**Chapter 12. Gender Stereotypes in Children’s Picture Books: A Systemic Functional Multimodal Discourse Analysis**

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**Abstract**

Children’s picture books are essential instruments in young children’s conceptualisations of gender and gender roles, highlighting the importance of such representations as a fundamental educational issue. Empirical research in the area has revealed how the landscape of gender representations has undergone great changes, where obvious prejudice and stereotypes have gradually retreated and been replaced by subtler and more covert forms. Thus, we argue a more revealing and robust approach is needed to accommodate these new forms of gender stereotyping. A Systemic Functional Multimodal Discourse Analysis (SF-MDA) approach is proposed in this chapter to investigate the meaning-making process of constructing gender stereotypes in children’s picture books. The analysis of four sample picture books demonstrates how gender stereotypes are constructed through combinations of verbal and visual choices, how covert gender stereotypes differ from overt gender stereotypes, and how the authors/ illustrators utilise different multimodal strategies to represent and construct gender relations.

**Keywords**: gender stereotypes, SF-MDA, social semiotics, children’s picture books

**Introduction**

Children’s picture books are typical hybrid texts that tell stories via interplays between words and visual images (Hamer, Nodelman and Reimer 2017; Sipe 2011; Nodelman 1988). In recent decades, the significant role of picture books in childhood development has been recognised by educators and scholars. On the one hand, they are convenient educational texts leading young children into the literary world and preparing them for future schooling (Rose 2011; Arizpe and Styles 2003; Torr and Clugston 1999; Meek 1988). On the other hand, they are essential instruments of socialisation that provide implicit ideological messages about the world (Stephens 1992; Fox 1993; Bussey and Bandura 1999). This chapter focuses on one aspect of picture book representation, namely gender stereotypes, and proposes a social semiotic multimodal approach to analyse how gender stereotypes are constructed in picture books for young children.

Specifically, this chapter aims to investigate how language and images function together to construct gender roles in social practices associated with family life and day-to-day activities in children’s picture books. A Systemic Functional Multimodal Discourse Analysis (SF-MDA) (e.g. O’Halloran 2008; O’Halloran and Lim 2014; Jewitt, Bezemer and O’Halloran 2016) is adopted to examine the interplay and joint effects of semiotic choices, which are interpreted in their social cultural context. In the SF-MDA approach, words and images receive equal attention and semantic relations are investigated in depth. In this way, we demonstrate how gender stereotypes are constructed through combinations of verbal and visual choices, how covert gender stereotypes differ from overt gender stereotypes, and how the authors/ illustrators utilise different strategies to represent and construct gender relations.

In what follows, a brief review on gender stereotypes in children’s literature is provided to contextualise this study, followed by a sample analysis of two pairs of picture books conduced from an SF-MDA perspective. The results will reveal the benefits of adopting a critical multimodal approach to gender studies to understand how children’s books represent social practices according to gender.

**Gender stereotypes in children’s literature**

Sexism in children’s literature is not a new topic. Due to the impact of the women’s movement, since 1970s people have questioned gender portrayals in media and literature. More recently, the Me Too (#MeToo) social movement has seen women speaking out directly about sexual abuse and sexual harassment in social settings, including the workplace. Despite the awareness of gendered representations and sexist behaviour, large-scale change is still required, as demonstrated by the Me Too and other social movements, which seek justice for women and other marginalised people on an international scale. The aim of this study is to investigate how gendered roles persist in children’s picture books which are critical sites for the inculcation of social practices (e.g. van Leeuwen 2008). Research in this area is briefly reviewed, before offering SF-MDA as a theoretical tool to address the limitations of existing approaches.

Researchers have carried out extensive work and conducted a series of empirical studies examining gender issues in children’s literature. For example, scholarly attention was drawn to the issue of female underrepresentation. From the 1970s until the 2010s, empirical studies repeatedly confirmed that female underrepresentation and gender-stereotyped characterisations were pervasive in children’s picture books (e.g. Weitzman et al. 1972; Nilsen 1971, 1978; Barnett 1986; Heintz 1987; Allen et al. 1993; Gooden and Gooden 2001; Hamilton et al. 2006). Weitzman et al.’s (1972) seminal work closely examined ‘Caldecott Medal and Honor’ books from 1938 to 1970, along with a sample of ‘Little Golden Books’, ‘Newbery Award’ winners, and children’s etiquette books. The results show male characters significantly outnumber female ones in central roles, titles and illustrations. In their words, “women are simply invisible” (Weitzman et al. 1972: 1128) in children’s books. Moreover, compared with active, adventurous, and talented male characters, the characterisations of females are usually “insignificant and inconspicuous” (Weitzman et al. 1972: 1129). Their study led to several follow-up studies and was updated by Heintz (1987) who sampled the ‘Caldecott Medal’ winners published from 1971 to 1984. She evaluated the male characters’ and female characters’ activities and occupations and calculated their occurrences in texts and pictures. Heintz (1987) found that Weitzman and his colleagues’ observations in the 1970s remained true in the 1980s. Stereotypical portrayals were still rampant in picture book discourses, despite an improved male/ female character distribution ratio (from 11:1 to 2:1). This trend was confirmed in Allen et al. (1993), who coded and compared ‘Caldecott Medal Award Picture Books’ from 1938 to 1940 and from 1986 to 1988. They concluded, “a weak trend towards egalitarian representation was noted in 7 out of 11 categories, although males still comprised the majority of characters in each category” (Allen et al. 1993: 67). Subsequently, Hamilton et al. (2006) gathered a large sample of 30 ‘Caldecott Prize’ winners and runners-up from 1995 to 2001 and another 170 bestselling picture books from 1999 to 2001. They examined a wide range of variables identified in previous studies via survey instruments of frequency counts, classifications, and fill-in-the-blanks as well as book titles, year of publication, and authors. They found the statistics of male characters nearly doubled (1.8:1) that of female characters in titles, illustrations and main characters, and that female protagonists did more nurturing work and were seen in more indoor scenes than male main characters. They also disclosed male authors favoured more male characters, while female authors did not display such a preference. In other words, the disparity between the number of male main characters and female main characters was related to the gender of the author. Five years later, Paynter (2011) re-applied methods in Hamilton et al. (2006) on a renewed dataset. The results showed that most measures of stereotypes and underrepresentation had improved since Hamilton et al. (2006), though assertive/ aggressive female characterisations were still lacking. From these studies, it can be seen that although different samples in different historical periods may result in differential findings, the overall conclusions of these studies are consistent; that is, picture books remain a site of gender stereotypes.

Against this background, changing patterns in the landscape of gender representation across different historical periods are noteworthy. For instance, Clark et al. (2003) identified an inconsistent trend in gender stereotyping and underrepresentation from the 1930s to the 1960s, suggested in the title of their article “two steps forwards, one step back” (Clark et al. 2003: 439). They found that in the later 1940s and 1960s females were less gender stereotyped, though severely underrepresented. Alternatively, in the late 1930s and 1950s, they were better represented though severely stereotyped. Kortenhaus and Demarest (1993) examined gender roles in 150 picture books from the 1940s to the 1990s and found that male and female characters became more balanced, with the male/ female ratio in central roles in the 1990s being approximately 1.9:1. A subtle trend was noted in gender depictions during this period. Girls were portrayed in more instrumental activities, but they remained as passive and dependent as they were 50 years previously, while boys occasionally appeared in passive and dependent roles and were instrumental as usual. Diekman and Murnen (2004) argued that gender roles have changed asymmetrically and that female roles have changed more than male roles. They examined both sexist picture books and non-sexist picture books classified by previous researchers and publishers, and they found that even the so-called non-sexist picture books were sexist in essence. They allowed female characters to adopt traditional masculine attributes and roles, but not vice versa. Portrayals in the so-called non-sexist picture books were still, to a large extent, restricted to traditional gender roles. Anderson and Hamilton (2005) focused on the representation of parents. They analysed 200 popular children’s picture books and found that males also fell victim to gender bias as portrayals of fathers were significantly underrepresented and were usually stereotyped as stoic actors who were insignificant to their children. In other studies of different historical periods, the patterns of change vary from period to period. All these studies point towards one certainty – that is, “change toward gender equality is uneven, nonlinear, and tied to patterns to feminist activism and backlash” (McCabe et al. 2011: 198).

From this brief review, it can be seen that research on gender issues in children’s picture books has been predominantly empirical and quantitative (sometimes in combination with intensive text analysis of a small sample). These studies usually collect a dataset of picture books, design procedures to code the data, extract quantitative data from the dataset, and interpret the results (Paynter, 2011). This method, which involves converting qualitative data (picture books in this case) into quantitative ones (typically frequencies of occurrences), is capable of addressing the question of female underrepresentation. However, as studies advance in depth, content analysis also has several weaknesses. The most severe shortcoming is that this kind of analysis breaks the text into separate components and filters out their relations, which may result in a loss of a holistic view of the text. In addition, although females have become increasingly visible in the literary world as a result of women’s movements, gender stereotypes have become more and more subtle and covert. That is, compared with the blatant underrepresentation and highly stereotyped characterisations of females in early times, nowadays, gender stereotypes have retreated from the foreground to the background. As Hamilton et al. (2006: 764) observed, “authors consciously or unconsciously resort to subtle sexism because blatant sexism no longer passes unnoticed. Prejudice and stereotyping tend to go underground when their more overt forms become less socially acceptable”. Obviously, a more revealing and robust approach is needed to accommodate this new situation. We propose that SF-MDA offers the necessary theoretical tools to address the limitations of existing approaches. In what follows, we first describe the approach, before briefly describing the four children’s picture books which provide the data for this study.

**SF-MDA approach to gender stereotypes in picture books**

***Selected Multimodal Systems***

Our study of multimodality draws on Halliday’s social semiotic theory. Halliday (1978) considered language and society as a unified concept which needs to be understood and investigated as a whole. Culture is conceptualised as interrelated semiotic systems and “cultural meanings are realised through a great variety of symbolic modes, of which semantics is one; the semantic system is the linguistic mode of meaning” (Halliday 2003: 83). Based on Halliday’s premise that the organisation of semiotic resources reflects their social functions, the functionality of language as well as other semiotic resources is theorised in terms of three metafunctions: ideational function (to describe world happenings), interpersonal function (to enact social relations) and textual function (to organise text as a coherent semantic unit). Meaning potentials are explicated and organised as rank-based systems of semantic choices, so text is interpreted in terms of these semantic choices selected by speakers in specific contexts. These are the key tenets in a social semiotic approach to multimodality, which sets the point of departure for the current analysis. In what follows, the analytical frameworks for three metafunctional meanings are presented with a brief discussion on their meaning-making contributions in context. These frameworks draw upon concepts from social semiotics (Kress and van Leeuwen 2001, 2006; van Leeuwen 2008), systemic functional linguistics (Halliday 1994), and visual narrative analysis (Painter et al. 2013). Since not all systems are utilised in equal measure; here we only examine systems that are actively used in the sample texts.

Figure 12.1 is the network for ideational choices in images, based on Painter et al. (2013). Ideation in images is analysed in terms of participant, process and circumstance. The identity of a visual participant is established via repetition of salient features in its appearance, and changes in appearance can signal changes in the status of the participant. Visual processes are identified by the presence of visual vectors created by oblique lines, postures, gaze, and other visual cues. In sequential images, the default reading of relations between two successive images is that of temporal relations, which signals the unfolding of narrative events. Images may either depict actions in succession or in simultaneity, depending on the context. In each picture book, there is usually a set number of images per activity sequence, and any deviations from this will constitute a marked choice of a speed-up or a slow-down in the pace of unfolding events. Meanwhile, the second image may depict an expected action, thus fulfilling expectation of the previous image, or it may fail the expectation by depicting an unexpected action. These are visual techniques for creating tension and transitions between different visual events. Circumstances are the settings where participants appear. Along with the unfolding of a story, depictions of circumstances may vary from image to image. Variations in the degrees of details signal different levels of contextualisation, and the continuity of a same circumstance implies the continuity of a previous activity sequence, while relocating circumstance usually functions to stage the story.

<INSERT **Figure 12.1** Options for ideational meaning adapted from Painter et al. (2013: 64, 71, 80) HERE>

Multimodal resources for constructing interpersonal relationships between readers and depicted characters include shot distance, view perspective, gaze, drawing styles and colours, which have been theorised into systems of Shot Distance, View Perspective and Gaze (van Leeuwen 2008) (see Figure 12.2), and Modality (Painter at al. 2013) (see Figure 12.3). For example, options in Shot Distance are realised by sizes of frame. In a long shot, depicted characters are presented in full length, which signal a remote social distance between the viewer and the character. Such symbolic social distance can be narrowed down when zooming into the representation from a long shot gradually to a close shot. View Perspective is the point of view from which the visual artefacts are viewed; different perspectives can convey different attitudes. Kress and van Leeuwen (2006) distinguish between horizontal angles (realising involvement) and vertical angles (realising power). Readers feel more involved when looking at the depicted characters from a frontal angle, and feel more detached when watching the characters from an oblique angle. Similarly, readers feel empowered if they can look down upon the depicted characters; otherwise, they feel disempowered when they have to look up to the depicted characters. Gaze is about symbolic interaction between depicted characters and the readers. Readers feel more engaged if they are visually addressed by a depicted character. Accordingly, absence of such a visual address grants readers an observer or onlooker position. In that case, the visual representation can be understood as a visual offer of information; otherwise, it would be interpreted as a visual demand for a symbolic response from the viewer.

<INSERT **Figure 12.2** Basic options for construing interpersonal meaning, adapted from van Leeuwen (2008: 141) HERE>

Modality (see Figure 12.3) is about the realness of the visual representation; this study mainly looks into two subsystems of visual modality, namely Pathos (drawing styles) and Ambience (the use of colour). Characters in picture books are drawn in three broad styles, i.e. “minimalist, generic, and naturalistic” (Painter et al. 2013: 30). Different drawing styles index different levels of visual modality, which affect the truth of the image (Kress and van Leeuwen 2006), and influence readers’ alignment (Painter et al. 2013). Similarly, different ways of colouring subconsciously influence viewers’ feelings and attitudes towards the visual representation.

<INSERT **Figure 12.3** Options for visual modality, adapted from Painter at al. (2013: 35, 36) HERE>

Compositional meaning in image is about packing meaning into accessible units via the use of Layout and Framing. Options for visual composition are systematised in Figure 12.4. In terms of Layout, on a single-paged or double-paged image, verbiage and image may be integrated or in complementary arrangement. Usually, they may be presented along horizontal axis or vertical axis. Despite Kress and van Leeuwen’s (2006) claims about the corresponding orientation between left-right and Given-New, and between upper-down and Ideal-Real, in this study we take Painter et al. (2013)’s position and consider semantic weight and information value in terms of how much space devoted to verbiage/ image, not by their orientation of distribution. Framing in picture books is about whether images are constrained within a closed margin or not, which results in bound and unbound distinctions. In unbound images, “characters are less constrained by their circumstances and the story world is more opened up to the reader” (Painter et al. 2013: 105). Especially in unbound and decontextualised images, the characters themselves (and their behaviours) will be foregrounded, which may spark immediate appraisal. In bound images, the story world is clearly delimited and characters are more confined to the depicted world. We incorporate these systemic functional systems into multimodal analysis software in order to undertake the analysis of the children’s picture books under consideration in this study.

<INSERT **Figure 12.4** Options for compositional meaning, adapted from Painter et al. (2013: 94, 99, 103) HERE>

***Multimodal Analysis Image Software***

In this study, the Multimodal Analysis Image1 (MMA Image) is used to facilitate our analysis. MMA Image is an interactive software developed by Kay O’Halloran and colleagues for annotation and analysis of register-based multimodal texts. It allows users to import their media files and analyse them using built-in catalogues, or to create their own catalogues according to specific tasks (O’Halloran, Tan and Wignell 2019; O’Halloran, Wignell and Tan 2015). Based on the multimodal systems discussed in the previous section (Figures 12.1-12.4), we created our own catalogue using facilities in the MMA Image platform, as displayed in Figure 12.5. The page-based images are annotated manually in separate windows using these self-defined catalogues, and the results are stored in a database for future processing. A sample analysis from *Busy Father* Book is displayed in Figure 12.6.

<INSERT **Figure 12.5** Screenshot of multimodal systems (left column) and system choices (right column) in MMA Image HERE>

<INSERT **Figure 12.6** SF-MDA Analysis of a double-paged spread in *Busy Mother* book HERE>

***The Data***

The sample texts in this study are Richard Scarry’s *Mother Cat’s Busy Day* (1997) and *Father Cat’s Busy Day* (1997), and Laura Numeroff (author) and Lynn Munsigner (illustrator)’s *What Daddies Do Best* (2001) and *What Mommies Do Best* (1998). There are several reasons for choosing these four picture books. Richard Scarry is one of the best-selling authors and illustrators of children’s books2. In his productive and well documented career, Richard Scarry illustrated over 150 picture books, most of which are still in print. His works are translated in over twenty languages and have sold over 100 million copies worldwide. More relevant for the purposes of this study is the style of his illustrations. His stories usually take place in typical social contexts and the illustrations are detailed, which is useful for multimodal discourse analysis. *Mother Cat’s Busy Day* and *Father Cat’s Busy Day* are two books in Richard Scarry’s ‘Busy Day’ storybook series. Other books in this series include *Humperdink’s Busy Day*, *Miss Honey’s Busy Day*, *Mr. Gronkles’ Busy Day*, *Rudolf Von Flugel’s Busy Day*, *Sergeant Murphy’s Busy Day*. Each book depicts the daily experience of one central character, which is usually a professional member of society. Actually, the juxtaposition of mother/ father roles with professional social actors in the series itself is noteworthy. The selected picture books display the complementary aspects of heterosexual parenting, which makes them perfect sites for studying gender stereotypes. Hereinafter we will refer to these two books as *Busy Father* book and *Busy Mother* book*.*

If *Busy Father* and *Busy Mother* booksdescribe heterosexual parents’ daily life, *What Daddies Do Best* (2001) and *What Mummies Do Best* (1998)construct role models for parents. Hereinafter, we will refer to latter two books as *Daddies* book and *Mummies* book. These two books are also selected from a book series; the rest are *What Grandmas Do Best*, *What Grandpas Do Best*, *What Aunts Do Best* and *What Uncles Do Best*. Obviously, the focus of the series is the roles of family members. It gives condensed depictions on father’s/ mother’s parenting activities. In this case, the *Daddies* bookand *Mummies* booknaturally form a pair which can be compared. Interestingly, the written text in the *Daddies* bookand the *Mummies* book are identical, but the accompanying illustrations differ. This special text-image relationship is informative when employing a detailed analysis that can reveal underlying ideologies.

As our analysis demonstrates, these two pairs of picture books stereotype gender in different ways directly related to visual and verbal choices. Gender stereotypes in the *Busy Father* and *Busy Mother* books are overt and foregrounded; in the *Daddies* and *Mummies* books, they are subtle, covert and hidden, not shown but implied.

**Analysis and discussion**

***Busy Mother/ Busy Father books***

These two picture books have different texts and images. To investigate gender stereotypes in these books, we start with their ideational meanings, that is, about world happenings encoded in language and images. In the linguistic analysis, we treat gender as an independent variable and inspect ideational choices in the father’s and mother’s texts. Systemic Functional Theory considers ideational meaning (more specifically, experiential meaning) in terms of participant + process + circumstance configurations (e.g. ‘the cat + meowed + loudly). Halliday (1994) recognises a second dimension of the transitivity analysis: namely, the ergative model which is characterised by the combination of Agent + Process + Medium + Circumstance, with the Medium and Process being obligatory elements (i.e. the Medium is the participant through which the process is realised) (e.g. the cat + scratched + the door + last night). These two models disclose two complementary perspectives on the transitivity phenomena. The transitive model centres on “deed-&-extension” (Halliday 1994: 340); being transitive means the impact can be extended to some other entity. In this case, there is an Agent, Medium and Process involved. The ergative model focuses on “cause-&-effect” (Halliday 1994: 340), i.e. the participant (Agent) which impacts on an entity (Medium). In some cases, there can be a participant who benefits from the process, called the Beneficiary (e.g. ‘the mother cooked breakfast *for the children’*). By conducting transitive analysis on our sample texts, we can obtain insights into the distribution of agency and the impact of father and mother on the represented activities, and more importantly, the semantic relations in their daily interactions.

As such, the methodology of the verbal analysis is: A. recognise father’s/ mother’s activities in the text; B. organise the selected text into clauses; C. analyse semantic roles and process types in these clauses; D. interpret the results. Following this, the images associated with each text are analysed using frameworks in Figures 12.1–12.4 and Multimodal Analysis Image software in order to interpret the text and image relations. The results of the linguistic analysis (Agent, Process, Medium and Beneficiary) for *Busy Father* and *Busy Mother* books are displayed in Table 12.1. The results show that Mother Cat participates in 37 processes. She functions as Agent in 20 processes, as Beneficiary in 5 processes, and as Medium in 12 processes. Compared with the number of occurrences for Father Cat (i.e. Agent 20; Beneficiary 2, and Medium 11), these two groups of statistics are quite close. However, when we scrutinise the specific semantic relations in Father Cat’s and Mother Cat’s daily activities, an essential difference is observed in the ideational choices for the mother and father as Agents who undertake an action which impacts on something (i.e. the Medium). Unlike Father Cat, where most of the entities (i.e. Mediums) which are impacted upon are artificial objects (e.g. boats, cars, breakfast, cups of coffee etc.), Mother Cat’s activities are closely related to household issues and caregiving works. This is supported by the observation that among Mother Cat’s 37 processes, children appear as Mediums 6 times, as Beneficiaries 2 times, and as Agent 2 times, compared with Father Cat’s roles where children only appear in 2 out of 33 processes. Obviously, the mother-children bond is constructed to be much tighter than the father-children one. Given the immediate context that the *Busy Mother* book represents one working day for mother, and that the *Busy Father* book shows the father’s weekend experiences, the difference between father’s role and the mother’s role could be assumed to be even larger than represented. Moreover, the burden of parenthood is overwhelmingly loaded on mother, while the father is largely absent from parenting duties. Apart from that, semantic roles in the *Busy Mother* book are more diverse. In Mother Cat’s daily activities, besides herself, other interactants include children, family, father, repairman, and restaurateur, while in Father Cat’s experience, he mainly deals with inanimate objects. This kind of depiction foregrounds father’s instrumental role of breadwinner, while it ignores other important aspects of fatherhood. It is fair to say that the gender representations of father and mother in these two picture books are equally stereotyped. In addition, the configuration of process types shows that although the father and mother are both engaged in various happenings, there are subtle differences in terms of the range of processes and the number of mental cognitive processes. That is, Mother Cat participates in 25 material processes, 9 verbal processes, 2 mental processes (1 cognition and 1 perception), and 1 relational process, compared with Father Cat’s 19 material processes, 5 mental processes (2 perception process and 3 cognition process), 5 verbal processes, 3 behavioural processes, and 1 relational process. In terms of the distribution of mental processes, van Leeuwen (2008: 58) observes that “the greater the power of social actors, the more likely it is that cognitive, rather than affective, reactions will be attributed to them”. Numbers in this study may not be enough to support this claim, but if a bigger sample size shows a correlation between gender and such a preference, it would be more evidence for gender stereotypes at a deeper level.

<INSERT **Table 12.1** *Busy Father/ Busy Mother* books: distribution of semantic roles HERE>

Clearly, ideation in language is gender stereotyped in these two picture books. Such stereotypical gender portrayals are enhanced in visual ideational choices. In images, Mother Cat wears an apron and a one-piece dress; this appearance remains consistent across the whole story. In the *Busy Father* book, where the temporal setting is a weekend, Mother Cat still wears her apron as usual. Compared with Father Cat, who wears a suit on working days, and changes into striped pyjamas on weekends, Mother Cat’s apron can be interpreted as a symbolic attribute that foregrounds Mother Cat’s caregiver role. The apron has become the most salient feature in Mother Cat. Such depictions reinforce traditional gender roles and, to some extent, restrict Mother Cat to family discourses. In depicting the characters, the central characters’ appearances remain unchanged across both books (i.e. unchanged option) and they constantly reappear in the successive images (i.e. reappear/ immediate option). The combination of these two options helps readers in identity retrieval of these central characters and successfully focus readers’ attention on characters’ actions. In the depiction of activity sequences, these two picture books share similar norms in terms of the number of images per activity sequence; for instance, a small scale activity sequence like ‘having breakfast’ is represented as a single image episode (i.e. an action) within a larger scale activity sequence of ‘getting ready for school’. Basically, one episode corresponds to one small scale activity sequence (i.e. one action in this case). This pace is maintained throughout the whole story. Despite a lack of obvious variation in pace, there is an observable difference in the inter-event relations of these two picture books. Figure 12.7 and Figure 12.8 are two flow charts of Father Cat’s and Mother Cat’s action sequences and the inter-event relations in-between. The ordinal numerals of each image episode mark their sequential order in page, for instance, 2.1 refers to the 1st episode in 2nd double-paged spread and episode 10 refers to the 10th double-paged spread which consists of a single image. The basic analysis unit is a double-paged spread, which is pre-determined by the illustrator. The square bracket means two or three actions happen simultaneously, and an arrow indicates the temporal relation of succession between actions depicted in successive episodes.

The visual narrative in the *Busy Mother* book is summarised in Figure 12.7. The inter-event relations in this book are simple and clear. As indicated by arrows in the flow chart, most episodes are arranged in temporal order of succession; as the narrative unfolds in sequential images, readers’ expectations about Mother Cat’s next action are fulfilled (i.e. +fulfil option in Process Unfolding network). The consistent use of the +fulfil option and the succession option between sequential images signals Mother Cat’s smooth shift from one task to another. This impression is reinforced by constantly relocating Mother Cat from one setting to next in chronological order (i.e. change context option), especially in the first three double-paged spreads which occupy 10 out of 28 image episodes (the total number of image episodes in this picture book), where Mother Cat is in constant motion from bedroom to kitchen, and from dining room to the backyard. Such condensed depictions of visual actions within one activity sequence (i.e. ‘getting ready for school) create the atmosphere of a busy working day morning. The simultaneity relation between sequential images/ image episodes depends on readers being able to see different characters’ actions at the same time (Painter et al. 2013). In Mother Cat’s flow chart, the simultaneity relation (indicated by square bracket) is constructed by depicting different characters’ actions in successive episodes within the same spread. For instance, Figure 12.6 is a screenshot of sample analysis of the first spread in *Busy Mother* book (which consists of 4 episodes, i.e. episode 1.1-1.4); episode 1.3 depicts Father Cat and children having breakfast in the dining room, and episode 1.4 depicts Mother Cat making sandwiches for the children’s lunchboxes. Actions in these two episodes happen simultaneously. This arrangement persists in the fourth, fifth and sixth spreads where Mother Cat’s actions are depicted side by side with Mr. Fixit’s actions to represent simultaneity. The actions of the same characters in successive pages naturally form a temporal succession of activity sequence. Furthermore, the number of image episodes per activity sequences signals the time duration of the event. While the time-consuming work of ‘Mr. Fixit fixing banging door’ (which spreads 5 episodes) runs in the background, Mother Cat has efficiently finished several tasks. Here, the use of the simultaneity option exhibits Mother Cat’s talent for time management. In a word, the combination of semiotic choices (i.e. succession option, simultaneity option, and + fulfil option) constructs the image of a busy and efficient mother.

<INSERT **Figure 12.7** Flowchart of Mother Cat’s action sequence and their inter-event relations HERE>

Different from the *Busy Mother* book, inter-event relations in the *Busy Father* bookare more complex. As shown in Figure 12.8, the most salient feature is the joint use of counter-expectation and causality relations. The temporal order of Father Cat’s action sequence is interrupted from episode 5.3 (Father Cat and Children have milkshakes while waiting for their car to be fixed). Its immediately successive episode (i.e. episode 6), however, depicts Father Cat’s sailboat trailer rolling down to the street. This unexpected event makes a counter-expectation (i.e. –fulfil option) and creates a crisis in the visual narrative. The cause of the crisis, however, refers back to episode 3.4 (which depicts Father Cat pulling the sailboat into the driveway). Such a long interval (5 episodes) between cause and effect adds excitement to the story and creates tension in the plot. Similarly, the second crisis is created by counter-expectation (i.e. –fulfil option) from episode 7.3 (the sailboat is pulled away by a truck trailer) to its successive episode on the next page (episode 8.1 the ice-cream melts in the car) and by causality relation between episode 4.2 (Father Cat and children do shopping in the market) and episode 8.1 (ice cream melts in car). Chronologically, two crises (the sailboat rolling down to the street and the ice cream melting in the car) happen simultaneously (which is indicated by the large square brackets in Figure 8). Unlike *Busy Mother* book, where simultaneity is constructed by interweaving two characters’ actions in the same spread, in *Busy Father* book the author/ illustrator adopts a differed strategy. He depicts the first crisis in one sequence (episode 6 to 7.3) without interruptions, and then inserts the whole activity sequence into the second crisis exactly between episode 5.3 (waiting for their car to be fixed) and episode 8.1 (finding their car in a mess due to the melted ice cream). The benefits of this arrangement are obvious. On the one hand, it creates an information gap between readers and the depicted character of Father Cat. It allows the first crisis (sailboat rolling away into street) to occur in the background. Father Cat is not aware of it, while readers are witness to the on-going mishaps. Such information gap between readers and the depicted character adds fun to the reading experience. On the other hand, it allows crisis and tension to accumulate along with the unfolding of the narrative in sequential images, until it reaches the climax in the last episode of the whole book when Mother Cat asks Father Cat to first change out of his pyjamas. By that moment, the image of an inept, clumsy, and dishevelled father stands vividly in readers’ minds and the delight in reading this picture book climaxes. The joint use of counter-expectation (-fulfil option), causality and insertion of one activity sequence dramatises Father Cat’s troublesome weekend.

<INSERT **Figure 12.8** Flowchart of Father Cat’s action sequence and their inter-event relations HERE>

In contrast to Father Cat’s dramatic experiences, Mother Cat exhibits great talent and capability. We can sense the author/ illustrator’s admiration for Mother Cat. Positive as her image is, such stereotyped gender portrayal is still harmful as it only foregrounds women’s caregiver role. Similarly, the portrayal of Father Cat is sexist. The semiotic choices exaggerate Father Cat’s shortcomings and restricts him to traditional father role as breadwinner while denying his (possible) talents in other areas of life.

***Daddies* book*/ Mommies* book**

*Daddies/ Mommies* books are not about a particular parent, but about the general concept of parenthood. The sequence of events in these two picture books are linked by a logical chain of comparison, rather than the temporal unfolding of events. In other words, both books are not visual narratives, even though each picture is a narrative one. The generic concept of parents is constructed via depictions of ten different anthropomorphic parents.

In the written text, the ideational choices in *Daddies/ Mommies* books make a strong claim about gender equality as they share identical lexica. This is quite rare, compared with that in the *Busy Father/ Busy Mother* books, where gender is an important variable in father’s and mother’s ideational choices. On a cursory inspection, these two books seem to be non-sexist. However, when we scrutinise the text in depth, details such as the modal operator ‘can’ play a role in gender stereotyping. According to Halliday (1994), modal operators like ‘can’, ‘may’, ‘must’ are resources for constructing speakers’ attitudes toward the probability and normality of what is said. These finite modal operators change the truth value of a statement, situating different positions in a continuum from ‘No’ polar to ‘Yes’ polar. ‘Can’ signals a low truth value, making the representation less determinate. In a word, the good will of non-sexist ideational content is counteracted by an author’s uncertain attitude in terms of potentiality, which is evidenced in the accompanying images. For instance, in a page in *Daddies* book about sewing “the loose button on your teddy bear” (Numeroff and Munsigner 2001:9), the accompanying image depicts Father Fox holding a needle in a clumsy way and messing the thread up, compared with the counterpart image (page 9) in *Mommies* book where Mother Mouse swiftly does the needlework with a sewing machine at hand. Such a contrast implies a covert sexist ideology; that is, even though father and mother can do the same things for children, the father is not particularly good at household and caregiving duties. Another observation is about the author’s conception of parenthood, which is evidenced in the author’s way of encoding. The fifteen processes are typical semantic features related to parenthood as recognised by the author. In systemic functional terms (e.g. Halliday 1994), the experiential content is categorised into three major domains, namely, doing, being, and sensing; these three semantic domains are encoded in language as material, relational and mental processes, with the other three minor processes (that is, behavioural, verbal, and existential) in between. Ideally, parenthood should cover every aspect of children’s lives. Accordingly, texts on parenthood should contain most of the process types. However, when we scrutinise Daddies’/ Mommies’ processes, we find thirteen of them are material, one perception mental process (watch sunset with children), and one verbal process (read bedtime story). In other words, the written representation of parenthood in these two books is predominantly about doing things for children, while other important aspects of parenting like verbal interaction, emotional support, and mental health have simply been ignored.

In relation to the ideational choices in images, we compare the fifteen images in *Daddies* book with their corresponding images in *Mommies* book. Although the visual participants and visual processes are different in these two picture books, they remain faithful to the written text in terms of portrayals of the happenings which are realised linguistically. However, in the ideational choices of visual circumstantial elements, subtle gender variations are noted, and this part of meaning is peculiar to images as the text does not specify circumstances of these processes. Using the concept of ‘delicacy’ from systemic functional grammar (Halliday 2002: 58), which specifies increasing depth of detail in analysis, gender variations occur at a higher level of delicacy in these two picture books. That is, they are not explicitly articulated in text, or directly shown in image; instead, they are implied in detail. For example, among the fifteen pairs of images, gender variations are detected in two subfields of circumstantial meaning, namely manner and setting. Images depict either Daddies’/ Mommies’ different manners of doing similar tasks or doing similar things in different settings, and the connotations of these manners/ settings are different. In what follows, an example analysis is given to demonstrate how the subtle sexism is constructed in these details.

Figure 12.9 and 12.10 are two screenshots of the piggyback ride page (i.e. page 6) in *Daddies/ Mommies* books. The text in both cases is ‘give you a piggyback ride’, but the visual representations are quite different. In *Mommies* book, it is represented as the scene where Mother Pig carries her baby doing daily shopping, while in *Daddies* book, it is represented as Father Goat carrying his baby to watch a ballgame alongside other anthropomorphic characters. Such depictions lead to different aspects of experience. For mothers, daily shopping is a recurrent event that happens at a high frequency. And the sense of familiarity is reinforced in the circumstance which is depicted in great detail and which occupies much of the space. However, in *Daddies* book, the prominence is given to the characters themselves. Information about the setting is implied through visual cues like cheer sticks, snacks, and sport hats. In other words, the ideational choices in the images disclose the fact that around the key word of piggyback ride, ideas about father and mother differ significantly. Fatherly piggybacks are about entertainment; while for mothers, it is about doing household chores (daily shopping) for the family. Such distinct associations of father/ mother are worth considering. Given that the written text represents the mother and father doing the same thing for children, this is, to some extent, undermined by the images which unconsciously associate father/ mother with different ideational aspects and such division is usually gender stereotyped.

<INSERT **Figure 12.9** Screenshot of piggyback ride page of *Mommies* book in MMA Image HERE>

<INSERT **Figure 12.10** Screenshot of piggyback ride page of *Daddies* book in MMA Image HERE>

Compared with sexism in language, sexism in these images is subtler and more covert, especially when images are accompanied with identical written text. In *Daddies/ Mommies* books, images not only visualise the verbal participants and processes, but also contextualise them in social cultural contexts. Here, text or image alone is non-sexist, but when considered together, different connotations emerge. Compared to *Busy Father/ Busy Mother* books where gender variations are directly shown, gender stereotypes in *Daddies/ Mommies* books are subtler connoted in the illustrator’s choices of settings, and in text-image relations.

***Multimodal Patterns***

In the previous sections, we have analysed semiotic choices in ideational meanings and found that gender portrayals in these four picture books are stereotyped in different ways. This section investigates the semiotic choices in the other two lines of meaning, namely the interpersonal meaning and compositional meaning. Different from ideational meaning, which is concerned with the content of representation, interpersonal meaning is concerned with the symbolic interactions between viewers and representation, and compositional meaning is concerned with the ways multimodal texts organise themselves into coherent wholes. Since *Busy Father/ Busy Mother* books are illustrated by the same illustrator, as is the case with the *Daddies/ Mommies* books, in our discussion, we treat them as two pairs and compare the different patterns in their deployment of different multimodal systems.

As shown in Table 12.2, *Busy Father/ Busy Mother* books and *Daddies/ Mommies* books exhibit quite different patterns in their deployment of multimodal systems, especially those for constructing compositional meanings, which leads to quite different reading experiences. In *Busy Father/ Busy Mother* books, space is subdivided into several image episodes of various sizes. They are framed in different ways. Some episodes are contained in closed margins (i.e. bound option) while others are not. The framing and layout lines on the pages give readers a clear sense that this is an artificial world, the space of which is subject to the illustrator’s manipulation. This composition constrains picture book world from reality. Such framing and layout choices, in combination with the long shot option, minimalist drawing style and absence of gaze address from depicted characters, further detach readers from the depicted world. In this case, it is unlikely for readers to be emotionally involved in the representation. More importantly, the visual techniques of framing and layout in the *Busy Father/ Busy Mother* books greatly expand the expression capacity of each page. For instance, as shown in Figure 12.6, the double-paged spread is divided into four image episodes of different sizes (as indicated by coloured square layers). The boundaries of the first image episode are delimited (thus, a bound image). The other three episodes spread in space without clear-cut boundaries (i.e. unbound option). For those unbound episodes in this spread, setting (and verbiage) fill the page and function to contextualise the image. In addition, the inter-event relations between actions depicted in these episodes exhibit a diversity. From the first episode to the second, it is a shift of perspective in circumstance from house exterior to house interior (i.e. maintain context/ new perspective option in Circumstance network). From the second episode to the third, it is a temporal relation of succession; here the change in context functions to stage the story and signals the unfolding of the visual narrative. The relation between the third episode and the fourth is that of a simultaneity relation, which is constructed by depicting actions of different characters in the same page. The variations in framing and layout, combined with choices in the inter-event relations create extra space for developing the narrative. In a word, semiotic choices in composition and interpersonal meaning in *Busy Father/ Busy Mother* books are typical of visual narratives.

<INSERT **Table 12.2** Multimodal choices in *Daddies/ Mommies* and *Busy Father/ Busy Mother* books HERE>

For *Daddies/ Mommies* books, due to the discrepancies in these semiotic choices, the reading experience differs a lot. Though *Daddies/ Mommies* books are also depicted in long shot, the size of frame in these two picture books appears much larger than that in *Busy Father/ Busy Mother* books. What is interesting here is that frame size and composition structure in *Daddies/ Mommies* books resemble that of family photographs (see Figure 12.9 and 12.10), which creates a feeling of leafing through a family photo album. In these two books, composition structure is simple and consistent. Verbiage and image are distributed in separated space. Characters are always depicted in the central position and claim prominence. There is no subdivision of space, nor framing lines, which makes each page a snapshot of family life. Such effect is further enhanced in the choices of colour and drawing style. The low saturated, orange-yellow hues look gentle and restrained, and the generic drawing style creates an empathic mood in the readers. In addition, the reduced palette in these two books make the representation a little bit removed from reality (Painter et al. 2013). All these features work together to create an album-like picture book, where moments with parents are presented.

As evidenced in their distinct uses of semiotic choices in these two pairs of picture books, in *Busy Father/ Busy Mother* books, readers’ attention is drawn to the plot; semiotic options used in this pair foreground the narrative nature of picture books. In *Daddies/ Mommies* books, however, the characters and their behaviours are foregrounded, which makes them read like photo albums that collect moments with parents. Given the linguistic text is consistent across *Daddies*/ *Mommies* books, they are not so much describing daddies’/ mommies’ real deeds as constructing role models for parents.

**Conclusion and limitations**

The analysis in this chapter has shown that in multimodal texts, gender stereotypes exist not only in the content of representation but also in the ways different multimodal systems are deployed. Sexism in multimodal texts is subtle and covert, where the meaning-making processes are more complex. Choices in different multimodal systems interact and counteract, which not only influences the content of representations, but also influences readers’ ideas about gender. Thus, a new approach is required to capture the affordances of these semiotic systems, especially the joint effects of different semiotic choices. The SF-MDA approach proposed in this study brings visual analysis and linguistic analysis together in Halliday’s (1978, 1994) metafunctional framework. Our discussion has made it clear that all three layers of meaning have the potential to encode gender stereotypes. In ideational meaning, gender stereotypes can manifest as the uneven distribution of semantic features and semantic roles between male and female characters. They can also manifest themselves in the arrangements of inter-event relations between sequential images or in image-text relations, depending on specific contexts. In addition, choices in multimodal systems for constructing interpersonal and compositional meanings can create different patterns of interaction between readers and representations, which can facilitate expression. The fundamental roles of picture books in shaping young children’s worldviews mean that the quality of picture books is an essential education issue which invites close scrutiny of their meaning-making choices. The sample analysis in this study has demonstrated the benefits of adopting a critical multimodal approach to investigate these multimodal texts, not only in terms of what is represented but also how the content is presented.

In this study, due to the time and space constraints, only four picture books have been analysed. In future research, it will be possible to expand the scope of analysis and explore patterns of multimodal phenomena at different scales which include the page, discourse level (that is, within and across the stages in the narrative), the complete picture book, and the genres of picture books across space, place and time.

**Notes:**

1. <http://multimodal-analysis.com/products/multimodal-analysis-image/index.html>

2. https://www.amazon.com/Richard-Scarry/e/B000AQ3290?ref\_=dbs\_p\_pbk\_r00\_abau\_000000

**References**

Allen, A. M., Allen, D. N. and Sigler, G. (1993) Changes in Sex-role Stereotyping in Caldecott Medal Award Picture Books 1938 – 1988. *Journal of Research in Childhood Education* 7 (2): 67 – 73.

Anderson, D. A. and Hamilton, M. (2005) Gender Role Stereotyping of Parents in Children’s Picture Books: The Invisible Father. *Sex Roles* 52: 145 – 151.

Arizpe, E. and Styles, M. (2003) *Children Reading Pictures: Interpreting Visual Texts.* With contributions from H. Bromley, K. Coulthard and K. Rabey. London and New York: Routledge Falmer.

Barnett, M. A. (1986) Sex Bias in the Helping Behavior Presented in Children’s Picture books. *Journal of Genetic Psychology* 147: 343 – 351.

Bussey, K. and Bandura, A. (1999) Social Cognitive Theory of Gender Development and Differentiation. *Psychological Review* 106: 676 – 713.

Clark, R., Guilmain, J., Saucier, P. K. and Tavarez, J. (2003) Two Steps Forward, One Step Back: The Presence of Female Characters and Gender Stereotyping in Award-Winning Picture Books between the 1930s and the 1960s. *Sex Roles* 49: 439 – 449.

Diekman, A. B. and Murnen, S. K. (2004) Learning to be Little Women and Little Men: The Inequitable Gender Equality of Nonsexist Children’s Literature. *Sex Roles* 50 (5/6): 373 – 385.

Fox, M. (1993) Politics and Literature: Chasing the “isms” from Children’s Books. *The Reading Teachers* 46: 654 – 658.

Gooden, A. and Gooden, M. A. (2001) Gender Representation in Notable Children’s Picture books: 1995 – 1999. *Sex Roles* 45 (1/2): 89 -101.

Halliday, M. A. K. (2003) The Context of Linguistics. In J. Webster (ed.). *On Language and Linguistics: Volume 3 in the Collected Works of M. A. K. Halliday*. London: Continuum, 74 -91.

—— (2002) Categories of the Theory of Grammar. In M.A.K Halliday. *On Grammar.* London and New York: Continuum, 37 – 94.

—— (1994) *An Introduction to Functional Grammar*, 3rdedition. London: Edward Arnold.

—— (1978) *Language as Social Semiotic: The Social Interpretation of Language and Meaning*. London: Edward Arnold.

Hamer, N., Nodelman, P. and Reimer, M. (2017) *More Words about Pictures: Current Research on Picture Books and Visual/Verbal Texts for Young People.* New York and London: Rutledge.

Hamilton, M., Anderson, D., Broaddus, M. and Young, K. (2006) Gender Stereotyping and Under-representation of Female Characters in 200 Popular Children’s Picture Books: A Twenty-first Century update. *Sex Roles* 55: 757 – 765.

Heintz, K. E. (1987) An Examination of Sex and Occupational-Role Presentations of Female Characters in Children's Picture Books. *Women's Studies in Communication* 10 (2): 67-78, DOI: [10.1080/07491409.1987.11089707](https://doi.org/10.1080/07491409.1987.11089707).

Jewitt, C., Bezemer, J. and O'Halloran, K. L. (2016) *Introducing Multimodality*. London and New York: Routledge.

Kortenhaus, C. M. and Demarest, J. (1993) Gender Role Stereotyping in Children’s Literature: An Update. *Sex Roles* 28: 219 – 232.

Kress, G. and van Leeuwen, T. (2001) *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Edward Arnold.

—— (2006) *Reading Images: The Grammar of Visual Design.* London: Routledge.

McCabe, J., Fairchild, E., Grauerholz, L., Pescosolido, B. A. and Tope, D. (2011) Gender in Twentieth-century Children’s Books: Patterns of Disparity in Titles and Central Characters. *Gender & Society* 25 (2): 197 – 226.

Meek, M. (1988) *How Texts Teach What Readers Learn*. South Woodchester: Thimble Press.

Nilsen, A. P. (1978) Five Factors Contributing to the Unequal Treatment of Females in Children’s Picture Books. *Top of the News* 34: 255 – 259.

Nodelman, P. (1988) *Words about Pictures: The Narrative Art of Children’s Picture Books*. Athens and London: The University of Georgia Press.

—— (1971) Women in Children’s literature. *College English* 32: 918 – 926.

Numeroff, L. and Musinger, L. (1998) *What Mommies Do Best.* New York: Scholastic Inc.

—— (2001) *What Daddies Do Best.* New York: Scholastic Inc.

O’Halloran, K. L. (2008) Systemic Functional-Multimodal Discourse Analysis (SF-MDA): Constructing Ideational Meaning Using Language and Visual Imagery. *Visual Communication* 7 (4): 443 – 475.

O’Halloran, K. L. and Lim, F. V. (2014) Systemic Functional Multimodal Discourse Analysis. In S. Norris and C. Maier (eds.). *Texts, Images and Interactions: A Reader in Multimodality*. Berlin: Mouton de Gruyter, 137 – 153.

O’Halloran, K. L., Tan, S. and Wignell, P. (2019) SFL and Multimodal Discourse Analysis. In G. Thompson, W. L. Bowcher, L. Fontaine and D. Schönthal (eds.). *The Cambridge Handbook of Systemic Functional Linguistics*. Cambridge: Cambridge University Press, 433 – 461.

O’Halloran, K. L., Wignell, P. and Tan, S. (2015) Multimodal Social Semiotic Approaches to Analyzing and Designing Brand Communidations. In G. Rossolatos (ed.). *Handbook of Brank Semiotics*. Germany: Kassel University Press, 280 – 328.

Painter, C., Martin, J. R. and Unsworth, L. (2013) *Reading Visual Narratives: Image Analysis of Children’s Picture Books*. Equinox.

Paynter, K. C. (2011) *Gender Stereotypes and Representation of Female Characters in Children’s Picture books*. Ph.D dissertation of Liberty University.

Rose, D. (2011) Meaning beyond the Margins: Learning to Interact with Books. In S. Dreyfus, S. Hood and M. Stenglin (eds.). *Semiotic Margins: Meaning in Multimodalities*. London and New York: Continuum, 177- 209.

Scarry, R.(1997) *Father Cat’s Busy Day.* New York: J.B. Communications.

—— (1997) *Mother Cat’s Busy Day.* New York: J.B. Communications.

Sipe, L. R. (2011) The Art of the Picture book. In S. A. Wolf, K. Coats, P. Enciso and C. A. Jenkins (eds.). *Handbook of Research on Children’s and Young Adult Literature*. New York and London: Routledge, 238 - 255.

Stephens, J. (1992) *Language and Ideology in Children’s Picture Book to Literary Theory.* Sydney: St Clair Press.

Torr, J. and Clugston, L. (1999) A Comparison between Information and Narrative Picture Books as a Context for Reasoning between Mothers and Four Years Old Children. *Early Child Development and Care* 159: 25 - 41.

van Leeuwen, T. (2008) *Discourse and Practice: New Tools for Critical Discourse Analysis*. New York: Oxford University Press.

Weitzman, L., Eifler, D., Hokada, E. and Ross, C. (1972) Sex-Role Socialization in Picture Books for Preschool Children. *American Journal of Sociology* 77 (6): 1125 – 1150.