (comprising twelve books, $1 \mathrm{~A}, 1 \mathrm{~B}, \ldots 6 \mathrm{~B}$, for each series) was counted quickly and accurately with the compilation of a word list (Murphy, 2010) by using the Word List tool of the corpus software AntConc. When the frequency list is generated, every item in the corpus, together with the total number of tokens of each word, is displayed (Evison, 2010). Following the procedure suggested by Stubbs (1996), the occurrences of the node words in the corpus and their frequency were identified (the word list which shows the
frequency of each node word was again generated automatically with the use of AntConc).

### 4.1.1.1 Frequency of occurrence of males and females in Step $\boldsymbol{U} \boldsymbol{p}$

First, the total number of word tokens in the Step Up sub-corpus is 19,674 and the total number of word types is 2,567 . The 'types' of male and female 'node words' and their frequency of occurrence in terms of 'tokens' are listed in Table 4-1 in Appendix 4. As can be seen, the total number of male 'mentions' in this sub-corpus is greater than that of female mentions, 889 compared with 595 respectively. The ratio of female to male mentions is 1:1.494. Given that $\chi^{2}(1, \mathrm{n}=1484)=58.245, p<.05$, males as tokens, that is, counting "every word form" (Nation, 2001, p. 7), are represented more often than females in the texts and the difference is strongly significant (even if the chi-square value is substantiated with $p<.001$ ), and the effect size index ( $\varphi=0.198$ ) shows the relationship is between small and medium. However, when counting the types, meaning "different words" (Schmitt, 2000, p. 74), there are more 'types' of node words for females than males, 55 'types' for females but 48 for males (a ratio of 1.146:1). $\chi^{2}(1, \mathrm{n}=$ $103)=0.476, p<.05$ and thus the difference is not significant. Therefore, in the reading passages of $S U$, males are more visible in one way and females are more visible in another.

To compare the frequency of occurrences of male and female node words easily, gendered terms for males and females are paired up (ranked according to the frequency of occurrence of the gendered terms for males, matched with their female equivalents) and listed in Table 4-2.

| Gendered Terms for Males | Frequency of Occurrence | Gendered Terms for Females | Frequency of Occurrence | Log- Likelihood (LL) |
| :---: | :---: | :---: | :---: | :---: |
| He | 180 | She | 79 | *40.45 |
| his (possessive adjective) | 83 | her (possessive adjective) | 42 | *13.70 |
| he | 77 | she | 36 | *15.22 |
| Mr | 40 | Mrs / Miss | $27 / 23$ | 2.54 / *4.64 |
| man | 38 | woman | 7 | *23.48 |
| him | 21 | her (object pronoun) | 28 | 1.00 |
| Uncle | 20 | Aunt | 1 | *21.07 |
| Grandpa | 19 | Grandma | 13 | 1.13 |
| king | 19 | queen | 5 | *8.71 |
| boy | 17 | girl | 13 | 0.53 |
| father | 12 | mother | 19 | 1.59 |
| brother | 10 | sister | 8 | 0.22 |
| His | 10 | Her | 7 | 0.53 |
| Dad | 7 | Mum / Mummy | 16/1 | 3.62 / *5.06 |
| prince | 7 | Princess | 1 | *5.06 |
| boys | 3 | girls | 1 | 1.05 |
| Father | 3 | Mother | 15 | *8.73 |
| Brother | 1 | Sister | 1 | 0 |
| his (possessive pronoun) | 1 | hers | 1 | 0 |
| husband | 1 | wife | 1 | 0 |
| $\begin{aligned} & \text { Total No. of 'Types': } \\ & 20 \end{aligned}$ | Total No. of 'Tokens': 569 | Total No. of 'Types': $22$ | Total No. of 'Tokens': 345 |  |

*Log-likelihood of 3.84 or higher is significant at the level of $\boldsymbol{p}<\mathbf{0 . 0 5}$
Table 4-2 Pairs of gendered terms for males and females in Step $\boldsymbol{U} \boldsymbol{p}$, and their frequency

If we read the figures in Table 4-2 carefully, it can be seen that the frequency of He is particularly high compared with the feminine subject pronoun She, 180 compared with 79. Analysing the Concordance Plot (see Figure 4a below), the node He has a particularly high frequency in Step $U p 5 B$ and $6 B$, with 69 and 41 hits respectively (compared with 2, 11, 10, 16, 17, 4, 21, 6, 33, and 27 hits for Step Up $1 A, 1 B, 2 A, 2 B, 3 A$, $3 B, 4 A, 4 B, 5 A$, and $6 A$ respectively). When referring to the original text by selecting File View of AntConc, it tells us that in Step Up 5B, there is a unit titled 'Funny Jokes' in which He/he has been used in many instances to refer to a hardworking but foolish farmer called Foo, and one titled 'Collecting Things' about old toys collected by Uncle Sam. Also, in Step $U p 6 B$, there is a unit about a male painter who drew a painting of a snake with legs, so there is a high occurrence of the node He/he. Therefore, the
particularly high frequency of $H e / h e$ is related to the contexts of different units.

Concordance | Concordance Plot | File View | Clusters | Collocates | Word List | Keyword List |
| :--- | :--- | :--- | :--- | :--- | :--- |



No. of Hits $=10$
File Length (in chars) $=4353$

HIT FILE: 4 FILE: 2B.txt

|  |  |  |  |  | No. of Hits $=16$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| File Length (in chars) $=5155$ |  |  |  |  |  |

HIT FILE: 5 FILE: 3A.txt


No. of Hits $=17$
File Length (in chars) $=5476$
HIT FILE: 6 FILE: 3B.txt


No. of Hits = 4
File Length (in chars) $=7054$

HIT FILE: 7 FILE: 4A.txt


No. of Hits $=21$
File Length (in chars) $=7239$

HIT FILE: 8 FILE: 4B.txt


HIT FILE: 9 FILE: 5A.txt

|  |  |  |  |  |  |  |  |  | No. of Hits $=33$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| File Length (in chars) $=11960$ |  |  |  |  |  |  |  |  |  |

HIT FILE: 10 FILE: 5B. xx


HIT FILE: 11 FILE: GA.tst


No. of Hits $=27$
File Length (in chars) $=15852$
HIT FILE: 12 FILE: 6B.txt



Figure 4a Concordance plot of the node He
Because males as tokens are represented more frequently than females in the reading passages of Step Up, the frequency of occurrence of the gendered terms for males is usually higher than that of the female gendered terms when they are paired up, except
for him/her, father/mother, Dad/Mum, and Father/Mother. The node words Mother and mother have higher frequencies of occurrence than Father and father because of their high number of mentions in the unit 'Mother's Day' in Step Up $4 B$. Considering the loglikelihood values, only the differences in the frequency of occurrence of the pairs $\mathrm{He} / \mathrm{She}$, his/her (possessive adjective), he/she, Mr/Miss, man/woman, Uncle/Aunt, king/queen, Dad/Mummy, prince/Princess, and Father/Mother are statistically significant, with a LL of higher than 3.84 at $p<0.05$ (Rayson, n.d.) (see Table 4-2), because the differences in the frequency of occurrence of other pairs of gendered terms for males and females are small.

### 4.1.1.2 Frequency of occurrence of males and females in Primary Longman Express

Table 4-3 in Appendix 4 shows the gendered terms (or 'node words' in corpus linguistics, i.e. target searched items (see also Section 3.6.3)) used for males and females in Primary Longman Express which are listed according to their frequency of occurrence.

In the Primary Longman Express sub-corpus, the total number of word tokens is 17,690 . When the frequency of occurrence of males and females in terms of 'tokens' is counted, the number of male mentions is much greater than the number of female mentions: 773 male mentions but only 522 female mentions. The ratio of male to female mentions (tokens) is 1.481:1. As $\chi^{2}(1, \mathrm{n}=1295)=48.649, p<.05$, the difference is strongly significant (even if the chi-square value is substantiated with $p<.001$ ), and the effect size is between small and medium as indicated from the calculated $\varphi$ coefficient of 0.194. This is similar to the studies conducted by the Equal Opportunities Commission (2000), Gharbavi and Mousavi (2012a), Hartman and Judd (1978), and Mukundan and

Nimehchisale (2008), and in Step Up.
In PLE, the node word with the highest frequency of occurrence for males is the proper noun Tim, followed by He , with 85 and 74 occurrences respectively. Analysing the Concordance Plot, which tells users where a search item appears in the corpus (Anthony, 2004), Tim has 30 hits in Primary Longman Express $4 A$ (see Figure 4b). When referring to the original texts in the File View, I found that the node Tim occurs in many instances in a unit of $4 A$, 'Getting to know you', because the passage in this unit is a conversation between Tim and Jason. Tim is also involved in asking his grandpa about life in Hong Kong 50 years ago in the unit 'In the old days' in $4 A$, which also gives Tim a high frequency of occurrence (see Hit File 8 in Figure 4b). Therefore, the distribution of the node Tim is not even in the whole sub-corpus, but rather the occurrences in these two units cause the high frequency. In other words, the high frequency of male mentions can be explained by the context of the reading passages. He is the node word with the highest frequency of occurrence (180 in the frequency of occurrence) in $S U$. The calculated loglikelihood (LL) value is 35.07 , which is greater than 3.84 with $p<0.05$, so the difference between the frequency of occurrence of the node word $H e$ across two reading passages sub-corpora, Step Up and Primary Longman Express, is statistically significant.


Figure 4b Concordance Plot of the node Tim
The nodes He and he occur more than 10 times in Primary Longman Express 1A, 3B, 4A, $5 A, 5 B$, and $6 A$, though can also be found in Primary Longman Express $1 B, 2 A, 2 B, 4 B$ and $6 B$. There are $13,19,15,18,15$, and 11 hits respectively in these books (Figure 4 c ) to refer to boys and men. For example, in 1 A , He or he is used 9 times in the unit 'Our toys' because Teddy (a soft toy personified as a male human being in Penny's dream) asked Penny a lot of questions about her classmates, and $H e$ in $3 B$ is used to represent male
friends ('My good friend') and male classmates ('My classmates').


Figure 4c Concordance Plot of the node He
In the node words for females, She has the highest frequency of occurrence in the reading passages of PLE, as in Step $U p$. However, the calculated log-likelihood value of She across the two textbook sub-corpora is 1.39 , which is less than 3.84 at $p<0.05$, so
the difference between the frequency of occurrence of the node word She across Step Up and Primary Longman Express sub-corpora is not statistically significant.

The node She or she occurs more than 10 times in Primary Longman Express 2B, $3 B, 4 A, 5 A$ and $6 A(21,11,12,14$ and 16 hits respectively in these books), though it can also be found in Primary Longman Express 1A, $1 B, 3 A, 4 B, 5 B$ and $6 B$. She or she has a particularly high frequency of occurrence in Primary Longman Express $2 B$ because of the poem 'The twin sisters' in the unit 'Good children' (9 instances of She or she) and 'About my family' in which Sam talks about what his mother does (4 instances of She or she). The node Emma has the second highest frequency of occurrence. A Concordance Plot shows that it has the highest frequency of occurrence in Primary Longman Express 2B, $4 A, 5 A$, and $6 B(8,12,11$ and 9 hits respectively) because Emma is a female character who is mentioned frequently in the whole textbook series. For example, in $4 A$, Emma is involved in a conversation between her and Eddy in the unit 'Buying food', and among her, Eddy and Mum in 'When I was younger'. Also, in 5A, Emma is used as the name of a female character in the units 'Behave well', 'Greeting on with others' and 'Having fun together'. These show that, like the high frequency of occurrence of $\operatorname{Tim}$ and He , that of She and Emma in PLE are also determined by the contexts of the reading passages.

To show the frequency of occurrence of male and female node words in PLE (as in $S U$, see Section 4.1.1.1), all the gendered terms for male and female 'pairs' are ranked according to the frequency of occurrence for males, matched with their female equivalents. The log-likelihood (LL) value for each pair of gendered terms is also listed to show if the difference between the frequency of occurrence of the gendered terms for males and females is statistically significant, with a LL of 3.84 or higher being
considered as significant at $p<0.05$ (Rayson, n.d.) (see Table 4-4).

| Gendered Terms for Males | Frequency of Occurrence | Gendered Terms for Females | Frequency of Occurrence | $\begin{gathered} \hline \text { Log- } \\ \text { Likelihood } \end{gathered}$ (LL) |
| :---: | :---: | :---: | :---: | :---: |
| He | 74 | She | 58 | 1.94 |
| his (possessive adjective) | 55 | her (possessive adjective) | 23 | *13.52 |
| His (possessive adjective) | 7 | Her (possessive adjective) | 5 | 0.33 |
| he | 38 | she | 30 | 0.94 |
| him | 30 | her (object pronoun) | 12 | *7.97 |
| man | 29 | woman | 1 | *32.82 |
| Mr | 21 | Mrs / Miss | $25 / 6$ | *16.51 / *8.83 |
| Dad | 19 | Mum | 40 | *7.64 |
| brother | 17 | sister | 9 | 2.5 |
| Grandpa | $13 /$ | Grandma | 4 | *5.02 |
| grandpa | 1 | grandma / grandmother | 2 / 3 | 0.34 / 1.05 |
| boy | 9 | girl | 8 | 0.06 |
| brothers | 5 | sisters | 3 | 0.51 |
| himself | 5 | herself | 2 | 1.33 |
| wizard / Wizard | $5 / 2$ | witch | 9 | 1.16 / * 4.82 |
| father | 2 | mother | 7 | 2.94 |
| headmaster | 1 | headmistress | 1 | 0 |
| his (possessive pronoun) | 1 | hers | 2 | 0.34 |
| Total no. of 'types': $19$ | Total no. of 'tokens': $334$ | Total no. of 'types': 20 | Total no. of 'tokens': $250$ |  |

*LL of 3.84 or higher is significant at $\boldsymbol{p}<\mathbf{0 . 0 5}$
Table 4-4 Pairs of gendered terms for males and females in Primary Longman Express, and their frequency

Except for the pairs Mr/Mrs, Dad/Mum, wizard/witch, father/mother, grandpa/grandmother, and his/hers, male terms have a higher frequency of occurrence than their female equivalents (as is the case in Step Up). However, when calculating the LL values, only the differences in the frequency of occurrence of the pairs his/her (possessive adjective), him/her (object pronoun), man/woman, Mr/Mrs or Mr/Miss, Dad/Mum, Grandpa/Grandma, and Wizard/witch are statistically significant (marked with *).

The node word Mum has a higher frequency of occurrence (40 instances) than Dad because in Primary Longman Express 4A (24 hits), there is a unit entitled 'Super Mums' and because the reading passage in the unit 'When I was young' involves a
conversation between a male and two females: Eddy, Emma and their Mum. The node witch occurs 9 times (wizard and Wizard occur 5 and 2 times respectively), but they are all from the same unit in Primary Longman Express 6A, with the subgenre being a book report on the story The Wizard of Oz in which a wicked witch catches Dorothy who is then helped by a good witch to get back home. Again, here, the frequency of occurrence of gendered terms is determined by the context of the reading passages. Finally, in the pairs father/mother, grandpa/grandma and his/hers, though the female terms have a higher frequency of occurrence than the male terms, the difference is very small and is not statistically significant.

Moving away from the corpus analysis, content analysis was conducted by counting the number of different 'types' of males and females in PLE. Although the number of male mentions is much greater than female mentions if the 'tokens' are counted, Table 4-2 in Appendix 4 shows that the total number of 'types' of the node words for males and females is nearly the same, 75 for males and 74 for females (i.e. the ratio of male to female mentions as types is 1.014:1. $\chi^{2}(1, \mathrm{n}=149)=0.007, p<.05$ and therefore, is not significant. In this sense, males and females were nearly equally represented.

Therefore, to answer Research Question A1(a) ('Are males and females comparably represented in terms of frequency of occurrence (both 'types' and 'tokens')'), in the reading passages of $S U$, while there is a higher frequency of occurrence of node words for males than females when counted as tokens, the opposite occurs when counted as types. In the reading passages of $P L E$, again, males are represented more often than females only when counted as tokens. When counted as types, the number of male and
female mentions is nearly the same.

### 4.1.2 Names and titles, or 'nomination' (Research Question A1(b))

After exploring the relative occurrences of male and female 'tokens' and 'types', I move on to looking at whether males or females are more likely to be represented with their names (and perhaps titles). Hellinger (1980) found that females were anonymous (as in, for example, his wife, without specifying their names) in a number of cases in her analysis of English Language textbooks used in German secondary schools. More interestingly, I looked at which names and titles males and females are represented with in Step Up and Primary Longman Express. In his Social Actor Network, van Leeuwen (2008) has suggested 'nomination' as one way to represent social actors. Nomination means that characters (or using van Leeuwen's term 'social actors') are represented in terms of their "unique identity" (p. 40) with their names (and perhaps titles), e.g. Miss Susan Smith. A character can be excluded from a text by making him/her anonymous. The nomination used for males and females in the two textbook series is listed in Table 45 and 4-6 in Appendix 4.

### 4.1.2.1 'Nomination' in Step $\boldsymbol{U p}$

In Step Up, although there is an equal number of 'types' of nomination features (including titles) used for males and females (32 'types'), if I counted the nomination in terms of 'tokens', there is a greater number for males than females, 369 and 276 'tokens' respectively (the ratio of 1.337:1). $\chi^{2}(1, \mathrm{n}=645)=13.409, p<.05$ and therefore, is significant. The effect size index is 0.144 , which means the effect is small.

The males and females in the reading passages of Step $U p$ are represented in different ways: formal, semiformal, or informal. In a formal way, nomination is realised by having titles and surnames together. The titles used for males are Mr. (Mr. Chan, Mr. Lee, and Mr. Wong), and Mrs (Mrs. Lee, Mrs. Chan and Mrs. Ho) and Miss (Miss Taylor, Miss Magic, Miss Lau, etc.) are the titles for females which can distinguish their marital status. No instances of $M s$ can be found. The frequency of occurrence of Miss and Mrs as female titles is 22 and 27 respectively. The ratio of the use of the marital status title Miss for females to Mr for males is 1:1.682 (given that the frequency of occurrence of Mr . is 37), while the ratio of the use of Mrs is $1: 1.370$. In other words, the ratio of Miss and Mrs to $M r$. is $1.324: 1$. It should be noted that among the 27 instances of the use of the title $M r$. for males, 18 of them were used for non-human male animals (Mr. Hare and Mr. Tortoise). Nomination is also realised in a semiformal way (that is, name and surname). Some sentences which show the use of names and surnames are as follows:

Males:
Terry Fox was a young Canadian. (Step Up 5B)
Alan Lee will receive a Good Citizen Award next month at Sha Tin
Town Hall. (Step Up 5B)
Females:
Helen Keller was born in America in 1880. (Step Up 6B)
A long time ago, there was an American woman called Anna Jarvis.
(Step Up 4B)
Very often, nomination is realised in an informal way, with the given name only. This can be seen in the following examples:

Males:

I am Ben. This is my school. (Step Up 1A)

Simon is at a holiday camp. It is the camp's Open Day today. (Step Up 2A)

Females:

Cindy is in front of the bench. (Step Up 1B)
It was Saturday. Emma and her family were on the plane. (Step Up 4B)
A male is also titulated by the addition of his standard title as with Dr. (Dr. Wong) which shows his occupation as a doctor. There are two other examples for a male and a female: Robot Jimmy and Nurse Amy. The former one refers that Jimmy is a robot and the latter is an addition of a job title to the given name Amy.
van Leeuwen (2008) suggested that nomination can also be in the form of a kinship relation term and a given name. This type of nomination can be found for males and females in SU. For males, there are Uncle (Uncle John, Uncle Sam, and Uncle Eddie) and Brother (Brother Bear), whereas Aunt (Aunt Ling) and Sister (Sister Bear) belong to this kind of nomination for females.

### 4.1.2.2 'Nomination' in Primary Longman Express

Table 4-6 in Appendix 4 shows that in Primary Longman Express, there is a greater range of 'types' of nomination for males than females, with 63 and 59 'types' for males and females respectively. If the number of nomination is counted as 'tokens', again, there is a much greater number of male than female 'tokens', 407 and 252 respectively (the ratio of 1.615:1), which commensurate with the fact that there is a higher frequency of
occurrence of male mentions as reported in Section 4.1.1.2. $\chi^{2}(1, \mathrm{n}=659)=36.457, p$ $<.05$ and is therefore, significant (even if the chi-square value is substantiated with $p$ $<.001$ ), and the difference produces an effect size index ( $\varphi=0.235$ ), that is, between a small effect and a medium effect. The aspect of having statistical significance in the number of 'tokens' of nomination for males and females is the same as that in the reading passages of Step $U p$.

The males and females in the reading passages of $P L E$, as in $S U$, are represented in a formal, semiformal, or informal way. Formally, the titles for males is Mr (e.g. Mr Lo, Mr Giant), and Mrs (e.g. Mrs Wong, Mrs Connor) and Miss (e.g. Miss Kelly, Miss Brown, Miss Lam) for females. Again, the marital status of a female is distinguished by the use of either the title Miss or Mrs, with no examples of Ms. The frequency of occurrence of Miss and Mrs as female titles is 5 and 20 respectively. The ratio of the use of the marital status title Miss for females to Mr for males is 1:4 (given that the frequency of occurrence of Mr is 20), while the ratio of the use of Miss and Mrs to $M r$ is $1.25: 1$. Some sentences which show the use of these titles are as follows:

It was Sunday. Mr Poon took the children and Coco to a dim sum restaurant. (Primary Longman Express 5A)

It is the children's last English lesson at primary school. They have made a poster for Mrs Connor. (Primary Longman Express 5A)

This is Miss Kelly. She is our English teacher. (Primary Longman Express 1A)

Nomination in PLE is also realised in a semiformal way, as follows:

Kitty Ho is a Primary 5 student. She does not care much about others. (Primary Longman Express 5A)

As in $S U$, the males and females in $P L E$ are however usually 'nominated' in an informal way by their given names. For example,

My best friend is Tim. He is behind Coco. We are in the same class.
(Primary Longman Express 4A)
Kate has a new puzzle and she is telling Penny about it after school.
(Primary Longman Express 2B)
Moreover, as in $S U$, nomination in $P L E$ is sometimes realised by a title and a given name (Princess Fiona), or in the form of affiliation, an addition of a kinship relation term to a given name (van Leeuwen, 2008) (e.g. Uncle Victor and Uncle David for males and Auntie Maggie for a female).

Other than proper nouns, van Leeuwen (2008) notes that other items can be used for nomination when a 'social actor' occupies a certain position or performs a certain function in a particular context (e.g. the Little Girl). Such nomination can be found in PLE, for example, Superboy for a male:

Jack Leung can run faster than all his schoolmates. They all call him
'Superboy. (Primary Longman Express 4B)
The nomination Superboy here refers to the strong ability of Jack Leung to run fast. Another example is Wonderboy in Primary Longman Express 3A. Referring to the concordances of the node Wonderboy, we know that it is the name of a cartoon and of the protagonist:

Paul is watching the cartoon Wonderboy at home.
Suddenly Wonderboy comes out of the TV set!

P: Wonderboy! I don't want to play the piano now. Can you help me?
This kind of interesting nomination, however, cannot be found for females.
To answer Research Question A1(b) ('Are males and females comparably represented in terms of names and titles, or 'nomination'?'), it can be concluded that there is a greater number of nomination for males than females in the reading passages of the two textbook series when counted in terms of 'tokens'. However, males and females are represented similarly in nomination, realised by proper nouns and noun phrases, in a formal, semiformal, or informal way, though both males and females are most often nominated only with given names. In some instances, nomination is not realised by proper nouns at all but by other items that can represent a certain ability of a character, or by a kinship relation term followed by a given name. Overall, however, the phenomenon of females often being relatively anonymous in the English textbooks used in German secondary schools analysed by Hellinger (1980) cannot be found in either $S U$ or PLE.

### 4.1.3 Pronouns (Research Question A1(c))

In this section, Research Question A1(c) ('Are male and female characters comparably represented in terms of pronouns?') is answered, this being an aspect of male and female visibility evident at a linguistic level. The masculine and feminine pronouns used in $S U$ and PLE are shown in Tables 4-7 and 4-8 respectively:

| Masculine Pronouns <br> ('Types') | Frequency of <br> Occurrence <br> ('Tokens') | Feminine Pronouns <br> ('Types') | Frequency of <br> Occurrence <br> ('Tokens') | Log- <br> Likelihood <br> (LLL) |
| :--- | :--- | :--- | :--- | :--- |
| He / he | 180 | She / she <br> His / his <br> him | 84 | 79 |
| Her / her | 70 | 1.27 |  |  |
| Total: 3 | 21 | hers | 1 |  |

*LL of 3.84 or higher is significant at $\boldsymbol{p}<\mathbf{0 . 0 5}$
Table 4-7 Pronouns used for males and females in the reading passages of Step Up

As can be seen in Table 4-7, the same number of different pronouns is used for males and for females in the reading passages of $S U$ ( 3 for both). Because there are more node words for males than females when counted as tokens (see Section 4.1.1.1), there is also a higher frequency of occurrence of masculine pronouns than feminine pronouns when counted as 'tokens' (285 and 150 'tokens' respectively). $\chi^{2}(1, \mathrm{n}=435)=41.897, p$ $<.05$ and is thus significant (even if the chi-square value is substantiated with $p<.001$ ), and this difference produces an effect size value of 0.310 , which approaches a mediumsized effect. In these pronouns, the masculine subject pronoun He/he has a particularly high frequency of occurrence, compared with She/she, with the LL value of their frequencies of occurrence being much higher than 3.84 (Rayson, n.d.), which is statistically significant.

Then, Table 4-8 shows the pronouns used for males and females in the reading passages of PLE.

| Masculine Pronouns <br> ('Types') | Frequency of <br> Occurrence <br> ('Tokens') | Feminine Pronouns <br> ('Types') | Frequency of <br> Occurrence <br> ('Tokens') | Log- <br> Likelihood <br> (LL) |
| :--- | :--- | :--- | :--- | :--- |
| He | 74 | She | 58 | 1.94 |
| he | 38 | she | 30 | 0.94 |
| his (possessive adjective) | 55 | her (possessive adjective) | 23 | 13.52 |
| His | 7 | Her | 0 | $* 33$ |
| him | 30 | her (object pronoun) | 12 | 1.97 |
| himself | herself | 2 | 0.33 |  |
| his (possessive pronoun) | 1 | hers | 2 | 0.34 |
| Total: 7 | Total: 210 | Total: 7 | Total: 132 |  |

*LL of 3.84 or higher is significant at $\boldsymbol{p}<\mathbf{0 . 0 5}$
Table 4-8 Pronouns used for males and females in the reading passages of Primary Longman Express

The same as $S U$, the number of different 'types' of pronouns used for males and females is the same, 7 for both. These include subject pronouns (He/he, She/she), object pronouns (him, her), possessive adjectives (His/his, Her/her), possessive pronouns (his, hers), and
reflexive pronouns (himself, herself). Again, because males as tokens have more mentions than females (see Section 4.1.1.2), it is unsurprising that the frequency of occurrence of masculine pronouns counted as 'tokens' is also higher than that of the feminine pronouns (210 and 132 'tokens' respectively). $\chi^{2}(1, \mathrm{n}=342)=17.789, p<.05$ and is thus significant. The effect size index is $\varphi=0.228$, which is a midway between a small effect and a medium effect. However, when the pronouns used for males and females are paired up, only the frequency of occurrence of the pairs his/her (possessive adjective) and him/her (object pronoun) are statistically significant, the LL values of these two pairs being higher than 3.84 . This aspect is comparable with $S U$. However, it is different from Healy's (2009) study of a modern EFL textbook, Touchstone Book 2, in which more female than male pronouns were used, 159 female pronouns compared with 143 male pronouns (because there are more female than male names, 52 female names and 37 male names).

Therefore, in answer to Research Question A1(c), in both $S U$ and $P L E$, there is a higher frequency of occurrence of masculine than feminine pronouns when counted as tokens, but the number of different types of pronouns used for males and females is exactly the same.

### 4.1.4 'Categorization' (family relationship and occupational roles) (Research Question 1(d))

Nouns and noun phrases are important elements to be considered when analysing sexism in language (Mills, 2008). In any language, nouns "constitute a basic and culturally significant lexical field ... and they may transit positive or negative attitudes" (Hellinger
\& Bußmann, 2001, p. 2). Hellinger and Bußmann (2001) go on to suggest that an appropriate use of nouns can contribute to maintaining one's identity, but inappropriate use (for example, of derogatory nouns) can make someone feel inferior. Therefore, nouns and noun phrases should be one of the aspects of analysing gender representation in the reading passages of the two textbook series.
van Leeuwen (2008) suggests that social actors can be represented by 'nomination' discussed above, or 'categorization', which refers to the "identities and functions they share with others" (p. 40) (e.g. father, housewife). In this study, categorization includes family relationship and occupational (social categorization) roles, all kinds of tasks done by males and females at home or in society. To identify the family relationship and occupational roles of males and females in the reading passages of the two textbook series, the Collocates tool of AntConc was used so that the statistical significance of each co-occurrence of collocation could be calculated. The span length chosen is $4 L / 4 R$. Both the family relationship roles and names of jobs associated with the search word, i.e. the "coherence collocates" (e.g. teacher - she, or driver is associated with man), and those that actually co-occur with the search word, i.e. the "neighbourhood collocates" or "horizon collocates" (e.g. teacher - a, my, this, the, or male co-occurs with nurse) were identified (Scott, 1998, p. 57).

### 4.1.4.1 'Categorization' in Step $\boldsymbol{U p}$

Table 4-9 in Appendix 4 shows that in Step Up, in terms of 'categorization', there are more instances of males being represented in this way than females (166 and 114 for males and females respectively, a ratio of 1.456:1), but interestingly the range of
categorization for females is greater than that of males ( 20 different types of categorization for females, compared with 17 for males, a ratio of 1.176:1).

The collocates associated with node words for males and females which have an MI score of 3 or above (as mentioned in Section 3.4, this score is considered to be significant) and are related to family relationship roles are also listed in Tables 4-10 and 4-11 below.

| Node Words | Collocates | Frequency | Frequency (L) | Frequency <br> $(\mathbf{R})$ | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| He | Brother | 1 | 1 | 0 | 6.77215 |
| Father |  |  |  |  |  |
| brother | 1 | 2 | 1 | 0 | 5.18719 |
| John | Uncle | 13 | 11 | 2 | 4.45022 |
| Sam | Uncle | 10 | 10 | 0 | 10.18308 |
| Jimmy | son | 1 | 1 | 0 | 9.80457 |
| Eddie | Uncle | 1 | 1 | 0 | 11.09408 |

Table 4-10 Family relationship roles associated with different node words for males in the reading passages of Step Up

| Node Words | Collocate | Frequency | Frequency (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| She | sister | 4 | 0 | 4 | 10.09408 |
|  | mother | 6 | 3 | 3 | 9.43111 |
| Emma | sister | 1 | 1 | 0 | 5.67904 |
| Mrs | Mum | 3 | 1 | 2 | 7.09408 |
|  | mother | 1 | 1 | 0 | 5.26119 |

Table 4-11 Family relationship roles associated with different node words for females in the reading passages of Step $\boldsymbol{U p}$

The node words generated from Word List of AntConc, together with their collocates, show that the family relationship roles of males in Step Up include Uncle, Grandpa, Father/father/Dad, Brother/brother/brothers, husband, and son. For females, their roles in family include Mother/mother/Mum/Mummy, Grandma, Sister/sister, Aunt/aunt, daughters, stepmother, stepsisters, and wife. In other words, there are slightly
more 'types' of family roles for females than males, 8 and 6 respectively.
Then, Tables 4-12 and 4-13 show the social (occupational roles) categorization associated with different node words for males and females.

| Node Words | Collocates | Frequency | Frequency (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| He | archer <br> policeman <br> fireman <br> farmer <br> painter <br> doctor <br> clown | 1 | 1 | 1 | 1 |
|  | policeman <br> farmer <br> teacher | 1 | 1 | 1 | 0 |

Table 4-12 Social (occupational roles) categorization associated with different node words for males in the reading passages of Step $\boldsymbol{U p}$

| Node Words | Collocates | Frequency | Frequency (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| She/she | helper <br> housewife <br> shopkeeper <br> athlete <br> reporter | 1 | 1 | 2 | 0 |

Table 4-13 Social (occupational roles) categorization associated with different node words for females in the reading passages of Step $U p$

For the occupational roles associated with different node words for males and females, males were associated with more 'types' of jobs than females, 13 types for males and 8 for females. The jobs associated with males were archer, policeman, fireman, farmer, painter, doctor, clown, teacher, helper, photographer, goalkeeper, Scout leader, and Fire Officer, whereas helper, housewife, athlete, reporter, shopkeeper, teacher, farmer, and nurse were the jobs associated with females.

From Tables 4-12 and 4-13, we can see that the textbook writers of $S U$ have shown some attempts to represent the males and females in a similar range of occupational roles. For example, primary school teaching is no longer a job for females only:

This is my school. Mr. Chan is my teacher. (Step Up 1A)
However, there is only one example of a male being a teacher (with an MI score of 6.77215), compared with four female teachers, and with one example of a male who
wants to be an English teacher:
He wants to do well in English. He wants to be an English teacher.
(Step Up 5A)
The other similar example is that while one female, Lily, is a home helper (Step $U p 4 A$ ), Puffy (a male) is also described as a helper who "helps out at Happy House" (Step Up 3A). However, Puffy is a non-human male character. In other words, no male human characters who do housework can be found.

Apart from teacher and (home) helper, farmer is also an occupation for one female and two males:

Tom's father and mother are farmers. (Step $U p 2 B$ )
Once upon a time in a village in China, there was a farmer called Foo.
(Step Up 5B)
There are other phenomena to note. Females work outside the home, for example, as a reporter (3 instances) who works at a TV station and reports the news or owns a shop as a shopkeeper ( 1 instance). A female can also be an athlete ( 1 instance) who won gold medals, though traditionally and globally, it was males who were considered to be good at sports, as in the following examples:

Mrs. Ho is a shopkeeper. This is her shop. (Step Up 1B)
Jenny is a reporter. She works at a TV station. (Step Up 4A)
Yu Chui Yee is a young athlete from Hong Kong. She won gold medals in the 2004 Paralympic Games. (Step Up 6B)

On the other hand, doctor is still the exclusive occupation of a male (except for contexts in which the sex of the doctor is not known) and nurse for a female, and fireman (or Fire Officer) is a male who puts out fires (or drives the fire engine).

Since the data size in the Step Up sub-corpus includes only 19,674 'tokens' of words, the frequencies of most of the occupations associated with node words for males and females are 1 only, although the MI score is above 3 which is significant statistically.

### 4.1.4.2 'Categorization' in Primary Longman Express

Table 4-14 in Appendix 4 shows the categorization of males and females in the reading passages of Primary Longman Express. The same as that in Step Up, there are more instances of males being represented with categorization than females (142 and 128 for males and females respectively, a ratio of 1.109:1), but there is a greater range of categorization for females than males (19 and 12 types for females and males, i.e. a ratio of 1.583:1).

The collocates associated with node words for males and females which have an MI score of 3 or above and are related to family relationship roles are listed in Tables 415 and 4-16 below.

| Node Words | Collocates | Frequency | Frequency <br> (L) | Frequency <br> (R) | Statistics (MI) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| He | son <br> grandpa <br> uncle <br> father <br> brother <br> dad | 1 | 0 | 1 | 7.90119 |
|  |  | 1 | 0 | 1 | 7.90119 |
|  |  | 1 | 1 | 0 | 6.90119 |
|  |  | 1 | 1 | 0 | 6.90119 |
|  |  | 2 | 1 | 1 | 4.81373 |
|  |  | 1 | 1 | 0 | 4.73127 |
| David | Uncle | 21 | 19 | 2 | 9.87361 |
| Eddy | brother | 2 | 2 | 0 | 6.02318 |
| Victor | Uncle | 4 | 3 | , | 8.19178 |
|  | brother | 1 | 1 | 0 | 6.56375 |
| Yoyo | Brother | 2 | 2 | 0 | 8.70126 |

Table 4-15 Family relationship roles associated with different node words for males in the reading passages of Primary Longman Express

| Node Words | Collocates | Frequency | Frequency <br> (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| She/she | sister | 3 | 3 | 0 | 7.61879 |
|  | grandmother | 1 | 1 | 0 | 7.61879 |
|  | mother | 2 | 2 | 0 | 7.39640 |
|  | mum | 2 | 2 | 0 | 5.88183 |
|  | Mum | 3 | 3 | 0 | 5.46679 |
| Carol | cousin | 1 | 1 | 0 | 10.20376 |
| Lily | sister | 1 | 0 | 1 | 9.35576 |
| Maggie | Auntie | 1 | 1 | 0 | 14.11065 |

Table 4-16 Family relationship roles associated with different node words for females in the reading passages of Primary Longman Express

The node words generated from Word List of AntConc, together with their collocates, show that the family relationship roles of males in PLE include Uncle/uncle, Dad/dad, brother/brothers, Grandpa/grandpa, and father, whereas the roles of females in family include Mum/mum/mother/Mums/mums, sister/sisters, Grandma/grandma/grandmother, aunt/Auntie, cousin, and wife. That is, there are slightly more 'types' of family roles for females than males, 6 and 5 respectively. In this textbook series, Uncle is the most common family relationship role for males, while mother and sister are the most common for females, as evidenced in their frequency of occurrence (the frequency of uncle collocates with He, David, and Victor is 1, 21, and 4 respectively, and the frequency of the collocates sister, mother, mum, and Mum associate with the node She/she is 3, 2, 2, and 3 respectively).

In terms of gender representation, males and females in $P L E$ are thus represented equitably, that is, with a similar range of family relationship roles. Except for son and cousin, the family relationship roles can be paired up as grandpalgrandmother, uncle/auntie, brother/sister, and father/mother or dad/mum.

Using the same procedure as identifying the family relationship roles of males and
females, the social categorization (i.e. occupational roles, the roles outside home, including school roles) of the males and females in the reading passages of Primary Longman Express was also identified and is listed in Tables 4-17 and 4-18.

| Node Words | Collocates | Frequency | Frequency <br> (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{H e} /$ he | writer | 3 | 0 | 3 | 7.90119 |
|  | fireman |  |  |  |  |
| teacher | 3 | 1 | 1 | 1 | 7.16423 |
| Jason | pupil | 1 | 0 | 1 | 4.44176 |
| Ivan | gardener | 1 | 0 | 1 | 12.20376 |
| John | pupil | 1 | 0 | 1 | 12.11065 |
| Ray | caretaker | 1 | 0 | 1 | 13.11065 |

Table 4-17 Social (occupational roles) categorization associated with different node words for males in the reading passages of Primary Longman Express

| Node Words | Collocates | Frequency | Frequency <br> (L) | Frequency <br> (R) | Statistics (MI) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| She/she | student <br> driver <br> teacher | 1 | 1 | 0 | 9.20376 |
| Mrs | teacher | 2 | 1 | 1 | 9.20376 |
| her <br> (possessive <br> adjective) | musician | 1 | 2 | 0 | 7.32929 |
| mother | driver | 1 | 1 | 0 | 8.98136 |

Table 4-18 Social (occupational roles) categorization associated with different node words for females in the reading passages of Primary Longman Express

The occupational roles of males in the reading passages of $P L E$ are writer, fireman, teacher, pupil, gardener, and caretaker, whereas student, driver, teacher, and musician are the occupational roles of females.

The two Tables above show that node words for males are associated with slightly more 'types' of occupational roles than females, 6 for males and 4 for females. Teacher is common to both. In PLE, a teacher can be either a male or a female:

Let's ask our Chinese teacher if he knows anything else. (Primary

Longman Express 5A)
She is Miss Kelly. She is my English teacher. (Primary Longman Express 1A)

While fireman is still represented as a job for a male, it is surprising but encouraging that driver (both bus driver and taxi driver), which is traditionally a maledominant occupation, is also shown as a job for a female (but no male drivers in $P L E$ ):

She's a bus driver. She drives bus number eight. (Primary Longman Express 2B)

My mother is a taxi driver. (Primary Longman Express 2B)
Finally, both a male and a female are described as engaging in jobs related to culture: a novel writer and a musician:

He has been a writer of novels since 1955, replied Mr Lo. (Primary
Longman Express 5A)
... this film is about a musician who loses her hearing. (Primary
Longman Express 6A)
To conclude this section regarding Research Question A1(d) ('Are males and females comparably represented in terms of 'categorization'?), slightly more types of family relationship roles were associated with females in Step $U p$, but the males and females in Primary Longman Express were represented in a similar range. Both males and females in both series have roles outside the home, which is different from the clear division of labour for men and women in traditional Chinese society, with men dominating the outer social sphere and women playing the major role in the inner domestic sphere (Gallagher, 2001). Although males were represented as engaging in slightly more jobs than females in both series, females were no longer only portrayed as
housewives engaging in housework as in Hartman and Judd's (1978) study, or in traditionally female-dominated jobs (e.g. nurse) or nurturing professions (e.g. teacher) as in previous studies (Gupta \& Lee, 1989; Lee \& Collins, 2008). Females can also even do male-dominated jobs such as a driver. Nevertheless, we need to be cautious when drawing conclusions here because the frequency of occurrence of all the collocates is low, not more than 3 .

### 4.1.5 Associated adjectives (Research Question A1(e))

After analysing nouns in Section 4.1.4, in this section, I investigated the adjectives used for male and female characters in isolation (not as part of van Leeuwen's Social Actor Network) to answer Research Question A1(e) ('Are male and female characters comparably represented in terms of associated adjectives?'). Adjectives can be defined as describing words that "provide information about the qualities of something described in a noun, a noun phrase, or clause" (Parrott, 2000, p. 18). Such descriptive adjectives suggest the qualities of the people or things they describe (Kam \& Kam, 1992). They can occur before nouns (e.g. an old story) as part of a noun phrase (i.e. the attributive use of adjectives) or after complement verbs (e.g. He is angry) (i.e. the predicative use of adjectives) (Collins \& Hollo, 2000). They can be used with modifiers such as very, rather, quite to show degree (Huddleston, 1984), and can take comparative and superlative forms to show comparisons (Kam \& Kam, 1992).

Simply identifying adjectives by analysing concordance lines may not be adequate because an adjective may occur in a certain context only by chance. Therefore, the adjectives used for males and females in the reading passages of the two textbook
series were found by identifying the collocates of node words. As mentioned in Section 3.6.3, collocates are words that co-occur with nodes or node words (Stubbs, 2002). By using the Collocates tool, the statistical significance of each co-occurrence of collocation can be computed (see Section 3.4). The span length chosen for this study is four words in either side of the node (that is, from 4L to 4R). The collocates associated with a node word include nouns, verbs, adjectives, and pronouns (see Figure 4 d with the node word She chosen as an example), but only the adjectives were focused on here to answer the research question. For example, in Figure 4d, the collocate adjectives puzzled, deaf, young, untidy, and smartest were focused on. To know whether the adjectives are associated with the nouns in questions, I also conducted analyses of concordance lines to find out the context the adjectives are used.


Figure 4d Collocates of the node word She in Primary Longman Express

### 4.1.5.1 Associated adjectives in Step $\boldsymbol{U p}$

The adjectives used in association with different node words for males and females in Step $U p$ found within the span length of $4 \mathrm{~L} / 4 \mathrm{R}$ (see Section 3.6.3) are listed in Tables 419 and 4-20 in Appendix 4 (the node words are listed according to their frequency of occurrence). Adding up the total number of adjectives used exclusively for either males
or females, and adjectives used for both males and females, a greater number of adjective 'types' is associated with males than with females, 60 compared with 35 .

The total number of 'positive' and 'negative' adjectives (together with comparatives) used uniquely for describing males and females are shown in Tables 4-21 and 4-22 below (listed according to their alphabetical order). 'Positive' and 'negative' refer to those adjectives that are used to describe something in a way conventionally thought of as good or bad in a person, globally, with reference to context (by referring to concordance lines) and connotation, which may be subjective to a certain extent as it involved my own interpretation.

| 'Positive' Adjectives Used for Males Only | Frequency | 'Positive' Adjectives Used for Females Only | Frequency |
| :---: | :---: | :---: | :---: |
| brave | 4 | beautiful | 2 |
| friendly | 2 | patient | 2 |
| kind | 2 | cheerful | 1 |
| careful | 1 | good | 1 |
| funny | 1 |  |  |
| gentle | 1 |  |  |
| sensible | 1 |  |  |
| smart | 1 |  |  |
| strong | 1 |  |  |
| polite | 1 |  |  |
| quick | 1 |  |  |
| stronger | 1 |  |  |
| Total: 12 |  | Total: 4 |  |


| 'Negative' Adjectives <br> Used for Males Only | Frequency | 'Negative' Adjectives <br> Used for Females <br> Only | Frequency |  |
| :--- | :--- | :--- | :--- | :---: |
| late | 3 | naughty | 1 |  |
| proud | 3 |  |  |  |
| careless | 2 |  |  |  |
| evil | 2 |  |  |  |
| cunning | 1 |  |  |  |
| foolish | 1 |  |  |  |
| lazy | 1 |  |  |  |
| not friendly | 1 |  |  |  |
| not hardworking | 1 | Total: 1 |  |  |
| not helpful | 1 |  |  |  |
| Total: 10 |  |  |  |  |

Table 4-22 'Negative' adjectives used for males and females only in Step Up

There are more 'positive' and 'negative' adjectives used uniquely for males than females, 12 'positive' adjectives for males but 4 for females, and 10 'negative' adjectives for males but 1 for a female. The differences in the numbers of 'positive' $\left(\chi^{2}(1, \mathrm{n}=16)=4, p<.05\right)$ and 'negative' $\left(\chi^{2}(1, \mathrm{n}=11)=7.364, p<.05\right)$ adjectives used uniquely for males and females are both significant and these differences produce a large-sized effect, as evidenced from the effect size values calculated ( $\varphi=0.5$ and 0.818 respectively). In other words, males and females were often described with either positive or negative descriptions, for example:

She is naughty but Jane is good. Ben is polite but Tom is rude. (Step Up

## 2A)

Some adjectives (including their comparative and superlative forms) could not however be categorised in this way, for example, those used to describe a person's feeling (e.g. bored, scared), financial situation (e.g. poor, wealthy), physical characteristics (e.g. fat, short) or physical condition (e.g. crippled). I classified them as 'other adjectives' used for males and females only in Table 4-23.

| Other Adjectives Used <br> for Males Only | Frequency | Other Adjectives Used <br> for Females Only | Frequency |
| :--- | :--- | :--- | :--- |
| crippled | 10 | deaf | 2 |
| hungry | 6 | dumb | 2 |
| tall | 4 | annoyed | 1 |
| wealthy | 4 | big | 1 |
| poor | 3 | cold | 1 |
| teenage | 3 | curious | 1 |
| fat | full | 1 |  |
| fit | 2 | short | 1 |
| tubby | small | 1 |  |
| worried | 2 |  |  |
| afraid | 2 |  |  |
| elder | 1 |  |  |
| embarrassed | 1 |  |  |
| lonely | 1 |  |  |
| shocked | 1 |  |  |
| younger | 1 |  |  |
| heavier | 2 |  |  |
| shorter | 1 | Total: 9 |  |
| Total: 18 | 1 |  |  |

Table 4-23 Other adjectives used for males and females only in Step Up

Male and female characters were often portrayed stereotypically, as in Pearce's (2008) investigation of the representation of MAN and WOMAN in the British National Corpus (BNC), with males being described as tall (6 instances), fit (2 instances), or strong ( 1 instance), while females are small ( 2 instances), or short ( 1 instance). For example,
$H e$ is tall and fat. (Step $U p 1 B)$
$H e$ is tall and strong. (Step $U p 4 A)$
Ben is fit. Peter is fit too. (Step $U p 4 A)$
She is small. (Step $U p 1 B)$

The following example even represents gender differences in a family in terms of height and body shape:

Mother is short. Father is tall. Simon is fat. Emma is small. (Step Up 1B)
Similar to Kobia's (2009) study, a greater range of positive adjectives was used
exclusively for males than for females. As can be seen in Table 4-21, only males were described as brave (4 instances), friendly (2 instances), kind (2 instances), careful (1 instance), funny (1 instance), gentle (1 instance), polite (1 instance), quick (1 instance), sensible (1 instance), smart (1 instance), and strong (1 instance), while beautiful (2 instances), patient (2 instances), cheerful (1 instance), and good (1 instance) were ascribed to females only. Contextualised, these can be illustrated in the following example sentences:
'Exclusive' positive adjectives for males
$H e$ is kind and gentle to his patients. (Step $U p 6 B$ )
The teenager was brave and sensible. He didn't push the woman in her wheelchair and use the lift when there's a fire. (Step Up $5 B$ )
'Exclusive' positive adjectives for females
Lily is a cheerful home helper. (Step $U p 4 A$ )
He opened it and saw a beautiful girl outside. (Step $U p 3 B$ )
However, there are also more instances of males being described negatively than females in the reading passages of Step Up. For example, whereas only one negative adjective (naughty) was used to describe a female (in the sentence "She is naughty but Jane is good" in Step Up 2A), ten different negative adjectives, proud (3 instances), careless (2 instances), evil (2 instances), cunning (1 instance), foolish (1 instance), late (1 instance), lazy (1 instance), not friendly (1 instance), not hardworking (1 instance), and not helpful ( 1 instance), were used to describe male characters. This can be illustrated in the following examples:

Foo was hardworking but foolish. (Step Up 5A)
However, after some time, Hou Yi became proud and evil. (Step Up 6A)

She is hardworking but John is lazy. He is not hardworking. (Step Up

2A)
The adjectives used for both males and females are listed in Table 4-24 below.

| 'Positive' Adjectives Used for <br> Both Males and Females | 'Negative' Adjectives Used for <br> Both Males and Females | Other Adjectives Used for <br> Both Males and Females |
| :--- | :--- | :--- |
| clever <br> great <br> hardworking <br> helpful | rude | angry <br> blind <br> bored <br> busy |
|  |  | excited <br> frightened <br> happy |
|  |  | ill <br> little |
|  |  | old <br> sad <br> scared |
|  |  | thirsty <br> tired <br> young <br> not happy |
| Total: 4 |  | 16 |

Table 4-24 'Positive', 'negative', and other adjectives used for both males and females in Step Up

There are instances in which a positive description was used to describe a female in one instance and the same description for a male in another. One example is the use of the adjective helpful. It was used to describe a male character in Step $U p 3 A$ ("He is helpful") and to describe a female character in Step Up $2 A$ ("She's always helpful"). Other examples include the adjectives clever and hardworking, illustrated as below:

Helen was clever and she learned fast. (Step Up 6B)
That's Puffy. He's clever and kind. (Step Up 3A)
She is hardworking but John is lazy. (Step Up 2A)

Foo was hardworking but foolish. Although he was poor, he lived
happily. (Step Up 5B)
Regarding a person's feeling, while female characters were described with the
adjectives scared and frightened which function as complements ("She is scared. There is a spider" in Step Up 2A, "Then my neighbour came out in her wheelchair. She was very frightened", and "She was very frightened,' said Alan Lee" in Step Up 5B), males were described as having the same feeling ("Terry knew that he would die. He was sad and scared" in Step Up 5B, "Bruce was frightened and could not sleep" in Step Up 5A, and "The crippled man was frightened but he could not walk... The blind man was frightened but he could not see" in Step $U p 6 A$ ).

Overall, in $S U$, men/boys as a social group were portrayed both positively and negatively, but women/girls were nearly never portrayed negatively. This means that the portrayal of female characters is socially and psychologically limited, in comparison to that of men/boys.

### 4.1.5.2 Associated adjectives in Primary Longman Express

The same as in the analysis of associated adjectives for males and females in the reading passages of $S U$, those collocates associated with node words for males and females in the reading passages of $P L E$ which have an MI (mutual information) score of 3 or above (sorted by their MI scores, with the collocates which have the higher MI scores being on top) are listed in Tables 4-25 and 4-26 in Appendix 4. The more strongly connected any two items are, the higher the MI score, which is considered to be significant if it is 3 or higher.

Table 4-25 shows that the adjectives associated with the different node words for males are cute, ugly, tall, embarrassed, smart, brave, worried, thoughtful, sick, polite, surprised, little, frightened, naughty, helpful, excited, shocked, and poor. The node word

He also collocates with the comparatives thinner and shorter, and Gavin collocates with the superlative youngest.

The adjectives associated with different node words for females, presented in Table 4-26, are puzzled, deaf, young, untidy, helpful, hardworking, lazy, brave, polite, kind, tired, patient, happy, famous, super, humorous, good-tempered, upset, rude, honest, wicked, good, funny, little, twin, colour, colourful, and frightened. The nodes she, sister and girl also collocate with the superlative smartest, and mum with bravest.

Tables 4-25 and 4-26 also show that a greater number of adjective 'types' is associated with females than with males, 30 compared with 21 . Among these adjectives, 13 were used only for males and 22 for females only. These 'gender unique' adjectives (including comparatives) are cute, thoughtful, naughty, ugly, embarrassed, excited, shocked, shorter, sick, surprised, tall, thinner, and worried for males, and super, good, kind, famous, good-tempered, hardworking, honest, humorous, patient, wicked, rude, lazy, untidy, colour, colourful, deaf, funny, happy, puzzled, tired, twin, and upset for females. While these are similar to Pearce's (2008) study of the representation of MAN and WOMAN in British National Corpus (BNC) in which MAN is associated strongly with adjectives of physical size such as tall and the personality trait thoughtful, they contrast with his finding that it is MAN which is more strongly associated with adjectives related to humour and happiness. The adjectives used for both males and females are smart, brave, polite, little, and helpful. For example, smart was used for a male in the sentence "I think he is very smart" in Primary Longman Express $3 B$ and a female in "She is the smartest person in my family" in Primary Longman Express 4A. In addition, "He is a fireman who is brave to put out fires and save people" in Primary Longman Express 2B,
and "She was also brave because she killed the wicked witch" in Primary Longman

## Express 6 A.

As more adjective 'types' are associated with females, accordingly, there are also more 'positive' adjectives associated with females: 9 for females but only 2 for males. Whether an adjective is positive or negative for gender representation can be determined by referring to the context it is used. Contrary to the study conducted by Mukundan and Nimehchisalem (2008) in which only a very small number (7\%) of negative qualities was attributed to females in all the textbooks they analysed, in $P L E, 4$ negative adjectives are associated with females but 2 for males (see Tables 4-27 and 4-28).

| 'Positive'Adjectives <br> Used for Males Only | Frequency | 'Positive' Adjectives <br> Used for Females Only | Frequency |
| :--- | :--- | :--- | :--- |
| cute | 1 | super | 6 |
| thoughtful | 1 | good | 4 |
|  |  | kind | 2 |
| famous | 1 |  |  |
|  |  | faod-tempered | 1 |
|  |  | goordworking | 1 |
|  |  | hardest | 1 |
|  |  | honest | 1 |
| Total: 2 | humorous | 1 |  |

Table 4-27 'Positive' adjectives used for males and females in Primary Longman Express

| 'Negative' Adjectives <br> Used for Males Only | Frequency | 'Negative' Adjectives <br> Used for Females Only | Frequency |
| :--- | :--- | :--- | :--- |
| naughty | 2 | wicked | 4 |
| ugly | 1 | rude | 2 |
|  |  | lazy | 1 |
| untidy | 1 |  |  |
| Total: 2 |  | Total: 4 |  |

Table 4-28 'Negative' adjectives used for males and females in Primary Longman Express

The positive adjectives used for females only are super, good, kind, famous, goodtempered, hardworking, honest, humorous, and patient.

The adjectives naughty and ugly were used exclusively for males, although ugly
was used to describe the male character ogre in the movie Shrek. However, contrary to Step $U p$ in which the negative adjectives lazy and rude were used for males, these two adjectives were used to describe females in PLE:

She's lazy. She doesn't help at home. (Primary Longman Express 2B)
Mo is rude. She pushes and she likes to fight. (Primary Longman Express 2B)

I think she is very rude. She fights with us and tells us lies. (Primary
Longman Express 3B)
However, there are too few examples for us to comment on this aspect.
On the other hand, both males and females in PLE were described as smart, brave, polite, little, and helpful.

As shown in Tables 4-27 and 4-28 above, in PLE, except for super, good and wicked, the frequency for the other 'unique' positive and negative adjectives to be used for females is low (just one or two instances).

Several adjectives cannot be classified as either positive or negative (see Table 429 below). These include the 'evaluative/emotive' type of adjectives classified by Biber, Johansson, Leech, Conrad, and Finegan (1999) that describe a person's state of mind (embarrassed, worried, sick, surprised, excited, shocked, puzzled, tired, happy and upset), and the 'qualitative adjectives' defined in Collins COBUILD English Grammar (2005) that describe a "quality that someone has" (p. 65) such as funny ("Who's this girl with the funny face?" in Primary Longman Express 5A), deaf, tall, shorter and thinner. Other 'neutral' adjectives in PLE are colour (Colour Fairy), colourful and twin. These were used exclusively for female characters to describe Fairy and sisters respectively.

| 'Neutral' Adjectives <br> Used for Males Only | Frequency | 'Neutral' Adjectives <br> Used for Females <br> Only | Frequency |
| :--- | :--- | :--- | :--- |
| embarrassed | 1 | colour | 1 |
| excited | 1 | colourful | 1 |
| shocked | 1 | deaf | 1 |
| shorter | 1 | funny | 1 |
| sick | 1 | happy | 1 |
| surprised | 1 | puzzled | 1 |
| tall | tired | 1 |  |
| thinner | twin | 1 |  |
| worried | upset | 1 |  |
| Total: 9 |  | Total: 9 |  |

Table 4-29 'Neutral' adjectives used for males and females in Primary Longman Express

To summarise this section, as regards Research Question A1(e), in Step Up, more 'positive' and 'negative' adjectives were used uniquely for males than females. Therefore, men/boys as a social group were portrayed both positively and negatively, but women/girls were rarely portrayed negatively, meaning that there was a narrower range of representation for females than males. However, in $P L E$, males and females were described both positively and negatively, and females were even associated with more 'exclusive' positive and negative adjectives than males. As there is a greater number of adjective 'types' associated with females than males in total, though there are more types of 'unique' positive and negative adjectives associated with females, we cannot then conclude that females were more often described positively and negatively than males. Besides these, males and females were not always portrayed with 'traditionally' masculine and feminine characteristics. While the positive adjectives good and patient were used only for females in the two textbook series, the negative adjective lazy was used only for females in PLE but for males in $S U$.

### 4.1.6 Associated verbs or 'social action' (Research Question A1(f))

After identifying the adjectives used to describe males and females, I also identified the verbs or 'social action' associated with male and female characters in the reading passages of the two textbook series to answer Research Question A1(f) ('Are male and female characters comparably represented in terms of associated verbs or 'social action'?'). To my knowledge, previous textbook studies have focused mainly on the frequency of occurrence of male and female references in texts (e.g. Bahiyah Dato’ Hj. Abdul Hamid et al., 2008; Equal Opportunities Commission, 2000; Gharbavi \& Mousavi, 2012a; Hartman \& Judd, 1978), the adjectives used to describe males and females (e.g. Evans \& Davis, 2000) and the occupations engaged in by males and females (e.g. Gupta \& Lee, 1990), but not the verbs associated with males and females. Therefore, this aspect was focused on in this study.

Most verbs, no matter what form they take (infinitive, -ing, past tense, or past participle form), it has been claimed, are action words which describe physical actions (Parrott, 2000) carried out by the subject of a sentence (e.g. eat, run), or what happens to the participant of the sentence (e.g. is hurt) (Kam \& Kam, 1992). There are also other verbs which describe mental states (e.g. believe, think) and senses (e.g. feel) (Parrott, 2000). Verbs can be identified by their position in sentences (usually following the subject and preceding other elements of a sentence). In corpus linguistics, they can be identified by analysing the concordance lines which show the context they occur.

Using the same method as for adjectives in Section 4.1.5, by computing the collocates of node words for males and females, the verbs associated with different node words for males and females in the reading passages of the two textbook series, together
with their frequency and MI scores (MI scores of 3 or above), were calculated. As I wanted to identify the actions or activities males and females engage in, only main verbs (or more specifically, the action/activity verbs and verbs expressing preference for an action/activity), which act as the head of verb phrases (Huddleston, 1984), and auxiliary verbs, which are dependent on the main verbs, including be, have and do (e.g. is, in is swimming and was, in was playing) (Collins \& Hollo, 2000; Huddleston, 1984) were focused on. Passive structures were excluded from analysis. Tables 4-30-4-33 in Appendix 4 show the verbs associated with different node words for males and females in $S U$ and PLE. After identifying the verbs associated with males and females, I classified them into different categories based on van Leeuwen's Social Action Network in his sociosemantic inventory which describes how 'social action' is represented (see also Section 3.6.4). The social action of the males and females in the two textbook series is classified and presented in Tables 4-34-4-37 in Appendix 4.

However, simply identifying the verbs which collocate with the gender-related node words does not clearly tell us about gender representation. For example, only identifying the verb play does not tell us what activity a character is portrayed engaging in. Therefore, Tables 4-38 and 4-39 in Appendix 4 also show the activities associated with the node words for males and females in the two textbook series.

### 4.1.6.1 Associated verbs or 'social action' in Step Up

In the reading passages in the whole series of Step $U p$, fairly equal gender representation can be found because both males and females were portrayed in several similar activities. For example, "Mr. Chan works at the weather station. He can tell you the weather" in

Step Up 2B, whereas "Jenny is a reporter. She works at a TV station" in Step Up 4A, and "Terry decided to start a run so that he could raise money" in Step Up 5B, whilst "She (Helen Keller) raised a lot of money to help blind people" in Step $U p 6 B$. This aspect is in contrast with previous studies (e.g. Lee \& Collins, 2008; Sakita, 1995) in which females were usually portrayed largely in domestic activities. Interestingly, household chores are not only done by females but also by a male. For instance, while She (Lily, a home helper) was represented with "wash the clothes of Jenny's parents and clean their flat" (Step Up 4A), "He (Simon) helps in the kitchen in the morning" (Step Up 2B), but note that the verb "help" suggests a secondary domestic role.

Analysing with van Leeuwen's Social Action Network, Table 4-34 in Appendix 4 shows that the 'social actions' for male characters in Step Up are affective and cognitive reaction, and material and semiotic actions, but no cognitive and semiotic social actions could be found for female characters. Most of the characters' activities (47 instances for males and 30 for females) belong to the type of 'material' action (e.g. plays basketball, drives the fire engine, wearing a beautiful white gown, helps her friends). The activities which belong to the 'material' action for males are sings, touring the Great Wall, plays basketball, plays the piano, dances, walking on the beach, making paper dolls, visited the Hong Kong Museum of History, doing sit-up in the gym, collected old toys, visited Japan, play with a model car, play with the ball, visiting Hong Kong, and travelled to many countries, whereas listened to music, danced, watched cartoons, travelled to many countries, making paper dolls, playing in the park, taking a photo, and goes to the library are the 'material' action that represent the activities of females. Some activities (15 instances for males and 7 for females) are 'affective' reactions (e.g. likes reading books,
wants to be a model), and a few (3 instances for males but none for females) are 'semiotic' actions (e.g. asked people to help poor children, asked wealthy people to donate money, and asked people to think up some ways to save the earth). There are only two instances of 'cognitive' reaction, both for male characters (decided to help the children and decided to give a name to his toast), but no 'perceptive' reactions could be found for both male and female characters. Males were portrayed as kind-hearted who help others through the use of the 'affective' reaction wanted, 'cognitive' reaction decided, and 'semiotic' action asked:

A young Canadian boy called Craig wanted to do something for these poor children. (Step Up 6A)

Terry decided to start a run so that he could raise money. (Step Up 5B)
He asked wealthy people to donate money so that he could build schools and clinics for the children. (Step Up 6A)

It should be noted from Table 4-30 that, except for the 'material' action works for males which has a frequency of 3 instances, the frequency of all similar types of 'material' actions engaged in by males and females is low (only one instance).

Nevertheless, males were still portrayed in a greater number of activities, 67 'types' of activities for males but 37 for females.

### 4.1.6.2 Associated verbs or 'social action' in Primary Longman Express

In the reading passages of Primary Longman Express, males and females were associated with different verbs or 'social actions' (van Leeuwen, 1995, 2008). First, males were portrayed as active and engaging in a range of outdoor activities such as swimming (2
instances), hiking (2 instances), going on an outing (1 instance), and playing hopscotch and hide-and-seek (1 instance):

Sam is swimming in the pool. (Primary Longman Express 1B)
$H e$ is hiking with his friends. (Primary Longman Express 1B)
Tim, Coco and her brother Yoyo are going on an outing. (Primary

Longman Express 1B)
There is only one instance of a female being portrayed as playing sport ("My mum isn't free to take me. She plays tennis on Mondays" in Primary Longman Express $2 B$ ). Instead, females were described engaging in cultural activities such as dancing ( 3 instances) and playing musical instruments (2 instances):

Kate is dancing in the hall. (Primary Longman Express 1B)
Lily always practises the guitar. She often practises the flute too.
(Primary Longman Express 4A)
In some contrast, both males and females were portrayed as engaging in negative, undesirable behaviours. Females push (1 instance), fight with others (2 instances), tell lies (2 instances), or do not care about others (1 instance):

Mo is rude. She pushes and she likes to fight. (Primary Longman Express 2B)

She fights with us and tells us lies. (Primary Longman Express 3B)
Yesterday Emma had a fight with her brother Eddy. (Primary Longman Express 5A)

Kitty Ho is a Primary 5 student. She does not care much about others.
(Primary Longman Express 5A)
Nevertheless, the only burglar found in $P L E$ is a male:

He broke into a jewellery shop on Jade Street this morning, a police officer told them. (Primary Longman Express 5B)

Table 4-33 in Appendix 4 shows that the node word She has 'strong' collocates kills and killed, whose MI score of 8.25307 is highly significant. Checking the concordance lines and the File View shows that these two collocates are from the unit 'The magic of stories' in Primary Longman Express $6 A$ which is about the book The Wizard of Oz , and kills and killed refer to the fact that "Dorothy cannot go home until she kills the wicked witch" and "she was also brave because she killed the wicked witch". Therefore, the use of the verbs kills and killed is rather exceptional and not ubiquitous.

Moreover, females more often engage in activities that help others (3 instances for females compared with only one instance for a male), evidenced in the strong collocate action verbs rescued and helps or helped. The things that females and a male have done to rescue and help people are evident in the following sentences:

She once rescued a girl from the sea. My mum is the bravest person in my family. (Primary Longman Express $4 A$ )

Billy: How about your mother?

Sam: She helps people too. (Primary Longman Express 2B)
The good witch helps Dorothy to get back home. (Primary Longman Express 6A)
$E d d y$ has helped me too. He has just drawn a flag for the ship, replied Emma. (Primary Longman Express 5A)

Also, males and females were both described as doing household chores, although females were portrayed as doing them more often males (4 and 2 instances respectively). This phenomenon is in contrast to previous studies (Lee \& Collins, 2010; Ullah \&

Skelton, 2013), as illustrated in the following:
Males
My brother hangs up the washing. (Primary Longman Express 2B)
Dad was busy preparing the food in the kitchen. (Primary Longman Express 5A)

Females
Helpful Bo waters the plants every Friday. (Primary Longman Express 2B)

Bo helps at home. She cleans the floor. (Primary Longman Express 2B)
Every Saturday Bo tidies her bedroom. (Primary Longman Express 2B)
My mother was cooking dinner when I got home. (Primary Longman
Express 5B)
The two instances of males engaging in household chores above however are not stereotypical. Further, the use of the adjective helpful and the verb helps for Bo are interesting because, as in the portrayal of a male's domestic role in $S U$, they imply a supportive role for Bo in doing the housework, instead of being primarily responsible for it.

The distribution of verbs associated with males and females in PLE in this sense means that gender is represented fairly equally. Though the associated verbs related to activities for males are more likely to be action verbs about outdoor activities or sports, while those for females tend to be activities related to music or dance, both males and females were portrayed doing household chores, and 'negative' behaviour is associated with both.

After identifying the verbs associated with males and females, I classified them
into different categories based on van Leeuwen's Social Action Network. The social action of the males and females in Primary Longman Express is presented in Tables 4-36 and 4-37 in Appendix 4.

As in Step $U p$ and as expected, most of the male and female activities belong to the 'material' action (e.g. puts out fires, playing football, cleans the floor, had a fight with her brother Eddy), with material processes representing processes of doing something (Halliday, 1985). There are 48 types of 'material' action for males and 44 types for females. One female social action (suggested Susie) belongs to the 'semiotic' action. There are also 'affective' reactions (6 instances for males and 6 instances for females), for example, likes PE, wants to be a music star. Two male 'cognitive' reactions are "could not decide what he wanted to be" and "decided to put some new photos into the family photo album".

Regarding 'material' action, as presented at the beginning of this section, males were portrayed as active and engaging in a range of outdoor activities in $P L E$, but no females were portrayed engaging in outdoor activities.

The 'semiotic' action suggested collocated with Susie in PLE also shows a female as wanting to help because Susie wants to swim a certain distance to raise money for charity:
'I'd rather do a sponsored swim,' suggested Susie. (Primary Longman Express 6A)

Finally, different representations of interests and preferences of males and females can be seen in the 'affective' reaction. Males like PE and want to be athletes, whereas females like music and want to be music stars, as evidenced in the following:

Males

He likes PE lessons best. (Primary Longman Express 3B)
Tim likes PE. He is good at running. (Primary Longman Express 4A)
'Dad,' said Jimmy, 'I want to be a famous athlete now.' (Primary

Longman Express 6A)
Females
She likes Art and Music best. (Primary Longman Express 3B)
Lily likes music and Bob does sports. (Primary Longman Express 4A)
She wants to be a music star. (Primary Longman Express 4A)
Based on the analyses above, to answer Research Question A1(f) ('Are male and female characters comparably represented in terms of associated verbs or 'social action'?'), males and females in the reading passages of $S U$ and $P L E$ were sometimes, but not always, represented equally in terms of social action. In $S U$, both indoor and outdoor activities were engaged in by males and females, but males in the reading passages of PLE were portrayed engaging in a range of outdoor activities. Household chores in both textbook series were done by both males and females but males only play a supportive role. Finally, males and females in PLE tend to have different interests, with sports preferred by males, and arts and music by females. However, we need to be cautious when drawing conclusions from the findings because the frequency of most verbs associated with both males and females in the reading passages of the two textbook series generated from Collocates of AntConc is low, just less than 5 .

### 4.2 Gender Representation at the Level of Formal Grammar

In addition to gender being textually represented at the lexical level, it can also be represented at the level of the structure or form of a sentence (Yule, 1998). This includes he/she, man/woman and man/woman-compounds in a generic sense to refer to "people in general or when the sex of the referent is not specified" (Lee \& Collins, 2008, p. 128), and male/female 'firstness', which are discussed in this section.
4.2.1 The 'generic' use of $h e$, man and man-compounds, and the 'generic' use of she, woman and woman-compounds in Step Up and Primary Longman Express

## (Research Question A2)

In this section, Research Question A2 ('What is the frequency of (a) the 'generic' use of he, man and man-compounds and (b) the 'generic' use of she, woman and womancompounds when the sex of the referent is not specified, and are there any patterns here?') is answered. As mentioned in Chapter 2, one aspect of linguistic sexism has been identified as the 'generic' use of the masculine pronoun he and the word man to refer to males and human beings in general (Swann, 1992), and man-compounds used in names of occupations to include both sexes (Rovano, 1991). To find out if there are any examples of 'generic' uses of he/she, man/woman, and man/woman-compounds in SU and PLE, I conducted concordance analyses. For the nodes he/she and man/woman, I analysed the concordance lines to find out the original context where they are used in the reading passages of the textbook series. For the man/woman-compounds, I first referred to the word list to find out if there are any examples and then, again, analysed their concordance lines to see if their referents are sex-specific or not.

Lee and Collins (2008) found some instances of masculine generic pronouns in their analysis of earlier and recent textbooks (53 and 29 tokens respectively). However, among the 257 hits of the node word $H e$ or he in the Step Up sub-corpus, no examples of the 'generic' use of He/he could be found. In PLE, the analysis of the 112 hits of the node word He or he also shows that $H e / h e$ as a subject pronoun was only used as a male reference. In other words, again, no examples of the 'generic' use of he could be found.

There are 115 and 88 concordance hits of the node word She or she in the Step Up and Primary Longman Express sub-corpora respectively. Analyses again showed no examples of 'generic' use of she, that is, She/she as a subject pronoun was only used to refer to a female subject. This is unsurprising, as Lee (2007) suggests, generic she is not common in Hong Kong.

Replicating the procedure of identifying the 'generic' use of he or she, I also found no examples of man used with a generic meaning in the reading passages of the whole series of $S U$ and PLE. Man was only used to refer to a male person, as in Ferguson's (2004) study (or more specifically a male adult, though there is no clue to show the age of the referent). However, there are six instances of the 'generic' use of the plural form men to refer to human beings in general (in this case, people who hunt and kill endangered animals) in PLE (but all three instances of men in $S U$ were used to refer to more than one adult male). Interestingly, they are all from the same reading passage, 'Endangered animals', in Primary Longman Express $6 B$, so it is not ubiquitous (see the concordance lines below).
h my dad. Endangered animals Once upon a time, men were in charge of the Earth but they did not look hino. 'Why me?' asked the rhino. 'I'm endangered! Men hunt rhinos so there aren't many of us left. You too,' said the tiger. 'Why?' asked the tortoise. 'Men like wearing fur so they hunt us for our skin. We hunt us for our skin. We'll become extinct unless men stop killing us,' said the tiger angrily. 'I hat top killing us,' said the tiger angrily. 'I hate men!' growled the crocodile. 'People like using our s 'Sharks only kill about six people every year but men kill 100 million sharks every year. Do you like e

There is a mix of generic and specific use of the plural form men in these six instances. First, it is generic in "men were in charge of the Earth" because men here refers to human beings, but specific if we consider rulers over time. In "Men hunt rhinos ...", men can be generic but also specific to refer to males who usually do the hunting. For the third instance, "Men like wearing fur", men is generic if we think of the Stone Age when everyone wore animal fur to keep themselves warm. However, if we think of modern times, this has an additional 'feminine' meaning as females sometimes wear fur. In the tiger's dialogue, "We'll become extinct unless men stop killing us", men is generic if it refers to 'people'. However, it can also be specific because hunters of animals are usually male. This is also the same as in "I hate men!" because it means that the crocodile hated all human beings (generic) or the hunters who are usually males (specific). Finally, men is generic in "men kill 100 million sharks every year" from the sharks' point of view, but probably in practice the people who kill sharks are male.

In all the reading passages of $S U$, there are 8 instances of the use of woman to refer to an adult or old female. There are no examples of the 'generic' use of woman. In PLE, there is only one instance of the word woman to refer to an adult female person in the sentence "A woman falls into a hole." in Primary Longman Express 6A. Again, there is no example of the 'generic' use of woman. (In both the two textbook series, the plural
form women could not be found at all.)
Finally, the frequency of the 'generic' use of man/woman-compounds in the reading passages of $S U$ and PLE (e.g. postman, saleswoman) was first identified from the word list compiled with AntConc and the results of analysis are as below:

In the Step Up sub-corpus, four examples of man-compounds were found: fireman (one instance of sex specific and one unknown reference of sex), firemen (three instances of unknown reference of sex), policeman (two instances of sex specific), and policemen (one unknown reference of sex). Then, the concordance lines of these compounds were analysed. The word 'fireman' is used as follows:

Jenny's brother is a fireman. (Step $U p 4 A$ ) (sex known)
and

A strong fireman then carried the woman for me. (Step $U p$ 5B) (sex unknown)

The plural form 'firemen' was used when referring to more than one firefighter, although the sex of these firefighters is unknown as no clues could be found in the texts or illustrations accompanying the reading passages:

When there is a fire, he and the other firemen go to the scene in a fire engine. (Step Up 4A)

It took the firemen more than an hour to put out the fire. (Step Up 5B)
When I was running down the stairs, the firemen came. (Step $U p 5 B$ )
A similar situation could be found for the word policemen. There is no clue to indicate the sex of the police in the sentence "The policemen took Bruce and his father to hospital" in Step Up $5 A$, but its singular form policeman was only used to refer to a male police officer, as in the sentences below:

Mr. Lee is a policeman. This is his police car. (Step $U p 1 B$ )
Mr. Lee is a policeman. He is busy this week. (Step $U p$ 2B)
While a few instances of man-compounds were used in occupation terms when the sex of the referent is unknown, alternatives could also be found. For example, the word police was used when referring to more than one police officer and their sex is not known, as in the following sentences:
'Stay calm. We're the police. We've come to save you,' said the man. (Step Up 5A)

When I was waiting for her to open the door, I called the police on my mobile phone. (Step Up 5B)

He reported the fire to the police. (Step $U p 5 B$ )
An instance of the use of Fire Officer could also be found in the sentence "Tony Wong, a Fire Officer, said..." in Step $U p 5 B$, though the sex of this fire officer is male.

On the other hand, in the Primary Longman Express sub-corpus, the only example of a man-compound is fireman, with 5 occurrences as shown in the following sentences:

He's a fireman. He's brave. He puts out fires and saves people. (Primary
Longman Express 2B)
I want to be a fireman when I grow up. (Primary Longman Express 6A)
If I become a fireman, I'll save people's lives,' said Jimmy proudly.
(Primary Longman Express 6A)
'Really?' said his mum. 'I thought you wanted to be a fireman.'
(Primary Longman Express 6A)
An actor can be an astronaut, a fireman, a vet AND an athlete! (Primary
Longman Express 6A)

The word fireman in Primary Longman Express $2 B$ and $6 A$ (hits 1-4) is clearly sexspecific, referring to a male firefighter (Sam's father) and Jimmy respectively, but that in hit 5 has a 'generic' sense. While no examples of the 'generic' use of woman and womancompounds could be found in the reading passages of Step Up, one example of a womancompound (policewoman) could be found in PLE, referring to a female police officer:

Billy: Is she a policewoman? (Primary Longman Express 2B)
The word police, however, as a collective noun, was used generally in the following instances to refer to an institution (hit 1) and when the sex of the officers is unknown (hits 2 and 3):

Helping the police (Primary Longman Express 5B)
The police arrived and grabbed the man. (Primary Longman Express 2B)
The police will be here shortly. (Primary Longman Express 5B)
The noun phrase police officer, a gender neutral term, was also used as a singular form. Here, the sex of the referent is not known, not relevant, or not made relevant, as follows:
‘Thank you for stopping this burglar. He broke into a jewellery shop on Jade Street this morning,' a police officer told them. (Primary Longman Express 5B)

A police officer arrived at the school and talked to a lot of people. (Primary Longman Express 5B)

The police officer asked them questions and told them to write a statement. (Primary Longman Express 5B)

To conclude this section, in answer to Research Question A2, in the reading passages of both $S U$ and $P L E$, no 'generic' examples of he, she, man, or woman could be found. The use of the plural form men (6 instances) to refer to human beings in general
could only be found in one unit of PLE. In terms of occupations, four examples of mancompounds (fireman, firemen, policeman, and policemen) could be found in $S U$, but just one (fireman) in PLE, along with one woman-compound (policewoman), with the mancompounds being usually used sex-specifically. The collective noun (police), and gender neutral terms fire officer (in $S U$ only) and police officer (in both series) were also used generically. These findings are not surprising because generic use of male pronouns is less common in recently published textbooks (Lee and Collins, 2008), since there is a growing awareness of gender equality among the public (Lee \& Collins, 2010). Besides, in another recent textbook study (Ferguson, 2004), man/woman-compounds were used in occupation terms only when it was necessary to specify the sex of the referents and not generically.

### 4.2.2 Frequency of 'male/female firstness' (Research Question A3)

Research Question A3 is to ask 'What is the frequency of 'male/female firstness', and are there any patterns here?'. Porreca (1984) defines 'firstness' as a phenomenon of the masculine word being always put first when two nouns for sex are paired (e.g. man/woman), and 'male/female firstness' refers to the "ordering of sex pairs" (Hartman \& Judd, 1978, p. 390) when either a male or female term is placed first when they are paired within a single phrase. Conventional usages include phrases such as Mr. and Mrs., brother and sister, husband and wife, he and she, he or she, him or her, and his or her in which the male term comes first. On the other hand, ladies and gentlemen, mum and dad, and bride and groom are examples of conventional phrases in which female terms are placed in the first position. I determined whether the 'male/female firstness' is
conventional or non-conventional by checking the British National Corpus (BNC). I considered 'male firstness' as conventional if there are more hits than the 'female firstness', and vice versa. For example, ladies and gentlemen is a conventional phrase but gentlemen and ladies is non-conventional because there are 50 hits in BNC but only 4 hits for gentlemen and ladies. Examples of 'male/female firstness' were found by identifying all 'pairs' of gendered terms, including pairs of proper nouns, common nouns and pronouns from the word list compiled with the corpus software AntConc, followed by analysing concordance lines of these gendered terms.

### 4.2.2.1 Frequency of 'male/female firstness' in Step $\boldsymbol{U p}$

In all the reading passages of Step Up, 11 instances of 'male firstness' and 5 instances of 'female firstness' can be found in the following sentences:

## Male firstness

Conventional:
Last weekend, Mr. and Mrs. Lee took the children to a new restaurant near their home. (Step Up 6A)

The script tells the actors and actresses what to say and how to say it.
(Step Up 6B)
Next, they will choose the actors and actresses. (Step Up 6B)
Every actor and actress must follow the script. (Step Up $6 B$ )
Hello, boys and girls (Step Up lB)
Non-conventional:
Ben and Cindy are cutting out the clothes for the paper dolls. (Step Up 2B)

Ben and Emma are taking him to school. (Step Up 2A)
He teaches Ben and Emma to look at the expiry date too. (Step Up 5B)

Grandpa and Grandma have a new house. (Step Up 2A)
Grandpa and Grandma are happy. (Step Up 2A)
Tom's father and mother are farmers. (Step Up 2B)
Female firstness

Conventional:
Grandma and Grandpa do not go to work. (Step $U p 2 B$ )
Emma sat between Mum and Dad. (Step Up 4B)
Let's get some water for Mum and Dad too. (Step Up 5A)
Non-conventional:
Sally and Peter are at the fun park. (Step $U p 1 A$ )

Girls and boys, Bring your toys. (Step Up 1A)

The ratio of conventional and non-conventional female-to-male firstness is 1:2.2. $\chi^{2}(1, \mathrm{n}=16)=2.25, p<.05$ and, therefore the difference in the number of instances of male and female 'firstness' is not significant. If the number of different examples (that is, the 'types') are counted, ignoring any repetition, there are also more instances of 'male firstness' than 'female firstness' (8 and 4 instances for male and female 'firstness' respectively). Males tend to be mentioned first when two nouns are paired for sex, for example, Grandpa and Grandma, actors and actresses. There are slightly more 'types' of conventional 'male firstness' than 'female firstness' ( 3 types and 2 types respectively): $M r$. and Mrs., actors and actresses, and boys and girls (male 'firstness'); Grandma and Grandpa, and Mum and Dad (female 'firstness'), and usually occur in 'nomination', e.g. Ben and Cindy (3 instances) or 'categorization' e.g. father and mother (6 instances). For
'female firstness', except for the instance of Sally and Peter ('nomination'), all instances of 'female firstness' are 'categorization'.

### 4.2.2.2 Frequency of 'male/female firstness' in Primary Longman Express

In all the reading passages of Primary Longman Express, in contrast to $S U$ and Lee and Collins's $(2008,2009,2010)$ studies, there are more examples of 'female firstness' than 'male firstness': 14 compared to 5 (ratio of male-to-female firstness is $0.357: 1$ ). $\chi^{2}(1, \mathrm{n}=$ 19) $=4.263, p<.05$ and therefore the difference in the number of instances of male and female 'firstness' is significant, and this difference produces an effect size value ( $\varphi=$ 0.474 ) that approaches a large-sized effect. Male and female 'firstness' occurs in the following sentences of Primary Longman Express:

## Male firstness

Conventional:
How many brothers and sisters do you have? (Primary Longman Express 2B)

Find out what this person has done and write a 300 -word essay about him or her. (Primary Longman Express 3A)

It was $5 \mathrm{a} . \mathrm{m}$. and $\mathbf{M r}$ and Mrs Wong were enjoying their morning walk in Fanling. (Primary Longman Express 5B)

Non-conventional:
Simon and Sharon are looking at some old clothes at home. (Primary
Longman Express 1B)
Narrator: Bobby and Carol are in the kitchen. (Primary Longman Express 2B)

## Female firstness

Conventional:

His mum and dad have some pizza. (Primary Longman Express $3 A$ )
Mum and Dad are going to have a baby! (Primary Longman Express 6B)
Mum and Dad were very excited but Emma thought, 'Looking at flats is so dull.' (Primary Longman Express $6 B$ )

Mum and Dad were going to take the children camping beside the stream. (Primary Longman Express 6B)

I thought Mum and Dad would be disappointed with me. (Primary Longman Express 6B)

Emma thought, 'I didn't know that Mum and Dad had so much fun here.
(Primary Longman Express 6B)
I went to church with Grandma and Grandpa. (Primary Longman Express 3B)

We went to a lot of restaurants with my aunt and uncle. (Primary Longman Express 6B)

Non-conventional:

She told Emma and Eddy to find the things they like. (Primary Longman Express 4A)

On the way, they pointed out some special places to Emma and Eddy.
(Primary Longman Express 6B)

Dad was going to teach Emma and Eddy how to catch fish with nets.
(Primary Longman Express 6B)
Ivy \& Jim: We lost our new backpacks today. (Primary Longman Express 5A)

Ivy \& Jim: Yes, they are ours. (Primary Longman Express 5A)
Lucky money is given to each girl and boy. (Primary Longman Express
6A)
The sentences above show that 'male/female firstness' in the reading passages of Primary Longman Express occurs in proper nouns (e.g. Simon and Sharon, Ivy \& Jim) and common nouns (e.g. brothers and sisters, Mum and Dad). One example of conventional 'male firstness' can be found in the titles Mr and Mrs and another in the object pronouns him or her. Except for girl and boy, all the examples of nonconventional 'male/female firstness' in Primary Longman Express are people's names.

The naming and address terms Emma and Eddy, Ivy \& Jim, and Mum and Dad were used three times, twice and six times respectively. If we count the number of 'types', the number of 'male firstness' and 'female firstness' is in fact very similar, 5 and 6 instances respectively. In this sense, it can be concluded that males and females were represented equitably in Primary Longman Express.

To sum up, to answer Research Question A3, gender representation in the reading passages of the two textbook series is different where 'male/female firstness' is concerned. In $S U$, there are more instances of male than female 'firstness', as regards both 'tokens' or 'types', although the difference is not significant. On the other hand, for $P L E$, it seems that the writers of this series have attempted to avoid the gender bias of always placing the male term first within a single phrase, which may reinforce the secondary status of females (Hartman \& Judd, 1978). Except for conventional sex pairs such as Mr and Mrs, more instances of 'female firstness' were found in PLE.

### 4.3 Summary and Conclusion

In this chapter, I have analysed textual representation of gender in the reading passages of Step Up and Primary Longman Express at two levels - lexical and grammatical - by using the corpus software AntConc.

At the lexical level, there is a higher frequency of occurrence of node words for males than females when counted as 'tokens' in both textbook series, and the difference between the number of male and female mentions is significant. However, when the node words are counted as 'types' (i.e. different words), the opposite occurs in $S U$ and the number of male and female mentions in $P L E$ is almost the same. Unsurprisingly, as there is a higher frequency of occurrence of node words for males than females in the two textbook series, there is also a greater number of nomination (i.e. names and title) for males than females and a higher frequency of occurrence of masculine than feminine pronouns in the reading passages of the two textbook series when counted as 'tokens'. These aspects are similar to the findings obtained by the Equal Opportunities Commission (2000) in their analysis of textbooks and examination papers used in Hong Kong primary and secondary schools, and Hartman and Judd's (1978) analysis of ESL texts in which male references outnumbered female references in terms of the sex-linked nouns, names or titles, and pronouns used. In this study, the high frequency of some node words for males such as the proper noun Tim and the subject pronoun $H e$ can be explained by the context of the reading passages as these node words are not evenly distributed throughout the whole textbook series. Regarding titles, there are more available titles for females (i.e. Miss and Mrs) than for males (Mr only), and either Miss or Mrs was used for an adult female to distinguish her marital status in the two textbook
series. It may be the case that the textbook writers wanted to deliberately highlight the marital status of the females, because in Hong Kong, nowadays, it is still not very common to use $M s$ to represent both married and unmarried women. In some situations, for example, filling in an application form, the options Miss, Ms and Mrs are all available for people to choose from. If the textbooks act as a medium to show learners all the different usages, then $M s$ should also be used. Overall, as regards nomination, males and females in the two textbook series were represented similarly, by proper nouns, in a formal, semiformal, or informal way, though the males and females were most often nominated with only their given names.

Gender representation can also be analysed in terms of categorization (i.e. the associated family relationship and occupational roles of males and females). In $S U$, females were associated with slightly more types of family relationship roles than males, but in $P L E$, the males and females were represented in a similar range. Though males were represented as engaging in slightly more jobs than females in both series, females were no longer only portrayed as engaging in housework and have jobs outside the home.

Regarding adjectives and verbs associated with males and females, the writers of the two textbook series appear to have attempted to avoid gender stereotyping. In $S U$, while more 'positive' adjectives were used exclusively for males than females, there were also more instances of males being described 'negatively' than females. On the other hand, in PLE, more 'positive' and 'negative' were used exclusively for females than males. Nevertheless, males and females were not always portrayed with 'traditionally' masculine and feminine characteristics. As regards verbs or 'social action', in $S U$, both males and females were portrayed in a similar range of activities, including working
outside home and doing household chores. In $P L E$, however, while males prefer sports, females prefer arts and music more. It should be noted that for household chores, males in the two textbook series were only portrayed as playing a supportive role.

At the grammatical level, no 'generic' uses of he, she, man, or woman could be found in both $S U$ and PLE. Only the plural form men was used in one unit of PLE to refer to human beings in general. In terms of occupations, man-compounds (fireman, firemen, policeman, and policemen) could be found in $S U$, and a man-compound (fireman) and a woman-compound (policewoman) in PLE. Similar to Lee and Collins's $(2009,2010)$ studies, in both series, the gender neutral generic noun phrase police officer was used, instead of using the word policeman, to refer to one single police officer. As regards 'male/female firstness', in $S U$, there are more instances of males being placed first when two nouns are paired for sex, but the difference in the number of instances of male and female 'firstness' is not significant. On the other hand, in $P L E$, the male term was not always placed first when male and female terms were paired up within a single noun phrase. There are more instances of conventional and non-conventional 'female firstness' than 'male firstness'. If the 'types' is counted, the number of 'male firstness' and 'female firstness' is actually the same.

Thus, it can be concluded that the overall picture of textual representation of gender in the reading passages of $S U$ and $P L E$ is similar. At the lexical level, males were represented more often than females in terms of having a higher frequency of occurrence of node words, nomination, and pronouns when counted as 'tokens' in the two series. However, both males and females were portrayed as having jobs outside the home and as engaging in household chores (even if this meant men only playing a supportive role). At
the formal grammatical level, the 'generic' use of masculine pronouns to refer to human beings in general could not be found in either textbook series. In other words, a considerable amount of gender equity can be seen in both textbook series, an exception being the significantly greater number of male tokens in both series, a matter of higher masculine visibility.

After this analysis of textual representation of gender in the aspects of lexis and grammar, discourse representation and gender in the dialogues in Step Up and Primary Longman Express will be analysed in Chapter 5.

## Chapter 5

## The Main Study: Discourse Representation and Gender in <br> Textbook Dialogues

### 5.0 Introduction and Pilot Study Findings

After analysing the textual representation of gender in lexis and grammar in Step $U p(S U)$ and Primary Longman Express (PLE) (Chapter 4), in this chapter, I analyse the dialogues to see if gender balance exists in the dialogues in $S U$ and PLE.

Jones et al. (1997, p. 471) define a dialogue, one 'subgenre' of language textbooks, as a written conversation "between two or more people". Dialogues in foreign or second language textbooks are usually "contrived" (Gilmore, 2004, p. 363) and can thus only imitate real-life conversation, but may provide students with some experience in communicating orally in their foreign or second languages and offer useful learning materials for developing their communicative competence by presenting the materials in certain situational contexts (Dörnyei \& Thurrell, 1992). They also provide useful expressions for students to practice conversation (Rivers \& Temperley, 1978).

Jones et al. (1997) considered only mixed-sex dialogues in their study, but singlesex dialogues were also analysed in my study. Going beyond Poulou's (1997) study of the mixed-sex dialogues in two textbooks for teaching Greek as a foreign language to adults, in which the number of utterances, words uttered, and initiating and concluding utterances was counted and the language functions of the utterances were analysed, in this chapter, I start by giving a general picture of the number of single-sex and mixed-sex dialogues in the two textbook series (RQ B1), followed by the number of male and
female speakers (RQ B2), and then the number of utterances (RQ B3) and words uttered by the male and female speakers (RQ B4). Number of words or length of utterances in mixed-sex dialogues is one indicator of visibility of male and female speakers in textbook dialogues. It may also be relevant to students' speaking opportunities in class: Sunderland (2000) suggests that male students will have more opportunities to practice speaking if male speakers in textbook dialogues utter longer utterances and if male students are asked to play the role of male speakers, while female students' language learning opportunities will be relatively fewer, and vice versa. After that, I analysed whether males or females initiate and conclude more mixed-sex dialogues (RQ B5), and speech acts of the utterances uttered by male and female speakers (RQ B6) and certain conversational features among male and female speakers (RQ B7) in the mixed-sex dialogues of the selected textbooks of $S U$ and PLE. Before presenting the main study, I first review the relevant findings of the pilot study.

In the pilot study, only the mixed-sex dialogues in speech bubbles from one particular unit of each book of the whole series of Step Up, the textbook series used in most primary schools I surveyed, were selected for analysis. Also, only Research Questions B3-7 were piloted. The results are as follows:

First, though the number of utterances uttered by males and females was nearly the same (17 and 19 utterances respectively), on average, males produced slightly more utterances than females because there are two more female speakers ( 12 female and 10 male speakers) (RQ B3). On the other hand, female speakers uttered more words than male speakers (115 and 92 words respectively). On average, each female speaker uttered slightly more words than each male speaker (RQ B4). For initiation and conclusion of
mixed-sex dialogues, each with two speakers only, while more dialogues were initiated by female than male speakers (11 and 5 respectively), more dialogues were concluded by male than female speakers (10 and 6 respectively) (RQ B5). Thus, the overall pattern of the discourse roles of male and female speakers in the analysed dialogues is patchy.

Informational and directives were the two most common types of speech acts uttered by both male and female speakers. 8 and 7 instances of informational were uttered by male and female speakers, but females uttered slightly more utterances of the directive type than males: 8 and 6 instances of directives for females and males respectively (RQ B6).

Finally, in the analysis of the features of conversation, the analysed mixed-sex dialogues are all in the form of adjacency pairs. The most common is the question-answer type, with the question being the first pair part and the answer the second. Among the 11 instances of question-answer adjacency pairs, females asked and males answered questions in 7 instances. In other words, males asked and females answered questions in 4 instances. There are no examples of overlapping speech, hesitations or other nonfluency features (RQ B7).

All the research questions piloted are operationalisable and there are slight differences in gender representation. As the findings of the pilot study came from the analysis of only a small amount of data: selected mixed-sex dialogues in the speech bubbles of one single textbook series, Step $U p$, in the main study, more data were needed by analysing also the dialogues embedded in the reading passages of Step Up, together with the analysis of the dialogues (dialogues in speech bubbles, self-contained dialogues and those embedded in reading passages) in the other selected textbook series, Primary

Longman Express. In addition, apart from analysing mixed-sex dialogues, single-sex (between-male and between-female) dialogues were analysed in the main study reported in this chapter. Chi-square $\left(\chi^{2}\right)$ values were calculated to determine if the differences between the numbers of dialogues, utterances, and words uttered by male and female speakers, and the number of mixed-sex dialogues initiated and concluded by male and female speakers are significant, with the values of greater than 3.841 for $p<0.05$ with 1 degree of freedom $(d f)$ being significant.

### 5.1 Number of Single-Sex and Mixed-Sex Dialogues (RQ B1)

In this section, Research Question B1 ('How many dialogues are (a) between males, (b) between females, and (c) mixed-sexed?') was answered. I focused on three types of complete dialogues: (a) those in speech bubbles, (b) self-contained dialogues in speaking tasks (outside speech bubbles and not embedded in reading passages, and this type of dialogues can only be found in Primary Longman Express), and (c) dialogues embedded in reading passages (also analysed in Chapter 4 for textual analysis) (see also Section 3.2.2.2). However, I excluded those dialogues which include incomplete utterances in which students are expected to finish what the speakers say in the two textbook series (see, for example, Figure 5a from Primary Longman Express $3 A$ p. 15) because such kind of dialogues requires students' knowledge of spoken English rather than provides inputs for students' learning of speaking.

Mandy: What do you like doing in your free time?
Tony : I like ... too.
Mandy: What's your favourite toy?
Tony : My favourite toy is ...


Figure 5a Dialogues including incomplete utterances

To the best of my knowledge, the basic unit of a dialogue has never been defined but turns are considered as the basic unit of conversation (Sidnell, 2010). Therefore, in this study, I define a dialogue as one single piece of discourse which includes a number of turns, or utterances produced by at least two speakers in a particular context, and the end of the dialogue is when there are no more utterances. All the single-sex and mixed-sex dialogues in the three types of dialogues of $S U$ and $P L E$ were counted in Tables 5-1-5-5 in Appendix 5, and presented in this section.

First, Table 5-1 in Appendix 5 shows the number of single-sex and mixed-sex dialogues (a total of 100) in the speech bubbles of $S U$. Among the single-sex dialogues, there are slightly more between-female than between-male dialogues (22 and 19 respectively). $\chi^{2}(1, \mathrm{n}=41)=0.220, p<.05$ and, thus, the difference in the number of
between-female and between-male dialogues is not significant. Adding up the betweenmale and between-female dialogues, there are still fewer single-sex than mixed-sex dialogues: 41 single-sex dialogues, compared with 59 mixed-sex dialogues. $\chi^{2}(1, n=100)$ $=3.240, p<.05$. Therefore, this difference is not significant either.

In the 34 dialogues embedded in the reading passages of $S U$ (see Table 5-2 in Appendix 5), again, there are slightly more between-female than between-male dialogues (12 and 10 respectively, $\left.\chi^{2}(1, \mathrm{n}=22)=0.182, p<.05\right)$. Here, there are more single-sex dialogues than mixed-sex dialogues, 22 and 12 respectively. However, $\chi^{2}(1, \mathrm{n}=34)=$ $2.941, p<.05$. Therefore, the difference is not significant.

In PLE, the speech bubbles include 112 dialogues (see Table 5-3 in Appendix 5), there are slightly more between-male than between-female dialogues, 27 and 24 respectively $\left(\chi^{2}(1, \mathrm{n}=51)=0.176, p<.05\right.$, that is, not significant). There are fewer single-sex than mixed-sex dialogues, 51 and 61 respectively $\left(\chi^{2}(1, \mathrm{n}=112)=0.893, p\right.$ $<.05$, that is, not significant).

Table 5-4 in Appendix 5 shows the number of single-sex and mixed-sex dialogues in the 25 self-contained dialogues of PLE. There are slightly more between-female than between-male dialogues, 8 and 6 respectively $\left(\chi^{2}(1, \mathrm{n}=14)=0.286, p<.05\right)$. Adding up the total, there are slightly more single-sex dialogues than mixed-sex dialogues, 14 and 11 respectively $\left(\chi^{2}(1, \mathrm{n}=25)=0.360, p<.05\right)$. Therefore, neither difference is significant.

Lastly, Table 5-5 in Appendix 5 shows the 75 dialogues embedded in the reading passages of PLE. In this subgenre, there are more between-male than between-female dialogues, 31 and 6 respectively. $\chi^{2}(1, \mathrm{n}=37)=16.892, p<.05$ and thus, it is significant
that there are more between-male than between-female dialogues. The effect size index is 0.676 , which is a large effect. Comparing single-sex and mixed-sex dialogues, the number of these two types of dialogues is nearly the same (37 and 38 respectively).

Based on the analysis above, to answer Research Question B1 ('How many dialogues are (a) between males, (b) between females, and (c) mixed-sex?'), it can be concluded that in $S U$, there are non-significantly more between-female than betweenmale dialogues in both the speech bubbles and those embedded in the reading passages. In $S U$, there are more mixed-sex dialogues than single-sex dialogues: 71 and 63 respectively. However, this difference not significant $\left(\chi^{2}(1, \mathrm{n}=134)=0.478, p<.05\right)$. In PLE, on the other hand, there are significantly more between-male than between-female dialogues in the reading passages, and the effect produced is large. If the number of dialogues in the three subgenres of $P L E$ is added up, there are again more between-male than between-female dialogues ( 64 and 38 dialogues respectively). $\chi^{2}(1, \mathrm{n}=102)=$ 6.627, $p<.05$ and thus, it is significant, and the effect size index of 0.255 approaches a medium effect. Therefore, there is more male visibility in dialogues and perhaps more practice opportunities for male students.

Simply counting the number of dialogues is not enough to tell us about the speaking opportunities of male and female speakers because a dialogue also varies with length, depending on the number of utterances and words involved. Therefore, the number of utterances and words uttered by male and female speakers were also counted (see Sections 5.3 and 5.4).

### 5.2 Number of Male and Female Speakers in Single-Sex and Mixed-

## Sex Dialogues (RQ B2)

Counting only the number of dialogues does not tell us much about the visibility of male and female speakers in dialogues because one speaker can produce many dialogues. Therefore, in this section, Research Question B2 ('How many male and female speakers are there in the single-sex and mixed-sex dialogues?') was answered. The different speakers involved in the between-male and between-female dialogues (i.e. single-sex dialogues), and mixed-sex dialogues are listed in Tables 5-6 to 5-10 (refer to Appendix 5), together with the number of utterances (for Research Question B3) in the two types of dialogues in $S U$ and three in PLE (i.e. those in speech bubbles, self-contained dialogues, and dialogues embedded in reading passages). Since the analysis of subgenres is one of the main features of this study and the same speakers may not only occur in one type of dialogues, adding up the total number of male and female speakers and the total number of utterances produced by male and female speakers in the different types of dialogues was not done as it may lead to an inaccuracy of the findings. Speakers here include both humans and non-humans (animals, a robot (Robot Jimmy), a soft toy bear (Teddy), and monsters, including Puffy and Twinkle in $S U$ and Coco, Toto and Yoyo in $P L E$ ), if the sex of such speakers can be recognised by their names, physical appearance, accessories, or clothing. The non-human speakers are indicated with an asterisk (*). When speakers in a visual are not given names, they were simply identified as a boy, a girl, a woman, etc. and were counted as different speakers if, for example, one boy looks different from another. The number of human and non-human male and female speakers in the two textbook series is presented in the following Table and explained in this section:

| Textbook Series/Subgenres | $\begin{gathered} \text { No. of } \\ \text { Between- } \\ \text { Male } \\ \text { Dialogues } \end{gathered}$ | Speakers in Between-Male Dialogues |  | $\begin{gathered} \text { No. of } \\ \text { Between- } \\ \text { Female } \\ \text { Dialogues } \end{gathered}$ | Speakers in BetweenFemale Dialogues |  | $\begin{gathered} \text { No. of } \\ \text { Mised- } \\ \text { Sex } \\ \text { Dialogues } \end{gathered}$ | Male Speakers inMixed-Sex Dialogues |  | Female Speakers inMixed-Sex Dialogues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { No. of } \\ \text { 'Tokens } \end{gathered}$ | $\begin{gathered} \text { No. of } \\ \text { CTypes' } \\ \hline \end{gathered}$ |  | $\begin{gathered} \substack{\text { No. of } \\ \text { Tokens }} \end{gathered}$ | $\begin{aligned} & \text { No. of } \\ & \text { 'Types' } \end{aligned}$ |  | $\begin{gathered} \substack{\text { No. of } \\ \text { 'Tokens }} \end{gathered}$ | $\begin{gathered} \text { No.of } \\ \text { Types } \end{gathered}$ | $\begin{gathered} \text { No. of } \\ \text { CTokens } \end{gathered}$ | $\begin{gathered} \text { No. of } \\ \text { 'Types' } \end{gathered}$ |
| Dialogues in the speech bubbles of Step Up | 19 | 36 | 14 | 22 | 40 | 18 | 59 | 54 | 23 | 56 | 28 |
| Dialogues embedded in the reading passages of Step Up | 10 | 16 | 14 | 12 | 18 | 9 | 12 | 11 | 7 | 13 | 6 |
| Dialogues in the speech bubbles of Primary Longman Express | 27 | 40 | 24 | 24 | 40 | 23 | 61 | 58 | 27 | 56 | 31 |
| Selfcontained dialogues in Primary Longman Express | 6 | 12 | 11 | 8 | 16 | 13 | 11 | 11 | 8 | 11 | 8 |
| Dialogues embedded in the reading passages of Primary Longman Express | 31 | 36 | 19 | 6 | 6 | 4 | 38 | 27 | 15 | 27 | 18 |

Table 5-11 Number of human and non-human male and female speakers in the single-sex and mixed-sex dialogues in Step Up and Primary Longman Express

### 5.2.1 Number of speakers in the dialogues in the speech bubbles of Step $\boldsymbol{U p}$

First, most of the dialogues in the speech bubbles of $S U$ involve two speakers, but four mixed-sex dialogues involve three speakers.

In the single-sex dialogues, in total, there are more human and non-human female speakers than male speakers in the between-female and between-male dialogues respectively, when counted as either tokens or types: 40 'tokens' of human and nonhuman female speakers but 36 'tokens' of human and non-human male speakers, and 18 'types' of human and non-human female speakers but 14 different human and non-human male speakers.

The same phenomenon also occurs in the mixed-sex dialogues: there are slightly
more 'tokens' of human and non-human female than male speakers (56 and 54 respectively), and more 'types' of human and non-human female than male speakers (28 and 23 respectively).

Non-human male and female speakers can be found in both single-sex and mixedsex dialogues. There are 1 and 2 'types' of non-human male and female speakers in the between-male and between-female dialogues respectively. In the mixed-sex dialogues, there are 4 and 2 'types' of non-human male and female speakers respectively. Excluding the non-human speakers, there are 13 and 16 'types' of human male and female speakers in the single-sex dialogues, and 19 and 26 'types' in the mixed-sex dialogues respectively.

### 5.2.2 Number of speakers in the dialogues embedded in the reading passages of

## Step Up

For the dialogues embedded in the reading passages of $S U$, only one mixed-sex dialogue involves three speakers and the rest (both single-sex and mixed-sex) involve two speakers.

When counted as tokens, there are more human and non-human female than male speakers in both single-sex and mixed-sex dialogues, 18 and 16 'tokens' of human and non-human female and male speakers in the between-female and between-male dialogues respectively, and 13 and 11 'tokens' of human and non-human female and male speakers in the mixed-sex dialogues. However, when counted as types, there are more human and non-human male than female speakers in both single-sex and mixed-sex dialogues (14 and 9 'types' of human and non-human male and female speakers in between-male and between-female dialogues respectively, and 7 and 6 'types' respectively in mixed-sex dialogues).

Among all these speakers, there are 2 and 1 'type' of non-human male and female speakers in the between-male and between-female dialogues, and 2 and 1 'type' in the mixed-sex dialogues respectively. That is, there are 12 and 8 'types' of human male and female speakers in the single-sex dialogues and the same number of human male and female speakers in the mixed-sex dialogues (5 'types').

### 5.2.3 Number of speakers in the dialogues in the speech bubbles of Primary

## Longman Express

In $P L E$, in the speech bubbles, many dialogues (104 dialogues) involve two speakers but seven mixed-sex dialogues involve three speakers and one mixed-sex dialogue involves four speakers.

The total number of human and non-human male and female speakers in the single-sex dialogues is nearly the same, 40 'tokens' of both male and female speakers, and 24 and 23 'types' in the between-male and between-female dialogues.

In the mixed-sex dialogues, while there are slightly more human and non-human male than female speakers as tokens ( 57 and 56 respectively), there are more different 'types' of human and non-human female than male speakers (31 and 26 respectively). Excluding one 'type' of non-human male and female characters in both single-sex and mixed-sex dialogues, there are 23 and 22 'types' of human male and female speakers in the single-sex dialogues, and 26 and 30 'types' respectively in the mixed-sex dialogues.

### 5.2.4 Number of speakers in the self-contained dialogues in Primary Longman Express

In the self-contained dialogues in $P L E$, all of them involve two human speakers and none of the speakers are non-human. In these 25 dialogues, there are more female than male speakers in the same-sex dialogues whether counted as tokens or types (16 and 12 'tokens', and 13 and 11 'types' of female and male speakers in the between-female and between-male dialogues respectively). On the other hand, in the mixed-sex dialogues, the number of male and female speakers, counted as tokens or types, is identical (11 'tokens' and 8 'types').

### 5.2.5 Number of speakers in the dialogues embedded in the reading passages of Primary Longman Express

Finally, for the dialogues embedded in the reading passages of $P L E$, one between-male dialogue and 5 mixed-sex dialogues involve three speakers, and one mixed-sex dialogue even involves four speakers.

In the single-sex dialogues, there are more 'tokens' and 'types' of male speakers than female speakers, 36 and 6 'tokens', and 19 and 4 'types' of male and female speakers respectively. If the only non-human female speaker is excluded, there are just 3 'types' of human speakers in the between-female dialogues.

In the mixed-sex dialogues, while there is an equal number of 'tokens' of human male and female speakers (27), there are slightly more 'types' of female than male speakers (18 and 15 respectively).

### 5.2.6 Conclusion

Most previous studies on gender representation in English Language textbooks (e.g. Gupta \& Lee, 1990; Hellinger, 1980; Mukundan \& Nimehchisalem, 2008) found that there were more male than female speakers in dialogues. In the present study, however, regarding Research Question B2 ('How many male and female speakers are there in the single-sex and mixed-sex dialogues?'), this is not always the case. In the single-sex dialogues, including both human and non-human speakers, there are more 'types' of male than female speakers both in the dialogues embedded in the reading passages of $S U$, and the speech bubbles and the dialogues embedded in the reading passages of $P L E$. On the other hand, in the mixed-sex dialogues, there are more 'types' of female than male speakers in the speech bubbles of $S U$, and the speech bubbles and those dialogues embedded in the reading passages of $P L E$. In other words, the number of male and female speakers is different in different subgenres.

### 5.3 Number of Utterances in Single-Sex and Mixed-Sex Dialogues

## (RQ B3)

Research Question B3 ('How many utterances are there in the single-sex and mixed-sex dialogues?') is answered in this section. Following the method used by Jones et al. (1997) and Poulou (1997) for analysing mixed-sex dialogues in textbooks, I counted the number of utterances (or turns) of male and female speakers in the single-sex and mixed-sex dialogues in the different subgenres of $S U$ and PLE. Gupta and Lee (1990, p. 34), in their analysis of two basal reader series used in Singapore primary schools, define an utterance as "a turn of speech" which is preceded and followed by other utterances. In fact, a turn is
the most basic unit of a conversation because a conversation is an activity in which "two or more people take turns at speaking" (Yule, 2006, p. 128). Tables 5-6 to 5-10 in Appendix 6 show the number of utterances uttered by human and non-human male and female speakers in the single-sex and mixed-sex dialogues in $S U$ and $P L E$, and are summarised in Table 5-12 below.

| $\begin{gathered} \text { Textbook } \\ \text { Series/ } \\ \text { Subgenres } \end{gathered}$ |  | Speakers in Between-Male Dialogues |  | $\begin{gathered} \text { No. of } \\ \begin{array}{c} \text { Between- } \\ \text { Female } \\ \text { Dialogues } \end{array} \end{gathered}$ | Speakers in Between-FemaleDialogues Female Dialogues |  | $\begin{gathered} \text { No. of } \\ \begin{array}{c} \text { Nived } \\ \text { Sialo } \\ \text { Sialagues } \end{array} \end{gathered}$ | $\begin{gathered} \text { Male Speakers in } \\ \text { Mixed-Sex Dialogues } \end{gathered}$ |  | $\begin{gathered} \text { Female Speakers in } \\ \text { Mixed-Sex Dialogues } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { No. of } \\ \text { Utterances } \end{gathered}$ | Types of |  | No. of Utterances | Types of |  | No. of Utterances | Types of Speakers | No. of Utterances | Types of |
| Dialogues in the speech bubbles of Step Up | 19 | 44 | 14 | 22 | 49 | 18 | 59 | 72 | 23 | 70 | 28 |
| Utterances |  |  | 3.14 |  |  | 2.72 |  |  | 3.13 |  | 2.5 |
| $\begin{gathered} \text { Dialogues } \\ \text { embedded } \\ \text { in the } \\ \text { reading } \\ \text { passages of } \\ \text { Step Up } \end{gathered}$ | 10 | 34 | 14 | 12 | 34 | 9 | 12 | 14 | 7 | 18 | 6 |
| Utterances per speaker |  |  | 2.43 |  |  | 3.78 |  |  | 2 |  | 3 |
| Dialogues <br> in the <br> speech <br> bubbles of <br> Primary <br> Longman <br> Express | 27 | 73 | 24 | 24 | 67 | 23 | 61 | 94 | 27 | 86 | 31 |
| Utterances per speaker |  |  | 3.04 |  |  | 2.91 |  |  | 3.48 |  | 2.77 |
| Self- <br> contained <br> dialogues in <br> Primary <br> Longman <br> Express <br> Et | 6 | 23 | 11 | 8 | 44 | 13 | 11 | 18 | 8 | 17 | 8 |
| $\begin{aligned} & \text { Utterances } \\ & \text { per speaker } \end{aligned}$ |  |  | 2.09 |  |  | 3.38 |  |  | 2.25 |  | 2.23 |
| Dialogues <br> embedded <br> in the <br> reading <br> passages of <br> Primary <br> Congman <br> Express <br> er | 31 | 115 | 20 | 6 | 13 | 4 | 38 | 71 | 15 | 63 | 18 |
| Utterances per speaker |  |  | 5.75 |  |  | 3.25 |  |  | 4.73 |  | 3.5 |

Table 5-12 Number of utterances uttered by human and non-human male and female speakers in the single-sex and mixed-sex dialogues in Step $U p$ and Primary Longman Express

### 5.3.1 Number of utterances in the dialogues in the speech bubbles of Step Up

In the speech bubbles of $S U$, in the single-sex dialogues, there are more utterances uttered
by human and non-human female than male speakers, 49 and 44 in the between-female and between-male dialogues respectively (see Table 5-6 in Appendix 5$)\left(\chi^{2}(1, \mathrm{n}=93)=\right.$ $0.269, p<.05$, meaning that the difference is not significant). On average, however, each male speaker produced more utterances than each female speaker in the single-sex dialogues, 3.14 and 2.72 respectively. Excluding the non-human speakers (1 and 2 'types' of non-human male and female speakers), human male and female speakers produced 39 and 42 utterances respectively $\left(\chi^{2}(1, \mathrm{n}=81)=0.111, p<.05\right.$, meaning that the difference is not significant). On average, each human male and female speaker produced 3 and 2.63 utterances respectively.

In the mixed-sex dialogues, slightly more utterances were produced by human and non-human male than female speakers, 72 and 70 respectively $\left(\chi^{2}(1, \mathrm{n}=142)=0.028, p\right.$ $<.05$, meaning that, again, the difference is not significant). On average, each human and non-human male speaker produced 3.13 utterances whereas each human and non-human female speaker uttered 2.5. If the non-human speakers (4 and 2 'types' of non-human male and female speakers) are not counted, human male and female speakers uttered 62 and 66 utterances respectively $\left(\chi^{2}(1, \mathrm{n}=128)=0.125, p<.05\right.$, meaning that the difference is not significant). That is, each human male and female speaker produced 3.26 and 2.54 utterances respectively. When there are three turns, except for the dialogue between Cindy and her Dad in Unit 1 of $2 B$ in which Cindy asked her Dad the time, it is always the male speaker who speaks twice (four cases).

Therefore, in the speech bubbles of $S U$, human male speakers produced more utterances than human female speakers in both single-sex and mixed-sex dialogues but the difference is not significant.

### 5.3.2 Number of utterances in the dialogues embedded in the reading passages of

## Step $\boldsymbol{U p}$

As regards the 34 dialogues embedded in the reading passages of $S U$, Table 5-7 in Appendix 5 shows the number of utterances uttered by human and non-human male and female speakers in the between-male dialogues, between-female dialogues, and mixedsex dialogues.

There is an equal number of utterances (34) produced by 14 male and 9 female speakers in the between-male and between-female dialogues. On average, this time, each human and non-human female speaker produced more utterances than each human and non-human male speaker in the single-sex dialogues, 3.78 and 2.43 utterances respectively. If only the human speakers are considered, 12 and 8 'types' of male and female speakers produced 28 and 32 utterances $\left(\chi^{2}(1, \mathrm{n}=60)=0.267, p<.05\right.$, and thus the difference is not significant), which means each human male and female speaker on average uttered 2.33 and 4 utterances respectively.

On the other hand, in the mixed-sex dialogues, there are 14 and 18 utterances by 7 and 6 different human and non-human male and female speakers $\left(\chi^{2}(1, \mathrm{n}=32)=0.5, p\right.$ $<.05$, and thus the difference is not significant), which means that each human and nonhuman male and female speaker on average uttered 2 and 3 utterances respectively. If the 2 and 1 'types' of non-human male and female speakers are excluded, 5 'types' of human male and female speakers uttered 10 and 15 utterances $\left(\chi^{2}(1, \mathrm{n}=25)=1, p<.05\right.$, and therefore, the difference is not significant), which means each human male and female speaker uttered 2 and 3 utterances respectively.

Thus, in both single-sex and mixed-sex dialogues embedded in the reading
passages of $S U$, human female speakers produced more utterances than male speakers but again, the difference is not significant.

### 5.3.3 Number of utterances in the dialogues in the speech bubbles of Primary

## Longman Express

In the speech bubbles of $P L E$, there are fewer utterances by human and non-human female than male speakers in the single-sex dialogues (see Table 5-8 in Appendix 5): 67 and 73 utterances for between-female and between-male dialogues respectively ( $\chi^{2}(1, \mathrm{n}$ $=140)=0.257, p<.05$ is not significant). One non-human male and one non-human female speakers produced 8 and 2 utterances respectively. Excluding the non-human speakers' utterances, 23 and 22 'types' of human male and female speakers produced the same number of utterances ( 65 utterances). That is, each human male and female speaker on average produced 2.83 and 2.95 utterances respectively.

In the mixed-sex dialogues, human and non-human female speakers also produced fewer utterances than human and non-human male speakers, 86 and 94 by human and non-human female and male speakers respectively $\left(\chi^{2}(1, \mathrm{n}=180)=0.356, p\right.$ $<.05$ is not significant). Excluding one 'type of non-human male and female speakers, 26 and 30 'types' of human male and female speakers produced 91 and 77 utterances respectively $\left(\chi^{2}(1, \mathrm{n}=168)=1.167, p<.05\right.$ is not significant). On average, each human male and female speakers uttered 3.5 and 2.57 utterances respectively.

Therefore, while each human female speaker produced more utterances than each male speaker in the single-sex dialogues, on average, human male speakers produced more utterances than female speakers in the mixed-sex dialogues. However, the
difference is not significant.
When there are three speakers in the mixed-sex dialogues in the speech bubbles (five cases), each speaker produced only one utterance, with one exception. In the dialogue in Unit 8 of Primary Longman Express $4 A$ between Tina, Emma and an old man at the home for the elderly, the old man produced two utterances because he answered the two questions asked by Tina and Emma. In all seven cases when there is an odd number of utterances by two speakers, male speakers produced one more utterance than female speakers, with one exception: the dialogue in Unit 5 of Primary Longman Express 2B between Emma and Sam about joining some classes together over the summer holidays in which Emma produced two utterances but Sam only one.

### 5.3.4 Number of utterances in the self-contained dialogues in Primary Longman

 ExpressTable 5-9 in Appendix 5 presents the number of utterances uttered by the human male and female speakers in single-sex and mixed-sex dialogues in the self-contained dialogues in Primary Longman Express. There are no non-human speakers.

In the single-sex dialogues, there are more utterances in the between-female dialogues than in the between-male dialogues, 44 and 23 utterances by 13 and 11 different female and male speakers respectively. $\chi^{2}(1, \mathrm{n}=67)=6.582, p<.05$ and thus, the greater number of utterances in the between-female dialogues is significant, and the effect size index of 0.313 approaches a medium effect. Female speakers uttered on average 3.38 utterances, but male speakers on average uttered 2.09 utterances.

However, in the mixed-sex dialogues, the average number of utterances uttered by
each male and female speaker is nearly the same, 2.25 and 2.13 utterances respectively. In the dialogues between two speakers in which there is an odd number of utterances, in three (in 1A Units 3 and 4, and 3A Unit 7), the male speakers produced one more utterance than the female speakers, but in two (in 5B Unit 5 and 6B Unit 1), female speakers produced one more utterance than male speakers.

### 5.3.5 Number of utterances in the dialogues embedded in the reading passages of

## Primary Longman Express

Finally, the utterances uttered by human and non-human male and female speakers in the single-sex and mixed-sex dialogues embedded in the reading passages of Primary Longman Express are summarised in Table 5-10 in Appendix 5.

In the single-sex dialogues, there are only a small number of utterances by female speakers in between-female dialogues (only 13 utterances compared with 115 utterances in between-male dialogues). $\chi^{2}(1, \mathrm{n}=128)=81.281, p<.05$ and thus, the greater number of utterances in the between-male dialogues is strongly significant (even if the chi-square value is substantiated with $p<.001$ ), and the effect size index ( $\varphi=0.797$ ) shows a large-sized effect. With 20 and 4 different human and non-human male and female speakers respectively in the single-sex dialogues, on average, each human and non-human male and female speaker produced 5.75 and 3.25 utterances respectively. Excluding the only non-human female speaker, who uttered 6 utterances in the betweenfemale dialogues, 3 different human female speakers produced only 7 utterances. That is, each human female speaker just produced 2.33 utterances. Therefore, human male speakers on average produced more utterances than female speakers in the single-sex
dialogues.
For the mixed-sex dialogues, there are 71 and 63 utterances uttered by 15 and 18 different human male and female speakers. There are no non-human speakers. $\chi^{2}(1, \mathrm{n}=$ 134) $=0.478, p<.05$ and, thus, is not significant. Each male speaker produced on average more utterances than each female speaker, 4.73 and 3.5 respectively. In the five mixed-sex dialogues with an odd number of utterances uttered by two speakers, with one exception (the dialogue between Peter and Kitty in Unit 8 of 5A), the male speaker uttered one more utterance than the female speaker. However, for the six dialogues involving three speakers, there are unsurprisingly more utterances uttered by male speakers when there are two male speakers and one female speaker, and the opposite occurs if there are two female speakers and one male speaker (apart from the dialogue among Gary, Helen and Sally, in Unit 2 of 4A, in which Gary produced two utterances but Helen and Sally produced only one utterance each).

### 5.3.6 Conclusion

In Poulou's (1997) textbook study, there are more utterances by males in one textbook (Greek Dialogues) but more utterances by females in another textbook (How to Speak Conversational Greek). Gupta and Lee (1990) found that the mean number of utterances produced by each male speaker is only slightly higher than that for female speakers. In this study, regarding Research Question B3, only the greater number of utterances in the between-female self-contained dialogues and the greater number of utterances in the between-male dialogues embedded in the reading passages of PLE are significant. Taken together, the findings presented above show that there are more utterances in between-
male than in between-female dialogues in both the speech bubbles and in the reading passages of PLE ( 73 and 67 utterances in between-male and between-female dialogues in the speech bubbles, and 114 and 13 utterances in between-male and between-female dialogues embedded in the reading passages). On the other hand, there are more utterances in between-female than between-male dialogues in both the speech bubbles of $S U$ (49 and 44 utterances respectively) and the self-contained dialogues in PLE (44 and 23 utterances respectively). Nevertheless, the number of utterances in the between-male and between-female dialogues embedded in the reading passages of $S U$ is the same ( 34 utterances each). In the mixed-sex dialogues, male speakers uttered more utterances than female speakers in the speech bubbles of $S U$ (72 and 70 utterances respectively) and PLE (94 and 86 utterances respectively), and self-contained dialogues (18 and 17 utterances) and the dialogues embedded in the reading passages ( 71 and 63 utterances for male and females respectively) of PLE.

Since the dialogues in the different subgenres of the two textbook series were analysed separately in this study, it is not possible to conclude that there are more utterances uttered by male speakers in one textbook series or vice versa, as in Poulou's (1997) study, but it can be noted that neither male nor female speakers always produced more utterances in single-sex and mixed-sex dialogues, and across different subgenres of the two textbook series. In other words, the patterns of male and female visibility in the dialogues of both textbook series are patchy and it seems that males and females were represented differently in different subgenres of dialogues. Overall, the single-sex and mixed-sex dialogues in both textbook series are mainly short dialogues. Except for the between-male dialogues and those utterances uttered by male speakers in the dialogues
embedded in the reading passages of $P L E$, each speaker (human or non-human) produced less than 4 utterances in the dialogues.

### 5.4 Number of Words Uttered by Male and Female Speakers in Single-Sex and Mixed-Sex Dialogues (RQ B4)

Counting the number of utterances by male and female speakers is interesting in terms of gender representation because it indicates visibility of male or female speakers in talk. It is also limited because the utterances can be either brief or lengthy, and it does not alone take account of what is said and the context (I dealt with the latter in Section 5.6). I analysed gender representation in dialogues here by counting the number of words uttered by male and female speakers in both single-sex and mixed-sex dialogues to answer Research Question B4 ('How many words are uttered by male and female speakers in the single-sex and mixed-sex dialogues?'). Mukundan and Nimehchisalem (2008) found that the words spoken by males always exceeded those spoken by females in their four analysed secondary English Language textbooks. Healy's (2009) study of an EFL textbook found 334 versus 294 words uttered by male and female speakers. On the other hand, Poulou (1997), in her analysis of textbook dialogues, found that males uttered more words in one textbook but females uttered more in another. Tables 5-13 to 5-17 in Appendix 5 show the number of words uttered by different male and female speakers in all the single-sex and mixed-sex dialogues in Step Up and Primary Longman Express, and these are summarised in Table 5-18 below.

| Textbook Series/ Subgenres | No. of BetweenMale Dialogues | Speakers in BetweenMale Dialogues |  | No. ofBetweenFemale Dialogues | Speakers in BetweenFemale Dialogues |  | No. ofMixed-SexDialogues | Male Speakers in Mixed-Sex Dialogues |  | Female Speakers in Mixed-Sex Dialogues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { No. of } \\ \text { Words } \\ \text { Uttered } \end{gathered}$ | $\begin{aligned} & \text { Types of } \\ & \text { Speakers } \end{aligned}$ |  | $\begin{gathered} \text { No. of } \\ \text { Words } \\ \text { Uttered } \end{gathered}$ | $\begin{aligned} & \text { Types of } \\ & \text { Speakers } \end{aligned}$ |  | $\begin{gathered} \text { No. of } \\ \text { Words } \\ \text { Uttered } \\ \hline \end{gathered}$ | Types of Speakers | $\begin{aligned} & \text { No. of } \\ & \text { Words } \\ & \text { Uttered } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Types of } \\ & \text { Speakers } \end{aligned}$ |
| Dialogues in the speech bubbles of Step Up | 19 | 214 | 14 | 22 | 291 | 18 | 59 | 415 | 23 | 369 | 28 |
| Words uttered per speaker |  |  | 15.29 |  |  | 16.17 |  |  | 18.04 |  | 13.18 |
| Dialogues embedded in the reading passages of Step Up | 10 | 596 | 14 | 12 | 262 | 9 | 12 | 128 | 7 | 227 | 6 |
| Words uttered per speaker |  |  | 42.57 |  |  | 29.11 |  |  | 18.29 |  | 37.83 |
| Dialogues in the speech bubbles of Primary Longman Express | 27 | 448 | 24 | 24 | 465 | 23 | 61 | 631 | 27 | 487 | 31 |
| Words uttered per speaker |  |  | 20.33 |  |  | 20.22 |  |  | 23.37 |  | 15.71 |
| Selfcontained dialogues in Primary Longman Express | 6 | 142 | 11 | 8 | 429 | 13 | 11 | 112 | 8 | 110 | 8 |
| Words uttered per speaker |  |  | 12.91 |  |  | 33 |  |  | 14 |  | 13.75 |
| Dialogues embedded in the reading passages of Primary Longman Express | 31 | 1,174 | 20 | 6 | 161 | 4 | 38 | 609 | 15 | 597 | 18 |
| Words uttered per speaker |  |  | 58.7 |  |  | 40.25 |  |  | 40.6 |  | 33.17 |

Table 5-18 Number of words uttered by human and non-human male and female speakers in the single-sex and mixed-sex dialogues in Step Up and Primary Longman Express

### 5.4.1 Number of words uttered by male and female speakers in the dialogues in the

 speech bubbles of Step $\boldsymbol{U} \boldsymbol{p}$In the single-sex dialogues in the speech bubbles of $S U, 14$ different human and nonhuman male speakers uttered 214 words and 18 different human and non-human female speakers uttered 291 words (see Table 5-13 in Appendix 5). $\chi^{2}(1, \mathrm{n}=505)=11.741, p$ $<.05$, meaning that the phenomenon of human and non-human female speakers uttering
more words than human and non-human male speakers is significant, and the phi coefficient $(\varphi) 0.153$ shows the effect is between small and medium. Considering only the human characters, 13 different male speakers uttered 192 words and 16 different female speakers uttered 240 words. $\chi^{2}(1, \mathrm{n}=432)=5.333, p<.05$, meaning that human female uttering more words than male speakers is, again, significant, though $\varphi=0.111$ shows only a small effect. On average, each human male speaker uttered 14.77 words and each human female speaker uttered 15 words, only very slightly more, which is surprising. Analysing in detail, it is the two non-human female speakers (Twinkle and her mum) who produced 30 words and one non-human male speaker (Puffy) who produced 22 words which make the difference.

In the mixed-sex dialogues, on the other hand, human and non-human male speakers in total uttered more words than female speakers, 415 and 369 respectively. $\chi^{2}(1$, $\mathrm{n}=784)=2.699, p<.05$ and thus the phenomenon of human and non-human male speakers uttering more words than female speakers is not significant. Replicating Jones et al.'s (1997) study, the average number of words uttered by male and female speakers was calculated. With 28 different human and non-human female speakers but 23 different human and non-human male speakers, on average, each human and non-human male speaker uttered 18.04 words but only 13.18 words were uttered by each human and nonhuman female speaker. Focusing only on the human speakers, 19 male speakers uttered 364 words and 26 female speakers 348 words. $\chi^{2}(1, \mathrm{n}=712)=0.360, p<.05$ and therefore, again, human male speakers uttering more words than human female speakers is not significant. On average, each human male speaker uttered 19.16 words and each female speaker uttered 13.38 words.

### 5.4.2 Number of words uttered by male and female speakers in the dialogues embedded in the reading passages of Step $\boldsymbol{U p}$

Table 5-14 in Appendix 5 lists the number of words uttered by male and female speakers in the single-sex and mixed-sex dialogues embedded in the reading passages of $S U$.

In the single-sex dialogues, human and non-human male speakers uttered many more words than female speakers: 14 different human and non-human male speakers uttered 596 words while 9 different female speakers uttered 262 words. $\chi^{2}(1, \mathrm{n}=858)=$ $130.019, p<.05$, meaning that human and non-human male speakers uttering more words than female speakers is strongly significant (even if the chi-square value is substantiated with $p<.001$ ), and this difference produces an effect size index ( $\varphi=0.389$ ) that is between medium and large. Considering only the human characters, 12 types of male speakers uttered 542 words and 8 types of female speakers uttered 235 words. $\chi^{2}(1, \mathrm{n}=$ 777) $=121.299, p<.05$, meaning that human male speakers uttering more words than female speakers is strongly significant (even if the chi-square value is substantiated with $p<.001)$, and this difference again produces an effect size index $(\varphi=0.395)$ that is between medium and large. On average, male speakers uttered 45.17 words but female speakers only 29.38 words.

In the mixed-sex dialogues, however, human and non-human female speakers uttered more words: 227 words were uttered by 6 different female speakers but only 128 words by 7 male speakers. $\chi^{2}(1, \mathrm{n}=355)=27.608, p<.05$, meaning that human and non-human female speakers uttering more words than male speakers is significant, and this difference produces an effect size index $(\varphi=0.279)$ that shows a medium-sized effect. Human and non-human female speakers on average uttered 37.83 words but human and
non-human male speakers only 18.29 words. Excluding the non-human speakers, 5 male speakers uttered 84 words and 5 female speakers 161 words $\left(\chi^{2}(1, \mathrm{n}=245)=24.200, p\right.$ $<.05$, and thus it is also significant that human female speakers uttered more words than human male speakers, and the phi coefficient of 0.314 also produces a medium-sized effect), giving a higher average number of words uttered by female speakers: 32.2 compared with only 16.8 for males.

### 5.4.3 Number of words uttered by male and female speakers in the dialogues in the speech bubbles of Primary Longman Express

As regards the number of words uttered by male and female speakers (both human and non-human) in the speech bubbles of Primary Longman Express, male speakers uttered slightly more words than female speakers in the single-sex dialogues: 488 compared with 465 (see Table 5-15 in Appendix 5). $\chi^{2}(1, \mathrm{n}=953)=0.555, p<.05$, meaning that male speakers uttering more words than female speakers is not significant. If we consider only the human speakers, 23 male speakers uttered 446 words and 22 female speakers uttered 454 words. $\chi^{2}(1, \mathrm{n}=900)=0.071, p<.05$, meaning that human female speakers uttering more words than human male speakers is not significant. On average, human male speakers uttered 19.39 words and female speakers uttered 20.64, only slightly more.

In the mixed-sex dialogues, human and non-human male uttered more words than female speakers: 631 compared with 487. $\chi^{2}(1, \mathrm{n}=1118)=18.547, p<.05$, meaning that human and non-human male speakers uttering more words than female speakers is significant, and this difference produces a small effect ( $\varphi=0.129$ ). The 27 different human and non-human male and 31 different female speakers uttered on average 23.37
and 15.71 words respectively. Of these, the 26 human male characters uttered 608 words and 30 human female characters 431 words. $\chi^{2}(1, \mathrm{n}=1039)=30.153, p<.05$, meaning that human male speakers uttering more words than human female speakers is also significant, and this difference produces an effect which is between small and medium ( $\varphi$ $=0.170$ ). The average number of words uttered is 23.38 and 14.37 for human male and female speakers respectively.

### 5.4.4 Number of words uttered by male and female speakers in the self-contained dialogues in Primary Longman Express

There are no non-human speakers in the self-contained dialogues in Primary Longman Express.

In the single-sex dialogues (see Table 5-16 in Appendix 5), the number of words uttered by female speakers is much greater than that uttered by male speakers: 13 female speakers uttered 429 words and 11 male speakers uttered 142 words. $\chi^{2}(1, \mathrm{n}=571)=$ 144.254, $p<.05$, meaning that female speakers uttering more words than male speakers is strongly significant (even if the chi-square value is substantiated with $p<.001$ ). The effect size index is 0.503 , which is a large-sized effect. On average, each female speaker uttered 33 words but each male speaker only 12.91 .

On the other hand, in the mixed-sex dialogues, the number of words uttered by male speakers is almost the same as that uttered by female speakers: 112 words uttered by 8 different male speakers and 110 words by the same number of different female speakers. $\chi^{2}(1, \mathrm{n}=222)=0.018, p<.05$ and is thus not significant. On average, male speakers uttered 14 words and female speakers 13.75 words.

### 5.4.5 Number of words uttered by male and female speakers in the dialogues

 embedded in the reading passages of Primary Longman ExpressFinally, in both single-sex and mixed-sex dialogues embedded in the reading passages of Primary Longman Express, human and non-human male speakers uttered more words than female speakers.

In the single-sex dialogues, 1174 words were uttered by 20 different male speakers, and 161 words by 4 different female speakers in between-male and betweenfemale dialogues respectively. $\chi^{2}(1, \mathrm{n}=1335)=768.666, p<.05$, meaning that human and non-human male speakers uttering more words than female speakers is strongly significant (even if the chi-square value is substantiated with $p<.001$ ). The phi coefficient is 0.759 , which is a large effect. On average, human and non-human male speakers uttered 58.7 words and female speakers 40.25 words. Excluding the only nonhuman female speaker, who uttered 44 words in the between-female dialogues, 3 different female speakers uttered 117 words: $\chi^{2}(1, \mathrm{n}=161)=33.099, p<.05$, meaning that the phenomenon of human male speakers uttering more words than female speakers is strongly significant (even if the chi-square value is substantiated with $p<.001$ ). The phi coefficient is 0.453 , which is also a large effect.

In the mixed-sex dialogues, 609 words were produced by 15 different male speakers and 597 words by 18 different female speakers (there are no non-human speakers). $\chi^{2}(1, \mathrm{n}=1206)=0.119, p<.05$, which means that male speakers uttering more words than female speakers is not significant (see Table 5-17 in Appendix 5). Human male and female speakers on average uttered 40.6 and 33.17 words respectively.

### 5.4.6 Discussion and conclusion

As we can see above, there are significances in many aspects in this research question, far more than those for other research questions. In single-sex dialogues, while it is strongly significant that human male speakers uttered more words than female speakers in the dialogues embedded in the reading passages of Step Up and Primary Longman Express, human female speakers uttering significantly more words than male speakers in the speech bubbles of Step Up and in the self-contained dialogues in Primary Longman Express (with a large effect produced). On the other hand, in the mixed-sex dialogues, while the human male speakers uttered significantly more words than female speakers in the speech bubbles of Primary Longman Express, it is also significant that the human female speakers uttered more words than male speakers in the dialogues embedded in the reading passages of Step $U p$.

It needs to be taken on board that the speakers in both Step Up and Primary Longman Express include non-human characters, including robots and animals personified as male or female. In Step Up, the four non-human male characters (Puffy, male bear, Robot Jimmy and Twinkle's Dad) and three non-human female characters (female bear, Twinkle and Twinkle's mum) uttered 73 and 51 words respectively in the speech bubbles, and 85 and 84 words respectively in the dialogues embedded in the reading passages. In Primary Longman Express, the two non-human male characters Yoyo and Teddy uttered 42 and 23 words in the single-sex and mixed-sex dialogues respectively, and the non-human female character Coco uttered 11 and 56 words in both between-female and mixed-sex dialogues respectively, together with Toto (one other nonhuman female speaker appearing in the between-female dialogue embedded in a reading
passage in $P L E$ ) who uttered 44 words. Added together, non-human male and female characters in the two series uttered 223 and 246 words respectively. $\chi^{2}(1, n=469)=$ 1.128, $p<.05$, which means that non-human female speakers uttering more words than male speakers is not significant. On average, non-human male and female speakers uttered 37.17 and 49.2 words respectively, which means that non-human male speakers uttered fewer words than female speakers.

The different number of words uttered by male and female speakers may be related to the social context of the dialogue and the communicative functions of the utterances. (I discuss speech acts fully in Section 5.6) To exemplify, in Unit 3 of Step Up $2 A$, in the dialogue between Ben and his Grandma, Ben uttered more words because he asked his Grandma a series of questions (e.g. whether he can read comics and talk on the mobile phone in the library), to which his Grandma simply answered "Yes, you can" or "No, you can't". In Unit 7 of Primary Longman Express $6 A$, in the speaking task, Alan uttered more words than his classmate Linda as he was asking her questions on his quiz cards, and Linda guessed the answers by uttering one ("Flowers") or two words ("Joss sticks"). In the dialogue between Judy and Jimmy who were looking at travel information in their guidebook (Unit 2 of Primary Longman Express 5B), Judy asked Jimmy about the distance and the time needed to go to one place from another place, and Jimmy just briefly answered Judy's questions. Similarly, in the reading passage in Unit 2 of Step Up $5 B$, Mrs. Lee (Simon's mother) uttered more words than Simon because she was teaching Simon to be a 'smart shopper' by looking at the expiry date on food and drinks. 'Discourse role', that is, the social roles and relationship of speakers, is clearly very important in understanding gender representation in textbook dialogues (see Section 5.5).

As I suggested above, the number of words uttered by a speaker is related to the functions of the relevant utterances. Jones et al. (1997) also suggest that the relative verbosity or silence of male or female speakers is a function of the social roles allocated to them. The social roles of the human and non-human male and female speakers in the mixed-sex dialogues in Step Up and Primary Longman Express are shown in Tables 5-19-5-23 in Appendix 5 and the roles are then ranked in order of frequency in Table 5-24 below:

| Textbook Series/Subgenres | No. of Male Social Roles | Frequency | No. of Female Social Roles | Frequency |
| :---: | :---: | :---: | :---: | :---: |
| Dialogues in the speech bubbles of Step Up $(\mathrm{N}=61)$ | friend <br> classmate <br> son <br> student <br> brother <br> father <br> clown <br> monster <br> grandson <br> landlord <br> home helper <br> audience <br> cashier <br> staff at the weather station gym instructor tourist | $\begin{array}{\|l\|} \hline 16 \\ 7 \\ 6 \\ 4 \\ 4 \\ 3 \\ 3 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | friend <br> classmate <br> mother <br> teacher <br> sister <br> daughter <br> Tom's friend <br> TV reporter <br> grandma <br> magician <br> customer <br> visitor <br> landlady <br> student <br> staff at the <br> Information <br> Centre | $\begin{aligned} & \hline 16 \\ & 7 \\ & 7 \\ & 5 \\ & 4 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Dialogues embedded in the reading passages of Step Up ( $\mathrm{N}=11$ ) | brother friend son prince grandpa child <br> waiter | $\begin{aligned} & \hline 3 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | sister <br> mother <br> friend <br> princess <br> granddaughter fairy customer | $\begin{aligned} & \hline 3 \\ & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Dialogues in the speech bubbles of Primary Longman Express $(\mathrm{N}=59)$ | classmate <br> friend <br> son <br> brother <br> student <br> toy <br> father <br> old man at a home for the elderly | $\begin{aligned} & 28 \\ & 13 \\ & 6 \\ & 5 \\ & 4 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | classmate friend mother teacher sister visitor toy's owner student daughter | $\begin{aligned} & 25 \\ & 13 \\ & 5 \\ & 4 \\ & 4 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Self-contained dialogues | classmate | 5 | classmate | 5 |


| in Primary Longman | son | 3 | friend | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Express | friend | 2 | mother | 2 |
| $(\mathrm{~N}=11)$ | student | 1 | teacher | 1 |
| Dialogues embedded in | classmate | 7 | classmate | 7 |
| the reading passages of | son | 4 | mother | 5 |
| Primary $\quad$ Longman | brother | 3 | 3 |  |
| Express | friend | 3 | sister | 2 |
| $(\mathrm{~N}=39)$ | customer | 2 | friend | cashier |
|  | cousin | 2 | teacher | 2 |
|  | cashier | 1 | cousin | 2 |
|  | uncle | 1 | customer | 1 |
|  | student | 1 | daughter | 1 |
|  | passer-by | 1 | passer-by | 1 |

Table 5-24 Social roles of human and non-human male and female speakers in the mixed-sex dialogues in the two analysed textbook series

Table 5-24 suggests that the most common type of social role for human and non-human male and female speakers in the dialogues in the speech bubbles of Step $U p$ is friend, while brother, sister, or mother is the most common in the dialogues embedded in the reading passages. On the other hand, classmate is the most common type of social role for both human and non-human male and female speakers in the three different subgenres of Primary Longman Express.

In general, the social roles of the male and female speakers in the two textbook series are usually friends (18 instances for both males and females in Step Up, and 18 for males and 17 for females in Primary Longman Express) or classmates (7 instances for both males and females in Step $U p$, and 40 instances and 37 instances for males and females respectively in Primary Longman Express) (i.e. peers).

For family roles, male speakers are brothers (7 instances in $S U$ and 9 instances in $P L E$ ), sons (8 instances in $S U$ and 13 instances in $P L E$ ), and fathers ( 3 instances in $S U$ and 1 instance in PLE), and female speakers are sisters ( 7 and 8 instances in $S U$ and PLE respectively), daughters (3 instances in $S U$ and 1 instance in $P L E$ ), and mothers (10 and

12 instances respectively in $S U$ and $P L E$ ). For example, in the speech bubble in Unit 1 of Step Up 2A, the question "What's Grandpa doing?" initiated by Emma was concluded by her brother's (Ben's) utterance "He's washing the tricycle". One more example is in the speech bubble in Unit 6 of Primary Longman Express 1B. Here, Tim initiated the question "What are they all doing?", which was followed by the answer "Sarah is watching TV with Lisa" by Tim's mother. Probably because of these family relationships, the dominance of either male or female speakers in conversations cannot be found, and they have rather similar speaking opportunities in the conversations. It is particularly interesting to find that in the family roles, there are more sons than daughters and more mothers than fathers in the two textbook series.

The relationships between male and female characters in the mixed-sex dialogues involving only two speakers (one male and one female) in the two textbook series are shown in Table 5-25.

| Textbook Series/Subgenres | Relationships Between A Male and A Female |  | Frequency |
| :---: | :---: | :---: | :---: |
|  | Male | Female |  |
| Dialogues in the speech bubbles of Step Up $(\mathrm{N}=55)$ | friend <br> classmate <br> son <br> student <br> brother <br> clown <br> father <br> landlord <br> grandson <br> audience <br> monster <br> monster <br> cashier <br> staff at the weather <br> station <br> home helper <br> home helper <br> gym instructor <br> tourist | friend <br> classmate <br> mother <br> teacher <br> sister <br> Tom's friend <br> daughter <br> TV reporter <br> grandma <br> magician <br> teacher <br> Simon's mother <br> customer <br> visitor <br> landlady <br> TV reporter <br> student <br> staff at the Information <br> Centre | $\begin{array}{\|l} \hline 13 \\ 7 \\ 5 \\ 4 \\ 4 \\ 4 \\ 3 \\ 3 \\ 3 \\ 2 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ \\ 1 \\ 1 \end{array}$ |
| Dialogues embedded in the reading | friend | friend | 2 |


| $\begin{aligned} & \text { passages of Step Up } \\ & (\mathrm{N}=10) \end{aligned}$ | brother son prince grandpa child waiter | sister <br> mother <br> princess <br> granddaughter <br> fairy <br> customer | $\begin{aligned} & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Dialogues in the speech bubbles of Primary Longman Express $(\mathrm{N}=53)$ | classmate <br> friend <br> brother <br> son <br> student <br> toy <br> an old man at a home for the elderly | classmate friend sister mother teacher toy's owner visitor | $\begin{aligned} & 22 \\ & 13 \\ & 5 \\ & 5 \\ & 3 \\ & 3 \\ & 2 \end{aligned}$ |
| Self-contained dialogues in Primary Longman Express $(\mathrm{N}=11)$ | classmate <br> son <br> friend <br> student | classmate mother friend teacher | $\begin{aligned} & \hline 5 \\ & 3 \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ |
| Dialogues embedded in the reading passages of Primary Longman Express $(\mathrm{N}=34)$ | brother <br> son <br> friend <br> cousin <br> classmate <br> customer <br> cashier <br> student <br> passer-by | sister <br> mother <br> friend <br> cousin <br> classmate <br> cashier <br> customer <br> teacher <br> passer-by | $\begin{array}{\|l} \hline 7 \\ 5 \\ 2 \\ 2 \\ 2 \\ 2 \\ 1 \\ 1 \\ 1 \end{array}$ |

Table 5-25 Relationships between human and non-human male and female speakers in the mixedsex dialogues involving two speakers in the two analysed textbook series

Table $5-25$ shows that even when the mixed-sex dialogues involve two speakers, the relationships between male and female speakers are friends, classmates, or family members.

Table 5-26 shows the relationships between human male and female speakers when the mixed-sex dialogues involve two males and one female.

| Textbook Series/Subgenres | Relationships Between Males and Females |  | Frequency |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Male | Male |  |  |
| Dialogue in the speech bubbles of <br> Step $U p(\mathrm{~N}=1)$ | friend | friend | friend | 1 |
| Dialogues in the speech bubbles of <br> Primary Longman Express <br> $(\mathrm{N}=4)$ | classmate <br> brother <br> father | classmate <br> brother <br> son | classmate <br> sister <br> daughter | 2 |
| Dialogues embedded in the reading <br> passages of Primary Longman <br> Express <br> $(\mathrm{N}=6)$ | friend <br> relative <br> classmate | friend <br> relative <br> classmate | friend <br> relative <br> classmate | 3 |

Table 5-26 Relationships between human male and female speakers in the mixed-sex dialogues involving three speakers (more male speakers) in the two textbook series

The relationships between human male and female speakers when the mixed-sex dialogues involve two females and one male are then presented in Table 5-27.

| Textbook Series/Subgenres | Relationships Between Males and Females |  | Frequency |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Male | Female |  |  |
| Dialogues in the speech bubbles of <br> Step Up $(\mathrm{N}=2)$ | friend <br> friend | friend <br> friend | friend's <br> mother <br> friend | 1 |
| Dialogues embedded in the reading <br> passages of Step Up <br> $(\mathrm{N}=1)$ | son | daughter | mother | 1 |
| Dialogue in the speech bubbles of <br> Primary Longman Express <br> $(\mathrm{N}=1)$ | student | student | teacher | 1 |
| Dialogues embedded in the reading <br> passages of Primary Longman <br> Express <br> (N = 6) | son <br> classmate <br> student | daughter <br> classmate <br> student | mother <br> classmate <br> teacher | 3 <br> 2 |

Table 5-27 Relationships between human male and female speakers in the mixed-sex dialogues involving three speakers (more female speakers) in the two textbook series

There are a small number of dialogues which involve more than two speakers in the two textbook series. Similar to what is shown in Table 5-25, Tables 5-26 and 5-27 show that even when the mixed-sex dialogues involve three speakers, the relationships between male and female speakers are also friends, classmates, or family members.

In Unit 1 of Primary Longman Express $2 B$, there is also a mixed-sex dialogue in the speech bubble which involves four speakers (two males and two females). The
relationships among these four speakers are classmates.
Based on the analysis above, it can be concluded that there are no represented power or status differences between male and female speakers in the mixed-sex dialogues of the two textbook series. Because of these similar social roles, any difference in the number of speaking turns (see Section 5.3) and words of utterances must be due to gender.

### 5.5 Initiations and Conclusions in Dialogues

After counting the number of single-sex and mixed-sex dialogues, the number of male and female speakers in the single-sex and mixed-sex dialogues, and the number of utterances and words uttered by male and female speakers, following Jones et al. (1997) and Poulou (1997), I analysed whether male or female speakers tend to initiate or conclude mixed-sex dialogues (Research Question B5), a form of male or female ${ }^{6}$ 'firstness'. The Equal Opportunities Commission (2000, p. 12) in Hong Kong found that males take on a more "pro-active conversational role" than females in textbook dialogues, i.e. they elicit an interaction more often but females tend to respond to an interaction. Regarding the pedagogical implications of this, Jones et al. (1997, p. 473) suggested that "if one sex initiates conversation more often than the other, the 'initiating sex' will end up having more active practice in the skill of initiating conversation".

In a dialogue that includes two speakers and only two or another even number of turns, the speaker who utters the first turn initiates the dialogue, whereas the other speaker, who utters the second or last turn concludes it. However, if a two-speaker

[^4]dialogue includes three or any other odd number of turns, then the speaker who initiates the dialogue must also be the one who concludes it. For example, in the three-part dialogue between Ben and Sally in Unit 4 of Step Up $1 B$, Ben initiated the dialogue by the turn "May I have an orange, please", followed by the turn "Yes, here you are" uttered by Sally, and Ben's concluding turn "Thank you". Another example is a self-contained dialogue in Unit 1 of Primary Longman Express $6 B$. Helen initiated the turn "I went to a ghost house last year", followed by Jason's turn "How did you feel?". Because of this question, this dialogue was then concluded by Helen's response. Therefore, two-person dialogues with an odd number of turns mean that the person who initiates also concludes.

Tables 5-28 to 5-32 in Appendix 5 show the human and non-human speakers who initiated and concluded the 59 and 12 mixed-sex dialogues in the speech bubbles and the reading passages respectively of Step $U p$, and in the 61,11 , and 38 mixed-sex dialogues in the speech bubbles, the self-contained dialogues, and the reading passages respectively of Primary Longman Express (see Table 5-33).

| Textbook <br> Series/ <br> Mixed-Sex <br> Dialogues | No. of Male <br> Speakers | No. of <br> Female <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Male <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Female <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Male <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Female <br> Speakers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dialogues in <br> the speech <br> bubbles of Step <br> Up | 23 | 28 | 36 | 25 | 27 | 34 |
| Dialogues <br> embedded in <br> the reading <br> passages of <br> Step Up | 7 | 6 | 4 | 7 | 6 | 5 |
| Dialogues in <br> the speech <br> bubbles of <br> Primary <br> Longman <br> Express | 27 | 31 | 29 | 30 | 35 | 24 |
| Self-contained | 8 |  |  |  |  |  |


| dialogues in <br> Primary <br> Longman <br> Express |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dialogues <br> embedded in <br> the reading <br> passages of <br> Primary | 15 | 18 | 25 | 14 | 21 | 18 |
| Longman <br> Express |  |  |  |  |  |  |
| Totals |  |  |  |  |  |  |

Table 5-33 Number of dialogues initiated and concluded by human and non-human male and female speakers in all the mixed-sex dialogues in Step Up and Primary Longman Express
In the speech bubbles of $S U$, human and non-human male speakers initiated mixed-sex dialogues more often than female speakers: 36 and 25 respectively. $\chi^{2}(1, \mathrm{n}=$ $61)=1.984, p<.05$ and therefore, is not significant. However, human and non-human female speakers concluded the dialogues more frequently: 34 and 27 dialogues respectively. $\chi^{2}(1, \mathrm{n}=61)=0.803, p<.05$ and therefore, is also not significant. If only human speakers are considered, the results are nearly the same: human male and female speakers initiated 32 and 23 mixed-sex dialogues respectively, but 33 and 22 were concluded by human female and male speakers respectively.

In contrast, in the mixed-sex dialogues embedded in the reading passages of $S U, 7$ and 4 dialogues were initiated by human and non-human female and male speakers respectively $\left(\chi^{2}(1, \mathrm{n}=11)=0.818, p<.05\right.$ and is thus not significant $)$, and 6 and 5 were concluded by human and non-human male and female speakers respectively. Considering only human speakers, 6 and 3 dialogues were initiated by female and male speakers, and 5 and 4 were concluded by male and female speakers.

In the mixed-sex dialogues in the speech bubbles of $P L E$, slightly more human and non-human female speakers initiated the dialogues but the difference is negligible, 30 and 29 respectively. However, if only human speakers are considered, human male
initiated slightly more dialogues than female speakers (26 and 25 respectively). Again, the difference is negligible. On the other hand, 35 and 24 dialogues were concluded by human and non-human male and female speakers respectively $\left(\chi^{2}(1, \mathrm{n}=59)=2.051, p\right.$ $<.05$ and is thus not significant). Excluding the two dialogues concluded by Coco (a nonhuman female), human male and female speakers concluded 35 and 22 mixed-sex dialogues respectively.

In the self-contained dialogues of $P L E$, there are no non-human speakers. 7 and 4 dialogues were initiated by human female and male speakers respectively $\left(\chi^{2}(1, n=11)\right.$ $=0.818, p<.05$ and is thus not significant), but 8 and 3 were concluded by male and female speakers respectively $\left(\chi^{2}(1, \mathrm{n}=11)=2.273, p<.05\right.$ and is also not significant $)$.

Finally, in the reading passages of PLE, again, there are no non-human speakers. More mixed-sex dialogues were both initiated and concluded by human male speakers, 25 and 14 dialogues were initiated by male and female speakers $\left(\chi^{2}(1, \mathrm{n}=39)=3.103, p\right.$ $<.05$ and is thus not significant), and 21 and 18 concluded by male and female speakers respectively $\left(\chi^{2}(1, \mathrm{n}=39)=0.231, p<.05\right.$ and is also not significant $)$.

Contrary to Mukundan and Nimehchisalem's (2008) study of English textbooks used in secondary schools in Malaysia in which only 2\% of female speakers started the conversations, in this study, neither male nor female speakers in the two textbook series always initiated or concluded the mixed-sex dialogues. The overall patterns vary across the different subgenres of the dialogues in the two textbook series.

However, not all mixed-sex dialogues in the two textbook series include only two speakers. In $S U$, 4 dialogues ( 3 in the speech bubbles and 1 embedded in a reading passage) involve three speakers, and in $P L E, 13$ ( 7 in the speech bubbles and 6 embedded
in reading passages) and 2 (one from a speech bubble and another embedded in a reading passage) involve three and four speakers respectively. The number of male and female speakers who initiated and concluded the mixed-sex dialogues involving more than two speakers is presented in Tables 5-34 and 5-35 below.

First, Table 5-34 shows the number of mixed-sex dialogues initiated and concluded by human male and female speakers when the dialogues involve two males and one female.

| Textbook <br> Series/ <br> Mixed-Sex <br> Dialogues | No. Male <br> Speakers | No. of <br> Female <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Male <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Female <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Male <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Female <br> Speakers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dialogues in the <br> speech bubbles <br> of Step Up | 4 | 2 | 2 | 0 | 0 | 2 |
| Dialogues in the <br> speech bubbles <br> of Primary <br> Longman <br> Express | 8 | 5 | 5 | 0 | 2 | 3 |
| Dialogues <br> embedded in the <br> reading passages <br> of Primary <br> Longman <br> Express | 4 | 3 | 6 | 0 | 4 | 2 |
| Totals |  |  |  |  |  |  |

Table 5-34 Number of dialogues initiated and concluded by human male and female speakers in the mixed-sex dialogues involving two male and one female speakers in Step Up and Primary Longman Express

Two things that are interesting and are worthy of mention is that while the total number of such kind of dialogues concluded by male and female speakers is nearly the same ( 6 and 7 dialogues), all 13 dialogues were initiated by male speakers. We would expect more (e.g. one-third of the mixed-sex dialogues) to be initiated by female speakers.

Also, the number of mixed-sex dialogues involving two females and one male
which were initiated and concluded by human male and female speakers is presented in
Table 6-35.

| Textbook Series/ <br> Mixed-Sex <br> Dialogues | No. of <br> Male <br> Speakers | No. of <br> Female <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Male <br> Speakers | No. of <br> Dialogues <br> Initiated by <br> Female <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Male <br> Speakers | No. of <br> Dialogues <br> Concluded <br> by Female <br> Speakers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dialogues in the <br> speech bubbles of <br> Step Up | 1 | 3 | 1 | 1 | 0 | 2 |
| Dialogues <br> embedded in the <br> reading passages of <br> Step Up | 1 | 2 | 0 | 1 | 1 | 0 |
| Dialogues in the <br> speech bubbles of <br> Primary Longman <br> Express | 1 | 2 | 0 | 1 | 0 | 1 |
| Dialogues <br> embedded in the <br> reading passages of <br> Primary Longman <br> Express | 3 | 7 | 0 | 6 | 4 | 2 |
| Totals |  |  |  |  |  |  |

Table 5-35 Number of dialogues initiated and concluded by human male and female speakers in the mixed-sex dialogues involving two female and one male speakers in Step Up and Primary Longman Express

Here, while there is an equal number of male and female speakers ( 5 male and 5 female speakers) for concluding the mixed-sex dialogues, the 10 dialogues were initiated by 9 female speakers but only 1 male speaker. This time, we would expect more to be initiated by male speakers.

In the speech bubbles in Unit 1 of Primary Longman Express 2B, there is also a mixed-sex dialogue involving four speakers (two males and two females). This dialogue was initiated by a male speaker and concluded by another.

To conclude this section about Research Question B5 ('Who initiates and who concludes the mixed-sex dialogues?'), both male and female speakers initiated and concluded mixed-sex dialogues. 98 and 83 dialogues were initiated by male and female
speakers $\left(\chi^{2}(1, \mathrm{n}=181)=1.243, p<.05\right)$, and 97 and 84 concluded by males and females respectively $\left(\chi^{2}(1, \mathrm{n}=181)=0.934, p<.05\right)$. Therefore, it is not significant that male speakers initiated and concluded more mixed-sex dialogues than female speakers. However, the patterns of male and female speakers initiating or concluding more mixedsex dialogues also vary across the different dialogue subgenres (all the differences in the number of mixed-sex dialogues initiated and concluded by male and female speakers in the different dialogue subgenres are not significant) and vary with the number of male and female speakers involved in the dialogues. These aspects are similar to the results of Poulou's (1997) study of initiating and final utterances in which male speakers initiated and concluded more dialogues than female speakers in one textbook but produced slightly fewer initiating and final utterances than female speakers in another.

### 5.6 Speech Acts in Selected Dialogues

In this section, I analysed the speech acts of the 73 mixed-sex dialogues ( 26 from Step Up and 47 from Primary Longman Express) in all subgenres in the twelve selected textbooks in two textbook series to answer Research Question B6 ('Are the speech acts of the dialogues related to speaker gender?'). As explained in Section 3.6.4.1, a speech act is the function of an utterance uttered by a speaker (Yule, 2006), or the "act of doing something through speaking" which is determined by the speaker's intention (Jaszczolt, 2002, p. 294). Poulou (1997), in her study of textbooks for teaching Greek as a foreign language to adults, using Leech's (1974) communicative functions of language, including informational, expressive, directive, and phatic functions, found that when the speakers had a more personal relationship with no status difference, that is, both were "non-
experts" (p. 71), females usually performed the requesting function and tended to ask for information or make requests, but males tended to give information or perform directive functions. However, Poulou (1997) did not explain clearly how she came up with the subcategories of the directive type of language function. In this study, I analysed the speech acts of the mixed-sex dialogues produced by male and female speakers in $S U$ and PLE by using a combination of Austin's (1976, p. 151-163) classification of five classes of speech acts and Searle's (1979, p. 12-27) taxonomy of illocutionary acts to come up with nine different categories: verdictives (provide evidence or reasons to a fact, or exercise judgment, e.g. describe, analyse); exercitives (exercise powers or influence, e.g. order, advise); commissives (commit the speaker to a certain future action, e.g. promise, intend); behabitives (reaction to someone's behaviour and attitudes, e.g. apologise, congratulate); expositives (give views and arguments, e.g. state, answer); assertives (commit the speaker to the truth of the expressed proposition, e.g. describe, identify); directives (get the hearer to do something, e.g. ask, request); expressives (express one's psychological states, e.g. thank, congratulate); and declarations (performing an act brings about a reality, e.g. I declare your employment is terminated) (see also Section 3.6.4.1). This combination was adopted in this study, following Jaszczolt's (2002, p. 306) suggestion that an option in analysing speech acts is to "integrate the theory of speech acts".

Utterances often involve more than one function. For example, the speech act of the utterance I feel hot can be expressive, to express how I feel, but can also be a directive to request someone to either open a window or turn on a fan (an indirect speech act). In this case, each different function was counted once for each instance. The same method of counting was also used for those utterances which can be classified with more than one
category suggested by Austin or Searle. For example, the speech act of the utterance "I want to go to the beach" uttered by Tim in the reading passage in Unit 4 of Primary Longman Express $3 A$ can be either 'expositive' (Austin, 1976) to answer Andy's question "Where do you want to go?", or 'commissive' to express the meaning of what someone intends to do (Austin, 1976). Tables 5-36 to 5-40 in Appendix 5 shows the analysis of the speech acts of the utterances in the analysed mixed-sex dialogues. The number of instances of the different types of speech acts of the utterances uttered by human and nonhuman male and female speakers in the selected textbooks is summarised in the following tables.

| Speech Acts | Dialogues in Speech <br> Bubbles |  | Dialogues Embedded in <br> Reading Passages |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers |
| verdictives | 1 | 1 | 0 | 0 | 1 | 1 |
| exercitives | 2 | 4 | 1 | 1 | 3 | 5 |
| commissives | 1 | 4 | 0 | 1 | 1 | 5 |
| behabitives | 2 | 2 | 0 | 0 | 2 | 2 |
| expositives | 7 | 14 | 1 | 1 | 8 | 15 |
| assertives | 8 | 14 | 1 | 2 | 9 | 16 |
| directives | 21 | 10 | 3 | 4 | 24 | 14 |
| expressives | 1 | 1 | 1 | 1 | 2 | 2 |
| declarations | 0 | 0 | 0 | 0 | 0 | 0 |

Table 5-41 Speech acts of the utterances uttered by human and non-human male and female speakers in the mixed-sex dialogues in the selected textbooks of Step Up

In $S U$, the most common type of speech act for human and non-human male speakers in the speech bubbles is clearly directives, followed by assertives and expositives. In contrast, for human and non-human female speakers, assertives is the most common, followed by expositives and directives. For example, in Unit 4 of Step Up $1 B$, a boy uttered a question "Do you like lemon?" (directive), which was then followed
by an answer with an explanation "No, I don't. They are sour" (expositive; assertive; expressive) uttered by a girl. The directive type of speech act here includes instances of asking or permitting (Searle, 1979). For example, in Unit 3 of Step Up $2 A$, Ben asked "Grandma, can I go to the library with you?", which was then permitted by his Grandma uttering "Yes, you can". However, the utterance "Yes, you can" can also be an exercitive because its consequence is someone is allowed to do a certain act (Austin, 1976).

There is only a small number of mixed-sex dialogues embedded in the reading passages of $S U$ (3 mixed-sex dialogues), containing 7 and 10 utterances uttered by human male and female speakers respectively. The most common type of speech act here for both males and females is directives. In Unit 8 of $3 B$, for example, the prince asked the beautiful girl to come to his castle ("Please come in") and then the girl asked if he could help her with "Can you help me?", which being a directive because it involves an attempt to get the hearer to do something (Searle, 1979).

A few instances of other types of speech acts by male and female speakers can be found, i.e. verdictives, exercitives, commissives, behabitives, and expressives. Examples include "She's always helpful" in Unit 5 of Step $U p 2 A$ (verdictive) because it is an assessment of someone's character (Austin, 1976); 'No, you can't" uttered by Ben's Grandma in Unit 3 of Step Up $2 A$ (exercitive) because it is "against a certain course of action" (Austin, 1976, p. 155); "Yes, here you are" uttered by Sally in Unit 4 of Step Up $1 B$ (commissive) as an offer to give Ben an orange; "Good morning, Miss Rom" uttered by Robot Jimmy in Unit 2 of Step Up $2 A$ (behabitive) to greet Miss Rom; and 'I'm cold and tired too" uttered by the beautiful girl in the reading passage in Unit 8 of Step Up $3 B$ (expressive) to express her feeling.

Table 5-42 shows the speech acts of the utterances of human and non-human male and female speakers in the mixed-sex dialogues in the speech bubbles, self-contained dialogues and dialogues embedded in the reading passages of the selected textbooks of PLE.

| Speech Acts | Dialogues in Speech <br> Bubbles |  | Self-contained <br> Dialogues |  | Dialogues Embedded <br> in Reading Passages |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Male <br> Speakers | No. of <br> Utterances <br> Uttered by <br> Female <br> Speakers |
| verdictives | 2 | 1 | 0 | 4 | 0 | 1 | 2 | 6 |
| exercitives | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| commissives | 2 | 1 | 0 | 1 | 3 | 3 | 5 | 5 |
| behabitives | 2 | 3 | 1 | 0 | 0 | 0 | 3 | 3 |
| expositives | 12 | 13 | 13 | 0 | 5 | 10 | 30 | 23 |
| assertives | 17 | 15 | 13 | 0 | 4 | 12 | 34 | 27 |
| directives | 12 | 13 | 2 | 9 | 20 | 10 | 34 | 32 |
| expressives | 3 | 2 | 3 | 0 | 7 | 3 | 13 | 5 |
| declarations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 5-42 Speech acts of the utterances uttered by human and non-human male and female speakers in the mixed-sex dialogues in the selected textbooks of Primary Longman Express

In these three subgenres, in some contrast to $S U$, the three common types of speech acts are expositives, assertives, and directives. Expositives include examples such as 'answer' and 'describe', for instance, "It's only ten dollars" uttered by the female cashier to answer Dad's question in the reading passage in Unit 5 of Primary Longman Express 3A, and "You can taste them. You can find them in the kitchen. They're in the cupboard. They're round" uttered by Robert in the self-contained dialogue in Unit 7 of Primary Longman Express $3 A$ to describe an object. The assertive type of speech act is to tell somebody the truth (Searle, 1979), including the example "I've never given anything to anybody" uttered by Kitty in the reading passage in Unit 8 of Primary Longman Express $5 A$.

While there are more directives by female than male speakers in the speech bubbles and self-contained dialogues, more directives were uttered by male speakers in
the mixed-sex dialogues embedded in the reading passages. The directives are either questions, requests, or a command. Examples are "Who's Danny's father?" asked by Jim's mother in the self-contained dialogue in Unit 3 of Primary Longman Express 5A; "Excuse me, can you help me to find my classroom?" uttered by Coco in the speech bubble in Unit 2 of Primary Longman Express $1 A$ as a request; and "Find the photo album, Kate", uttered by Victor in the reading passage in Unit 1 of Primary Longman Express $6 B$ as a command to his sister Kate.

Other less frequent types of speech acts in the mixed-sex dialogues in PLE are verdictives, exercitives, commissives, behabitives, and expressives. Verdictives involve "an exercise of judgement" by a speaker (Austin, 1976, p. 163), for instance, the guess "You are the girl in the jeans" by Harry in the speech bubbles in Unit 3 of Primary Longman Express 5A, and "L-I-G-H-T. It is a light" guessed by a girl in the selfcontained dialogue in Unit 4 of Primary Longman Express 1A.

Regarding Research Question B6, the above analysis suggests that the speech acts used by male and female speakers in the selected mixed-sex dialogues vary with textbook series. In $S U$, directive is the most common type of speech act for male speakers (24 utterances, with 14 for females), but assertives is the most common, followed by expositives, for female speakers (16 and 15 utterances respectively, with 9 and 8 for males). On the other hand, in PLE, while assertives and directives are the most common speech acts for male speakers ( 34 utterances for each), female speakers uttered the most directives ( 32 utterances). In fact, directive is the most common speech act for both male and female speakers in PLE. However, as I mentioned at the beginning of this section, Poulou (1997) found that when speakers in textbook dialogues had a more personal
relationship (i.e. a 'non-expert' role), females tended to ask for information or make requests, but males tended to give information or perform directive functions. I analysed this aspect to find out whether the same phenomenon occurs in the selected mixed-sex dialogues of $S U$ and PLE by considering also the speakers' relationship. I classified human and non-human speakers who have a more personal relationship as those who are friends, classmates, brother and sister, cousins, and prince and princess. Based on the sub-categories suggested by Austin (1976) and Searle (1979), I counted the number of utterances that belong to the assertive and directive types of speech acts uttered by speakers who have a more personal relationship. I focused on these two types of speech acts for two reasons. First, assertives "commit the speaker ... to the truth of the expressed proposition" (Searle, 1979, p. 12), which is related to giving information. Another reason is that directives are, as mentioned above, "attempts ... by the speaker to get the hearer to do something" (Searle, 1979, p. 13) denoted by verbs such as ask and request, which can include the functions of asking for information and making a request. The analyses of the selected textbooks of $S U$ and PLE are summarised in Tables 5-43 and 5-44 below:

| Speakers'Relationship/Speech Acts | Dialogues in Speech Bubbles |  | Dialogues Embedded in Reading Passages |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. of Utterances Uttered by Male Speakers | No. of Utterances Uttered by Female Speakers | No. of Utterances Uttered by Male Speakers | No. of Utterances Uttered by Female Speakers |
| Friends: |  |  |  |  |
| assertives | 4 | 2 | 0 | 0 |
| directives | 3 | 3 | 0 | 0 |
| Classmates: |  |  |  |  |
| assertives | 1 | 1 | 0 | 0 |
| directives | 2 | 0 | 0 | 0 |
| Brother and sister: |  |  |  |  |
| assertives | 1 | 2 | 0 | 0 |
| directives | 2 | 1 | 0 | 0 |
| Prince and princess: |  |  |  |  |
| assertives | 0 | 0 | 0 | 1 |
| directives | 0 | 0 | 1 | 1 |
| Total: |  |  |  |  |
| assertives | 6 | 5 | 0 | 1 |
| directives | 7 | 4 | 1 | 1 |

Table 5-43 Speech acts of the utterances uttered by human and non-human male and female speakers of 'non-expert roles' in the selected mixed-sex dialogues in Step Up

In the selected mixed-sex dialogues in the speech bubbles of $S U, 6$ and 7 utterances by male speakers belong to the assertive and directive types respectively, and female speakers produced 5 and 4 utterances of the assertive and directive types respectively. If the total number of utterances in the speech bubbles and in those dialogues embedded in the reading passages that belong to the assertive and directive types is added up, male and female speakers produced the same number of assertive utterances ( 6 utterances) but male speakers produced more directive utterances because they asked more questions (5 questions), and the other one ("May I have an orange please?" in Step Up 1B Unit 4) belongs to a request.

Table 5-44 shows the numbers of utterances that belong to the assertive and directive types uttered by human and non-human male and female speakers in the three
dialogue subgenres of $P L E$ when the speakers have more personal relationships.

| Speakers’ Relationship/ Speech Acts | Dialogues in Speech Bubbles |  | Self-contained Dialogues |  | Dialogues Embedded in Reading Passages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Utterances Uttered by Male Speakers | No. of Utterances Uttered by Female Speakers | No. of Utterances Uttered by Male Speakers | No. of Utterances Uttered by Female Speakers | No. of Utterances Uttered by Male Speakers | No. of Utterances Uttered by Female Speakers |
| Friends: |  |  |  |  |  |  |
| assertives | 6 | 1 | 1 | 0 | 1 | 2 |
| directives | 1 | 5 | 0 | 1 | 3 | 2 |
| Classmates: |  |  |  |  |  |  |
| assertives | 4 | 8 | 4 | 0 | 1 | 5 |
| directives | 5 | 4 | 1 | 2 | 7 | 1 |
| Brother and sister: |  |  |  |  |  |  |
| assertives | 0 | 1 | 0 | 0 | 0 | 1 |
| directives | 1 | 0 | 0 | 0 | 1 | 1 |
| Cousins: |  |  |  |  |  |  |
| assertives | 0 | 0 | 0 | 0 | 1 | 3 |
| directives | 0 | 0 | 0 | 0 | 3 | 0 |
| Total: |  |  |  |  |  |  |
| assertives | 10 | 10 | 5 | 0 | 3 | 11 |
| directives | 7 | 9 | 1 | 3 | 14 | 4 |

Table 5-44 Speech acts of the utterances uttered by human and non-human male and female speakers of 'non-expert roles' in the selected mixed-sex dialogues in Primary Longman Express

Except for the speech bubbles in which male and female speakers uttered the same number of assertive utterances ( 10 utterances), the number of assertive and directive utterances varies across different subgenres. If the total number is added up, male speakers produced more directive than assertive utterances (22 and 18 respectively) across the three subgenres. Of the 22 directive utterances, 20 are questions asked by male speakers to seek information. On the other hand, female speakers uttered more assertive than directive utterances in the three subgenres of $P L E$ (21 and 16 respectively).

Based on the above analyses, by focusing broadly on the assertive and directive types of speech acts, it can be concluded that the phenomenon of females asking for information or making requests, and males giving information or performing directives
more often when they have "non-expert" relationships, with friends and classmates being the most common types of 'more personal' relationship, found by Poulou (1997) does not occur in my analysed mixed-sex dialogues. Male speakers produced more directive utterances than female speakers in these dialogues but most have the function of asking for information rather than making requests. This is not surprising given the fact that the language patterns introduced in primary English textbooks are very often of the questionanswer type (for adjacency pairs, see Section 5.7.1). Another key finding is that the speech acts used by human and non-human male and female speakers in the selected mixed-sex dialogues are similar. However, we need to be cautious when answering the research question 'Are the speech acts of the dialogues related to speaker gender?', when classifying speech acts with Austin's (1976) classes of speech acts and Searle's (1979) taxonomy of illocutionary acts because the functions of utterances are manifold, which makes it difficult to categorise the different functions of these utterances with a small number of classes of speech acts.

### 5.7 Features of Conversation between Male and Female Speakers

In Section 5.6, I looked at the dialogues from the perspective of gender representation and speech acts. In this section, I report certain features of the selected mixed-sex dialogues in the two analysed textbook series by borrowing notions of Conversation Analysis (CA). Here, I looked at adjacency pairs of the utterances of male and female speakers, overlapping speech, and non-fluency features, including hesitations, to see if they are particularly associated with male or female speakers. The reasons for focusing on these features will be explained in the following sections.

### 5.7.1 Adjacency pairs

To answer Research Question B7(a) ('Are certain features of conversation between male and female speakers, i.e. adjacency pairs, related to speaker gender?'), I identified 82 adjacency pairs embedded in the dialogues based on the prior analysis of speech acts of the mixed-sex dialogues in the speech bubbles, self-contained dialogues and those embedded in the reading passages of the twelve selected textbooks in Section 5.6. Adjacency pairs are two speaking turns uttered by two speakers which are usually placed one after another, though they can sometimes be separated by embedded, intervening talk (Schegloff, 2007), to form a small unit of "conventional routine" (Widdowson, 2007, p. 37). For example,

A: Would you like to go shopping with me?
B: But I have to attend the evening class.
A: No, the evening class has been cancelled.
B: Really? Ok! Let's go.
In the mixed-sex dialogues, the different types of adjacency pairs identified include question-answer, request-acceptance, request-compliance, offer-acceptance, greetinggreeting, and request-rejection (see Tables 5-45-5-49 in Appendix 5). In fact, the first pair parts of the question-answer, request-acceptance, request-compliance, and requestrejection types of adjacency pairs are the directives suggested by Searle (1979) in speech acts, which are denoted by verbs such as ask and request. As suggested in Pridham (2001) regarding conversation, the most common type of adjacency pair that can be identified in the analysed mixed-sex dialogues is question-answer. Out of the 82 instances of adjacency pairs, 68 are of the question-answer type (24 in Step Up and 44 in Primary Longman Express), for example:

Speech bubbles
Peter: What can you hear? (First Pair Part - Question)
Sally: I can hear a baby. (Second Pair Part - Answer)
(Unit 3, Step Up 1B)
Self-contained dialogues
Jason: How did you feel? (First Pair Part - Question)
Helen: I was so scared of the strange noises. (Second Pair Part - Answer)
(Unit 1, Primary Longman Express 6B)
Reading passages
'What's the date today?' asked Mrs. Lee. (First Pair Part - Question)
'It's $\mathbf{1 8}^{\text {th }}$ February,' answered Simon. (Second Pair Part - Answer)
(Unit 2, Step Up 5B)
Among the 68 instances, male speakers initiated the First Pair Part (FPP) (i.e. the question) in more than half: 44 instances, 18 from $S U$ and 26 from $P L E$, and accordingly female speakers responded with the Second Pair Part (SPP) (i.e. the answer) in 24 question-answer adjacency pairs, 6 in $S U$ and 18 in PLE (see below for significance).

In addition, there are five examples of request-acceptance adjacency pairs (four from $S U$ and one from $P L E$ ). Within these five, male speakers initiated the FPP (the request) in two instances:

| Ben: | May I have an orange, please? (First Pair Part - Request) |
| :--- | :--- |
| Sally: | Yes, here you are. (Second Pair Part - Acceptance) |
| (Unit 4, Step $U p l B)$ |  |
| Ben: | Grandma, can I go to the library with you? (First Pair Part - |
| Request) |  |
| Grandma: $\quad$ Yes, you can. (Second Pair Part - Acceptance) |  |
| (Unit 3, Step $U p$ | $2 A)$ |

In PLE, I also identified five instances of adjacency pairs which I classified as request-compliance, rather than request-acceptance, because the speaker of the second pair part complies with the request of the speaker of the first pair part. In this type of adjacency pair, female speakers initiated the request in two instances and male speakers in three instances. For example,

```
a boy: No, it isn't a chair. Guess again. (First Pair Part - Request)
a girl: L-I-G-H-T. It is a light. (Second Pair Part - Compliance)
(Unit 4, Primary Longman Express 1A)
```

In this example, the girl complied with the boy's request to guess again by uttering the second pair part.

There are also two examples of offer-acceptance, one from $S U$ and the other from PLE. In both examples, the female speakers offered help and the male speakers accepted, for example:

Kelly: Can I help you? (First Pair Part - Offer)
Peter: Yes, please. (Second Pair Part - Acceptance)
(Unit 5, Step Up 2A)
Kate: Here. Take my pencil. (First Pair Part - Offer)

Tim: Thank you. (Second Pair Part - Acceptance)
(Unit 3, Primary Longman Express 1A)
These two examples imply that these females are kind.
Only one example of each of the two other types of adjacency pairs, greetinggreeting (male-female) and request-rejection (female-male), was found in the speech bubbles in Step Up, as follows:

[^5]- Greeting)
(Unit 2, Step Up 2A)
*Twinkle: Can we go there, Dad? (First Pair Part - Request)
*Twinkle's Dad: No, Twinkle. We're going to the red planet. (Second Pair Part
- Rejection)
(Unit 8, Step Up 2A)
Overall, then, the most common type of adjacency pair found in Step Up and Primary Longman Express is question-answer (see Table 5-50).

| Types of <br> Adjacency Pairs | Step Up |  | Primary Longman Express |  | Total |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
|  | Dialogues in <br> Speech <br> Bubbles | Dialogues <br> Embedded <br> in Reading <br> Passages | Dialogues <br> in Speech <br> Bubbles | Self- <br> Contained <br> Dialogues | Dialogues <br> Embedded <br> in Reading <br> Passages |  |
| question-answer | 22 | 2 | 21 | 9 | 14 | 68 |
| request- <br> acceptance | 3 | 1 | 0 | 0 | 1 | 5 |
| request- <br> compliance | 0 | 0 | 1 | 1 | 3 | 5 |
| greeting-greeting | 1 | 0 | 0 | 0 | 0 | 1 |
| offer-acceptance | 1 | 0 | 0 | 1 | 0 | 2 |
| request-rejection | 1 | 0 | 0 | 0 | 0 | 1 |

Table 5-50 Number of different types of adjacency pairs found in the selected books of Step Up and Primary Longman Express

In this type, although both male and female speakers had opportunities to initiate the FPP (the question), male speakers initiated questions more often: as shown above, 44 questions were initiated by human and non-human male speakers, compared with 24 initiated by human and non-human female speakers. $\chi^{2}(1, \mathrm{n}=68)=5.882, p<.05$, meaning that male speakers initiating more questions than female speakers is significant, and this difference produces a phi coefficient (0.294) that approaches a medium-sized effect. This contrasts with the findings of the study conducted by the Equal Opportunities Commission (2000) in Hong Kong in which women engaged in the question-answer type
of interaction more often men. For the request-acceptance adjacency pairs, female speakers initiated the FPP (the request) slightly more often (3 initiated by females and 2 by males), and male speakers initiated requests slightly more often in the requestcompliance pairs ( 3 initiated by males and 2 by females in $P L E$ ) (see Tables 5-45-5-49 in Appendix 5). However, examples are few and such differences are negligible.

### 5.7.2 Overlapping speech

The conversational feature of overlapping speech between male and female speakers is analysed in this section to answer Research Question B7(b) ('Are certain features of conversation between male and female speakers, i.e. overlapping speech, related to speaker gender?'). Using actual spoken data, Zimmerman and West (1975) suggested that masculine dominance could be exercised in men's conversations with women, in part by topic control through overlaps and interruptions. In eleven mixed-sex conversational segments, Zimmerman and West (1975) found that all 'overlaps' (100\%) and nearly all 'interruptions' (96\%) were by male speakers. Coates (1993) later distinguished more carefully between overlaps and interruptions. The former being a kind of non-hostile "over-anticipation" (p. 109) by the next speaker about what the current speaker wants to say, and the latter being more impolite as the speaker who interrupts does not follow the turn-taking rules of conversation and begins to speak while the current speaker is still speaking (Coates, 2004). Overlapping hence usually occurs at or towards the end of the current speaker's speaking turn, whereas an interruption occurs when the next speaker starts speaking and/or while he or she is still speaking, has not finished or is not near to finish speaking.

While overlapping may be common in natural conversation, especially when the interlocutors have a close relationship, it may not be so in represented talk, especially in language textbooks for beginners because of the pedagogical aims textbooks as an educational medium need to achieve by presenting good examples of language structures to language learners (Gilmore, 2004). Indeed, in the textbooks I analysed in this study, no instances of overlapping could be found. However, two examples of interruptions were found, both from the same unit of Primary Longman Express 5B. In the reading passage in Unit 2, the mixed-sex dialogue involves Mrs Wong, a passer-by, and a male burglar. As the man was in a hurry to flee the jewellery shop, he interrupted Mrs Wong after asking her the way to the airport:
> 'The Airport Express takes 23 minutes,' replied Mrs Wong. 'I often take the KCR. It's ...' 'KCR?' shouted the man.
> 'Go over the footbridge. Go around the corner. Walk past the post office.
> Then walk through the subway. Then ...' 'That's a long way,' said the man.

In these two examples, the man took over the speaking turns to utter "KCR?" and "That's a long way" before Mrs Wong had finished her utterances starting "It's ..." and "Then ...". As these two examples of male interruptions come from the same unit and are explicable by the 'burglar' role relationship with Mrs Wong (with the burglar being in a hurry) rather than gender, I can conclude that the phenomenon of male dominance exercised in mixed-sex dialogues through interruptions is not evident across the analysed textbook series.

### 5.7.3 Hesitations and other non-fluency features

In this section, I answer Research Question B7(c) ('Are certain features of conversation
between male and female speakers, i.e. hesitations and other non-fluency features, related to speaker gender?'). Non-fluency features, i.e. those features that interfere with the fluency of speech (Leech \& Short, 2007), include hesitation pauses (filled or unfilled), false starts, and syntactic anomalies ${ }^{7}$.

Wong (2002) suggests that there is usually a mismatch between textbook dialogues and naturally occurring language: as suggested above, dialogues in language textbooks are contrived to develop students' speaking skills in a clear way and to provide good models for speaking. In the two analysed textbook series, only two examples of hesitation could be found, both from Primary Longman Express. In the reading passage of Primary Longman Express $6 A$ Unit 6, the pupils were put into groups where they discussed how to raise money for charity. Lisa uttered: "Hmm. How about running a stall?". In a conversation between Bobby and Carol in Unit 3 of Primary Longman Express 3B, in the kitchen, Bobby uttered: "Lettuce? Umm ... are there any hot dogs?" No conclusion about differences in males' and females' represented use of non-fluency features in this respect can be drawn from so few examples, especially as Bobby and Carol are non-human characters (town mice). Rather differently, the minimal responses $H m m$ and Umm here can be considered as represented linguistic devices to show that the speakers are thinking about what to say next instead of being non-fluent.

[^6]
### 5.8 Summary and Conclusion

In this chapter, I have analysed discourse representation and gender in single-sex and mixed-sex dialogues in three different subgenres (speech bubbles, self-contained dialogues and dialogues embedded in the reading passages) of Step Up and Primary Longman Express to answer Research Questions B1-7.

First, the number of single-sex and mixed-sex dialogues was counted (RQ B1). In $S U$, there are more between-female than between-male dialogues in both the speech bubbles and those embedded in the reading passages, and more mixed-sex dialogues than single-sex dialogues. However, the differences are not significant. In $P L E$, while there are non-significantly more between-male than between-female dialogues in the speech bubbles, there are non-significantly more between-female than between-male dialogues in the self-contained dialogues. Only in the dialogues embedded in the reading passages are there significantly more between-male than between-female dialogues, and the difference in the number of between-male and between-female dialogues produces an effect size value that is a large effect. Comparing the numbers of single-sex and mixedsex dialogues, none of the differences in any of the three dialogue sub-genres (speech bubbles, self-contained dialogues, and those embedded in reading passages) are significant.

As regards the number of human and non-human male and female speakers in the single-sex and mixed-sex dialogues (RQ B2), this varies with subgenres and dialogue types. In the single-sex dialogues, there are more 'types' of male than female speakers in the dialogues embedded in the reading passages of $S U$, and the speech bubbles and those dialogues embedded in the reading passages of PLE. On the other hand, in the mixed-sex
dialogues, there are more 'types' of female than male speakers in the speech bubbles of $S U$ and $P L E$, and those dialogues embedded in the reading passages of PLE.

Simply counting the number of dialogues only tells us about one aspect of the potential speaking opportunities of male and female speakers. Another aspect is the number of utterances in the single-sex and mixed-sex dialogues (RQ B3). In the singlesex dialogues, there are non-significantly more utterances in between-male than in between-female dialogues in the speech bubbles of $P L E$, but non-significantly more utterances in between-female than between-male dialogues in the speech bubbles of $S U$. On the other hand, the greater number of utterances in the between-female self-contained dialogues and in the between-male dialogues embedded in the reading passages of PLE are significant. However, the number of utterances in the between-male and betweenfemale dialogues embedded in the reading passages of $S U$ is the same. For the mixed-sex dialogues, there are non-significantly more utterances uttered by male speakers in the speech bubbles of $S U$ and $P L E$, and in the self-contained dialogues and the dialogues embedded in the reading passages of $P L E$, but each female speaker on average uttered only slightly more utterances than each male speaker (3 and 2 utterances respectively) in the dialogues embedded in the reading passages of $S U$. In other words, overall, neither male nor female speakers dominated in the single-sex and mixed-sex dialogues.

Of course, utterances can be brief or lengthy. Therefore, the number of words uttered by human and non-human male and female speakers in both single-sex and mixed-sex dialogues was counted (RQ B4). There are some imbalances in the number of words uttered by males and females. In the single-sex dialogues, while it is strongly significant that human male speakers uttered more words than female speakers in the
dialogues embedded in the reading passages of $S U$ and $P L E$, it is strongly significant that human female speakers uttered more words than male speakers in the self-contained dialogues in $P L E$, and the effect size index shows there is a large effect. In the mixed-sex dialogues, human male speakers uttered more words than female speakers in all three subgenres in PLE, but only the difference in the speech bubbles is significant. In contrast, in $S U$, human female speakers uttered significantly more words than male speakers only in the dialogues embedded in the reading passages. However, the number of words uttered by male and female speakers can largely be explained by the social context of the dialogues, the communicative functions of the utterances (i.e. speakers' communicative purposes), and the relationship between speakers (e.g. 'expert' or 'non-expert', or a more personal relationship).

Then, I analysed whether male or female speakers tended to initiate or conclude the mixed-sex dialogues (RQ B5). Human male speakers initiated more mixed-sex dialogues than female speakers in the speech bubbles of $S U$ and the dialogues embedded in the reading passages of $P L E$. On the other hand, human male speakers concluded more mixed-sex dialogues in the speech bubbles of $S U$, and in all three dialogue subgenres of PLE. In other words, patterns of male and female speakers initiating or concluding more mixed-sex dialogues vary across different dialogue subgenres, but are not significant.

The next section reports the analysis of speech acts of male and female speakers in the selected mixed-sex dialogues by using a combination of Austin's (1976) classification of speech acts and Searle's (1979) taxonomy of illocutionary acts (RQ B6). The speech acts of the male and female speakers in the selected mixed-sex dialogues vary with textbook series. In $S U$, directives are the most common type of speech act for male
speakers in the speech bubbles, while assertives and expositives are the most common for female speakers. For the small number of mixed-sex dialogues embedded in the reading passages of $S U$, the most common type of speech act for male and female speakers is directives. On the other hand, in the three dialogue subgenres (i.e. speech bubbles, selfcontained dialogues and dialogues embedded in the reading passages) in $P L E$, the three most common types of speech acts are directives, assertives, and expositives. Directives are also the most common speech act for both male and female speakers in PLE. Poulou (1997), in her analysis of the mixed-sex dialogues in two textbooks for teaching Greek as a foreign language to adults, found that females tended to ask for information or make requests, whereas males tended to give information or perform directive functions, even when they have a personal relationship. This phenomenon does not occur in my analysed mixed-sex dialogues.

The last section of this chapter reports the analysis of several conversational features in dialogues between male and female speakers - adjacency pairs, overlapping speech, and hesitation and other non-fluency features. As expected, question-answer is the most common type of adjacency pair, and human and non-human male speakers initiating more questions than female speakers is significant. While 'overlapping' is common in natural conversation, especially when the interlocutors have a close relationship, no examples could be found, and only two examples of interruptions and two of hesitation in PLE.

To briefly conclude, as regards gender representation in dialogues, the results vary between the two textbook series and across different dialogue subgenres. Neither male/female invisibility, or even relative invisibility, nor domination in dialogues exists,
and there are no instances of gender stereotyping in the analysed dialogues of Step Up and Primary Longman Express.

After analysing discourse representation and gender in the dialogues of the two textbook series, I go on to analyse visual representation of gender in selected illustrations in Chapter 6.

## Chapter 6

## The Main Study: Visual Representation of Gender

### 6.0 Introduction and Pilot Study Findings

After analysing gender representation in the reading passages of the two selected textbook series, Step Up (SU) and Primary Longman Express (PLE) in Chapter 4 and the dialogues in Chapter 5, I now analyse the visuals, which play an important role in primary textbooks because it is likely that they can enhance students' learning by arousing their interest (Lee \& Collins, 2010). Visuals or illustrations (visuals and illustrations are used interchangeably in this thesis), as a subgenre of textbooks, here include broadly the line drawings and photographs of human (usually children or pupils) and non-human (animals and other creatures such as monsters) characters in all units of all books of $S U$ and $P L E$ (eight units in each book of $S U$; in PLE, seven units in 1A-3B and eight units in 4A-6B). Visibility of males and females in illustrations can be analysed by counting the number of males and females on each page of different books of the two selected textbook series to find out if males or females are numerically overrepresented (RQ C1 'Are male and female characters comparably represented in the illustrations in terms of frequency') and how they are represented in the illustrations is addressed through RQ C2 ('What are the different visualised occupations of the male and female adult characters?'), RQ C3 ('How are male and female characters represented in selected illustrations (both line drawings and photographs) in terms of involvement in activities?'), and RQ C4 ('How are male and female characters represented in selected illustrations (line drawings and photographs) in terms of size/height, hair length, and clothing?').

While all textbooks of the two series were analysed to answer RQs C1-2, a principled selection of textbooks (Step Up $3 A$ and $5 B$ and Primary Longman Express $2 A$ and $4 B$ ) was analysed to answer RQs C3-4.

In the pilot study, I analysed only the visuals accompanying the reading passages in the twelve books (1A, 1B, $\ldots 6$ B) of Step Up to answer Research Question C1. In both line drawings and photographs, there were more human males than females, when counted as 'tokens'. The same phenomenon applies when counting the non-human males and females as 'tokens'. Therefore, there is a higher visibility of male than female characters (both human and non-human) in the illustrations accompanying the reading passages of each book of Step Up.

When I analysed how males and females are represented in the illustrations in terms of their size/height, hair length and clothing, males and females of similar age in the same visual were often portrayed as similar in size (i.e. the size of characters in comparison to each other) and height. In the 17 analysed line drawings, there are 6 instances in which males and females were portrayed as of the same size and height, 4 instances in which the males and females were of the same size, and one instance in which the male was of the same height as the female. For the remaining, a female was illustrated taller than a male in 3 instances and 2 instances for the opposite (i.e. a male is taller than a female). Regarding size, a female was drawn slightly larger than a male in one visual, and in another visual involving two males and two females, the boy and the girl sitting at the back are of the same size but the boy sitting in the front was drawn larger in size than the girl next to him. Females in the line drawings and photographs were usually portrayed wearing dresses ( $78.57 \%$ of the analysed females) and almost all
(91.95\%) had long hair.

As only the 17 visuals accompanying the reading passages of the selected units of Step $U p$ were analysed in the pilot study, more visuals need to be analysed by selecting some books from Primary Longman Express and Step Up, and within a principled selection of the textbooks, the visuals on different pages have to be analysed. I present the results of the main study in the following sections. Regarding clothing (RQ C4(c)), instead of just analysing if females wear dresses or trousers as in the pilot study, I also analyse the colour of the clothing.

### 6.1 Representation of Male and Female Characters in Illustrations (RQ C1)

Several previous language textbook studies (e.g. Amini \& Birjandi, 2012; Gharbavi \& Mousavi, 2012a; Kobia, 2009; Lee \& Collins, 2008, 2009, 2010; Mukundan \& Nimehchisalem, 2008) found a higher visibility of male characters in illustrations. Different from the method used by Lee and Collins $(2008,2009,2010)$ in which the number of visuals of males/females only, more males/females, and an equal number of males and females was counted, in my study, the number of males and females in the illustrations on each page of the whole series of Step Up and Primary Longman Express was counted to see if the same phenomenon of higher visibility of male characters could also be found in these two textbook series. Using the same method as in the pilot study, each occurrence of each visualised character, that is, the illustrations as 'tokens', was counted. Counting 'types' was not done because most of the illustrated human characters are not given names, which made identifying individuals complicated. The characters
include those in both line drawings and photographs. Those characters that are too small or not clear enough to allow recognition of their sex were excluded. Non-human characters in the line drawings and photographs were also counted as either male or female if they were drawn with a conventionally male or female appearance, in conventionally male or female clothing, or given male or female names. It is interesting and worthwhile to analyse non-human characters, given that primary textbooks are targeted at young children and, to the best of my knowledge, non-human characters have never been looked at in previous textbook studies. The findings are documented in Tables 6-1-6-7 in Appendix 6. The number of visualised characters in each book of the two textbook series is summarised in the Tables below. Chi-square $\left(\chi^{2}\right)$ values were calculated to determine if the differences between the number of males and females are significant, with the values of greater than 3.841 for $p<0.05$ with 1 degree of freedom $(d f)$ being significant.

Table 6-8 shows the total number of human males and females in the line drawings and photographs in each book of Step Up.

| Books | Line Drawings |  | Photographs |  |
| :--- | :---: | :---: | :---: | :---: |
|  | No. of Males | No. of Females | No. of Males | No. of Females |
| $1 A$ | 85 | 78 | 0 | 0 |
| $1 B$ | 142 | 84 | 0 | 0 |
| $2 A$ | 108 | 99 | 0 | 1 |
| $2 B$ | 137 | 104 | 7 | 7 |
| $3 A$ | 68 | 81 | 0 | 4 |
| $3 B$ | 87 | 55 | 38 | 20 |
| $4 A$ | 60 | 45 | 5 | 1 |
| $4 B$ | 78 | 86 | 6 | 2 |
| $5 A$ | 65 | 30 | 1 | 0 |
| $5 B$ | 62 | 39 | 3 | 0 |
| $6 A$ | 101 | 61 | 34 | 10 |
| $6 B$ | 49 | 20 | 35 | 24 |
| Total | 1042 | 782 | 129 | 69 |

Table 6-8 Total number of human males and females in the line drawings and photographs in each book of Step $\boldsymbol{U p}$

Except in Step Up $3 A$ and $4 B$, there are noticeably more human males than females in the line drawings in each book. In total, there are 1,042 male tokens but only 782 females (the ratio is 1.332:1). $\chi^{2}(1, \mathrm{n}=1824)=45.361, p<.05$ and therefore human males are significantly more visible than females in the line drawings in $S U$ (even if the chi-square value is substantiated with $p<.001$ ), and the effect size produced is between small and medium as the $\varphi$ coefficient calculated is 0.158 .

As regards the photographs in $S U$, except for $2 A$ and $3 A$, there are again more males: 129 males but only 69 females (the ratio of male to female is $1.870: 1) \cdot \chi^{2}(1, n=$ $198)=18.182, p<.05$ and therefore is also significant and this difference produces a medium-sized effect ( $\varphi=0.303$ ).

The numbers of non-human male and female characters in the line drawings and photographs in different books of $S U$ are shown in Table 6-9.

| Books | Line Drawings |  | Photographs |  |
| :--- | :---: | :---: | :---: | :---: |
|  | No. of Males | No. of Females | No. of Males | No. of Females |
| $1 A$ | 9 | 0 | 0 | 0 |
| $1 B$ | 38 | 17 | 2 | 0 |
| $2 A$ | 12 | 16 | 1 | 0 |
| $2 B$ | 4 | 3 | 3 | 0 |
| $3 A$ | 14 | 4 | 8 | 2 |
| $3 B$ | 12 | 13 | 2 | 0 |
| $4 A$ | 12 | 7 | 1 | 0 |
| $4 B$ | 40 | 9 | 4 | 1 |
| $5 A$ | 2 | 0 | 1 | 0 |
| $5 B$ | 0 | 1 | 4 | 0 |
| $6 A$ | 0 | 0 | 2 | 0 |
| $6 B$ | 0 | 70 | 1 | 0 |
| Total | Table 6-9 | Total number of non-human males and females in the line drawings and photographs in |  |  |

Although there are more non-human female characters in the line drawings in nearly half of the books of $S U(2 \mathrm{~A}, 2 \mathrm{~B}, 3 \mathrm{~A}, 3 \mathrm{~B}$, and 6 A$)$, there are still more non-human male characters in total: 106 compared with 70 non-human female characters (the ratio is
1.514:1). $\chi^{2}(1, \mathrm{n}=176)=7.363, p<.05$. This is again significant, and the effect is midway between small and medium ( $\varphi=0.205$ ).

In the photographs of $S U$, there are more non-human male than female characters: 29 and 3 respectively (the ratio is $9.667: 1) \cdot \chi^{2}(1, \mathrm{n}=32)=21.125, p<.05$ and therefore, it is significant and the effect size index produced is large ( $\varphi=0.813$ ).

Adding the total number of males and females in both line drawings and photographs, there are 1,171 and 851 human males and females (the ratio of 1.376:1; $\chi^{2}$ $(1, \mathrm{n}=2022)=50.643, p<.05)$ and 172 and 73 non-human males and females (the ratio of 2.356:1; $\left.\chi^{2}(1, \mathrm{n}=245)=40.004, p<.05\right)$ in $S U$. Thus, it is significant that human and non-human males are more visible than females in the illustrations of $S U$ (even if the chisquare value is substantiated with $p<.001$ ), and the effects are between small and medium ( $\varphi=0.158$ ), and between medium and large ( $\varphi=0.404$ ) respectively.

As regards $P L E$, Table 6-10 shows the total number of human male and female characters in the line drawings and photographs in each book.

| Books | Line Drawings |  | Photographs |  |
| :--- | :---: | :---: | :---: | :---: |
|  | No. of Males | No. of Females | No. of Males | No. of Females |
| $1 A$ | 202 | 159 | 19 | 24 |
| $1 B$ | 156 | 111 | 37 | 29 |
| $2 A$ | 136 | 82 | 13 | 12 |
| $2 B$ | 254 | 204 | 22 | 19 |
| $3 A$ | 214 | 123 | 32 | 29 |
| $3 B$ | 234 | 195 | 23 | 12 |
| $4 A$ | 266 | 180 | 17 | 29 |
| $4 B$ | 190 | 146 | 6 | 29 |
| $5 A$ | 357 | 263 | 45 | 52 |
| $5 B$ | 175 | 78 | 23 | 61 |
| $6 A$ | 187 | 198 | 70 | 65 |
| $6 B$ | 198 | 172 | 33 | 78 |
| Total | 2569 | 1911 | 340 | 439 |

Table 6-10 Total number of human males and females in the line drawings and photographs in each book of Primary Longman Express

Again, there are more human male than female characters in the line drawings,

2,569 and 1,911 respectively (the ratio is $1.344: 1$ and $\chi^{2}(1, \mathrm{n}=4480)=96.644, p<.05$, meaning that it is strongly significant that there are more human male than female characters in the line drawings, even if the chi-square value is substantiated with $p<.001$, and this difference produces an effect size index of 0.147 which is between a small and a medium effect).

Interestingly, however, different results could be found for photographs. There are more females than males in half of the books in the PLE series (1A, 4A, 4B, 5A, 5B and 6B), and more females than males in the photographs in total, 439 and 340 respectively (the ratio is 1.291:1). $\chi^{2}(1, \mathrm{n}=779)=12.582, p<.05$. Here, it is significant that human females are more visible than males, and this difference produces an effect size index of 0.127 which is a small effect.

In $P L E$, there are non-human characters only in the line drawings (see Table 6-11). In these, there are more non-human females than males, 75 and 31 respectively (the ratio is 2.419:1). $\chi^{2}(1, \mathrm{n}=106)=18.264, p<.05$ and thus non-human females are significantly more visible than non-human males. The effect size index ( $\varphi=0.415$ ), which is midway between a medium and a large effect.

| Books | No. of Males | No. of Females |
| :--- | :---: | :---: |
| $1 A$ | 2 | 19 |
| $1 B$ | 0 | 5 |
| $2 A$ | 5 | 10 |
| $2 B$ | 7 | 10 |
| $3 A$ | 0 | 6 |
| $3 B$ | 16 | 13 |
| $4 A$ | 0 | 3 |
| $4 B$ | 0 | 4 |
| $5 A$ | 0 | 4 |
| $5 B$ | 0 | 0 |
| $6 A$ | 1 | 1 |
| $6 B$ | 0 | 0 |
| Total | 31 | 75 |

Table 6-11 Total number of non-human males and females in the line drawings in each book of Primary Longman Express

To answer Research Question C1 ('Are male and female characters comparably represented in the illustrations in terms of frequency?'), it can be concluded that human males are represented significantly more than females in the line drawings in both Step Up and Primary Longman Express, and the photographs in $S U$, as are the non-human male characters in the line drawings of $S U$. It is amazing to get four statistically significant differences here, which contrasts with the reading passages and dialogues analysed in Chapters 4 and 5 in which few significant differences were found. In contrast, in PLE, human females in the photographs and non-human females in the line drawings are represented significantly more. As the visuals in the two textbook series are however mostly line drawings, human and non-human males are still much more visible in total, 1,343 males and 924 females in $S U$, and 2,940 and 2,425 males and females in PLE. This higher visibility of males in the illustrations is comparable to findings of other recent textbook studies (e.g. Amini \& Birjandi, 2012; Barton \& Sakwa, 2012; Gharbavi \& Mousavi, 2012a; Lee \& Collins, 2008; Mukundan, \& Nimehchisalem, 2008; Ullah \& Skelton, 2013).

One possible reason why there are more females than males in the photographs in
$P L E$ is that when a single character or a group of single sex characters is/are shown, this/these is/are usually a female/females (see for example, page 24 of Primary Longman Express $4 B$ and page 30 of Primary Longman Express $6 B$ as follows).


Primary Longman Express 4B p. 24


Primary Longman Express 6B p. 30
Similarly, non-human females may be represented more in the line drawings of PLE because Coco, a non-human female monster, was illustrated 54 times.

### 6.2 Occupations of Adult Male and Female Characters in Illustrations

After counting the number of males and females in the illustrations on each page of each
book of the two textbook series, I move on to analyse how males and females are represented in the illustrations. Content analysis conducted in previous studies (e.g. Amini \& Birjandi, 2012; Gharbavi \& Mousavi, 2012a; Gupta \& Lee, 1990; Hartman \& Judd, 1978; Hellinger, 1980; Kobia, 2009; Lee \& Collins, 2008; Ullah \& Skelton, 2013; Sakita, 1995) usually found that males were portrayed in a wide range of occupational roles but females in a limited range of occupations such as nurturing professions (e.g. teaching, nursing) that are stereotypical for females, or 'assisting' jobs (e.g. secretary). Previous research analysing textbook visuals (e.g. Giaschi, 2000; Lee \& Collins, 2008, 2009, 2010) focused on the spheres of activities engaged in by males and females, including occupations and other activities such as household chores. In this section, I analysed the different occupations engaged in by the adult human and non-human males and females in the illustrations (line drawings and photographs) of the whole series of Step Up and Primary Longman Express to answer Research Question C2 ('What are the different visualised occupations of the adult male and female characters?'). These occupations and the number of instances are documented in Table 6-12 in Appendix 7 and summarised in Tables 6-13-6-16 below.

| Occupations of Human Adult Males | Frequency | Occupations of Human Adult Females | Frequency |
| :---: | :---: | :---: | :---: |
| police officer | 5 | teacher | 15 |
| teacher | 5 | reporter | 8 |
| shopkeeper | 3 | housewife | 3 |
| driver | 3 | staff of an animal house | 3 |
| cameraman | 2 | athlete | 2 |
| doctor | 2 | librarian | 2 |
| farmer | 2 | nurse | 2 |
| firefighter | 2 | shopkeeper | 2 |
| staff of the weather | 2 | bank teller | 1 |
| station |  | dentist | 1 |
| waiter | 2 | doctor | 1 |
| baker | 1 | driver | 1 |
| construction worker | 1 | farmer | 1 |
| cook | 1 | flight attendant | 1 |
| cook (Chinese | 1 | home helper | 1 |
| barbecue) |  | news reporter | 1 |
| postman | 1 | owner of a food counter | 1 |
| staff at the ferry pier | 1 | shop assistant | 1 |
|  |  | singer | 1 |
|  |  | staff at the Tourist Information Centre | 1 |
|  |  | veterinarian | 1 |
| Total: 16 'types' | Total: 34 | Total: 21 'types' | Total: 50 |

Table 6-13 Occupations of the human adult males and females in the line drawings of Step Up

Table 6-13 shows that in the line drawings of $S U$, human adult females were portrayed engaging in a wider range of occupations than males, 21 and 16 'types' respectively. The two most common occupations engaged in by males were police officer and teacher. However, the number of instances males were portrayed in these two occupations is low (only 5). For adult females, the most common type of occupation, as expected, is teacher ( 15 instances), followed by reporter. There are only 3 and 2 instances of females being portrayed as housewives and nurses respectively.

| Occupations of Human Adult Males | Frequency | Occupations of Human Adult Females | Frequency |
| :---: | :---: | :---: | :---: |
| firefighter | 9 | teacher | 61 |
| police officer | 9 | nurse | 7 |
| reporter | 7 | housewife | 5 |
| teacher | 6 | police officer | 5 |
| driver | 5 | cashier | 4 |
| athlete | 4 | staff at the food stall | 4 |
| actor | 3 | actress | 3 |
| cashier | 3 | dancer | 3 |
| cook | 3 | designer | 3 |
| doctor | 3 | headmistress | 3 |
| pilot | 3 | singer | 3 |
| singer | 3 | bank teller | 2 |
| staff at the food stall | 3 | dim sum server | 2 |
| dentist | 2 | hotel receptionist | 2 |
| headmaster | 2 | news reporter | 2 |
| waiter | 2 | businesswoman | 1 |
| writer | 2 | cook | 1 |
| animator | 1 | driver | 1 |
| architect | 1 | doctor | 1 |
| astronaut | 1 | flight attendant | , |
| businessman | 1 | home helper | 1 |
| dancer | 1 | model | 1 |
| film director | 1 | musician | 1 |
| magician | 1 | shop assistant | 1 |
| news reporter | 1 | staff at the information | 1 |
| nurse | 1 | desk |  |
| painter | 1 | staff at the kiosk |  |
| scientist | 1 | staff at the Tourist | 1 |
| security guard | 1 | Information Centre |  |
| staff at the information | 1 | writer | 1 |
| desk in the shopping centre staff at the kiosk | 1 |  |  |
| staff of a charity | 1 |  |  |
| veterinarian | 1 |  |  |
| Total: 33 'types' | Total: 85 | Total: 28 'types' | 122 |

Table 6-14 Occupations of the human adult males and females in the line drawings of Primary Longman Express

In PLE, however, human adult males were illustrated as engaging in a wider range of occupations than females in the line drawings, 33 and 28 'types' respectively. As in $S U$, the occupation that was portrayed as engaging in by most females is teacher (61 instances, with only 6 for males), and its number of instances is much greater than other occupations. The second most common occupation engaged in by females is nurse (7
instances), but no males were portrayed as nurses.

Human adult males and females were also shown to engage in different occupations in the photographs of $S U$ and $P L E$, as presented in Table 6-15 below.

| Textbook Series | Occupations of Human Adult Males | Frequency | Occupations of Human Adult Females | Frequency |
| :---: | :---: | :---: | :---: | :---: |
| Step Up | dolphin trainer | 1 |  |  |
| Total: | 1 'type' | 1 |  |  |
| Primary <br> Longman <br> Express | athlete <br> ambulanceman <br> firefighter <br> actor <br> astronaut <br> clown <br> lion tamer | $\begin{aligned} & 4 \\ & 3 \\ & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | athlete <br> animator <br> astronaut <br> conductor <br> pilot <br> teacher <br> trapeze artist <br> waitress <br> writer | $\begin{aligned} & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Total: | 7 'types' | 13 | 9 'types' | 10 |

Table 6-15 Occupations of the human adult males and females in the photographs of Step Up and Primary Longman Express

Only one male dolphin trainer could be found in the photograph of $S U$, but adult females were illustrated in more types of occupations than males in the photographs of PLE, 9 and 7 'types' respectively.

Tables 6-13 and 6-15 show that females in PLE were not only illustrated as engaging in female-dominated occupations, but also in 19 types of occupations which are the same as males. Both males and females were illustrated in line drawings and photographs as police officer, teacher, driver, actor/actress, cashier, cook, doctor, pilot, singer, headmaster/headmistress, waiter, writer, animator, businessman/businesswoman, dancer, news reporter, nurse, athlete, and astronaut (see, for example, Figure 6a, from Primary Longman Express $2 B$ p. 29, Primary Longman Express $2 A$ p. 32, and Primary Longman Express $5 A$ p. 53).


Astronauts have snacks too. They can have chocolates or biscuits.


Figure 6a Males and females illustrated engaging in the same types of occupations

For males in PLE, the most common type of occupation is firefighter (9 instances in line drawings and 2 in photographs), followed by police officer ( 9 instances, but 5 instances for females). Males were also illustrated as firefighters in $S U$ (2 instances). Females were however never depicted as firefighters in either $S U$ or $P L E$. This may not be surprising because even though there is a female fire station officer in Hong Kong, the
number of female uniformed staff in the Fire Service Department is the lowest (111 females, i.e. $1.28 \%$ ) of all disciplined services in Hong Kong (Tam, 2003).

In the line drawings of $S U$, non-human adult males and females were also portrayed as engaging in different occupations (see Table 6-16).

| Occupations of Non- <br> human Adult Males | Frequency | Occupations of Non- <br> human Adult Females | Frequency |
| :--- | :--- | :--- | :--- |
| home helper | 12 | teacher | 1 |
| cashier | 2 |  |  |
| boss | 1 |  | 1 |
| teacher | 1 | Total: 1 'type' |  |
| Total: 4 'types' | Total: 16 |  |  |

Table 6-16 Occupations of the non-human adult males and females in the line drawings of Step $\boldsymbol{U} \boldsymbol{p}$

There is one non-human female teacher, but non-human males were drawn as home helper, cashier, boss and teacher, with home helper being the most common type of occupation, but it was engaged by Puffy only.

If both human and non-human adult males and females in the line drawings and photographs of the two textbook series are considered, it could be found that they were portrayed as engaging in a similar range of occupations. In $S U$, males and females engaged in 20 and 21 different types of occupations respectively, and 36 and 35 'types' respectively in PLE. This aspect is different from Bahiyah Dato' Hj. Abdul Hamid et al.'s (2008) study in which females were illustrated in less varied occupations. Nearly half of the adult females in the line drawings and photographs of the two textbook series (42.31\%) were illustrated as primary school teachers, compared with only $8.33 \%$ of males. This may be unsurprising because the contexts of different units of the two textbook series are often schools or classrooms, and the textbook illustrators may be attempting to reflect reality because many primary school teachers in Hong Kong are female. According to the Census and Statistics Department (2013b), in 2012/13, 78.1\%
(i.e. 17,293 ) of the primary school teachers in Hong Kong are females but only $21.9 \%$ $(4,860)$ are males.

To conclude this section about Research Question C2 ('What are the different visualised occupations of the adult male and female characters?'), the adult males and females in the line drawings and photographs of the two textbook series were illustrated as engaging in a similar range of occupations (20 and 21 'types' for human and nonhuman males and females respectively in $S U$, and 36 and 35 'types' for human males and females respectively in $P L E$ ). Although teacher is the most common type of occupational role for females, outnumbering other types of occupations, in both $S U$ and $P L E$, it may just reflect reality, given the fact that there are more female than male teachers in primary schools in Hong Kong. Females were no longer only portrayed in those professions that are stereotypical for females such as nurse, cashier and secretary as in Bahiyah Dato' Hj . Abdul Hamid, et al.'s (2008) study of two primary English Language textbooks in Malaysia, but also illustrated in traditionally male-dominated occupations such as police officer and driver, which also reflects reality in Hong Kong somehow, because there are female police officers and bus drivers in Hong Kong.

### 6.3 Involvement in Activities of Male and Female Characters in

## Selected Illustrations

After analysing the visualised occupations of adult males and females in 7.2, I move on to analyse the involvement in activities of the male and female characters in the illustrations in selected textbooks to answer Research Question C3 ('How are male and female characters represented in selected illustrations in terms of involvement in
activities?') to find out whether males and females are represented differently through the activities they were illustrated engaging in. van Leeuwen (2008), in his Visual Social Actor Network, suggests that the characters in illustrations may be depicted as "involved in some action" (2008, p. 142). If they are involved in an action, they may be an agent (i.e. the doer of that action).

As mentioned in Chapter 3, I selected four textbooks, Step $U p 3 A$ and $5 B$ and Primary Longman Express $2 A$ and $4 B$, by using systematic sampling in which every fifth book was selected from a list of twenty-four books from the whole series of $S U$ and PLE so that detailed analyses of the illustrations became possible. The different types of activities engaged in by the males and females in the resultant four selected textbooks and the number of instances these activities were engaged in by different 'tokens' of males and females are documented in Table 6-17 in Appendix 6.

Table 6-17 shows that human and non-human males were portrayed engaging in a greater number of different types of activities than females in the line drawings in the selected textbooks of $S U$ and $P L E, 30$ and 20 'types' of activities engaged in by the human and non-human (marked with ** in the Table) males and females respectively in $S U\left(\chi^{2}(1, \mathrm{n}=50)=2, p<.05\right.$ and thus the difference in the number of types of activities engaged in by the human and non-human males and females is not significant), and 48 and 31 'types' engaged in by the human and non-human males and females respectively in PLE ( $\chi^{2}(1, \mathrm{n}=79)=3.658, p<.05$ and is thus, again, not significant). These results may be explained by the fact that only four selected books were analysed (compared with all the textbooks of both series when analysing visualised occupations) which may limit the types of activities engaged in by the males and females because of the themes of the
units. For example, the activities engaged in by the males and females in Unit 6 of Step $U p 3 A$ are activities engaged in the park (e.g. running around) and those engaged in Unit 1 of Primary Longman Express $2 A$ are students' misbehaviours at school (e.g. running in the corridor). Excluding those activities engaged in by the non-human characters (Puffy, a non-human male monster in $S U$, and Yoyo, a non-human female monster in $P L E$ ), the human males and females in the two $S U$ textbooks were portrayed as engaging in the same number of different activities (20 'types' each), but the human males in the two PLE textbooks were portrayed as engaging in a wider range than females, 45 and 31 'types' respectively.

Previous textbook studies conducting visual analysis have usually found that males were portrayed as more active and sporty than females (Lee \& Collins, 2008, 2010). I tried to find out if the same phenomenon also applies in the illustrations of the four selected textbooks by classifying the activities into different categories. To classify broadly, the activities engaged in by the human and non-human males and females in the textbooks include indoor activities, outdoor activities, sports activities, misbehaviours, household chores, activities related to art and music, job duties, and others (those that do not fit in any of the categories), as shown in Tables 6-18-6-20 below:

| Categories of Activities | Activities Engaged by Males | Frequency | Activities Engaged by Females | Frequency |
| :---: | :---: | :---: | :---: | :---: |
| Indoor activities | collecting old toys <br> growing plants <br> reading (a book) <br> watching TV <br> shopping (in a <br> supermarket) | $\begin{aligned} & 2 \\ & \\ & 1 \\ & 1 \\ & 1 \\ & 2 \end{aligned}$ | shopping (in a shopping centre/supermarket) watching TV |  |
| Outdoor activities | having a barbecue picnicking taking photographs playing with paper boats hiking playing in the park riding on a boat | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | having a barbecue picnicking <br> playing in the park playing in the snow <br> hiking riding on a boat | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \end{aligned}$ |
| Sports activities | playing football running in a marathon | $\begin{aligned} & \hline 3 \\ & 3 \end{aligned}$ | playing basketball playing badminton | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ |
| Misbehaviours | running around in the park climbing up a tree | $\begin{aligned} & \hline 3 \\ & 1 \\ & \hline \end{aligned}$ | running around in the park <br> flying a paper plane | $\begin{aligned} & \hline 3 \\ & 1 \\ & \hline \end{aligned}$ |
| Household chores |  |  | washing clothes cooking sweeping the floor watering plants | $\begin{aligned} & 2 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Activities related to art and music |  |  | singing | 1 |
| Job duties | catching a robber directing traffic | $\begin{aligned} & \hline 2 \\ & 1 \\ & \hline \end{aligned}$ | interviewing reporting news | $\begin{aligned} & \hline 7 \\ & 1 \\ & \hline \end{aligned}$ |
| Others | having a discussion with others driving | $\begin{array}{r} 7 \\ 1 \\ \hline \end{array}$ | having a discussion with others | 7 |
| Total: | 20 'types’ | 42 | 20 'types’ | 46 |

Table 6-18 Different categories of activities engaged in by human males and females in the line drawings of the selected books of Step $\boldsymbol{U p}$

| Categories of Activities | Activities Engaged by Males | Frequency | Activities Engaged by Females | Frequency |
| :---: | :---: | :---: | :---: | :---: |
| Indoor activities | reading (abook/newspaper) <br> doing $\quad$ (Maths) <br> exercises <br> practising handwriting <br> reading aloud <br> watching TV <br> doing crafts <br> listening to songs <br> shopping (in a <br> shopping centre) a <br> writing compositions | $\begin{aligned} & \hline 6 \\ & 3 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | reading (a book) <br> doing (English/Maths) exercises practicing handwriting watching TV drawing going to the library playing computer games shopping (in a shopping centre) writing a diary | $\begin{aligned} & 5 \\ & 3 \\ & 3 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Outdoor activity | hiking | 1 |  |  |
| Sports activities | running <br> playing basketball <br> playing tennis <br> playing football <br> doing karate <br> skipping <br> swimming <br> playing badminton | $\begin{aligned} & \hline 3 \\ & 3 \\ & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | playing basketball swimming doing gymnastics | $\begin{aligned} & 2 \\ & 2 \\ & 1 \end{aligned}$ |
| Misbehaviours | fighting <br> running in the corridor <br> running around the classroom/library <br> talking in the classroom/library climbing up a tree pushing others drawing on the blackboard drinking in the computer room eating on the train littering playing ball games in the classroom spitting touching the animals in the zoo walking on the grass |  | talking in the library picking flowers in the park <br> playing ball games in the classroom <br> riding a bicycle in the park <br> running in the library talking in the classroom | $\begin{aligned} & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Household chores | making food tidying a bookshelf | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | ironing clothes tidying the flat sweeping the floor tidying a bookshelf washing dishes | $\begin{aligned} & 3 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ |
| Activities related to art and music | singing <br> dancing listening to songs | $\begin{aligned} & 4 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | singing <br> dancing playing the flute | $2$ |
| Job duties | acting | 2 | answering (customers'/ | 3 |


|  |  |  | tourists') enquiries |  |
| :---: | :---: | :---: | :---: | :---: |
|  | cooking <br> interviewing <br> answering (customers') <br> enquiries <br> checking a patient's teeth <br> reporting news | $\begin{aligned} & \hline 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | reporting news/the <br> weather report <br> acting <br> giving a talk about <br> healthy eating <br> teaching | $\begin{aligned} & 3 \\ & 2 \\ & 1 \end{aligned}$ |
| Others | eating healthy food helping someone up | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ |  |  |
| Total: | 45 'types' | 78 | 31 'types' | 51 |

Table 6-19 Different categories of activities engaged in by human males and females in the line drawings of the selected books of Primary Longman Express

| Categories of Activities | Activities Engaged by Males | Frequency |
| :---: | :---: | :---: |
| Step Up |  |  |
| Indoor activities | shopping (in a supermarket) | 1 |
| Household chores | painting the door repairing the TV cleaning the floor cleaning windows making the beds preparing food tidying the house washing dishes | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Activities related to art and music | playing the piano drawing a painting | $\begin{array}{\|l} \hline 2 \\ 1 \\ \hline \end{array}$ |
| Total: | 11 'types' | 14 |
| Primary Longman Express |  |  |
| Misbehaviours | feeding the animals in the zoo jumping in queue picking the flowers in the park pushing others | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| Total: | 4 'types' | 4 |

Table 6-20 Different categories of activities engaged in by non-human males in the line drawings of the selected books of Step Up and Primary Longman Express

In the two $S U$ textbooks, the phenomenon of males being portrayed as more active and sporty than females (Lee \& Collins, 2008, 2010) cannot be found: males and females in these textbooks were illustrated engaging in a similar range of outdoor activities ( 7 and 6 types engaged by males and females respectively) and the same number of sports activities (2 types). On the other hand, males were also portrayed to
engage in more types of indoor activities than females (5 and 2 types respectively). Household chores were only done by human females and a non-human male (Puffy, a helper at Happy House in Unit 4 of Step Up $3 A$ ).

In the selected books of $P L E$, although males and females were illustrated doing the same number of different indoor activities ( 9 types), males were portrayed as more active and sporty than females, illustrated engaging in hiking (an outdoor activity) and 8 types of sports activities (running, playing basketball, playing tennis, playing football, doing karate, skipping, swimming, and playing badminton). Females were only illustrated engaging in playing basketball, swimming, and gymnastics. On the other hand, contrary to Amini and Birjandi's (2012) study in which only females engaged in various kinds of household chores in visuals, both human males and females engaged in household chores, but more types were done by females than males ( 5 and 2 types respectively): females were portrayed ironing clothes, tidying the flat, sweeping the floor, tidying a bookshelf, and washing dishes, whereas males were illustrated making food and tidying a bookshelf. Although females were illustrated engaging in 6 types of misbehaviours (talking in the library, picking flowers in the park, playing with the ball in the classroom, riding a bicycle in the park, running in the library, and talking in the classroom), even excluding the misbehaviours by Yoyo (a non-human male character), males were still illustrated engaging in more types of misbehaviours (14 types).

To summarise this section briefly, for Research Question C3 ('How are male and female characters represented in selected illustrations in terms of involvement in activities?'), both human males and females in the line drawings of the four selected textbooks of $S U$ and $P L E$ were depicted as involving in some activities. In $S U$, both were
illustrated engaging in a similar range of outdoor activities and the same number of sports activities. However, males were portrayed in a wider range of indoor activities than females (5 and 2 types respectively). On the other hand, in $P L E$, males were portrayed as more active and sporty than females (males engaged in 9 types of outdoor and sports activities, compared with 3 types of sports activities for females), as in Lee and Collins's ( 2008,2010$)$ studies. Also, males were illustrated as less well-behaved than females (as evidenced in more types of misbehaviours and frequency of males engaging in these misbehaviours), and females were more often drawn engaging in household chores than males ( 5 types of chores, compared with 2 by males). In other words, different patterns of visual representation of gender could be found in the selected books of the two textbook series.

### 6.4 Size/Height, Hair Length, and Clothing of Male and Female Characters in Selected Illustrations

Gender representation in visuals means far more than the number of occurrences of males and females, their occupations and activities, but also how they are shown in terms of appearance. Therefore, after counting the number of males and females in visuals, and the occupations and activities engaged in to find out if males or females are comparably represented in the illustrations in Step Up and Primary Longman Express, I look at how the male and female characters are represented in terms of appearance to answer Research Question C4 ('How are male and female characters represented in selected illustrations (line drawings and photographs) in terms of: a) size/height; b) hair length; and c) clothing?').

Previous textbook studies analysing visuals mainly focused on frequency counts of males and females (e.g. Amini \& Birjandi, 2012; Gharbavi \& Mousavi, 2012a; Kobia, 2009; Lee \& Collins, 2008, 2009, 2010; Mukundan \& Nimehchisalem, 2008). In this study, size/height, hair length, and clothing of the males and females in the visuals of the four selected textbooks of Step Up and Primary Longman Express were also analysed. As Sunderland (2011) suggests, these are some aspects from which gender stereotyping in the visuals of children's books can be shown, and the same applies to textbooks. Leinbach and Fagot (1993, p. 329) also found that even children under 1 year old tend to distinguish males from females based on categories such as "sex-typical" hair length and clothing styles (i.e. social construction of gender (see also Section 2.2.2)).

### 6.4.1 Size/height (Research Question C4(a))

For the analysis of size, I mean the relative space occupied by a character, compared with another character, in a visual (coded with the categories of 'larger' and 'smaller'). The height of the males and females was also considered, coded with 'taller' or 'shorter', to see if it is always the case that males are portrayed taller and/or larger (which may imply being more muscular or fatter) than females.

In the main study, only the 67 visuals ( 24 in $S U$ and 43 in $P L E$ ) which include both males and females were focused on. First, the total number of such visuals was counted. A visual which occupies a whole page was counted once. Visuals separated by text were counted separately. Those visuals in which the males and females were drawn as standing or sitting at different 'ground levels', which made it difficult to determine if they are of similar size or height, were excluded from analysis. Other cases which made it
difficult to compare the height of human males and females were also excluded, for example, the visual on page 35 of Primary Longman Express $2 A$, in which the dad was drawn bending over and it was hard to determine if he is of similar height as the mum or not. In other visuals, only faces are shown (see, e.g. Figure 6b from Primary Longman Express $4 B$ p. 19) or the characters are sitting (see e.g. Figure 6 c from Step $U p 3 A$ p. 32) which made determining their height impossible. For these cases, I only considered if they occupied relatively more space.


Figure 6b Males and females drawn with only their faces


Figure 6c Males and females drawn sitting

As there are many possibilities of how characters were positioned in an illustration, and it is not always the case that there is only one male and one female in an illustration, the criteria I chose for inclusion are: there must be one male and one female
(or more) in an image, no matter the characters were illustrated in a 'long shot' from far away, or in a 'close-up' as if more prominence is given to them (see, for example, Figure 6d below from Step Up $3 A$ p. 13 and Primary Longman Express $2 A$ p. 18 respectively, and Table 6-21 in Appendix 6 for the number of illustrations in which male(s) and female(s) were illustrated in the same 'ground', in a 'long shot', and in a 'close-up').


Figure 6d Characters illustrated in a 'long shot' or in a 'close-up'

Table 6-23 below shows the size and height of human males and females in the 39 line drawings with only one male and one female in each visual of $S U$ and $P L E$, and those in the 5 photographs of $P L E$ (no photographs in $S U$ were analysed) are presented in Table 6-

24 (more detailed analysis can be found in Table 6-22 in Appendix 6). Since the characters of the four selected textbooks were not always drawn in the same 'ground', and I only focused on the males and females of broadly the same age, the number of analysed visuals is very small, 44 in total.

| Books | Male is <br> larger in <br> size | Female is <br> larger in <br> size | Male and <br> female are <br> of the same <br> size | Male and <br> female are <br> of the same <br> height | Male is <br> taller | Female is <br> taller |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Step Up $3 A$ | 0 | 0 | 4 | 1 | 5 | 0 |
| Step Up $5 B$ | 0 | 0 | 2 | 1 | 1 | 0 |
| Primary <br> Longman <br> Express $2 A$ | 0 | 0 | 4 | 1 | 2 | 2 |
| Primary <br> Longman <br> Express $4 B$ | 1 | 2 | 3 | 2 | 8 | 0 |
| Total |  |  |  |  |  |  |

Table 6-23 Size and height of human males and females (one male and one female) in the line drawings of the selected books of Step Up and Primary Longman Express

Regarding size, in 13 visuals (33.33\%), male and female characters are of the same size. On the other hand, in the same textbook, there are two line drawings in which females are slightly larger than males (see, for example, Figure 6e from Primary Longman Express $4 B$ p. 37, in which Helen is slightly larger than Dan and Penny is slightly larger than Sam).


Figure 6e Females drawn larger than males
There is one visual in Primary Longman Express $4 B$ in which a male is slightly larger than a female (see Figure 6f from Primary Longman Express $4 B$ p. 21).


Figure 6 A male drawn slightly larger than a female

When height is considered, there are more instances of males being taller than females in these line drawings: 16 visuals (i.e. $41.03 \%$ of all 39 visuals), but only 2 visuals $(5.13 \%)$ in which the female is taller. There are 5 visuals ( $12.82 \%$ ) in which males
are as tall as females. In only Primary Longman Express $2 A$, the number of line drawings in which a male is taller is the same as that in which a female is taller ( 2 examples of each).

| Books | Male is <br> larger in <br> size | Female is <br> larger in <br> size | Male and <br> female are <br> of the same <br> size | Male and <br> female are <br> of the same <br> height | Male is <br> taller | Female is <br> taller |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary <br> Longman <br> Express $2 A$ | 0 | 0 | 2 | 0 | 2 | 0 |
| Primary <br> Longman <br> Express $4 B$ | 0 | 0 | 0 | 1 | 0 | 0 |
| Total | 0 |  |  |  |  |  |

Table 6-24 Size and height of human males and females (one male and one female) in the photographs of the selected books of Primary Longman Express

Table 6-24 above shows the analysis of males and females in the photographs that include a male and a female in the two selected books of Primary Longman Express. 5 photographs were analysed. In 2 , both from Primary Longman Express $2 A$, the male is taller than the female. For the other 3, the male and female are of the same size (Figure 6 g from Primary Longman Express 2 A p. 31 ), or the same height (Figure 6 h from Primary Longman Express $4 B$ p. 22).


Figure $6 \mathrm{~g} \quad$ A male and a female of the same size


Figure 6h A male and a female of the same height

While 39 line drawings include only one male and one female, 21 others include more than one male and/or female. Table 6-25 below shows the analysis of the size and height of the 51 males and 45 females in these.

| Books | Male(s) and <br> female(s) <br> are the <br> same in size | Male(s) and <br> female(s) <br> are the <br> same in <br> height | Male(s) <br> is/are taller | Female(s) <br> is/are taller | Other cases | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Step Up 3A | 2 | 1 | 1 | 0 | 2 |  |
| Step Up $5 B$ | 2 | 0 | 1 | 1 | 0 | 6 |
| Primary <br> Longman <br> Express $2 A$ | 2 | 1 | 0 | 0 | 2 | 4 |
| Primary <br> Longman <br> Express $4 B$ | 0 | 1 | 0 | 0 | 5 | 5 |
| Total |  |  |  |  |  | 6 |

Table 6-25 Size and height of human males and females (more than one male and/or one female in a visual) in the line drawings of the selected books of Step Up and Primary Longman Express

The number of analysed visuals is very small (21 visuals). In 9 line drawings, the males and females are of the same size and height. In only 2 line drawings are males taller than females (on page 37 in Step $U p 3 A$, the boy is taller than the two girls, and on page 8 in Step Up 5B, the old man and the boy are taller than the old lady and the girl
respectively) and one for vice versa (page 33 in Step $U p 5 B$ ).
I classified 9 line drawings as 'other cases', because neither males nor females were always obviously drawn taller or larger in size in a visual. For example, on page 31 in Step Up 3A, for the three children standing at the back, Henry is the tallest and John is the shortest, but just slightly shorter than Winnie. For the other three children standing in the front, Tommy is the same height as Alex and they are all slightly taller than Mandy (Figure 6i).


Figure 6i Neither males nor females drawn taller or larger in size

Two examples can also be found on page 5 in Primary Longman Express $4 B$. In the top illustration, Kate is the tallest but Penny is the shortest of the five students. For the line drawing at the bottom, while Kate is the tallest, Dan is the shortest (Figure 6j).


Figure $\mathbf{6 j}$ Height of males and females in line drawings

It is interesting that only a male (Billy) was drawn as rather fat among all the analysed visuals.

Of the 2 photographs involving more than one male and one female in Primary Longman Express $4 B$ (no photographs in Primary Longman Express $2 A$ do so), on page 7, Joyce, Eva and Thomas are of the same height (Figure 6k).


Figure 6k A male and females of the same height in a photograph

On the other hand, on page 39 , while one boy is very slightly shorter than the others, Linda and her classmates are of the same height (Figure 61).


Figure 61 Height of males and females in a photograph

To summarise this section, as regards Research Question C4(a) ('How are male and female characters represented in selected illustrations (both line drawings and photographs) in terms of size/height?'), in nearly half of all the analysed illustrations (line
drawings and photographs), 31 illustrations (i.e. $46.27 \%$ ), male and female characters are either of the same size relative to each other, or the same height. In other words, neither males nor females are given more focus in these visuals. In 67 illustrations, males were drawn taller than females in 20 illustrations (29.85\%), and females drawn taller than males in just 3 illustrations (4.48\%). Males, on average, are taller than females (Disabled World, 2008). For example, based on the figures of Disabled World, in Hong Kong, the average male height is 170 cm and the average female height is 158.8 cm . Girls grow faster than boys temporarily only when they enter puberty (Tanner, 1990). Therefore, it is a case of real representation for the illustration of males and females in terms of their height.

### 6.4.2 Hair length (Research Question C4(b))

In this study, how the male and female characters in the four selected textbooks of Step $U p$ and Primary Longman Express are represented in illustrations (both line drawings and photographs) were also analysed by focusing on their hair length. Intons-Peterson (1988) suggests that hair length is an important cue children use to identify the sex of the characters of drawings, and they are likely to identify those figures with long hair as female and those with short hair as male. In this study, I define a person's hair as 'short' if it just reaches the neck or above, and 'long' if it is either tied up, or at or below the shoulder. Some visuals (in Primary Longman Express) were drawn in a way that made it difficult for me to determine the hair length (see, for example, Figure 6 m from Primary Longman Express $4 B$ p. 62), these were excluded from the analysis.


Figure 6m An example of an excluded illustration for the visual analysis

Each occurrence of each visualised character (i.e. the number of 'tokens') was counted because most illustrated characters were not given names. The analysed 131 and 115 human males and females portrayed with 'long' and 'short' hair can be found in Table 6-26 in Appendix 6, and is summarised in Tables 6-27 and 6-28 below.

| Books |  |  |  | No. of Males With <br> Long Hair |  | No. of Males With <br> Short Hair |  | No. of Females <br> With Long Hair |  | No. of Females <br> With Short Hair |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs |  |  |  |
| Step Up 3A | 0 | 0 | 66 | 0 | 68 | 3 | 8 | 0 |  |  |  |
| Step Up 5B | 0 | 0 | 61 | 4 | 32 | 0 | 4 | 0 |  |  |  |
| Total | 0 | 0 | 127 | 4 | 100 | 3 | 12 | 0 |  |  |  |

Table 6-27 Number of human males and females portrayed with long or short hair in the line drawings and photographs in the selected books of Step $U p$

In both line drawings and photographs of Step Up, all the males were portrayed with short hair. Females in contrast were almost always illustrated with long hair. In the line drawings, 100 'tokens' of females (i.e. $89.29 \%$ ) have long hair. $\chi^{2}(1, \mathrm{n}=112)=69.143, p$ $<.05$ and thus it is strongly significant that more females were portrayed with long hair than with short hair, even if the chi-square value is substantiated with $p<.001$, and $\varphi=$ 0.786 has produced a large effect size. The three females in the photographs on page 33
in Step Up $3 A$ all have long hair. (One, the Japanese woman, has her hair tied up and the other two have their hair below their shoulders; see Figure 6n).


Figure 6n Hair length of females in Step $\boldsymbol{U p}$

The number of human males and females with long or short hair in the line drawings and photographs in Primary Longman Express is presented in Table 6-28.

| Books | No. of Males With <br> Long Hair |  | No. of Males With <br> Have Short Hair |  | No. of Females <br> With Long Hair |  | No. of Females <br> With Short Hair |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs |
| Primary <br> Longman <br> Express 2A | 0 | 0 | 135 | 13 | 41 | 12 | 40 | 0 |
| Primary <br> Longman <br> Express 4B | 2 | 0 | 163 | 6 | 68 | 12 | 66 | 14 |
| Total | 2 | 0 | 298 | 19 | 109 | 24 | 106 | 14 |

Table 6-28 Number of human males and females portrayed with long or short hair in the line drawings and photographs in the selected books of Primary Longman Express

Again, females were illustrated with long hair more often than short hair in the line drawings. 109 'tokens' of the females (i.e. $50.70 \%$ ) were drawn with long hair and 106 'tokens' (i.e. $49.30 \%$ ) with short hair. Interestingly the differences were negligible
compared with that in Step Up and not significant. In the photographs in Primary Longman Express 2A, all 12 females have long hair, although in Primary Longman Express $4 B$, the number of females illustrated with long hair and short hair is similar. Adding up the total, more than half of the females in all the photographs (63.16\%) have long hair but only 14 female 'tokens' (36.84\%) have short hair. All 19 males in the photographs were portrayed with short hair. Nearly all of the males in the line drawings have short hair. Only two (from Primary Longman Express $4 B$ p. 3 and p. 11) have long hair. Tellingly, one is a pop singer and the other is a man from ancient China, with his hair tied up (see Figure 60 below).


Figure 60 Males portrayed with long hair

Apart from human characters, non-human characters were also analysed. The sex of non-human characters is not as distinguishable by hair length as the human characters. Rather, the non-human female characters were identified as female by their accessories (a bow-knot), clothing items (e.g. a handbag (of Twinkle's mum)) or colour (see Section 6.4.3 below). Non-human male characters were also not distinguishable by hair length but by their clothing (see below). Among the 70 and 17 non-human female characters in Step Up and Primary Longman Express respectively, 51 and 11 of them (i.e. $72.86 \%$ and $64.71 \%$ respectively) were drawn with a bow on their heads (see, for example, Twinkle from Step $U p 2 A$ p. 46 in Figure 6p).


Figure 6p Appearance of non-human female characters in Step Up

To sum up, for Research Question C4(b), overall, the human females in the four analysed textbooks were more often illustrated with long than short hair in both the line drawings (209 and 118 line drawings respectively) and photographs (27 and 14 photographs respectively). In other words, in $63.91 \%$ of the line drawings and $65.85 \%$ of the photographs, human females were portrayed to have long hair. Gender differences were exaggerated in $S U$, with nearly $90 \%$ of females in the line drawings and photographs with long hair but all males with short hair. However, the textbook illustrators of PLE have shown attempts to portray the characters in a way that reflects the reality because in Hong Kong (as in western countries), many people think that females having long hair are beautiful and therefore, many actresses and models have long hair. Nonetheless, many females in Hong Kong do not have long hair. Some of them prefer short hair. On the other hand, males in Hong Kong usually have short hair. Hair length however seems less relevant to non-human female characters (e.g. monsters, as
shown in the illustrations above), whose sex is determined rather by their accessories or clothing, because they look alike as their male counterparts except for the bow on their heads or a handbag.

### 6.4.3 Clothing (Research Question C4(c))

The male and female characters' clothing was also analysed in this study because clothing is a category which functions as a sign of gender (Lloyd \& Duveen, 1990). I counted the number of instances (as 'tokens') of human females being portrayed wearing dresses or skirts, or trousers, and of females and males wearing pink or blue. The colour of clothing was examined because children have been found to have gender-stereotyped colour preferences (LoBue \& DeLoache, 2011). The reason for focusing on these two colours is that pink is more generally accepted as a 'feminine' colour (Koller, 2008) and blue a 'masculine' colour. One study at Newcastle University in which more than 200 men and women were asked to choose their favourite colours from more than 250 different ones, women tended to choose pink while blue was preferred by the men (Macrae, 2007). LoBue and DeLoache (2011), in two experiments, also found that by the age of 2.5 , girls have a significant preference for pink over other colours.

To count the number of line drawings and photographs in which human males and females in the coloured illustrations of the four selected textbooks wear blue and pink, all blue and pink clothing items of shirt/T-shirt, skirt/trousers/shorts, hat/cap, tie (if any), and shoes worn by a character were counted, no matter how many pieces he/she is wearing. For example, a pink T-shirt and a pair of blue shoes worn by a male were counted separately. The clothing items could be plain, with blue or pink stripes. These were also
counted. The number of instances in which 460 'tokens' of human males wear in blue or pink can be found in Table 6-29 in Appendix 6 and are summarised in the following Table:

| Books | No. of Males ('tokens') |  | Instances of Males <br> Wearing Blue |  | Instances of Males <br> Wearing Pink |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs |
| Step <br> $3 A$ | 62 | 0 | 31 | 0 | 3 | 0 |
| Step <br> $5 B$ | 61 | 0 | 25 | 0 | 10 | 0 |
| Primary <br> Longman <br> Express 2A | 133 | 13 | 55 | 10 | 0 | 0 |
| Primary <br> Longman <br> Express 4B | 182 | 6 | 66 | 5 | 3 | 0 |
| Total | 441 | 19 | 177 | 15 | 16 | 0 |

Table 6-30 $\quad$ Number of instances in which human males wear blue or pink in the selected books of Step Up and Primary Longman Express

In $S U$, of the 123 human males in the line drawings, 56 (i.e. $45.53 \%$ ) were drawn wearing blue, but only 13 (10.57\%) wearing pink. In other words, slightly more than half were drawn wearing either blue or pink. No males illustrated in the photographs are wearing blue or pink. In the line drawings of $P L E$, of the 315 human males, again, less than half, 121 (i.e. $38.41 \%$ ), were portrayed wearing blue. Only 3 human males (in Primary Longman $4 B$ ), that is, less than $1 \%(0.95 \%)$ were drawn wearing pink. Of the 19 human males in the photographs of $P L E$, 15 (i.e. $78.95 \%$ ) are wearing blue, but none in pink. In fact, the blue clothes worn by all the human males in the photographs are their school uniform (see, for example, Figure $6 f$ above).

Tables 6-32 and 6-33 below show the 'tokens' of human females who were illustrated wearing blue or pink, and the number of instances in which human females were portrayed wearing dresses and trousers. The details of the analysis can be found in Table 6-31 in Appendix 6. As regards whether females are wearing a dress or trousers,
sometimes I could not determine this because only the upper part of the body was drawn. Also, in a few instances, this was not clearly drawn (see, for example, the small illustration in the Phonics section on page 12 of Primary Longman Express $2 A$ in Figure $6 q)$. All these instances were excluded from analysis.

## Phonics



Figure 6q An illustration excluded from the analysis of the female's clothing

| Books | No. of Females ('Tokens') |  | Instances of Females <br> Wearing Blue |  | Instances of Females <br> Wearing Pink |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs |
| Step Up 3A | 78 | 4 | 15 | 0 | 12 | 0 |
| Step Up 5B | 37 | 0 | 14 | 0 | 12 | 0 |
| Primary <br> Longman <br> Express 2A | 74 | 12 | 11 | 0 | 19 | 1 |
| Primary <br> Longman <br> Express 4B | 142 | 29 | 15 | 0 | 24 | 0 |
| Total |  |  |  |  |  |  |

Table 6-32 Number of instances in which human females wear blue or pink in the selected books of Step Up and Primary Longman Express

First, regarding the colour of the clothing items, while human males were not always illustrated wearing in a 'masculine' colour (blue), human females were not always portrayed wearing pink. In the line drawings of the two $S U$ textbooks, of the 115 analysed females, females were portrayed wearing pink and blue in 24 and 29 instances respectively (i.e. $20.87 \%$ and $25.22 \%$ respectively). In the photographs, none of the four females were portrayed in either pink or blue. Of the 216 human females in the line drawings of $P L E$, only 43 are wearing pink but 27 are wearing blue, that is, $19.91 \%$ and
$12.04 \%$ respectively. Of the 41 human females in the photographs, only one $(2.44 \%)$ is in pink and none in blue.

| Books | No. of Females ('Tokens') |  | Instances of Females <br> Wearing Dresses |  | Instances of Females <br> Wearing Trousers |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs | Line <br> Drawings | Photographs |
| Step Up 3A | 78 | 4 | 43 | 1 | 16 | 1 |
| Step Up 5B | 37 | 0 | 11 | 0 | 10 | 0 |
| Primary <br> Longman <br> Express $2 A$ | 74 | 12 | 43 | 6 | 11 | 1 |
| Primary <br> Longman <br> Express 4B | 142 | 29 | 58 | 22 | 4 | 0 |
| Total | 331 | 45 | 155 | 29 | 41 | 2 |

Table 6-33 Number of instances in which human females were portrayed wearing dresses or trousers in the selected books of Step Up and Primary Longman Express

While none of the males were illustrated wearing dresses, Table 6-33 above shows that in the two selected $S U$ textbooks, females were portrayed wearing dresses more often than trousers in both line drawings and photographs. Of the 80 analysed females in the line drawings, 54 are wearing dresses ( 10 of these are school uniform) and only 26 are wearing trousers (i.e. $67.5 \%$ and $32.5 \%$ respectively). Only one female in a photograph in Step Up $3 A$ was illustrated wearing trousers (together with a parka, a thick jacket), and one wearing a sari, a dress from India (The other two females were illustrated wearing a kimono and a sarong respectively) (see Figure 6 m above). The line drawings in the two PLE textbooks are similar. In the 116 analysed pictured females, 101 wear dresses (18 of these are school uniform) but only 15 wear trousers ( $87.07 \%$ and $12.93 \%$ respectively). In the 29 photographs, again, females were nearly always illustrated wearing dresses: 28 are wearing dresses (all school uniform), with only one wearing trousers (i.e. $96.55 \%$ and $3.45 \%$ respectively).

Non-human characters were also analysed, but the number would be too small if
only four selected textbooks were analysed. Therefore, all the personified non-human characters in the two textbook series were analysed. The sex of the non-human characters was determined by their clothing items and accessories. If the non-human characters were not drawn wearing clothes, I analysed to see if the non-human females were always drawn in pink and blue for non-human males.

In the whole series of $S U$, among the 71 'tokens' of non-human females in the line drawings, 23 ( $32.39 \%$ ) were portrayed wearing dresses (see, for example, Figure 6 r from Step Up $1 B$ p. 41), but none in trousers.


Figure $6 \mathbf{r}$ Non-human female characters in Step $\boldsymbol{U} \boldsymbol{p}$ drawn wearing dresses

On the other hand, one non-human male character (Mr. Hare's boss) and 11 'tokens' (4 'tokens' of Mr. Tortoise and 7 'tokens' of Mr. Hare) in Step Up $4 A$ Unit 8 (on p. 47) were drawn wearing a shirt and a tie, and trousers respectively (see Figure 6 s below).


Figure 6s Non-human male characters in Step Up drawn wearing a shirt or trousers

The remainder of the non-human males and females can be distinguished by their skin colour (see below). All 3 non-human female 'tokens' in the photographs were identified as females with their bows in their hair. In fact, they are all Twinkle, a star-like nonhuman female character, shown in three different photographs (see, for example, Figure 6 t from Step $U p 4 B$ p. 37).


Figure 6t Twinkle portrayed putting a bow on her head

In PLE, among the 85 non-human female 'tokens' in the line drawings, 18 (21.18\%) were drawn wearing dresses but, again, none in trousers. Of the non-human male characters, 5 'tokens' were drawn wearing a tie and a shirt, and 2 'tokens' are wearing trousers, but they are all Bobby the town mouse, drawn in different illustrations on page 18 in Primary Longman Express 3B Unit 3 (see Figure 6 u ). (No non-human characters can be found in the photographs of PLE.)


Figure 6u Non-human female characters in Primary Longman Express drawn wearing dresses

As regards colour, among the 145 non-human male 'tokens' in the line drawings
of $S U$, unexpectedly, male characters were drawn in pink more often than blue: 50 and 35 instances respectively (i.e. $34.48 \%$ and $24.14 \%$ respectively). This is however because Puffy, a non-human male monster, was drawn in pink and he appears very frequently (49 instances) (see, for example, Figure 6v from Step Up $1 A$ p. 17).


Figure 6v Puffy illustrated in pink in line drawings of Step $\boldsymbol{U} \boldsymbol{p}$

In the photographs, non-human males were also illustrated in pink in 30 instances, but in only one instance was a male illustrated in blue ( $96.77 \%$ and $3.23 \%$ respectively). Again, this is because Puffy appears in the photographs in all 30 instances (see, for example, Figure 6w from Step Up $1 B$ p. 20).


Figure 6w Puffy illustrated in pink in a photograph of Step $\boldsymbol{U} p$

On the other hand, among the 71 non-human female 'tokens' in the line drawings, 13 'tokens' were drawn wearing pink but only one wearing blue (i.e. $18.31 \%$ and $1.41 \%$ respectively). Twinkle, the only non-human female character shown in three different photographs of $S U$, is neither in pink nor in blue. Rather, she is in yellow. Apart from the colour of their bodies, among the 71 non-human female 'tokens' in the line drawings, they were drawn in pink bows in 39 instances and a blue bow in one instance, and carrying a pink handbag in 3 instances. In the line drawings of PLE, among the 34 nonhuman male 'tokens', slightly more than half, 19 'tokens' (i.e. 55.88\%), were drawn in blue but none is in pink. On the other hand, among the 85 non-human female 'tokens', 54 'tokens' (i.e. $63.33 \%$ ) were drawn in pink but none in blue (see, for example, Figure $6 x$ from Primary Longman Express 1 A p. 42).


Figure 6x A non-human male character drawn in blue and a female character drawn in pink in Primary Longman Express

Overall, for non-human characters, one way to determine their sex is based on their clothing. Non-human males and females were illustrated wearing 'masculine' and feminine' clothing in only less than half of all instances. However, their skin colour is not a reliable sign of their sex either. In $S U$, though it is more often for females to be drawn in pink than blue, the non-human male Puffy was drawn in pink but not in blue. On the other hand, in PLE, more than half of non-human males were drawn in blue and none in a 'feminine' colour pink, and the opposite occurs in non-human females.

Thus, to answer Research Question C4(c) ('How are male and female characters represented in selected illustrations (line drawings and photographs) in terms of clothing?'), it can be concluded that females were more often portrayed wearing dresses
than trousers in both the line drawings and photographs of the four selected textbooks of Step Up and Primary Longman Express, 184 compared with 44 respectively $\left(\chi^{2}(1, \mathrm{n}=\right.$ $228)=85.965, p<.05$ and thus it is strongly significant, even if the chi-square value is substantiated with $p<.001$, and $\varphi=0.614$ has produced a large-sized effect). From my own daily observation, in contrast, except for school uniform, females in real life wear trousers (especially jeans, or leggings in recent years) more often than dresses, in particular on less formal occasions. In terms of colour, less than half the males in the line drawings of $S U$ and $P L E$ ( $45.53 \%$ and $38.41 \%$ respectively) were portrayed wearing blue, but many males in the photographs of $P L E(78.95 \%)$ were wearing blue because this is the colour of their school uniform. This is very interesting because, in reality, males' uniform in many Hong Kong primary schools is a white shirt (together with white or grey shorts), as illustrated in some line drawings. In some contrast, given the cultural association of the colour pink with femininity suggested by Koller (2008), surprisingly, human females were not always or even usually portrayed dressing in this feminine colour, with only a small number ( $20.87 \%$ and $19.91 \%$ in $S U$ and $P L E$ respectively) wearing pink. However, pink is used for both non-human male (Puffy, a monster in $S U$ ) and female (Coco, a monster in PLE) characters.

### 6.5 Summary and Conclusion

To summarise, in this chapter, I analysed the representation of males and females in the visuals (line drawings and photographs) in Step Up and Primary Longman Express by counting characters in terms of 'tokens' and the occupations engaged in by adult males and females, and then analysing how males and females are represented in terms of
involvement in activities, size/height, hair length, and clothing in the four selected textbooks.

First, males have a higher visibility than females in the line drawings in both Step $U p$ and Primary Longman Express. In $S U$, there are more human males than females in both the line drawings and photographs and more non-human male than female characters. There are also more human males than females in the line drawings in PLE. However, there is a higher visibility of human females than males in the photographs, and a higher visibility of non-human females than males in the line drawings in PLE.

For the occupations engaged in by the visualised adult males and females, content analysis conducted in previous studies (e.g. Bahiyah Dato’ Hj. Abdul Hamid et al., 2008; Gupta \& Lee, 1990) which usually showed that females were portrayed in a limited range of occupations that are stereotypical for women. In this study, although human and nonhuman adult males were illustrated engaging in a greater range of occupations than females in the line drawings in $S U$ and PLE (33 and 28 'types for human males and females respectively in $P L E$, and 4 and 1 for non-human males and female respectively in $S U$ ), and in a photograph in $S U$ (one 'type' for a human male), human females were illustrated engaging in a greater range of occupations than males in the line drawings in $S U$ (21 and 16 'types' for females and males respectively) and the photographs in PLE (9 and 7 'types' respectively). Reflecting the reality that there are more female than male teachers in primary schools, the most common type of occupation for females in both $S U$ and PLE is teacher, although this particular representation may be exaggerated.

Regarding activities involved, human and non-human males were portrayed engaging in a wider range of activities than females in the line drawings of selected
books of both $S U$ and PLE (30 and 20 'types' by human and non-human males and females respectively in $S U$, and 48 and 31 'types' for human and non-human males and females respectively in $P L E$ ). However, in $S U$, while both males and females were illustrated engaging in a similar range of outdoor activities and the same number of sports activities, males were also portrayed in a wider range of indoor activities than females (5 and 2 'types' respectively). In PLE, human males were illustrated as more active and sporty ( 9 'types' of outdoor and sports activities were portrayed engaging in by males, compared with 3 'types' of sports activities and no outdoor activities for females), and as engaging in more types of undesirable behaviours than females (14 'types' of misbehaviours engaged in by males, compared with 6 for females).

When comparing the relative size (i.e. 'bigger' or 'smaller') of the males and females of broadly the same age in the images in the four selected books of $S U$ and $P L E$, and those males and females that are in the same 'ground' to compare their height (i.e. 'taller' or 'shorter'), male and female characters were either represented broadly as the same size or the same height in nearly half ( $46.27 \%$ ) of the analysed line drawings and photographs. Males were drawn taller than females in $29.85 \%$, and females taller than males in only $4.48 \%$.

As regards hair length and clothing, similar to Kereszty's (2009) analysis of five elementary textbooks used in Hungary in which girls and women were usually found to wear skirts and have long hair, and boys and men to wear trousers, in both analysed textbook series, females were more often portrayed having long hair than short hair in both line drawings and photographs (in $63.91 \%$ of the line drawings and $65.85 \%$ of the photographs). Also, females were more often portrayed wearing dresses than trousers in
both the line drawings and photographs (184 'tokens' compared with 44 respectively). These aspects are unsurprising, as Kereszty (2009) suggests, the 'typical' (i.e. traditional) characteristics of the characters are used to make their sex obvious. For clothing, however, although blue and pink are generally considered 'masculine' and 'feminine' colours respectively, less than half of the human males ( $45.53 \%$ and $38.41 \%$ in the line drawings of $S U$ and $P L E$ respectively) were portrayed wearing blue, and only a small percentage of human females in the line drawings ( $20.87 \%$ and $19.91 \%$ in $S U$ and $P L E$ respectively) and one female in a photograph of PLE wearing pink. Nevertheless, 78.95\% of the human males in the photographs of $P L E$ wore blue as it is their school uniform's colour. For non-human characters, however, colour is not always a reliable cue to their sex while Coco (a non-human female monster in $P L E$ ) and Yoyo (a non-human male monster in $P L E$ ) were drawn in pink and blue respectively, Puffy (a non-human male monster in $S U$ ) is also in pink. Yet, we can still distinguish non-human females from their clothing and accessories, with non-human female characters wearing dresses, wearing bows on their heads, or carrying handbags in both the line drawings and photographs of $S U$.

As we can see, except for the human males in the photographs in the selected $P L E$ textbooks being usually portrayed wearing in blue uniform, and Puffy, a non-human male monster in $S U$ being illustrated in pink (a 'feminine' colour), the findings of visual representation of gender in the illustrations (both line drawings and photographs) in the four selected books of $S U$ and $P L E$ are consistent. Overall, it can be concluded that the phenomenon of gender stereotyping is not prominent in the illustrations in the selected books of either textbook series, because females were not mainly illustrated as housewives or as engaging in stereotypical female occupations (e.g. nurse), but engaging
in a wide range of occupations as males. Also, females were not often depicted as wearing dresses or wearing pink, a 'feminine' colour. However, given that the characters in the textbook illustrations are all 'invented', colours and the characters' clothes are determined by the writers, illustrators and publishers according to their choice and preference, which may be influenced by what are considered as 'masculine' or 'feminine' colours in the culture. For non-human characters, the only way for readers to distinguish their sex must be based on the generally accepted 'masculine' or 'feminine' colour (with Puffy in Step $U p$ as an exception because he was drawn in pink), or their clothing items (e.g. tie, shirt, or trousers for males and dresses for females), accessories and handbags. In other words, as the writers, illustrators, or publishers want the non-human characters to be recognisably male or female when the characters are not recognisable as male or female from their facial features alone, they may use exaggerated gender devices (e.g. a bow in a female's hair). One other gender issue involved is the representation of the nonhuman characters as males and females. If the purpose of including non-human characters in primary textbooks is to draw children's attention and arouse their interest, the characters can indeed be gender-neutral, without personifying them as males or females.

## Chapter 7

## Discussion

After presenting the data analysis in Chapters $4-6$, in this chapter, I will start by comparing the findings with previous studies on gender representation in EFL/ESL textbooks, followed by suggesting some possible explanations for the findings. Then, the significance of the study and its contributions to gender and language study are discussed.

### 7.1 Comparison of Findings with Previous Work on Gender Representation in EFL/ESL Textbooks

In Chapters 4-6, I presented my findings about the representation of gender in lexis and grammar in the reading passages, dialogues, and a selection of visuals of two textbook series, Step Up (SU) and Primary Longman Express (PLE). In this section, the findings of this study are compared more fully with previous studies of gender representation in EFL/ESL textbooks.

### 7.1.1 Textual representation of gender - Lexis and grammar

How is gender represented in the reading passages in the Step $\boldsymbol{U p}$ and Primary

## Longman Express series in terms of lexis and grammar?

The most basic aspect of textual representation of gender is the visibility or inclusion of males and females, identified by counting the frequency of occurrence (both 'tokens' and 'types') of males and females in texts. Previous studies of gender representation in EFL/ESL textbooks (e.g. Gharbavi \& Mousavi, 2012a; Hartman \& Judd, 1978;

Mukundan \& Nimehchisale, 2008) have consistently shown that male references outnumbered female references in texts, though 'tokens' and 'types' were not distinguished in these studies. The present study also demonstrates this phenomenon in the reading passages of Step Up and Primary Longman Express because there are more male than female 'mentions' when the node words for males and females were counted as 'tokens', and the numerical differences between male and female mentions in these two textbook series are strongly significant. If the number of characters is considered by counting only the number of different male and female names (represented with proper nouns) (i.e. 'types'), again, there are still slightly more males than females in the reading passages in both textbook series, though the differences are not significant (see also Section 4.1.1). This finding is similar to Gupta and Lee's (1990) study of two basal reader series used in primary schools in Singapore in which the number of male characters (both human and non-human) was consistently higher than that of female characters. My study shows that overrepresentation of males in texts still exists and does not reflect the actual number of male and female population in Hong Kong, because in reality there are slightly more females than males. According to the Census and Statistics Department (2013c), in mid-2012, the number of females and males in Hong Kong is 3,827,300 and 3,327,300 (i.e. $53.5 \%$ and $46.5 \%$ ) respectively. Including more males than females is also consistent with many other previous textbook studies (Amini \& Birjandi, 2012; Bahiyah Dato' Hj. Abdul Hamid et al., 2008; Barton \& Sakwa, 2012; Gupta \& Lee, 1990; Lee \& Collins, 2008, 2009, 2010).

Males and females can also be and are often represented with pronouns. Because of the higher number of 'tokens' of node words for males than females, the frequency of
occurrence of masculine pronouns in the reading passages of both $S U$ and $P L E$ is higher than that of the feminine pronouns when counted as 'tokens' and the differences are significant in both textbook series $\left(\chi^{2}(1, \mathrm{n}=435)=41.897, p<.05\right.$ for $S U$ and $\chi^{2}(1, \mathrm{n}=$ 342 ) $=17.789, p<.05$ for PLE) (see also Section 4.1.3). The higher frequency of occurrence of male than female pronouns is in contrast to Healy's (2009) unusual study of an EFL textbook in which there were more female than male pronouns because there were more female than male names in the EFL textbook he analysed (Touchstone Book 2).

Previous studies of social categorization through occupational roles (Amini \& Birjandi, 2012; Bahiyah Dato’ Hj. Abdul Hamid et al., 2008; Gharbavi \& Mousavi, 2012a; Gupta \& Lee, 1990; Hartman \& Judd, 1978; Hellinger, 1980; Lee \& Collins, 2008; Sakita, 1995) have tended to show women engaging in fewer or a more limited range of occupations than men, or in occupations that are stereotypical for females such as teacher, nurse, and housewife (Gupta \& Lee, 1990; Hartman \& Judd, 1978). Better-paid and higher-status jobs (e.g. engineer, pilot) (Barton \& Sakwa, 2012; Kobia, 2009) or physically demanding jobs (Lee \& Collins, 2009) tended to be engaged in by males. In my own study, though males were still represented engaging in more types of jobs than females, it is to be welcomed that the difference is small and non-significant. As well as housewives, a female can be an athlete ( 1 instance in $S U$ ), a reporter (3 instances in $S U$ ), or a driver ( 2 instances in $P L E$ ). On the other hand, only males were depicted as firefighters in both textbook series (see also Section 4.1.4).

Previous studies of activities (an aspect of 'social action') (van Leeuwen, 1995, 2008) have usually shown a limited range of activities engaged in by females, who are often depicted in the kitchen (Barton \& Sakwa, 2012) or engaging in a range of other
household work (Amini \& Birjandi, 2012; Hartman \& Judd, 1978; Lee \& Collins, 2008, 2010; Sakita, 1995). However, in my study, in the reading passages of $S U$, although males were again represented doing a greater range of activities, both males and females were portrayed in similar categories of activities. Many females work outside the home, and housework is done by a male and females, though this male just plays a supportive role in only one instance (see also Section 4.1.6.1). In the reading passages of $P L E$, again, males are associated with a greater range of activities than females, and both males and females were portrayed engaging in household chores. However, males and females have different preferences for activities: males prefer outdoor activities, but females prefer cultural activities (see also Section 4.1.6.2). Therefore, in comparison with previous textbook studies, the analysis of these two textbook series demonstrates only relatively little gender stereotyping.

Regarding adjectives, in $S U$, similar to Kobia's (2009) study of four selected textbooks of the Let's Learn English series used in primary schools in Kenya, more positive traits were used exclusively for males than for females. However, there are also more instances of males being described negatively (see also Section 4.1.5.1). In PLE, as more adjective 'types' are associated with females, accordingly and unsurprisingly, there are also more positive adjectives associated with females than males, and slightly more negative adjectives. This is contrary to Mukundan and Nimehchisalem's (2008) finding in their study of four secondary English textbooks used in Malaysia in which negative qualities were associated with males more than females (see also Section 4.1.5.2). Nevertheless, different from Evans and Davies's (2000) content analysis of two elementary reading textbook series in which males were more often portrayed with
'traditionally' masculine characteristics than females, males and females in $S U$ and PLE were only sometimes portrayed with 'traditionally' masculine and feminine characteristics. In $S U$, both males and females were described as clever, great, hardworking, helpful, and rude, and brave, polite, little, and frightened are associated with both males and females in PLE.

At the level of formal grammar, while Amini and Birjandi (2012) could still find a few cases of masculine generic constructions in their two analysed EFL textbooks used in the second and third grades of high schools in Iran, no examples of 'generic' use of he could be found in either $S U$ or $P L E$, and $H e / h e$ was only used as a subject pronoun to refer to a male referent. Even relative 'invisibility' of females at the word level cannot be found in either textbook series. A few instances of man-compounds could be found but they were often used sex-specifically, as in Ferguson's (2004) study. However, similar to Lee and Collins's (2010) study of English language textbooks used in secondary schools in Hong Kong and Australia, the gender-neutral term police officer was also used (as a kind of 'gender-neutralization' strategy, mentioned in Section 2.3) in PLE, and police, a collective noun, was used in both $S U$ and $P L E$ when referring to more than one police officer and their sex is unknown (see also Section 4.2.1). Regarding male/female 'firstness', Lee and Collins $(2009,2010)$ found that males were more often mentioned first when two nouns for sex are paired up. In my study, while there are slightly more types of conventional 'male firstness' than 'female firstness' in $S U$ (e.g. Mr. and Mrs. and boys and girls), there is the same number of different types of conventional 'male firstness' and 'female firstness' in PLE (see also Section 4.2.2). Thus, the kind of linguistic bias which may lead to 'sexual hierarchy' (see Chapter 2) does not occur in
either textbook series.
Overall, the textual representation of gender in the two textbook series is broadly similar. Males were represented more than females in the reading passages as there is a greater number of node words for males than females when counted as 'tokens', and there is a higher frequency of occurrence of masculine than feminine pronouns. In occupations and activities engaged in, though males were represented in a greater range of occupations and activities than females, females no longer only engage in stereotypical occupations for females, and housework is not only engaged in by females. At the grammatical level, no 'generic' use of he could be found, and the subject pronoun He/he was only used to refer to a male referent. Hence, although overrepresentation of males can still be found, in contrast to previous textbook studies, there is no linguistic bias towards males or females and only a little gender stereotyping in the reading passages of both series. This suggests that the writers of the two series have made real attempts to ensure equality in their gender representation.

### 7.1.2 Discourse representation and gender in textbook dialogues

How is the discourse of male and female characters represented in the dialogues in the Step Up and Primary Longman Express series?

Previous studies of the representation of gender in textbook dialogues have usually shown fewer female speakers than male speakers (e.g. Gupta \& Lee, 1990; Hamdan \& Jalabneh, 2009; Hellinger, 1980; Mukundan \& Nimechisale, 2008). In this study, as the dialogues in three different textbook subgenres (speech bubbles, self-contained dialogues, and dialogues embedded in reading passages) were analysed separately, the results cannot
be the same as those of previous textbook studies, but are arguably more sensitive. First, male speakers are not always more visible than female speakers, as evidenced from the number of between-male and between-female dialogues, and the number of male and female speakers. As regards the sub-genres, there are non-significantly more betweenfemale than between-male dialogues in both the speech bubbles and those embedded in the reading passages of $S U$, and slightly more between-female than between-male dialogues in the self-contained dialogues in $P L E$ (see also Section 5.1). The number of male and female speakers also varies with subgenres and dialogue types - single-sex or mixed-sex. In the single-sex dialogues, there are more 'types' of male than female speakers in the single-sex dialogues embedded in the reading passages of $S U$, and the speech bubbles and dialogues embedded in the reading passages of $P L E$. On the other hand, for the mixed-sex dialogues, there are more 'types' of female than male speakers in the speech bubbles of $S U$ and $P L E$, and those embedded in the reading passages of $P L E$ (see also Section 5.2).

Male dominance in dialogues has also been found in previous studies, as evidenced in female speakers' lower mean number of utterances and lower mean length of utterances (Gupta \& Lee, 1990), and more dialogues being initiated by male speakers (Mukundan \& Nimechisale, 2008). In my study, however, neither male nor female speakers dominated in either the single-sex or mixed-sex dialogues. As regards the utterances of male and female speakers, in the single-sex dialogues, human female speakers produced significantly more utterances than male speakers in the self-contained dialogues in PLE (and non-significantly in the speech bubbles and in the dialogues embedded in the reading passages of $S U$ ), but the number of utterances produced by
human male and female speakers in the speech bubbles of $P L E$ is the same. On the other hand, in the mixed-sex dialogues, male speakers produced non-significantly more utterances than female speakers in the speech bubbles of $S U$ and PLE, and in the selfcontained dialogues and the dialogues embedded in the reading passages of $P L E$ (see also Section 5.3). Regarding the number of words uttered, in the single-sex dialogues, while it is significant that human male speakers uttered more words than female speakers in the dialogues embedded in the reading passages of $S U$ and $P L E$, it is also significant that human female speakers uttered more words than male speakers in the self-contained dialogues in PLE. In the mixed-sex dialogues, human male speakers uttered more words than female speakers in all three subgenres in $P L E$, but only the difference in the speech bubbles is significant. Female speakers uttered significantly more words than male speakers only in the speech bubbles of $S U$ (see also Section 5.4). Finally, patterns of male and female speakers initiating more mixed-sex dialogues vary across different dialogue subgenres: human male speakers initiated more mixed-sex dialogues than female speakers only in the speech bubbles of $S U$ and the dialogues embedded in the reading passages of $P L E$, and the difference is not significant (see also Section 5.5).

From what I have presented above, the findings as regards gender representation in dialogues vary somewhat between the two textbook series and across the three dialogue subgenres. However, overall, in both series, female speakers are often as visible as male speakers, and male domination and male 'firstness' in dialogues only sometimes exist, which suggest a more balanced representation of gender than previously found in textbook studies.

### 7.1.3 Visual representation of gender

How is gender represented in the visuals in the Step $U p$ and Primary Longman

## Express series?

As in the reading passages, males were nearly always represented more frequently than females when counted as 'tokens' in the illustrations of the two textbook series. In $S U$, in total, there is a higher visibility of human and non-human males than females in the line drawings and photographs. In PLE, there are also more human males than females in the line drawings. This is similar to findings of other recent studies of gender representation in EFL/ESL textbooks (e.g. Amini \& Birjandi, 2012; Barton \& Sakwa, 2012; Gharbavi \& Mousavi, 2012a; Kobia, 2009; Lee \& Collins, 2008, 2009; Levine \& O’Sullivan, 2010; Mukunsan \& Nimehchisale, 2008). However, there was an exception: human females in the photographs and non-human females in the line drawings were represented more frequently than their male counterparts, although this was not significant (see also Section 6.1).

Previous studies have also usually found that males are depicted visually engaging in a wider range of occupations (Amini \& Birjandi, 2012) and a greater variety of activities (Bahiyah Dato' Hj. Abdul Hamid et al., 2008) than females. When females are portrayed visually, their occupations are mostly professions that are genderstereotypical such as nurse and secretary (Bahiyah Dato’ Hj. Abdul Hamid et al., 2008). In my study, in contrast, the adult males and females in both $S U$ and $P L E$ were illustrated engaging in a similar range of occupations, and both males and females in $S U$ were illustrated engaging in a similar range of outdoor activities and the same number of sports activities. Though teacher was still the most common type of visualised occupation for
adult females, females were also occasionally illustrated working as drivers, police officers, news reporters, and athletes. In contrast, in some other studies, males and females were depicted engaging in different types of activities. For example, in several studies, only females were depicted engaging in household chores (Amini \& Birjandi, 2012; Bahiyah Dato' Hj. Abdul Hamid et al., 2008), and males were illustrated as more active or sporty (Lee \& Collins, 2008; Levine \& O’Sullivan, 2010). In the present study, though human females were slightly more often illustrated engaging in household chores than males, in $S U$, both were illustrated engaging in a similar range of outdoor activities and the same number of sports activities. In $P L E$, males however were portrayed as more active and sporty as in Lee and Collins's $(2008,2010)$ studies, illustrated as engaging in a greater range of sports activities (see also Sections 6.2 and 6.3).

Overall, although males in total were represented more than females in the illustrations in the two textbook series, as in the frequency of occurrence of males and females in the reading passages when counted as 'tokens', males were not always more represented than females in both line drawings and photographs, and the phenomenon of gender stereotyping in terms of occupations and activities engaged in, in the illustrations in the selected books of both textbook series, is not prominent.

Based on all the findings above, it can be concluded that males and females are overall represented similarly and that there is only little gender stereotyping in either textbook series. This shows an improvement over previous studies of earlier textbooks. However, there are still areas of significant gender imbalance, in particular in both series, in the number of male and female tokens in both reading passages and visuals. This contributes to an impression of relative female invisibility. Similarly, in dialogues, for
example, significantly more words were produced by male speakers than female speakers in the speech bubbles of $P L E$.

### 7.2 Possible Explanations for the Findings

There are several possible explanations for the findings of similarities and differences compared with other textbook studies, the rather similar representation of males and females in the two analysed textbook series, and the similarity of the two series in this aspect.

One explanation for my findings concerns the ways in which this study are different from other textbook studies. One way was the counting of 'tokens' and 'types' when analysing the reading passages. Another way was the analysis of different subgenres (i.e. reading passages and dialogues) and visuals (line drawings and photographs). By doing so, patterns of variation of gender representation in these textbooks could be discovered (see also Section 7.3.1 below).

Another reason may be the Guiding Principles for Quality Textbooks published by the CDC Ad Hoc Committee on Textbook Quality of the Education Bureau in 2003, before the publication of the two textbook series. (In 2012, the Education Bureau published a revised version entitled Guiding Principles for Quality Printed Textbooks.) One principle is that " $(\mathrm{t})$ here is not any bias in content, such as over-generalisation and stereotyping" and "( t )he content and illustrations do not carry any form of discrimination on the grounds of gender, ... nor do they suggest exclusion" (Education Bureau, 2003). The guiding principles may serve as a useful reminder to textbook publishers, editors and writers about ensuring gender equality in their representations. In fact, when I sent an
email to the textbook publishers to seek copyright approval, the publishing manager of Longman Hong Kong Education, the publisher of Primary Longman Express, replied that all Hong Kong textbooks need to be approved by the Education Bureau before they can appear in the official recommended booklist. As indicated above, the Education Bureau has strict guidelines for all publishers to follow: avoiding gender stereotyping is one of them, and publishers have to be careful about gender distribution across occupational roles. Therefore, it is not surprising that extreme examples of gender stereotyping were not found in these two currently published textbook series.

In addition, the broadly similar representation of males and females may reflect changes in society. Traditional Chinese society was patriarchal: women were powerless and were under the control of men (Gallagher, 2001). However, such a phenomenon no longer exists in Hong Kong, in part as a Chinese society influenced greatly by western values. In Hong Kong, a developed city, nowadays, males and females enjoy equal opportunities in education and employment as human rights are emphasised and the Sex Discrimination Ordinance (SDO), an anti-discrimination law passed in 1995 (Equal Opportunities Commission, n.d.), is implemented by the Equal Opportunities Commission: it is unlawful to discriminate against either males or females in any way. Therefore, males and females in Hong Kong can be employed in different industries and professions, though more males are employed in manufacturing, construction work, and transport, while more females are employed in community, social and personal services (Census and Statistics Department, 2013b).

Relatedly, there is the changing status of females in Hong Kong. The role of women and men emphasised in the doctrine of Confucianism is that of inside and outside
the home respectively（Li，2000），that is，the＇nei－wai＇（内外）distinction（Chan，2003）． However，as a citizen of Hong Kong，I am aware that the traditional Chinese concepts （the Chinese traditional proverbs I learned in Chinese Language and Chinese History textbooks when I was a school student）＇Man are breadwinners；women are homemakers＇ （男主外，女主內）and＇A woman lacking in talent and learning is virtuous＇（女子無才便是德）are no longer widely seen as applicable to contemporary Hong Kong society because of the higher educational background of females．In the past 15 years，the number of females receiving tertiary education has continued to increase．According to the Census and Statistics Department（2012b）figures，in 1996，13．3\％of females had post－secondary education，compared with $17.1 \%$ of males．However，by 2011，the figure had increased to $25.5 \%$ of females，though it is still slightly lower than the percentage for males $(29.4 \%)$ ．The same patterns can also be found in the labour force participation rate． In 1996，for females this was only $47.8 \%$ compared with $75.7 \%$ for males．In 2011 and 2012，however，the rates for females and males were similar， $53.0 \%$ and $68.4 \%$ in 2011 and $53.6 \%$ and $68.7 \%$ in 2012 respectively．With increasing educational and employment opportunities for females，women have become more economically active and independent（Census and Statistics Department，2012b）．I would argue that textbooks should（and it seems increasingly do）reflect this reality，i．e．should show women engaging in a wide range of occupations，as men do，rather than portraying them largely as housewives engaging in household chores（there are still 682，800 females who were home－makers，compared with $1,813,100$ who were economically active，but they are thus in a minority）（Census and Statistics Department，2013b）．In modern Hong Kong society， women sometimes even have a higher status than men，with some senior management
positions being taken up by females (e.g. Mrs. Margaret Leung Ko May-yee, ViceChairman and Chief Executive of Hang Seng Bank in Hong Kong) and there are two female officials, Carrie Lam Cheng Yuet-ngor (the Chief Secretary for Administration) and Regina Ip Lau Suk-yee (a Legislative Council member), in the Hong Kong Government.

Though the status of women is now higher than before, the concept of 'Men are breadwinners; women are homemakers' (the rather fixed 'gender-specific roles' for men and women (Lee, 2002)) is still deeply-rooted in Hong Kong people's minds. It tends to make males feel that they lose face if they work at home but their wives work outside. Even for professional working women, including middle-class women with have a higher educational background (Lee, 2002), doing household chores and/or looking after children are still considered the major duties if they are also wives. Husbands, on the other hand, just play a secondary role to support their wives in housework. Thus, in this aspect, the textbook series I analysed may just reflect the reality in Hong Kong.

In the selected visuals of the two textbook series, while human females were more often illustrated with long than short hair in the line drawings and photographs, human males were nearly always depicted with short hair. It is easy to be understood because it is considered as unusual and feminine for a man to have long hair. (One Legislative Council member in Hong Kong, Leung Kwok Hung, has as his nickname "Long Hair" because it is unusual for a Legislative Council member, who is supposed to be serious, to have long hair.) Similarly, in clothing, whereas females were more often portrayed wearing dresses than trousers, males were never drawn wearing dresses. Again, this aspect merely reflects reality, because males in Hong Kong (and also in other cultures) do
not wear dresses, except for those that have gender identity disorder who wear clothing items for the opposite sex (Barlow \& Durand, 2012) and male transvestites.

### 7.3 Significance and Contributions to Gender and Language Study

The present study is significant for and can contribute to the field of gender and language because of the data selected for analysis, the methodology used (in particular, my analytical categories, as shown in my Research Questions (see Section 1.5) and its findings, which will be explained in the following two sections:

### 7.3.1 Data, methodology, and analytical categories

First, as reviewed in Section 2.7, gender and language studies conducted in Hong Kong, especially analyses of primary English Language textbooks, are few. And while the main focus of Au's (2004) study was to investigate student and teacher responses to the representation of gender in the dialogues in three sets of primary English Language textbooks, New Welcome to English (2 ${ }^{\text {nd }}$ edition), Integrated Primary English (TOC edition), and New On Target, this study analyses how gender is represented in two widely-used, more currently published English Language textbook series used in Hong Kong primary schools, Step Up and Primary Longman Express.

In this study, I focussed on two main textbook subgenres, reading passages and dialogues, which can be found in all Hong Kong language textbooks for primary school students. Many textbook studies do not distinguish between subgenres, but rather look at a textbook as a whole (e.g. Amini \& Birjandi, 2012; Kobia, 2009). In $S U$, dialogues can be found in speech bubbles, or are embedded in the reading passages. In $P L E$, in addition,
some dialogues are self-contained. Therefore, these three further subgenres (speech bubbles, those embedded in reading passages, and self-contained dialogues) were analysed separately when analysing discourse representation and gender in dialogues, which makes this study different from all previous studies of gender representation in textbooks. I also looked at visuals. While these have been explored before in studies on language textbooks (e.g. Lee \& Collins, 2008, 2009, 2010; Mukundan \& Nimehchisalem, 2008), to my knowledge, no study has broken these down into the two different modes of line drawings and photographs, as I have done. Therefore, the exploration of the visual representation of gender in this study involves the analysis of both line drawings and photographs.

One related aspect of originality and hence contribution of this study is the very detailed analysis of how visualised male and female characters are represented in illustrations. Previous studies of males and females in illustrations mainly focused on frequency of occurrence of male and female characters (e.g. Gharbavi \& Mousavi, 2012a; Kobia, 2009; Lee \& Collins, 2008, 2009; Mukundan \& Nimehchisale, 2008) or the spheres of activities they engaged in (e.g. Bahiyah Dato' Hj. Abdul Hamid, 2008; Giaschi, 2000; Lee \& Collins, 2009; Levine \& O’Sullivan, 2010; Otlowski, 2003). In my study, as well as analysing these two aspects, I also analysed how male and female characters were represented in terms of size/height, hair length, and colour of clothing, for human characters, and skin colour for non-human characters, because these are all aspects through which human and non-human characters can be 'gendered'.

To the best of my knowledge, in studies of gender and textbooks, only Lee and Collins (2008) have attempted to distinguish character 'types' from frequency of
occurrence ('tokens') when analysing the representation of male and female characters in Hong Kong secondary English Language textbooks published in the late 1980s/early1990s. Therefore, to build on their work, in this study, both 'tokens' and 'types' were counted when analysing the frequency of occurrence of male and female node words in the reading passages of the two selected textbook series. This is important as a higher frequency of references to male or female characters ('tokens') does not mean that there are more actual male or female characters, or indeed vice versa.

Since the analysed textbook series are targeted at young readers, non-human characters, namely animals, monsters, robots, and fairies, could be found and were therefore also analysed. In Gupta and Lee's (1990) study, both human and non-human characters were also counted when analysing the frequency of occurrence of male and female characters. However, to my best knowledge, they are the only analysts to do so in analysing language textbooks, so I again built on their work in this way. In my study, however, I also analysed the non-human characters in relation to gender both in the dialogues and illustrations of both textbook series, by analysing if, for example, nonhuman speakers are less visible than male speakers in dialogues, and if non-human male and female characters were drawn in 'masculine' and 'feminine' colours.

Finally, it is innovative to use corpus analysis to analyse gender representation in textbooks in my study. Mukundan and Nimehchisale (2008) used WordSmith Tools 4.0 in their analysis of four English Language textbooks used in Malaysian secondary schools. In my own study, AntConc, another kind of corpus analysis software was used to analyse textual representation of gender quickly and accurately. The reading passages of the two
textbook series were saved separately to have two reading passages sub-corpora so as to allow me to compare how gender is represented in the two textbook series easily.

### 7.3.2 Findings

The use of new analytical categories and hence specific research questions, in conjunction with the use of a corpus, have resulted in new findings that can contribute to the gender and language field in general, and the field of gender representation in language textbooks in particular.

First, it is most encouraging that the gender stereotyping and relative invisibility of female characters that was found in previous studies of language textbooks (e.g. Hartman \& Judd, 1978; Hellinger, 1980) was not found in the current study. Quantitatively, males did not always have higher visibility than females in texts as in other textbook studies, including studies of relatively recent textbooks (e.g. Gharbavi \& Mousavi, 2012a; Mukundan \& Nimehchisale, 2008), but males and females were nearly equally represented; indeed, females were represented more than males in the reading passages in Step Up, when the number of different 'types' of node words for males and females was counted (see also Section 4.1.1). Qualitatively, 'exclusive' positive adjectives were used to describe both males and females in the reading passages of the two textbook series; both males and females were portrayed engaging in household chores. As regards discourse representation and gender in textbook dialogues, previous studies frequently showed a higher visibility for male than female speakers, with both more male than female speakers in dialogues (Gupta \& Lee, 1990; Hellinger, 1980; Mukundan \& Nimehchisale, 2008), and males producing more and longer utterances than
females (Gupta \& Lee, 1990; Mukundan \& Nimehchisale, 2008). In my study, however, neither male nor female speakers dominated in either the single-sex or mixed-sex dialogues by always producing more and longer utterances, and the findings of the current study are patchy and vary between the two textbook series and across different dialogue subgenres.

Although some very positive findings as regards gender equality have been found, females were still represented less frequently than males in illustrations, which is of concern because the result does not reflect the actual number of male and female population in Hong Kong. Textbooks writers, publishers (and also the Education Bureau) need to be vigilant about this, and that the work of researchers of gender representation in textbooks is not over yet.

### 7.4 Conclusion

To sum up, in this chapter, I started by comparing some key findings of the study with relevant previous work on gender representation in EFL/ESL textbooks, for example, it is encouraging that both males and females were illustrated engaging in a similar range of outdoor activities in visuals, but not only depicting females to engage in household chores. After that, I suggested some possible reasons for the findings of my study. In the last part of the chapter, I pointed out the significance of the study, and my contributions to the gender and language field. In the final chapter of this thesis, the Conclusion chapter, I will briefly summarise the main findings of the study, followed by drawing implications for teachers, teacher educators, and materials writers and publishers. Then, I will identify the limitations of the study. Implications for further research will also be suggested.

## Chapter 8

## Conclusion

In this last chapter of the thesis, the major findings of the study, concerning textual representation of gender in reading passages, discourse representation and gender in textbook dialogues, and visual representation of gender, are summarised. Then, the implications for professional practice are discussed. After that, some limitations are identified and directions for further research are suggested, followed by a conclusion for the whole study.

### 8.1 Summary of the Major Findings

This study aims to examine how gender is represented in the two selected English Language textbooks widely-used in Hong Kong primary schools. The major findings of the study are listed as follows:

## A. Textual representation of gender

How is gender represented in the reading passages in the Step $\boldsymbol{U p}$ and Primary
Longman Express series in terms of lexis and grammar?

1. Are males and females comparably represented in terms of: frequency of occurrence (both 'types' and 'tokens'); names and titles, or 'nomination'; pronouns; 'categorization' (family relationship and occupational roles); associated adjectives; and associated verbs, or 'social action'?

Regarding visibility/inclusion of males and females in the reading passages (one of the
subgenres) of both Step Up (SU) and Primary Longman Express (PLE), males as tokens were represented more often than females, and the differences between male and female mentions in the two textbook series are strongly significant. This contrasts with the number of males and females in Hong Kong population. If the male and female references were counted as types, there are slightly more types of node words for females than males in $S U$, but the number of different types of male and female references in PLE is nearly the same.

In the two textbook series, there is a greater number of 'nomination' for males than females when counted as 'tokens'. Both males and females were represented with proper nouns, in a formal, semiformal, or informal way, though both were most often nominated with only their given names. Therefore, the phenomenon of females often being anonymous in the English textbooks analysed by Hellinger (1980) cannot be found.

At the pronoun level, contrary to Healy's (2009) study in which more female than male pronouns were used, in $S U$ and $P L E$, it is significant that males were represented with pronouns as 'tokens' more often than females because there are more 'tokens' of node words for males than females.

In $S U$, females are associated with slightly more different types of family relationship roles, but males and females were represented with a similar range of domestic categorization in PLE. Instead of having a clear division of labour for men and women as in traditional Chinese society, with men working outside home but women occupying only the domestic sphere, both males and females in these two series have roles outside the home. However, males were represented engaging in slightly more types of jobs than females in both textbook series.

Males as a social group were portrayed both positively and negatively through adjectives, but females were rarely portrayed negatively in $S U$. On the other hand, in PLE, as there are more adjective types uniquely associated with females than males, females are associated with more types of positive and negative adjectives. Nevertheless, different from Evans and Davies's (2000) content analysis of two elementary reading textbook series, males and females in $S U$ and $P L E$ were not always portrayed with 'traditionally' masculine and feminine characteristics.

For the verbs associated with males and females in $S U$ and $P L E$, both males and females were represented equitably in terms of different types of 'material' social actions engaged in. Males (but not females) in PLE were portrayed engaging in a range of outdoor activities, but both indoor and outdoor activities were engaged in by males and females in $S U$. Household chores were done by males and females in both textbook series. However, probably because the fixed 'gender-specific roles' for men and women are deeply-rooted in people's minds, including those of the textbook writers, males were only portrayed playing a supportive (but not a primary) role in the household chores.
2. What is the frequency of (a) the 'generic' use of he, man and man-compounds and (b) the 'generic' use of she, woman and woman-compounds when the sex of the referent is not specified, and are there any patterns here?

Probably because there is a growing awareness of gender equality among the public, no 'generic' use of he, she, man, or woman could be found in both $S U$ and $P L E$. The plural form men used to refer to human beings in general could only be found in the same unit in PLE. In occupation terms, a man-compound (fireman) and a woman-compound (policewoman) were used sex-specifically in PLE, but four examples of specific or
unknown reference of sex of man-compounds could be found in $S U$. The collective noun police and gender neutral term police officer were also used generically in both textbook series.
3. What is the frequency of 'male/female firstness', and are there any patterns here? In the reading passages of $S U$, there are non-significantly more instances of 'male firstness' than 'female firstness', but in PLE, except for conventional sex pairing like men and women, there are more instances of 'female firstness' and the difference in the number of instances of male and female 'firstness' is significant.

Overall, textual representation of gender in the reading passages of the $S U$ and $P L E$ textbook series is similar. Gender inequity and gender stereotyping rarely exist at either the lexical or grammatical level in either textbook series.
B. Discourse representation and gender

How is the discourse of male and female characters represented in the dialogues in the Step Up and Primary Longman Express series?

1. How many dialogues are (a) between males, (b) between females, and (c) mixedsex?

In single-sex dialogues, there are non-significantly more between-female than betweenmale dialogues in both the speech bubbles and those embedded in the reading passages of $S U$. In PLE, however, there are significantly more between-male than between-female dialogues in the reading passages. If the number of mixed-sex dialogues is considered, there are non-significantly more mixed-sex than single-sex dialogues in the speech bubbles of $S U$ and $P L E$, and those dialogues embedded in the reading passages of $P L E$.

## 2. How many male and female speakers are there in the single-sex and mixed-sex dialogues?

The number of male and female speakers is different in different subgenres of $S U$ and PLE. In single-sex dialogues, there are more 'types' of male than female speakers both in the dialogues embedded in the reading passages of $S U$, and the speech bubbles and the dialogues embedded in the reading passages of $P L E$. In the mixed-sex dialogues, on the other hand, there are more 'types' of female than male speakers in the speech bubbles of $S U$, and the speech bubbles and those dialogues embedded in the reading passages of PLE.

## 3. How many utterances are there in the single-sex and mixed-sex dialogues?

In the single-sex dialogues, there are non-significantly more utterances in between-male than in between-female dialogues in the speech bubbles of PLE, but non-significantly more utterances in between-female than between-male dialogues in the speech bubbles of $S U$. On the other hand, there are significantly more utterances in the between-female self-contained dialogues and in the between-male dialogues embedded in the reading passages of $P L E$. For the mixed-sex dialogues, male speakers produced non-significantly more utterances than female speakers in the speech bubbles of $S U$ and $P L E$, and in the self-contained dialogues and the dialogues embedded in the reading passages of $P L E$.
4. How many words are uttered by male and female speakers in the single-sex and mixed-sex dialogues?

In the single-sex dialogues, while it is strongly significant that human male speakers uttered more words than female speakers in the dialogues embedded in the reading passages of $S U$ and $P L E$, it is strongly significant that human female speakers uttered
more words than male speakers in the self-contained dialogues in PLE. In the mixed-sex dialogues, human male speakers uttered more words than female speakers in all the three subgenres in PLE. Nonetheless, only the difference in the speech bubbles is significant. The different number of words uttered by male and female speakers is determined by the social context of the dialogues, the speakers' intended purposes, and the relationships between male and female speakers, with friends, classmates, or family members being the most common type of relationship.

## 5. Who initiates and who concludes the mixed-sex dialogues?

In both textbook series, it is not significant that male speakers initiated and concluded more mixed-sex dialogues than female speakers. However, the patterns of male and female speakers initiating or concluding more mixed-sex dialogues vary across different dialogue subgenres (male speakers initiated non-significantly more mixed-sex dialogues in the speech bubbles of $S U$ and in those dialogues embedded in the reading passages of PLE when involving two speakers). This aspect is similar to Poulou's (1997) study in which the pattern of male speakers producing more initiating and final utterances than female speakers varies across different textbooks.

## 6. Are the speech acts of the dialogues related to speaker gender?

The range of speech acts of the analysed mixed-sex dialogues uttered by male and female speakers in the two textbook series is similar. In $S U$, for male speakers, directives are the most common speech act, but for female speakers, assertives are the most common, followed by expositives. On the other hand, in PLE, assertives and directives are the most common speech acts of male speakers, but the most common type for female speakers is directives. When the speakers had "non-expert" relationships as friends, classmates, or
brother and sister, the male speakers produced more directive type of utterances than female speakers, but most of these function as asking for information but not making requests.
7. Are certain features of conversation between male and female speakers, i.e. (a) adjacency pairs, (b) overlapping speech, and (c) hesitations and other nonfluency features, related to speaker gender?

As most of the directive types of utterance function as asking for information, the question-answer type of adjacency pair is the most common in $S U$ and $P L E$, with human and non-human male speakers initiating (with questions) more often than female speakers. Other types of adjacency pairs identified include request-acceptance, request-compliance, offer-acceptance, greeting-greeting, and request-rejection. Female speakers initiated the requests slightly more often than male speakers in the request-acceptance adjacency pairs, but male speakers initiated requests slightly more often in the request-compliance pairs, and such differences are negligible. While overlapping may be common in natural conversation, especially when the interlocutors have a close relationship, no instances of overlapping could be found in either textbook series, but two instances of interruptions (a man interrupting a woman in the same unit) and two instances of hesitation could be found in PLE. This may be explained by the pedagogical aims of textbooks to present good examples of language structures to language learners.

As can be seen above, regarding gender representation in dialogues, the results vary between the two textbook series and across different dialogue subgenres. Neither male/female invisibility nor domination exists, and there are no instances of gender stereotyping in the analysed dialogues.

## C. Visual representation of gender

How is gender represented in the visuals in the Step $U p$ and Primary Longman Express series?

1. Are male and female characters comparably represented in the illustrations in terms of frequency?

Human and non-human male characters were represented significantly more than female characters in both the line drawings and photographs of $S U$. In PLE, human male characters were represented significantly more than female characters in the line drawings, but non-human female characters were represented significantly more than male characters in the photographs. As the visuals in the two textbook series are mostly line drawings, human and non-human males are still much more visible than females in total, and the higher visibility of males in the illustrations is comparable to findings of other textbook studies.
2. What are the different visualised occupations of the adult male and female characters?

While males were represented engaging in slightly more types of jobs than females in the reading passages, the adult males and females in both textbook series were illustrated engaging in a similar range of occupations. Reflecting the reality, among the different occupations, teacher is the most common type of visualised occupational role for adult females because there are more female than male teachers in primary schools in Hong Kong. In contrast to Bahiyah Dato' Hj. Abdul Hamid, et al.'s (2008) study of two primary English Language textbooks in Malaysia, females were sometimes illustrated in traditionally male-dominated occupations such as police officer and driver in PLE.

## 3. How are male and female characters represented in selected illustrations in terms of involvement in activities?

Both human males and females in the line drawings of the selected textbooks of the two textbook series were depicted as involving in some activities. In $S U$, both males and females were illustrated engaging in a similar range of outdoor activities and the same number of sports activities. In PLE, males were portrayed as more active and sporty but less well-behaved than females. On the other hand, females were more often than males illustrated engaging in household chores.
4. How are male and female characters represented in selected illustrations in terms of size/height; hair length; and clothing?

In terms of how males and females were represented in visuals, in the selected illustrations, males and females were illustrated as either in the same height, or in the same size relative to others in nearly half of the analysed illustrations. However, while many females in Hong Kong do not have long hair and wear dresses, human females were more often illustrated with long hair than short hair in both line drawings and photographs, and more often portrayed wearing dresses than trousers. In terms of the colour of clothing, males and females were not always illustrated wearing 'masculine' and 'feminine' colours because less than half of the males in the line drawings of $S U$ and PLE were portrayed wearing blue, and only a small number of females wore pink. In some contrast, pink was used as the skin colour for both non-human male and female characters in both textbook series.

From the results above, regarding gender representation in visuals, although females were still less represented than males and often portrayed having long hair, a
traditional 'cue' for identifying someone's sex, gender stereotyping is not prominent in the illustrations in the selected books of either textbook series.

To conclude, although there is some variation with textbook series and subgenres, particularly in the discourse representation of gender in dialogues, there are obvious similarities in gender representation across the whole data set. The overall results are encouraging, although there are definitely some problematic visibility/inclusion issues of females in the reading passages and visuals, as illustrated above.

### 8.2 Implications for Professional Practice

Though gender is represented fairly and similarly in the two textbook series, some implications for teachers, teacher educators, materials writers, and the Education Bureau about gender issues can still be drawn.

### 8.2.1 Pedagogical implications

In classroom teaching, gender issues may be overlooked by both teachers and students (the aspect of enhancing teacher trainees' awareness of gender issues will be discussed in Section 8.2.2). Many students may not be aware of gender issues and gender imbalance in visuals, or even just simply overlook them in regard to language use (e.g. in reading passages) in the textbooks because they may have accepted the use of sexist language, as Maehara (2010) found in her study of Japanese EFL junior high school students. However, teachers can discuss gender issues or gender stereotyping in the textbooks deliberately and explicitly in lessons so as to raise the students' awareness, especially in the students' early stages of learning English, because the first encounter with the
language (vocabulary items in particular) will arguably remain in a learner's memory for a long time (Maehara, 2010). Through explicit instruction as regards gender issues, the use of sexist language or different aspects of stereotyping of either sex will hopefully not become deeply rooted in learners' minds. The gendered discourse in textbooks can also be undermined (i.e. 'subversion' of gendered text) (Sunderland, Rahim, Cowley, Leontzakou, \& Shattuck, 2001; Sunderland, Cowley, Rahim, Leontzakou, \& Shattuck, 2002) by ridiculing the idea in texts or reversing the roles in dialogues so that boys do not always play the male parts and girls do not always play the female parts in dialogue practice.

### 8.2.2 Implications for teacher educators

Sunderland (1994, p. 64) believes that "a non-sexist textbook cannot guarantee non-sexist teaching". Arguably, gender issues should be an important topic in teacher education programmes, as teacher trainees themselves may not have an awareness of gender issues, or may not have techniques to deal with gender issues involved in textbooks. For example, in her study of English Language teacher trainees' perception of gendered textbook texts, Kızılaslan (2010) found that only a few of the participants could identify gender bias. Most of them just ignored gender issues and did not consider stereotypical roles assigned to males and females as a problem. Barton and Sakwa (2012) also found that teachers usually just ignored gender bias in the textbook texts without dealing with it critically. Sunderland, et al. $(2001,2002)$ believe that traditional gender roles will be maintained if they are dealt with uncritically by teachers (i.e. 'endorsement' of gendered text). Therefore, in the teaching methodology courses of teacher education programmes,
the textbooks that are currently available on the market could be used for discussion to draw the teacher trainees' attention to and raise their awareness of the gender issues involved. Blumberg (2008, p. 358) suggests that teacher trainees should be educated to be able to identify gender bias and gender stereotyping so that they will not be "genderblind", and at the same time, will become more aware of their own attitudes and behaviour to avoid being sexist. Lastly, because it is the teacher treatment of gender in textbooks that influences learners' response to it, Sunderland, et al. (1997, p. 25) suggest that pre-service and in-service teachers should be taught the strategies of dealing with gender representation, or the "mediation of gender", in language textbooks so that, if, for example, dialogues include more boys than girls, boys do not necessarily always play those roles.

### 8.2.3 Implications for materials writers and publishers

Primary textbook writers and publishers should be aware of the possibility of gender stereotyping and possible consequences for their readers (young learners) and should avoid it when writing textbooks. I would argue that textbook writers and illustrators should ensure that the content and illustrations of the textbooks truly reflect reality, without distortion or being unfair to either males or females (e.g. in terms of their physical appearance and characteristics (Women in EFL Materials, 1991; see also Sunderland, 1994)). Moreover, textbook writer(s) can invite a third party (the one other than the textbook writer(s) him/herself or themselves and illustrators, for example, academic consultants) to review the textbooks in a more objective way to make sure that males and females are represented fairly and in a balanced way.

Apart from human characters, materials writers can consider including more imaginative non-human characters that are neither male nor female in the line drawings so as to avoid being criticised for over-representing either males or females in the content and illustrations. In fact, non-human characters may draw younger readers' attention and arouse their reading interests easily. Similarly, materials writers can include general topics that do not involve any human characters in textbooks (as in Unit 8 of Step Up $6 B$ about typhoons, or Unit 6 of Primary Longman Express 5B about some invented funny things) so that the focus is not always on male and female humans, and the problems of gender stereotyping and overrepresentation of males or females can be avoided.

Finally, overrepresentation of males or females can be avoided linguistically. Instead of using masculine and feminine pronouns (he, she, him, and her), the pronouns $Y o u$ and $W e$ can be used instead to refer to people in general so that it is not necessary to refer to a person of a particular sex. The writers of the two textbook series in this study have attempted this. For example, in Unit 5 of Primary Longman Express 5B, the second person pronoun You is used in the sentence "With this insect catcher, you can catch an insect without touching it"; and in Unit 3 of Step $U p 3 B$, We is used in the title "Games We Play" and in the passage "We all love playing games. We play some games outdoors ...". Women in EFL Materials (1991) also suggests some other strategies for avoiding the use of masculine or feminine pronouns, which include changing a pronoun to a noun or a plural, and using the structure he and she or she or he. The aim is not to avoid using masculine or feminine pronouns completely, as we still need to expose our learners to the different subject pronouns, but the use of $W e$ or You can be an alternative
when specifying the sex of referents is not important, which suggests that gender is not important.

### 8.2.4 Implications for the Education Bureau

Although there are guidelines (Guiding Principles for Quality Textbooks) published by the CDC Ad Hoc Committee on Textbook Quality of the Education Bureau, which act as a useful reminder for publishers (see also Section 7.2), it is rather general to remind materials writers not to include any form of gender discrimination or exclusion of males or females in the content and illustrations of textbooks. Since there can be variation in the patterns of gender representation with different subgenres, as the results of my study, the guidelines issued by the Education Bureau need to be more specific to remind the materials writers and publishers to ensure gender equality in different subgenres (both reading passages and dialogues) and types of illustrations (both line drawings and photographs) of their textbooks.

### 8.3 Limitations of the Study

Though this study is innovative and can contribute to the gender and language field (see Section 7.3), a few limitations can still be identified:

First, it is not certain that the two textbook series analysed in this study are the most widely-used textbook series in Hong Kong primary schools. The survey to identify the most widely-used textbook series was based on the replies of only sixty different primary schools (i.e. about one-tenth of all the primary schools in Hong Kong) and it was conducted in December 2011. Later, in early 2013, when I had some informal chats with
primary school English teachers, I discovered that Step Up is not as widely used as before because it has not been updated (as have some other textbook series) since its latest edition published in 2005. Through informal observation and casual talk with primary school English teachers I know personally, I found that Primary Longman Elect published by Longman Hong Kong Education in 2009 is used rather widely nowadays.

There is also a drawback in analysing the illustrations. As the data of the whole study was analysed by me only, there may be some researcher bias, in particular when I determined the sex of different human characters in Primary Longman Express: many characters were drawn very small in size; also I usually considered hair length of the characters to determine their sex, so the analysis may not be 100 per cent accurate. As regards the analysis of the colour of clothing, it was sometimes difficult to distinguish dark pink from purple as these colours look similar when printed in a book. Similarly, even though the number of males and females in line drawings and photographs in the two textbook series was counted by me twice, and so the intra-rater reliability may be high, the actual number of males and females may not be 100 per cent correct, because the characters in some line drawings and photographs were unclearly drawn or shown in a way that made identifying their sex difficult (see two example illustrations below, the first one is from Step Up $6 A$ p. 44 in which people standing at the back were not clearly drawn and the second one is from Primary Longman Express $6 A$ p. 36 in which the first photograph on the left has many people that are unclearly shown which made counting difficult).


Though the two textbook series were analysed from different perspectives, including the analysis of lexis and grammar, dialogues, and visuals, triangulation of data could not be achieved because of the difficulties I encountered, which made the whole study rely only on one source of data. The first problem is that the views of teachers about gender representation in the selected textbook series could not be solicited and the
teacher treatment of gender in textbooks could not be observed either. My initial plan of including teachers' views as part of my data was discarded because most of the English panel heads were not willing to be contacted for further follow-up interviews when I sent out questionnaires to them to find out which textbooks were used in their schools. Another problem is the textbook writers could not be interviewed as their contact details could not be obtained even though great effort was put into finding their contact details through sending email to the publishers and checking the Internet.

The last limitation concerns the speech acts. Although Austin's (1976) and Searle's (1979) taxonomies of speech acts used in the current study are the most influential, it does not mean they are flawless. As suggested by Jaszczolt (2002), the number of categories in the classification of speech acts is arbitrary. Each category includes many different types of speakers' intention (e.g. behabitives in Austin's (1976) taxonomy include apologise, thank, congratulate, criticize), and there is some overlapping in the verbs suggested in different categories (Jaszczolt, 2002) (e.g. verdictives in Austin's (1976) classification of speech acts include the example of describe, but describe is also an expositive). These made it hard to classify the speech acts and may affect the accuracy of the analysis. Palmer (1981, p. 163) writes that "it is very difficult in practice to determine whether a particular utterance is to be characterised as a particular kind of speech act"; in this case, the textbook writers may need to be interviewed to find out the real intentions the writers want to express through the speakers in textbook dialogues.

### 8.4 Implications for Further Research

This study has shown that the study of gender representation in texts, in this case, language textbooks, is still worth doing, and in detailed, with special consideration of subgenres. This should involve consideration of represented gender similarities as well as differences.

For further studies of gender representation, to address the limitations identified in Section 8.3, the following aspects could be considered:

Firstly, reliability could be further enhanced in the analysis of illustrations. Line drawings could be analysed by two researchers independently and then their analyses are compared. Discrepancies could be resolved by having the two researchers review the items together, as in the textbook study conducted by Lee and Collins (2008), in order to achieve high inter-rater reliability.

Also, triangulation could be sought by using different methods of data collection in order to further enhance credibility of the study (McMillan, 2000; Seliger \& Shohamy, 1989). Despite the fact that textbooks may have considerable impact on school children, Sunderland (2000) considers that analysing the text alone may not be useful. If consent can be obtained, lesson observations should be conducted to analyse teacher treatment of gender in textbooks because it is the teacher's 'mediation' of gender representation in textbooks (i.e. 'teacher talk around the text') that influences learners' response to it (Sunderland, et al., 1997, 2001). Sunderland (2000) also claims that any 'effect' can never be accurately predicted because students may interpret the representation of gender in textbooks rather differently (i.e. reader response) and may even "resist" any gendered 'subject positioning' in the text (Sunderland, 2004, p. 22). Therefore, students'
perceptions about gender representation in textbooks should also be identified by interviewing the students. Textbook writers should be interviewed as well to find out the decisions they made when writing the textbooks so as to get some insights that cannot be obtained from analysing only the textbooks. For example, it will be very interesting to find out the reason why the colour of the male students' school uniform in the photographs of Primary Longman Express is always blue. In other words, instead of analysing what is represented and how gender is represented, future research can also explore why gender is represented in a certain way.

Finally, textbooks written by both male and female writers could be analysed. Given the fact that the writers of Primary Longman Express series are all female (but the writers of Step Up are not known), they might represent females and males more equitably in the textbooks. If textbooks written by both male and female writers are analysed, we can determine if the sex of textbook writers relates to how gender is represented.

### 8.5 Concluding Remarks

Gender stereotyping and the relative invisibility of females (including in textbooks) have long been issues paid attention to in gender and language research from as early as the 1970s, focusing on females being relatively excluded from texts or visuals, to their being frequently described in a biased or stereotypical way (e.g. females but not males are emotional, or implying that most women work in a restricted range of occupations, such as secretaries or nurses, or are housewives). The results obtained from different textbook studies are similar, no matter whether the contexts are developed countries such as

Singapore (Gupta \& Lee, 1990) and Australia (Lee \& Collins, 2009) or less-developed countries such as Uganda (Barton \& Sakwa, 2012) and Kenya (Kobia, 2009). This study, conducted after 2010 analysing two currently published and widely-used English Language textbook series in Hong Kong primary schools, is focused on analysing how males and females are represented (gender representation), including if there is gender differentiation (that is, whether the textbook writers and illustrators differentiate between male and female characters a lot or even a little) as well as examining gender bias and gender stereotyping as these may be the case less for modern than for older textbooks. The results of this study are encouraging in that in many ways males and females were represented similarly and fairly, though females were still represented less frequently than males in illustrations. The detailed analyses of the reading passages, dialogues and visuals of the textbooks, all important subgenres found in all Hong Kong primary English Language textbooks, which involved both corpus-informed quantitative frequency counts and qualitative analysis of how gender is represented, make this study a real contribution to the gender and language field.

Nowadays, meanings of the words 'sex' and 'gender' are understood to be more complex. Most basically, physical characteristics are not always reliable cues for us to determine if a person is a male or female, but features such as occupations, activities engaged in, hair length and colour of clothing can be seen as socially constructed as associated with men/boys or women/girls. On top of this, however, individuals have a measure of agency, through which they can implement their own choices or preferences. In terms of gender representation, textbooks may not just simply 'mirror' reality but may reflect personal or ideological active and conscious choices made by the writers,
illustrators, editors and publishers about the number of male and female characters, their roles, what they say, what they do, what they wear, and so on. On the other hand, these 'representers' may not have any agenda in their minds, but may just, say, represent males and females differently, unconsciously. Yet, as textbooks are an important medium for instructional purposes often targeting young learners, and as the world is continually changing, textbook writers and illustrators may need to learn to represent males and females in an ever more equitable or at least socially realistic manner. This study has shown that this is possible - at least to a large extent.

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[^0]:    ${ }^{1}$ The Horn Book is a guide which includes reviews about books for children and young adults.

[^1]:    ${ }^{2}$ Group I: able to learn effectively in either Chinese or English
    Group II: able to learn more effectively in Chinese
    Group III: able to learn better in Chinese but may also learn effectively in English

[^2]:    ${ }^{3}$ Lexis here refers to words or vocabulary (Barcroft, Sunderman, \& Schmitt, 2011), while grammar simply refers to the linking of words together (Swan, 2011).
    ${ }^{4}$ Terms in single quotes refer to van Leeuwen's (2008) functional grammatical categories.

[^3]:    ${ }^{5}$ The unit titles are also the titles of the reading passages in the different units of both textbook series.

[^4]:    ${ }^{6}$ I borrowed the term 'firstness' from Jones et al. (1997, p. 474).

[^5]:    *Robot Jimmy: Good morning, Miss Rom. (First Pair Part - Greeting)
    Miss Rom: Good morning. Welcome to Smart School. (Second Pair Part

[^6]:    ${ }^{7}$ False starts is a feature which shows an ungrammatical sequence of words by either taking the form of unnecessary repetition of a word or a reformulation of what has been said, whereas syntactic anomalies occur in natural speech when a person fails to control the syntax of his/her utterances and produces constructions which deviate from normal (Leech \& Short, 2007).

