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Gendered body language in children's literature over time

Abstract:

In this paper, we study gendered patterns of body language descriptions in children's fiction. We compare a corpus of nineteenth century children's literature with a corpus of contemporary fiction for children. Using a corpus linguistic approach, we study gendered five-word body part clusters, i.e. repeated sequences of words that contain at least one body part noun and a marker of gender. Our aim is to identify and describe differences between the description of male and female body language across both corpora. We find that in the nineteenth century there are not only fewer clusters for female characters, but the functional range of these clusters is also limited. The contemporary data suggests a trend for male and female clusters to become more similar. Over time, the clusters illustrate an increasing range of options for the description of female characters and their interactional spaces.

Keywords: children's literature, fiction corpora, body language, gender

1. Introduction

Gender is one of the fundamental structuring principles of our society. It is constructed in different ways in different discourses. Crucially, gender is not a stable concept. Its construction changes over time. Children's literature represents cultural norms and values, and hence is an important source for children to learn about gender norms. As Reynolds (2011: 34) notes "writing for the young has considerable potential to influence what its intended readers regard as normal, good, acceptable, important, unjust, or to be feared." Gender norms are often presented implicitly. The description of fictional characters, their actions, as well as social relationships and interactions expose children to common patterns of gendered behaviour. Common patterns that are shared across a number of texts link the fictional worlds in literature to the cultural contexts in which they are produced and received. Thus the study of fiction allows us to study how behaviours and norms have changed over time.

In the nineteenth century, children's literature reached its first 'golden age' with classics like *Alice's Adventures in Wonderland*. Nevertheless, research specifically focused on children's literature is fairly recent. As Nikolajeva (2016: 133) points out: "[u]ntil relatively recently, children's literature research was predominantly inspired by cultural theory viewing the child and childhood as a social construction rather than a material body existing in a material world." This has gradually changed with the 'material' turn and research focusing on aspects such as ecocriticism (Curry 2013) or fashion (Vaclavik 2019). Such research explores "in more detail the complex relationship between perceptible phenomena and their representations in children's fiction; between the physical body and its immaterial, linguistic fictional portrayal" (Nikolajeva 2016: 13). Importantly, the child reader is a "novice reader" (Nikolajeva 2014), not only in terms of limited cognitive and affective skills, but also in terms of limited life experience. So children learn through texts.

Our focus is on textual patterns of a particular type of gendered behaviour – body language. Body language is an important part of the material world that is portrayed in fiction. It does not only refer to the physical body of fictional characters but also shows how fictional people

interact with one another as well as with the material world they inhabit. The study of gender will inherently be comparative – part of the definition of gender is through the description of differences and contrasts. Additionally, due to its close link with cultural practices, a diachronic study can shed light on gendered behaviour through comparison. In this article, we compare gendered body language in nineteenth century children’s literature with contemporary fiction for children. The golden age of children’s literature is a good starting point for a comparison with contemporary texts. As Reynolds (2002: 97) notes, still “much current thinking seems in many ways to map the attitudes of the late-Victorian period”.

Although current research into gender and children’s literature involves various approaches (for an overview see e.g. Hateley 2011) including linguistic analysis (e.g. Malmkjær and Knowles 1996, Sunderland 2011, Hunt 2015, Eberhart 2017), this is the first study to systematically explore linguistic descriptions of gendered body language in children’s literature. We work with two different data sets: a corpus of nineteenth century children’s literature and a corpus of contemporary children’s literature. Our aim is to identify and describe some of the most prominent gendered differences in each corpus, before then comparing these differences across the two time periods. In the nineteenth century, gender was mainly constructed in binary terms of femininity and masculinity, so we concentrate on this contrast. In Section 2, we begin by contextualising our linguistic approach to body language descriptions, Section 3 introduces the corpora we work with and explains our methodology. In Section 4, the analysis focuses on the nineteenth century data set, and in Section 5 on the contemporary data, before we draw together conclusions in the final section.

2. Body language in fiction for children

Research on fictional body language relates to the wider context of non-verbal communication. From a literary perspective, the most comprehensive descriptive framework to date was developed by Korte (1997). Korte (1997: 3-4) defines body language “as non-verbal behaviour (movement and postures, facial expressions, glances and eye contact, automatic reactions, spatial and touch behaviour) which is ‘meaningful’ in both natural and fictional communication”. For the classification framework that Korte (1997) develops she draws both on real-life as well as fictional categories. Body language plays an important role in the process of characterisation, where the link between real-world information and textual features is key, too. Within the theoretical context of corpus stylistics and cognitive poetics, characterisation is a process in the mind of the reader that combines the processing of textual cues with real-world background knowledge (Culpeper 2001). In his approach to mind-modelling, Stockwell (2009) particularly emphasises the similarities in the way in which readers perceive real and fictional people. Corpus linguistic methods support the identification of textual cues for characterisation in general and body language in particular (Stockwell and Mahlberg 2015). Especially repeated lexico-grammatical patterns are useful starting points to find common body language, i.e. body language whose main function is not to set individual characters apart from others, but descriptions of what appears like natural body language (Mahlberg 2013). Such seemingly natural body language that is shared by fictional characters across a range of texts provides important insights into social, cultural and especially gendered norms. This approach to body language contributes more widely to research into fictional descriptions of common patterns of human behaviour highlighting the close link between literary and cultural history that is increasingly addressed in digital humanities studies (e.g. Underwood, Bamman and Lee 2019).

As with body language more generally, gendered types of behaviours might be more or less explicitly presented in fiction. A striking example is the following from Mark Twain's *Adventures of Huckleberry Finn* (1884) (also discussed in Eschholz 1973). Huck dresses up as a girl but gives himself away by his body movements:

You do a girl tolerable poor, but you might fool men, maybe. Bless you, child, when you set out to thread a needle don't hold the thread still and fetch the needle up to it; hold the needle still and poke the thread at it; that's the way a woman most always does, but a man always does t'other way. [...] And, mind you, when a girl tries to catch anything in her lap she throws her knees apart; she don't clap them together, the way you did when you caught the lump of lead.

A body, as a physical object, may seem to be “a self-evident concept” (Violi 2008: 54). Similarly, conventionalised gestures might be taken as straightforward to decode. However, perceptions of the body as well as conventionalised behaviours cannot be accounted for without reference to their cultural contexts. And even then, descriptions of body language in literature do not necessarily map neatly onto our perceptions of body language in the real-world. As Korte (1997: 88) observes, literary body language was strongly conventionalised well into the nineteenth century and “a decline in the use of conventional body language is one of the important developments in the twentieth century”. To decode body language in fiction, the reader will need both real-world knowledge and knowledge of literary conventions. Fiction for children is a place where some of this knowledge will be acquired.

In the field of children's literature, questions around embodiment and meaning making are gaining increasing interest (Nikolajeva 2016), but so far no systematic attempt has been made to describe the literary conventions of body language. This may be due to the fact that common patterns of body language descriptions are exactly that – common, as opposed to striking. It is usually the striking descriptions, as in the *Huckleberry Finn* example, and unique features of fictional characters that receive attention. To identify patterns of body language descriptions that readers are less consciously aware of, corpus linguistic methods provide important tools (Mahlberg 2013). In the present paper, we draw on such methods to focus specifically on gendered patterns and bring an innovative approach to children's fiction.

3. Data and methodology

Table 1 provides an overview of the two corpora we used for this study. The ChiLit corpus is a 4.4 million word corpus of nineteenth century British children's literature. It is freely accessible through the CLiC web application (<http://cllc.bham.ac.uk/>). It contains 35 books by 14 female authors (1.9 million words) and 36 books by 24 male writers (2.5 million words) (for more detail see Čermáková 2018). The selection of books, primarily guided by Hunt (2001), but also Altick (1957), aimed to represent books published for children throughout the nineteenth century, to reflect the various genres that emerged (e.g. the school story, adventure story, fantasy), and to include best-sellers of the time like Hughes's *Tom Brown's School Days* (1857), Carroll's *Alice Adventures in Wonderland* (1865), Hesba Stretton's *Jessica's First Prayer* (1867) or Anna Sewell's *Black Beauty* (1877). See Appendix 1 for the list of books included in ChiLit.

The OCC2000+ contains 12.9 million words. It is a subcorpus of the Oxford Children's Corpus (OCC) compiled by Oxford University Press (OUP). As a publisher reaching extensive audiences across the UK, OUP has a significant impact on the perceived

mainstream norms of children’s literature. The OCC is hosted through SketchEngine but access to the corpus is restricted due to copyright. The OCC2000+ is a sample of the OCC created by selecting only texts published from 2000 onwards. According to the metadata available through SketchEngine, there are 598 titles by 137 authors. There are several book series written by one author, e.g. the *Witchfinder* series by William Hussey. Additionally, there are four author collectives. The authors of the OCC2000+ are mainly British but, unlike ChiLit, not exclusively so. There are, for instance, some translations (e.g. Astrid Lindgren books). The age range of the target audience of the OCC2000+ covers KS1 up to KS3 (i.e. five to 15-year-olds). The OCC primarily serves lexicographic purposes, so there are limitations as to the detail that is available about the exact composition of the corpus, and hence any subcorpus drawn from it.¹ For stylistic analysis the main limitation of this data source is the lack of access to extended context. Through SketchEngine it is only possible to examine a context of about 180 words around the search word, i.e. about 90 words to the left and to the right.

Table 1. Overview of ChiLit and the OCC2000+.

	ChiLit	OCC2000+
Words	4.4 million	12.9 million
Texts	71	598
Authors	38	137
Date range	1826-1911	From 2000

Following Mahlberg (2013), we focus on five-word body part clusters. These are repeated sequences of five words that include at least one body part (BP) noun, as in *his eyes fixed on the*. In this study, our aim is to compare male and female BP clusters, so we concentrate on ‘gendered body part clusters’ (GBPCs): clusters that contain at least one BP noun and at least one third person singular possessive determiner or pronoun (in the following we sometimes refer simply to ‘pronouns’ for short): *he, his, him, she, her*.

Both CLiC and SketchEngine have *n*-gram functionalities. We generated a list of five-word clusters with the following thresholds. For ChiLit, clusters will occur at least five times, i.e. they have a normalised frequency of at least 1.13 per million words. To match the same normalised frequency in the OCC2000+, a cluster has to occur at least 18 times. With these thresholds, there are 4041 and 1669 clusters in ChiLit and the OCC2000+ respectively. From the initial lists, the GBPCs have been identified manually: there are 112 GBPCs in ChiLit and 94 in the OCC2000+. Our selection does not contain clusters that are specific to one text only. In ChiLit all clusters occur in at least two texts, in the OCC2000+ the clusters are distributed across at least 11 texts.

Table 2. Overview of clusters in ChiLit and the OCC2000+.

	ChiLit Types (tokens)	OCC 2000+ Types (tokens)
Total number of clusters above cut-off	4041	1669
All GBPCs	112 (783)	94 (2898)
Male GBPCs	76 (551)	75 (2377)
Female GBPCs	28 (180)	18 (502)
GBPCs with both pronouns/possessives	8 (52)	1 (19)

Table 2 provides an overview of the GBPCs. In both corpora, male GBPCs are more frequent than female GBPCs. For the full list of GBPCs see Appendix 2. There is an imbalance both in

the number of different clusters (i.e. the types) and in the number of individual occurrences of the types (i.e. the tokens). The ratios of male to female GBPC tokens are 4.7 in ChiLit and 3.1 in the OCC2000+. It might be that body language of female characters is described less often. Another explanation could be the number of male and female characters overall. The ratio of the frequencies of male to female pronouns (including possessives) is 2.3 in ChiLit and in the OCC2000+ it is 1.8. So there is already an imbalance in pronouns which only becomes more striking when it comes to GBPCs. These observations are in line with findings from Underwood, Bamman and Lee (2018). Across the centuries, there seems to be no real shift towards a more balanced representation of male and female characters.

In this study, our aim is to describe the most prominent gender differences in each corpus and to compare these differences across the two corpora. Our focus is on the functions of the clusters in their textual contexts, so our analysis is mainly qualitative. We will point to tendencies based on frequencies, but as a total of 206 GBPCs is not a sound basis for statistical comparisons, these are just that – tendencies. Frequency overviews provide starting points for our analysis that are followed up by looking at clusters in concordances to understand their textual functions in context.²

4. Gendered body language in nineteenth century children's literature

To get a picture of the gendered differences in body language that five-word clusters can reveal, the frequencies of the clusters and the relationships between them are relevant. Table 3 shows the top 15 male and female GBPCs in ChiLit. The table provides the raw frequency of a cluster, its normalised frequency per one million words, the number of books it occurs in, and the frequency for its form in the opposite gender. The table simply lists formal types of clusters, but five-word clusters can overlap and be part of longer clusters. For instance, *his hands in his pockets* and *with his hands in his* are also found in the six-word cluster *with his hands in his pockets*. Similarly, *his face with his hands* and *covered his face with his* overlap with *covered his face with his hands*. Even if clusters do not formally overlap in this way, there are other similarities, too. Hand movements are frequent types of body language, and there are similar examples across both genders: *and held out his hand*, *he put out his hand*, *she held out her hand*, *held out her hand to*.

To account for gendered differences, male and female variants of clusters deserve specific attention, i.e. clusters that formally only differ in the gender of the pronoun. In Table 3, clusters highlighted in bold have both a male and a female form among the top 15 clusters, such as *his/her face with his/her hands* (occurring 19 and 12 times respectively). Most clusters have a form for both genders. Out of the 76 male clusters, 14 have no attested female form. For the female clusters six out of 28 are found with only one gender. It is generally the masculine variant that is more frequent. In Table 3, clusters with an asterisk * are more frequent in the feminine form. Clusters in grey cells (e.g. *his hands in his pockets* and *and threw her arms round*) are examples that only occur with one of the genders.

Table 3. Top 15 male and female GBPCs in ChiLit.

R	Male GBPC	Fr eq	Per million	Bks	Fem freq	Female GBPC	Fr eq	Per million	Bks	Male freq
1	his hands in his pockets	20	4.5	11	0	her face with her hands	12	2.7	5	19
2	his face with his hands	19	4.3	12	12	covered her face with her	10	2.3	5	15

3	covered his face with his	15	3.4	9	10	*her arms round her neck	9	2.0	4	4
4	on his hands and knees	15	3.4	9	5	*her face in her hands	9	2.0	7	7
5	and held out his hand	14	3.2	9	4	*she held out her hand	9	2.0	5	8
6	his head on one side	13	2.9	7	0	with tears in her eyes	9	2.0	6	10
7	the back of his head	12	2.7	9	0	and threw her arms round	7	1.6	6	0
8	he put out his hand	11	2.5	10	4	*she put her arms round	7	1.6	7	1
9	his eyes fixed on the	11	2.5	10	1	clapped her hands and said	6	1.4	6	0
10	with his hands in his	11	2.5	9	1	face with her hands and	6	1.4	3	8
11	looked up in his face	11	2.5	6	2	held out her hand to	6	1.4	5	7
12	arms round his neck and	10	2.3	10	4	her eyes full of tears	6	1.4	4	0
13	with tears in his eyes	10	2.3	10	9	*her on the back and	6	1.4	4	1
14	when he opened his eyes	9	2.0	9	6	*she put her hand on	6	1.4	5	4
15	the top of his head	9	2.0	6	3	*threw her arms round her	6	1.4	5	3

The most frequent clusters already point to an important difference between male and female clusters. Not only are there fewer female GBPCs overall, there is also a tendency for less variety across the female clusters. In Table 3, there are four female clusters that contain the word *arms* (ranks 3, 7, 8 and 15). Three of them occur more frequently in the feminine variant and the cluster *and threw her arms round* is found in the feminine form only. The plural form *arms* is the most frequently occurring BP in female GBPCs. Out of the 28 female GBPCs, seven contain the word *arms*. In comparison, of the 76 male GBPCs, there are only five with either *arm* or *arms* (*him by the arm and, arms round his neck and, he threw his arms round, in his arms and carried, in his arms and kissed*). Strikingly, while there is variation even among the five male clusters (*by the arm, his arms round, in his arms*), all female clusters are similar in that they contain *arms* and *round*:

her **arms round** her neck
and threw her **arms round**
she put her **arms round**
threw her **arms round** her
throwing her **arms round** her
and put her **arms round**
her **arms round** her and

Frequency counts and the identification of formal similarities between clusters make a good starting point for our analysis. To find out how the clusters function in their textual contexts, concordances provide more detailed insights. Figure 1 shows the seven occurrences of the cluster *and threw her arms round*. This is the cluster that does not have a male variant in ChiLit. Touch is often associated with the expression of emotions. In the cluster itself, the verb *threw* already indicates the emotional outburst of the character. The meanings that are associated with a cluster, i.e. the functions that the cluster can fulfil in fictional texts, are not inherent in the cluster alone, but also depend on the context. In this sense, describing the meaning of clusters is similar to describing meanings of words in the contexts shown in concordances. To account for meanings of body language clusters, Mahlberg (2013) draws on the term ‘local textual functions’, which stresses the need to see the cluster in its local context. The meaning of the cluster is its function in the fictional text, i.e. the way in which it contributes to describing and creating a fictional character. In the concordance in Figure 1,

other action verbs underline the meaning triggered by *threw*. There is *ran* (lines 2 and 6) and *sprang* (lines 3 and 5), which show the force of the action. There are also references to kissing (lines 4 and 7) indicative of an emotional situation. The concordance in Figure 1 further points to the relatedness of the different *arms* clusters. It contains three of the six occurrences of the cluster *threw her arms round her* (lines 1, 2 and 7), and there is also the cluster *her arms round his neck* (lines 4 and 6).

2a3a120		↕		↕		↕	↕	↕
Left			Node			Right	Book	In bk.
1	summon Bellairs, when Meta came gliding in,		and threw her arms round			her. Ethel could not speak, but Meta's voice w	daisy	
2	and take us home!" She ran to the Vicar's wife		and threw her arms round			her. The Vicar's wife put her arms round Jane	five	
3	od appears." ¶ Annie suddenly sprang forward,		and threw her arms round			Miss Danesbury's neck. ¶ "Miss Danesbury, yo	girls	
4	paper. Then Phyllis suddenly snatched it away,		and threw her arms round			his neck. ¶ "Oh, let's kiss and be friends," she	railway	
5	nne, for it was she, sprang out of the carriage		and threw her arms round			Hugh's neck. ¶ "O Chéri," she said, "I _couldn't	tapestry	
6	chilled and perplexed. ¶ Jeanne ran after him		and threw her arms round			his neck. ¶ "Chéri, Chéri," she said, "I didn't m	tapestry	
7	ess ought to be, Matilda went to her one day,		and threw her arms round			her and kissed her. The Princess kissed her b	unlikely	

Figure 1. All seven occurrences of *and threw her arms round* in ChiLit.

2a3a120		↕		↕		↕	↕	↕
Left			Node			Right	Book	In bk.
1	seat himself on one, panting for breath, than he		threw his arms round his			neck, and burst into a flood of tears. "Oh, Jack	coral	
2	his own harsh want of sympathy, struck him. He		threw his arms round his			brother's neck, and said, "We will both go with	eric	
3	instead of looking at the prizes, Harry suddenly		threw his arms round his			neck, and burst into tears. ¶ "My dear--dear bo	holiday	

Figure 2. All three occurrences of *threw his arms round his* in ChiLit.

The meanings associated with ‘throwing someone’s arms round someone’ are not exclusive to female characters. The cluster *threw her arms round her* has a male form, *threw his arms round his*, shown in Figure 2. Again, the action verb *threw* is supported by related meanings in the context (*burst* in lines 1 and 3, and *struck* in line 2). The female and male clusters are similar in that they function in emotionally-loaded contexts. The important difference is that this type of meaning makes up a larger proportion of the body language descriptions of female characters than that of male characters. These clusters show haptic, or touch, behaviour, indicating the relationship between two characters. The relational meaning of clusters is also relevant for the cluster *arms round his neck and*. Formally, it is a male GBPC – in the five-word sequences there is only a male possessive. But as Figure 3 shows, half of the ten occurrences are part of the six word cluster *her arms round his neck and*. So an important aspect of the body language that is described for female characters is the way in which they reach out to other characters. Female characters tend to be shown in relation to others.³

2a3a120	Left	Node	Right	Book	In bk.
1	nd drawn near to Daniel; and now she flung her	arms round his neck, and	hid her face upon his breast, crying. ¶ "Why, no jessica		
2	the tears came in his eyes; but she put her	arms round his neck and	kissed him, and asked no more questions. ¶ The princess		
3	ie!" And, to Paul's horror and alarm, she put her	arms round his neck, and	cried piteously on his shoulder. ¶ "Good graciou vice		
4	Good, he swore feebly, while Foulata threw her	arms round his neck and	shrieked. ¶ Only Gagool chuckled loud and long solomons		
5	'but we do like kissing you, Uncle," throwing her	arms round his neck, and	kissing him heartily; "because you have been so clive		
6	did just as his father had done before--put his	arms round his neck and	cried--but not much. ¶ "Ain't it jolly, father?" he wind		
7	as if he had always known him. He put his	arms round his neck, and	whispered in his ear what he was thinking of;-- crofton		
8	el! on one, panting for breath, than he threw his	arms round his neck, and	burst into a flood of tears. "Oh, Jack, Jack!" sai coral		
9	f looking at the prizes, Harry suddenly threw his	arms round his neck, and	burst into tears. ¶ "My dear--dear boy! what ha holiday		
10	I climbed up from behind upon him, putting my	arms round his neck; and	so he bore me 'pickaback'. I shut my eyes firm moonfleet		

Figure 3. All 10 occurrences of *arms round his neck and* in ChiLit, alphabetically sorted on L1.

4.1 Touch, emotions and the social context

The description of touch behaviour allows to show interpersonal relations between fiction characters as well as emotional reponses to other characters and situations. At the same time, touch behaviour is socially regulated. As Korte (1997: 68) points out: "every society has rules regarding which areas of the body are allowed to be touched [...] and who is allowed to touch them". GBPCs can provide insights into socially acceptable physical contact. Clusters that contain both a masculine and feminine pronoun are good candidates in this regard. Table 4 lists all of them for ChiLit. The body parts in these clusters are *arms*, *arm*, *neck*, *hand*, *head* and *shoulder*. The clusters tend to describe encounters among siblings, parents and their children, occasionally other family members, or very close friends. Example (1) illustrates a family situation. There are also social roles that affect conventions for acceptable behaviour, as in example (2), where Mr Everard is a close family friend. Example (3) shows how the text can explicitly comment on the appropriateness, or in this case the inappropriate nature, of an encounter.

- (1) Mr. Tufton kissed them both, muttering to himself: "I suppose I ought to kiss them. Girls always expect to be kissed at every opportunity."
"What are you laughing at, grandniece?"
"I don't think girls expect to be kissed, except by people they like," Kate said; "but we do like kissing you, Uncle," throwing **her arms round his neck**, and kissing him heartily; "because you have been so kind to Charlie, and have brought us up to see him again." [Henty, *With Clive in India*]
- (2) "Tell me what is wrong, my poor child," said Mr Everard. He laid **his hand on her shoulder**, and gradually and skilfully drew from the agitated and miserable girl the story of her sin [...] [Meade, *A World of Girls*]
- (3) And, to Paul's horror and alarm, she put **her arms round his neck**, and cried piteously on his shoulder.
"Good gracious!" he cried, "let me go. Don't do that, for Heaven's sake! I can hear someone coming. If it's your father, it will ruin me!" [Anstey, *Vice Versa*]

Table 4. GBPCs with both masculine and feminine pronouns/possessive determiners.

R	Cluster	Freq	Freq per million	Bks
1	her arms round his neck	11	2.5	11
2	her in his arms and	9	2.0	7
3	put her hand on his	7	1.6	6
4	her hand on his arm	5	1.1	5
5	her head on his shoulder	5	1.1	3
6	put his arm round her	5	1.1	4
7	threw her arms round his	5	1.1	5
8	took her in his arms	5	1.1	5

For children, there seems to be more variety of physical contact, as in example (4).

- (4) ‘Oh, it’s not that, Oswald,’ Alice said. ‘Don’t be a pig! I am so miserable. Do be kind to me.’
So Oswald thumped **her on the back and** told her to shut up. [Nesbit, *The Story of the Treasure Seekers*]

Touch behaviour provides an opportunity to stress the closeness between characters (see Mahlberg 2013: 117). It can also reflect social status and asymmetrical relationships of power or responsibility, as shown by the cluster *his hand on his shoulder* in example (5).

- (5) “My brave lad!” said master, laying **his hand on his shoulder**, “are you hurt?”
[Sewell, *Black Beauty*]

Touch behaviour is not the only way to make the emotional state of characters visible. Among the most frequent GBPCs in ChiLit (Table 3), there is *with tears in his/her eyes*. Eye language is generally important in fiction and has been much commented on (cf. Korte 1997, Mahlberg, Wiegand and Hennessey 2020, Čermáková and Malá forthcoming 2021). In ChiLit, the prominence of *with tears in his/her eyes* is notable, as it is a cluster that occurs in the top of the frequency list for both genders. As we pointed out before, the cluster numbers we are dealing with are relatively low. Still, considering that not for every cluster variants for both genders are attested in ChiLit, *with tears in his /her eyes* deserves a closer look. The female variant *with tears in her eyes* is less frequent in absolute terms (nine occurrences vs ten for the male cluster). Due to the ratio of male vs female pronouns and possessives though (cf. Section 3), the cluster is relatively more common for female characters. What is noteworthy is that tears are also seen with men, as in example (6).

- (6) As it was, he stood before the Assembly an object of universal contempt, - proposing, **with tears in his eyes**, a declaration of war against those who were preparing war at his desire, and for his sake; and everyone knowing that it was so. [Martineau, *The Peasant and the Prince*]

Richgels (1994) observes a shift during the nineteenth century with tears shed by men gradually becoming unacceptable. Nineteenth-century ideas of masculinity increasingly seem to emphasise toughness and self-control. Examples (7) and (8) are both from texts from the latter half of the century (published in 1869 and 1877 respectively). As Stearns (1993: 37)

notes, from the 1850s popular advice “urged males and females to prepare for distinct gender roles from childhood onward by accepting equally distinct emotional norms”. Boys were to learn to “handle emotions in ways useful in the world outside the home, girls to manage emotions in ways useful for maintaining the family” (Stearns 1993: 42).

(7) [...] without a word Tony slipped down upon a heap of paper shavings strewed within, drew his ragged jacket up about his ears, and turned his face away, **lest his tears should be seen**. [Stretton, *Alone in London*]

(8) [...] he stood close up to our heads **to hide his tears**. [Sewell, *Black Beauty*]

4.2 An effect of fashion

The most frequent cluster among the male GBPCs is *his hands in his pockets*. It occurs 20 times in 11 books. Out of the 20 instances, 11 are part of the six-word cluster *with his hands in his pockets*. This cluster does not have a female variant in our data. As Burman (2002) explains, ‘pockets’ echo wider gender issues. Throughout the long nineteenth century fashion changed dramatically. So did male and female pockets (for a contemporary view see Diehm and Thomas (2018)). While male pockets were mostly of the inset type, the prevailing female pocket was the tie pocket.⁴ The long, knitted sports cardigans that were fashionable at the turn of the century were amongst the first female fashion items that routinely had side patch pockets (Burman 2002: 452). That pockets were an item of fashion that underwent change did not escape Charles Dickens either – the master of body language descriptions. In *Barnaby Rudge*, set at the end of the eighteenth century, the narrator comments on Dolly who is looking for something in her pockets, stressing “there were pockets in those days”, example (9).

(9) Dolly nodded and smiled, and feeling in her pockets (there were pockets in those days) with an affectation of not being able to find what she wanted, [...] (Dickens, *Barnaby Rudge*).

Whether body language descriptions that refer to hands in pockets are found with male or female characters will depend to some extent on the fashion of the time. The availability of specific types of clothes will affect women’s opportunities to deport themselves. Additionally, the occurrence of specific clusters might also be affected by the typical meanings that have come to be associated with specific poses, as well as their social desirability. For the ‘hands in pockets’ pose Burman (2002: 463) notes:

The hand in the trouser pocket, though expressive of bodily confidence and presence, was also an ambivalent stance because of its association with poor deportment, lack of restraint and degeneracy. In 1868 an English public school reportedly ruled that its scholars would no longer have ‘side trousers pockets’ because they ‘continually had their hands in these pockets, and thereby contracted a lounging and stooping habit’.

The general frequency of clusters arounds *his hands* and *pockets*, not only in children’s literature but also nineteenth-century novels more widely, is associated with a range of functions the clusters can fulfil – at least for male characters. These can be described on a cline from providing contextualising information, as in example (10) to highlighting information as in example (11). In example (10), *putting his hands his pockets* provides detail on the context of speech, together with the description of the character’s gaze direction. In

example (11), the cluster is more than contextualising information. It is associated with a particular character, Peter, for whom having his hands in his pockets is characteristic behaviour (for more detail on the functional variety of this cluster see Mahlberg 2007a, 2007b, 2012, 2013).

- (10) “Look here, Jane,” said the grown-up Lamb, putting **his hands in his pockets** and looking down at her, “little girls should be seen and not heard. You kids must learn not to make yourselves a nuisance. Run along home now -- and perhaps, if you’re good, I’ll give you each a penny to-morrow.” [Nesbit, *Five Children and It*]
- (11) “All the same,” said Peter, **with his hands in his pockets**, “I don’t exactly look forward to telling Mother the whole truth about it.” [Nesbit, *The Railway Children*]

Of particular significance for the comparison of gendered body language is that *his hands in pockets* refers to body movements that can be described without reference to other characters. So the most frequent male GBPC is in stark contrast to the most frequent patterns we observed for female characters, which emphasise how female characters are seen in relation to others.

For any analysis of clusters, it is important to keep in mind that clusters, as fixed sequences of words, only provide a selection of the range of meanings they reflect (Mahlberg 2013). The clusters in our study are a selection of ways in which gendered body language can be shown. As we have illustrated with the concordance examples, the specific textual functions of clusters are created together with other words and phrases in their context. Since the meanings of the clusters are context dependent and shaped by the overall fictional worlds of the texts in which they occur, they can potentially change.

5. Body language in contemporary children’s literature

The clusters in our corpus of contemporary children’s literature point to several ways in which the representation of male and female characters has developed. We focus on tendencies, the attestation of clusters and the insights into textual functions we can gain from these. In the contemporary data, all clusters above the minimal occurrence thresholds have both male and female variants. If the variant of the opposite gender does not make the threshold, we still checked it occurs in the corpus. This tendency towards convergence distinguishes the contemporary from the nineteenth-century data. It is important to note that the OCC2000+ is almost three times bigger than ChiLit and also contains books in series written by one and the same author, which might affect the overall picture. However, all the clusters we consider are well distributed and none of them is author- or book-specific (see Table 5 for distribution information). It is important to describe the increasing similarities from a number of angles.

As Table 3, Table 5 shows the top 15 clusters for both male and female GBPCs, for the full list see Appendix 2. Also as in Table 3, clusters in bold are those for which both feminine and masculine forms already appear among the top 15. Clusters with an asterisk * are more frequent in the feminine form. Although overall male clusters are still more frequent than the female forms, compared to ChiLit, the table shows that there are now more clusters that are common for both genders. Additionally, while in ChiLit the most frequent male GBPC (*his*

hands in his pockets) occurs exclusively in the male form, in the OCC2000+, the most frequent male cluster does have a female form. We will discuss this point in more detail in Section 5.1. At the same time, the variety of frequent female forms presents a different picture in the OCC2000+, which we will look at in Section 5.2. Another development from Table 3 to Table 5 is the appearance of a number of clusters specifying a body part in greater detail (*the back of his/her neck, the corner of his/her eye, the top of his/her head*) which suggests increased focus on detailed description, but in this article we do not have the space to follow up on this point.

Table 5. Top 15 male and female GBPCs in the OCC2000+.

R	Male GBPC	Freq	Per million	Bks (Authors)	Female GBPC	Freq	Per million	Bks (Authors)
1	the back of his neck	118	7.4	70 (34)	*her hands on her hips	51	3.2	42 (22)
2	the corner of his eye	108	6.8	59 (27)	the top of her head	37	2.3	29 (22)
3	he closed his eyes and	80	5.0	40 (23)	the back of her neck	35	2.2	28 (18)
4	the back of his head	78	4.9	56 (33)	she opened her eyes and	33	2.1	25 (18)
5	his head in his hands	73	4.6	60 (42)	she closed her eyes and	31	2.0	23 (13)
6	the back of his hand	61	3.8	48 (33)	the back of her head	30	1.9	24 (18)
7	he held out his hand	54	3.4	33 (24)	the corner of her eye	30	1.9	26 (18)
8	the palm of his hand	53	3.3	39 (26)	the back of her hand	29	1.8	27 (19)
9	the top of his head	52	3.3	35 (21)	her head in her hands	27	1.7	18 (14)
10	he opened his eyes and	49	3.1	30 (16)	her head to one side	27	1.7	21 (14)
11	his head on one side	47	3.0	29 (9)	she shook her head and	26	1.6	23 (15)
12	his head to one side	44	2.8	34 (18)	*her face in her hands	25	1.6	23 (17)
13	his eyes fixed on the	38	2.4	30 (17)	*put her hands on her	24	1.5	23 (14)
14	he got to his feet	37	2.3	32 (26)	she opened her mouth to	21	1.3	18 (12)
15	on his hands and knees	37	2.3	29 (18)	with her back to the	20	1.3	17 (12)

5.1 Towards more equal opportunities

When clusters have both a male and a female form it does not automatically follow that male and female characters are described in exactly the same way. Still, such clusters provide an opportunity for more similarity. The example of *the back of his/her neck* illustrates this point. It is the most frequent male GBPC and among the most frequent female ones, so it can illustrate a range of local textual functions. One is to contribute to descriptions of a character's feelings or emotional responses. In these contexts, for both male and female forms, we find the verb FEEL (examples 12 to 17) and references to hairs 'rising' or 'standing up' (examples 12 to 15) as well as sweat breaking out (examples 16 and 17). There can also be adjectives to explicitly describe the feeling or situation (*terrified, nervous, menacing*) (examples 12, 14, 15).

(12) The terrified boy **felt** the **hairs rise** on **the back of his neck**. [J. A. Henderson, *Bunker 10*, 2011]

(13) ...and when John spoke again she **felt** the **hairs rise on the back her neck** [R. Lassiter, *Bad Blood*, 2011]

(14) Dax **felt** the **hairs stand up** on **the back of his neck**. He was quite nervous. [A. Sparkes, *Shapeshifter 5: Stirring The Storm*, 2011]

- (15) Sara **felt** the hairs on **the back of her neck stand up** on end as a low, menacing chuckle started up. [S. Cole, *The Day of the Monster Pigeons*, 2011]
- (16) The voice screamed higher this time. Tom **felt** beads of **sweat** break out on **the back of his neck**, his cheeks. [H. Chancellor, *Tom Scatterhorn 3: The Forgotten Echo*, 2012]
- (17) Sara **felt** a trickle of **sweat** dart down **the back of her neck**. [S. Cole, *The Day of the Monster Pigeons*, 2011]

In addition to the cluster being used in similar contexts for both genders, it is still used in contexts of more gendered descriptions, too. While there were no examples of male forms together with descriptions of appearances, examples (18) and (19) illustrate such descriptions for female characters.

- (18) She had grey-brown hair in an untidy bun at **the back of her neck** and cold watery blue eyes behind thick-lensed glasses. [R. Lassiter, *Borderland*, 2004]
- (19) All the time, I was wondering what Jennifer would wear and what we'd talk about and I was thinking of her eyes, the way they were like the sun, and the bit of velvet on **the back of her neck**, and I was worrying what Pacific rim with gallic bottom meant ... [N. Richardson, *The Wrong Hands*, 2005]

The availability of male and female forms of a GBPC opens up more options especially for the description of female characters. This development from ChiLit to the OCC2000+ becomes even clearer when we look at the increased variety among the female clusters, which we discuss in the next section.

5.2 Female assertiveness

For ChiLit, we found that body language involving *arms* was particularly important for the description of female characters and a way to describe them in relation to others. In the OCC2000+, descriptions of arms appear to be different. To start with, among all clusters, there are only three that contain a reference to arms: *a hand on his arm*, *put an arm round her* and *put his arm around her* (see Appendix 2). For all three, it is the singular form of the noun, *arm*, that occurs in the clusters. In ChiLit, in contrast, the plural form, *arms*, is preferred. Additionally, there is the indefinite article instead of a possessive determiner (*put an arm round her*), which is now also found in other clusters (*a hand on his shoulder*, *a finger to his lips*). So there are diachronic shifts that concern the singular and plural forms of the noun, as well as the determiners. These are outside the focus of this article. What is relevant here, is that none of the three clusters that refer to arms are among the most frequent ones shown by Table 5. For ChiLit, there were not only more clusters containing the form *arms* but also some of them were among the most frequent ones. In the nineteenth century data, all female GBPCs that contain *arms* refer to *her arms*, showing female characters reaching out to others. In the OCC2000+, the only female GBPC that refers to arms is *put an arm around her*, and here the agency is not with the female character. This is the same for the cluster *put his arm around her*, the only example in the OCC2000+ that has both male and female pronouns. It relates to the cluster *put his arm round her* in ChiLit, listed in Table 4

(indicating clusters with both male and female pronouns/possessive determiners). It is worth looking at this example in more detail.

Figure 4 shows all five of the ChiLit examples and Figure 5 a sample of ten out of 19 lines from the OCC2000+. Compared to ChiLit, in the OCC2000+ data, the cluster contains *around* instead of *round*.⁵ What is noticeable in the contemporary data are examples where male agency is described in a way that gives consideration to how the participants feel in the situation. In Figure 5, in line 1, the male character puts “his arm around her, shyly”; in line 3, Roland realises that it was a “Bad idea”; in line 5, “Alex wondered if he should try to put his arm around her”. We find occurrences where the female character responds negatively “Alice shuddered” (line 3) or actively opposes the approach “she shrugs him off” (line 7). There are also examples where the cluster describes comforting behaviour, see lines 4, 6, 9 and 10. This comforting behaviour shows similarity in function between ChiLit and the OCC2000+. See line 2 in Figure 4, where the arm round the neck allows the female character to rest her head on his shoulder, similar to line 2 in Figure 5, where the character Harriet rest her head on the male character’s shoulder.

1	¶ "Never mind," again said Norman, but he	put his arm round her.	¶ "Have you done your Euripides? Can I he
2	wn, and sat by him on the old footstool; he	put his arm round her	neck, and she rested her head on his shou
3	ch he seldom did; and most of all when he	put his arm round her	neck, as he did now. But she answered-- "
4	added, as she came so near that he could	put his arm round her	neck, "sorrow not, for Ebbo will need thee
5	laugh and "Well done, little one!" ¶ Dr. May	put his arm round her,	turned aside from him, and began talking t

Figure 4. All five examples of *put his arm round her* in ChiLit.

1	.. a safe place. At the service station." He	put his arm around her	, shyly. "We'll keep warm. Do you mind .
2	.. r eventually sat down next to Harriet and	put his arm around her	. She rested her head on his shoulder a
3	.. ot my Alice'. Alice shuddered and Roland	put his arm around her	. Bad idea, he realized when he saw the
4	.. ured and experimented on'. 'Hey'. Simon	put his arm around her	. 'We're going to get him out, you know
5	.. ted and Alex wondered if he should try to	put his arm around her	. It seemed like forever since they 'd bee
6	.. could sense she was raw with pain so he	put his arm around her	and gave her a hug. ` You know it's not
7	.. and across her belly. Uncle Tom goes to	put his arm around her	but she shrugs him off. `You didn't listen
8	.. r spades bigger than yourselves.' Fergus	put his arm around her	shoulder. ` Hoodlums, the pair of us.' St
9	.. lld feel his mother sobbing with relief. He	put his arm around her	shoulder. ` Diego,' the committee head l
10	.. vas trembling uncontrollably. Eagle-Child	put his arm around her	shoulders to stop her shaking. "I was wr

Figure 5. A sample of ten out of the 19 lines of *put his arm around her* in the OCC2000+.

A key difference between ChiLit and the OCC2000+ is the emergence of the cluster *her hands on her hips*, which is the most frequent female GBPC and one of the few clusters that are more frequent in the female form.⁶ To get a better general picture of the time period between the two corpora, Figure 6 shows the Google N-gram Viewer curve for this cluster over a period from 1800 to 2000. Although the N-gram Viewer only provides a very rough picture, we do see a sharp rise from the 1980s. This suggests a link to what has come to be

referred to as the ‘Wonder Woman pose’, with the first Wonder Woman comics appearing in the 1940s. This ‘power pose’ is also discussed in terms of public speaking and self-confidence⁷ (Cuddy 2015). In this pose, a woman can claim more space for herself, which Argyle (2010: 97) describes as a signal for dominance.⁸

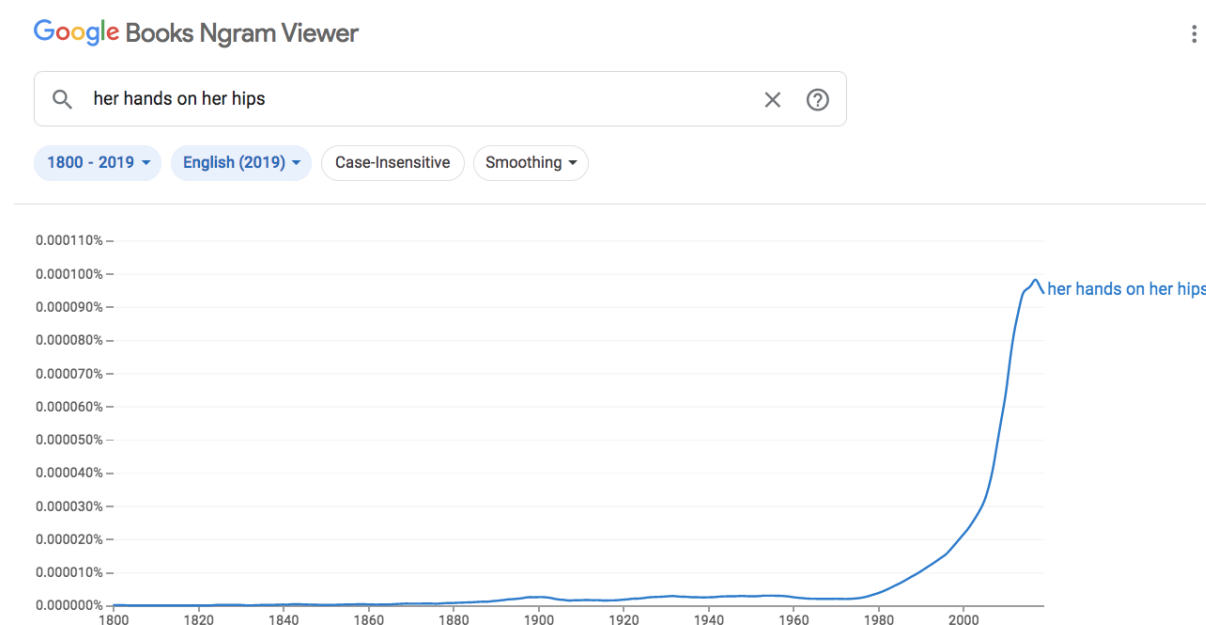


Figure 6. Google N-gram viewer: *her hands on her hips*, 1800 to 2000 [accessed 2 May 2021].

In the OCC2000+, the cluster *her hands on her hips* occurs 51 times in 42 texts by 22 different authors. The cluster is preferred by female authors who seem to be driving the change. Ali Sparkes in particular contributes to the overall frequency using the cluster 12 times in nine texts. See Appendix 3 for the distribution of the cluster by author. As Figure 7 illustrates, the contexts of this cluster are often confrontational situations in which female characters are shown as being assertive. For example, in line 3 *flung* expresses the force that complements “got ready to let him have it”, in 11 the narrator explicitly points out that Mrs Clamworthy is exasperated, and in line 13 “Lorna was furious” paraphrases “She put her hands on her hips”.

1	. But Sassticca was unexpectedly an ally. Sassticca, her hands on her hips , told them roundly that they should be ashamed of
2	' she did seem to be noticing. times she stood, vexed, her hands on her hips , sighing and shaking her head as her pupils stumbl
3	gh in the last few days, she'd had enough. She flung her hands on her hips and got ready to let him have it. "Listen, Jennings. Y
4	'o everything, Captain.Stella Tor stood up and placed her hands on her hips .I accept the role assigned to me. I will find it highly
5	gers as I move back into the living room. Mom props her hands on her hips and surveys the house -- us -- with what seems like
6	I who was dressed in a dark blue jersey and jeans, put her hands on her hips and glared at him. `Who? Who did you lose'? The F
7	l t try anything, Mia, honey!' Catherine sighed and put her hands on her hips and her head to one side, as if she were talking to a
8	ould be so stupid. Eunice flung back her hair and put her hands on her hips . ` Now look here,' she said. ` Just who do you think
9	'er wear herself out. Lisa narrowed her eyes and put her hands on her hips and was about to tell him his life story, so he grinner
10	'e will go to Nice! I have friends in Nice.Catherine put her hands on her hips and her head on one side, considering. "I guess you
11	st getaway in Evelyn's Citroen. Mrs Clamworthy put her hands on her hips . ' she said in exasperation with her son. ` We've got
12	ically freezing over.) and a commanding air. She put her hands on her hips and looked at Nian as though he were something th
13	ou on my conscience . ' Lorna was furious . She put her hands on her hips . ` Jake Hunter , how dare you -- ' ` Sorry , Lorn . Th
14	ked at her and were about to laugh when Winnie put her hands on her hips . `You are all so RUDE!' she shouted. And everyone
15	ing down the bank towards me. `Nothing'. Mina puts her hands on her hips and looks at me. `Are you just going to sit there'? I s

Figure 7. A sample of 15 of the 51 lines of *her hands on her hips* in the OCC2000+.

6. Conclusions

Our analysis shows that the descriptions of female characters in children's literature allows more space and variety in contemporary fiction compared to nineteenth century texts. Based on our data, it seems to be still the case that there is overall more room for male characters, but the space in which female characters are operating has started to change. The most striking evidence of this development is the emergence of the cluster *her hands on her hips*. The picture that the clusters paint for the nineteenth century emphasises female behaviour in relation to others. Generally, the description of body language is a prime location in the text to depict interpersonal relations between fictional characters, especially when it comes to touch behaviour. What we have seen for the descriptions of female characters is a limited range of behaviours that are typically described. The fact that the contemporary data contains more clusters that have both a male and a female form shows how the range of clusters formally reflects the increasing options for female behaviour. The changing interactional spaces are also reflected in the way in which clusters that remain formally the same function differently in their textual contexts. In the contemporary data, touch behaviour as in one character putting their arm around another, can still be shown as comforting and positive interaction. But we have also seen that there is a tendency towards more reflection on the appropriateness of the behaviour and the response of the person (especially the female characters) who is the beneficiary of the action.

Our comparison further points to the context-dependency of clusters. The functions that clusters fulfil are created in connection with other words and patterns in the text. The context-dependency also extends to the situational context. As we have shown, clusters indicate what is common in the social contexts of the time. This became especially apparent through the link to fashion. At the same time, clusters are culturally dependent. Almost all the texts in our corpora are written by British authors. Body language in general is culturally dependent, so what we have shown in this article does not necessarily hold for other cultural contexts. This

will also be relevant to studies that look at translations and cross linguistic comparisons of fictional body language (e.g. Cermakova and Mahlberg 2018, Cermakova and Mala (forthcoming)).

Clearly, clusters only provide a very specific view on the body language descriptions in the texts. They emphasise those behaviours that are repeatedly described and described in fixed forms. On the one hand, this is a limitation, and studies that investigate more flexible patterns (e.g. Mahlberg, Wiegand and Hennessey 2020) can broaden the view. On the other hand, as we have argued, clusters are a useful starting point and enable comparisons that focus on common patterns. Additionally, the observation of repeatedly occurring patterns is relevant to the role of children's fiction in child development. As we focus on patterns that occur repeatedly across texts, as opposed to patterns that are specific to individual texts or authors we are dealing with common patterns – patterns that are likely candidates to become part of the literary knowledge of child readers. In this way, they have the potential to contribute relatively subtly to the knowledge that children develop about gendered behaviours. This is no different for children's literature than for gendered patterns in the language at large. The methods we employed in this paper are not only a means to identify and describe gendered body language, they can also help to raise awareness of the existence of such patterns. In this sense, our methods and approach open up further opportunities for studies that contribute to the big picture of gendered differences in language, literature and culture.

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Appendix 1. ChiLit corpus.

Publ.	Author	Title
1826	Strickland, A.	<i>The Rival Crusoes; Or, The Ship Wreck</i>
1839	Sinclair, C.	<i>Holiday House: A Series of Tales</i>
1841	Martineau, H.	<i>Feats on the Fiord</i>
1841	Martineau, H.	<i>The Crofton Boys</i>
1841	Martineau, H.	<i>The Peasant and the Prince</i>
1841	Martineau, H.	<i>The Settlers at Home</i>
1853	Yonge, C. M.	<i>The Heir of Redclyffe</i>
1854	Yonge, C. M.	<i>The Little Duke: Richard the Fearless</i>
1856	Yonge, C. M.	<i>The Daisy Chain, or Aspirations</i>
1866	Yonge, C. M.	<i>The Dove in the Eagle's Nest</i>
1867	Stretton, H.	<i>Jessica's First Prayer — Jessica's Mother</i>
1868	Stretton, H.	<i>Little Meg's Children</i>
1869	Ewing, J. H.	<i>Mrs. Overtheway's Remembrances</i>
1869	Ingelow, J.	<i>Mopsa the Fairy</i>
1869	Stretton, H.	<i>Alone In London</i>
1870	Tytler, A. F.	<i>Leila at Home. A continuation of Leila in England</i>
1877	Mrs. Molesworth	<i>The Cuckoo Clock</i>
1877	Sewell, A.	<i>Black Beauty. The Autobiography of a Horse</i>
1879	Mrs. Molesworth	<i>The Tapestry Room: A Child's Romance</i>
1883	Ewing, J. H.	<i>Jackanapes</i>
1886	Meade, L.T.	<i>A World of Girls: The Story of a School</i>
1895	Mrs. Molesworth	<i>The Carved Lions</i>
1899	Nesbit, E.	<i>The Book of Dragons</i>
1899	Nesbit, E.	<i>The Story of the Treasure Seekers</i>
1901	Nesbit, E.	<i>Nine Unlikely Tales</i>
1902	Potter, B.	<i>The Tale of Peter Rabbit</i>
1903	Potter, B.	<i>The Tale of Squirrel Nutkin</i>
1904	Potter, B.	<i>The Tale Of Benjamin Bunny</i>
1904	Potter, B.	<i>The Tale of Two Bad Mice</i>
1905	Nesbit, E.	<i>The Railway Children</i>
1906	Nesbit, E.	<i>Five Children and It</i>
1906	Nesbit, E.	<i>The Story of the Amulet</i>
1908	Potter, B.	<i>The Tale of Jemima Puddle-Duck</i>
1909	Potter, B.	<i>The Tale of the Flopsy Bunnies</i>
1911	Burnett, F. H.	<i>The Secret Garden</i>
1841	Marryat, F.	<i>Masterman Ready. The Wreck of the "Pacific"</i>
1841	Ruskin, J.	<i>The King of the Golden River; or the Black Brothers: A Legend of Stiria</i>
1844	Marryat, F.	<i>The Settlers in Canada</i>
1847	Marryat, F.	<i>The Children of the New Forest</i>
1854	Thackeray, W. M.	<i>The Rose and the Ring</i>

1857	Hughes, T.	<i>Tom Brown's Schooldays (By An Old Boy)</i>
1858	Ballantyne, R. M.	<i>The Coral Island, A Tale of the Pacific Ocean</i>
1858	Farrar, F. W.	<i>Eric, Or, Little by Little, A Tale of Roslyn School</i>
1863	Kingsley, C.	<i>The Water-Babies</i>
1865	Carroll, L.	<i>Alice's Adventures in Wonderland</i>
1870	Kingsley, C.	<i>Madam How and Lady Why. Or, First Lessons in Earth Lore for Children</i>
1871	Carroll, L.	<i>Through the Looking-Glass</i>
1871	MacDonald, G.	<i>At the Back of the North Wind</i>
1872	MacDonald, G.	<i>The Princess and the Goblin</i>
1881	Jefferies, R.	<i>Wood Magic. A Fable</i>
1882	Anstey, F.	<i>Vice Versa or A Lesson to Fathers</i>
1882	Henty, G. A.	<i>Winning His Spurs. A Tale of the Crusades</i>
1883	Stevenson, R. L.	<i>Treasure Island</i>
1884	Henty, G. A.	<i>With Clive in India. Or, The Beginnings of an Empire</i>
1885	Haggard, H. R.	<i>King Solomon's Mines</i>
1886	Stevenson, R. L.	<i>Kidnapped</i>
1887	Haggard, H. R.	<i>Allan Quatermain</i>
1887	Reed, T. B.	<i>The Fifth Form at Saint Dominic's: A School Story</i>
1888	Wilde, O.	<i>The Happy Prince, and Other Tales</i>
1889	Lang, A.	<i>Prince Prigio. From "His Own Fairy Book"</i>
1894	Kipling, R.	<i>The Jungle Book</i>
1895	Grahame, K.	<i>The Golden Age</i>
1897	Crockett, S. R.	<i>The Surprising Adventures of Sir Toady Lion With Those of General Napoleon Smith</i>
1898	Falkner, J. M.	<i>Moonfleet</i>
1898	Farrow, G. E.	<i>Adventures in Wallypug-Land</i>
1898	Grahame, K.	<i>Dream Days</i>
1899	Kipling, R.	<i>Stalky & Co.</i>
1900	Anstey, F.	<i>The Brass Bottle</i>
1908	Grahame, K.	<i>The Wind in the Willows</i>
1910	De La Mare, W.	<i>The Three Mulla-mulgars</i>
1911	Barrie, J. M.	<i>Peter and Wendy (Peter Pan)</i>

Appendix 2. Gendered body part clusters in ChiLit and the OCC2000+.

ChiLit corpus: 5-word GBP clusters								
Male clusters			Female clusters			Male/female clusters		
	Freq.	Bks		Freq.	Bks		Freq.	Bks
his hands in his pockets	20	11	her face with her hands	12	5	her arms round his neck	11	11
his face with his hands	19	12	covered her face with her	10	5	her in his arms and	9	7
covered his face with his	15	9	her face in her hands	9	7	put her hand on his	7	6
on his hands and knees	15	9	with tears in her eyes	9	6	her hand on his arm	5	5
and held out his hand	14	9	she held out her hand	9	5	her head on his shoulder	5	3
his head on one side	13	7	her arms round her neck	9	4	put his arm round her	5	4

the back of his head	12	9	she put her arms round	7	7	threw her arms round his	5	5
he put out his hand	11	10	and threw her arms round	7	6	took her in his arms	5	5
his eyes fixed on the	11	10	clapped her hands and said	6	6			
with his hands in his	11	9	held out her hand to	6	5			
looked up in his face	11	6	she put her hand on	6	5			
arms round his neck and	10	10	threw her arms round her	6	5			
with tears in his eyes	10	10	when she opened her eyes	6	5			
when he opened his eyes	9	9	her eyes full of tears	6	4			
the top of his head	9	6	her on the back and	6	4			
face with his hands and	8	8	face with her hands and	6	3			
his head out of the	8	8	throwing her arms round her	6	3			
with his back to the	8	7	and put her arms round	5	5			
he held out his hand	8	6	her arms round her and	5	5			
he sprang to his feet	8	6	on her hands and knees	5	5			
his hand in his pocket	8	6	put her head out of	5	5			
laid his hand on his	8	6	tears came into her eyes	5	5			
put his hand in his	8	5	and whispered in her ear	5	4			
his face in his hands	7	7	her face hidden in her	5	4			
put out his hand to	7	7	her head out of the	5	4			
himself on his knees and	7	6	thumped her on the back	5	4			
his head on his hand	7	6	she covered her face with	5	2			
turned on his heel and	7	6	clapped her hands with delight	4	3			
put his hand to his	7	5						
looking up in his face	7	4						
up in his face and	7	3						
held out his hand to	6	6						
put his head out of	6	6						
he opened his eyes and	6	5						
him by the hand and	6	5						
his finger in his mouth	6	5						
his hands on his knees	6	5						
laid his hand on the	6	5						
put out his hand and	6	5						
the palm of his hand	6	5						
threw himself on his knees	6	5						
took to his heels and	6	5						
he put his hand in	6	4						
hands in his pockets and	6	3						
he lifted his head and	6	3						
his hand on his shoulder	6	3						
laying his hand on his	6	3						
and he laid his hand	5	5						
buried his face in his	5	5						
he threw his arms round	5	5						
him on the shoulder and	5	5						
his elbows on his knees	5	5						
in his arms and carried	5	5						
in his hand and a	5	5						
in his hand as he	5	5						
it into his head to	5	5						
out his hand to the	5	5						
out of his mouth and	5	5						
with his face to the	5	5						
hand in his pocket and	5	4						
he held in his hand	5	4						
he laid his hand on	5	4						
he put in his hand	5	4						
his hand as if to	5	4						
his head out of his	5	4						
in his arms and kissed	5	4						
sprang to his feet and	5	4						
the hand and led him	5	4						
took him by the hand	5	4						
with his eyes on the	5	4						
him by the arm and	5	3						
him full in the face	5	3						
the corners of his mouth	5	3						
with his ear to the	5	3						

he said between his teeth	5	2						
his head upon one side	5	2						

OCC2000+ subcorpus: 5-word GBP clusters								
Male clusters			Female clusters			Male/female clusters		
	Freq.	Bks (Auth.)		Freq.	Bks (Auth.)		Freq.	Bks (Auth.)
the back of his neck	118	70 (34)	her hands on her hips	51	42 (22)	put his arm around her	19	13 (9)
the corner of his eye	107	58 (27)	the top of her head	37	29 (22)			
he closed his eyes and	80	40 (23)	the back of her neck	35	28 (18)			
the back of his head	78	56 (33)	she opened her eyes and	33	25 (18)			
his head in his hands	73	60 (42)	she closed her eyes and	31	23 (13)			
the back of his hand	61	48 (33)	the corner of her eye	30	26 (18)			
he held out his hand	54	33 (24)	the back of her head	30	24 (18)			
the palm of his hand	53	39 (26)	the back of her hand	29	27 (19)			
the top of his head	52	35 (21)	her head to one side	27	21 (14)			
he opened his eyes and	49	30 (16)	her head in her hands	27	18 (14)			
his head on one side	47	29 (9)	she shook her head and	26	23 (15)			
his head to one side	44	34 (18)	her face in her hands	25	23 (17)			
his eyes fixed on the	38	30 (17)	put her hands on her	24	23 (14)			
he got to his feet	37	32 (26)	she opened her mouth to	21	18 (12)			
on his hands and knees	37	29 (18)	with her back to the	20	17 (12)			
he shook his head and	35	32 (24)	got to her feet and	19	16 (9)			
got to his feet and	35	32 (20)	put an arm round her	19	14 (7)			
opened his mouth to speak	35	30 (19)	her head on one side	18	13 (12)			
put a hand on his	35	27 (16)						
he opened his mouth to	33	30 (18)						
and held out his hand	33	28 (18)						
a hand on his shoulder	33	25 (18)						
with his back to the	32	31 (22)						
his finger to his lips	32	28 (21)						
he glanced over his shoulder	30	22 (14)						
in front of his face	29	27 (15)						
turned on his heel and	29	26 (16)						
a hand on his arm	29	23 (17)						
the side of his face	28	24 (17)						
threw back his head and	28	23 (15)						
he dropped to his knees	28	20 (14)						
the side of his head	27	22 (18)						
and he shook his head	27	21 (15)						
held out his hand and	26	21 (14)						
in front of his eyes	26	20 (16)						
smiled and shook his head	26	20 (11)						
a finger to his lips	25	24 (20)						
his hands over his ears	25	22 (16)						
the look on his face	24	23 (18)						
the corner of his mouth	24	23 (18)						
over his shoulder at the	24	22 (15)						
leapt to his feet and	24	20 (13)						
when he opened his eyes	24	19 (13)						
the pit of his stomach	24	17 (11)						
put his hands over his	23	20 (13)						
held out his hand to	23	19 (13)						
opened his mouth to say	23	18 (9)						
he put his hand on	22	21 (17)						
the corners of his mouth	22	21 (14)						
looked back over his shoulder	22	19 (12)						
rose to his feet and	22	15 (7)						
his hands on his knees	21	20 (15)						
he jumped to his feet	21	20 (14)						
he opened his mouth and	21	20 (13)						
over his shoulder and saw	21	14 (11)						
his hands through his hair	21	14 (10)						

keep an eye on him	20	20 (17)						
his face in his hands	20	17 (12)						
his hands behind his back	20	16 (15)						
dropped to his knees and	20	16 (11)						
his hands on his hips	20	13 (11)						
put his finger to his	19	18 (13)						
then he shook his head	19	18 (13)						
take his eyes off the	19	12 (9)						
he turned his back on	18	17 (16)						
his eyes for a moment	18	16 (15)						
his hands in his pockets	18	16 (15)						
put his head in his	18	16 (15)						
the tips of his fingers	18	16 (13)						
head in his hands and	18	16 (13)						
the soles of his feet	18	15 (13)						
the back of his throat	18	14 (9)						
opened his eyes and saw	18	13 (8)						
corner of his eye he	18	12 (8)						
sat back on his heels	18	11 (6)						

Appendix 3. The *her hands on her hips* cluster in the OCC2000+ by author distribution.

Author	Freq
Sparkes, Ali	12
Prue, Sally	4
Golding, Julia	4
Owen, Laura / Paul, Korky	3
Briggs, Andy	3
Hammond, Sarah	3
Richardson, Ellen	2
Jordan, Sophie	2
Cousins, Dave	2
Lewis, Gill	2
Abela, Deborah	2
Lindgren, Astrid	2
Jensen, Marie-Louise	1
Pielichaty, Helena	1
Owen, Laura /Paul, Korky	1
Henderson, J.A.	1
Cole, Steve	1
Sutcliff, Rosemary	1
Stirling, Joss	1
McCaughrean, Geraldine	1
Sinder, Nicky	1
Howarth, Leslie	1

Endnotes

¹ We would like to thank Oxford University Press for kindly giving us access to the OCC hosted on SketchEngine <https://www.sketchengine.eu/oxford-childrens-corpus/>. For the OCC2000+ subcorpus we included texts published after 2000, but the date is not necessarily the first publication date. Also note that SketchEngine does not provide data on author gender, this had to be checked manually. Since the OCC2000+ is not openly

accessible, in Table 5 and Appendix 2 we provide information both on the distribution of clusters across books and authors. For ChiLit, readers have access to this information through the CLiC interface.

² While the number of different clusters and the frequencies of individual clusters are relatively low, it is important to note that the repeated appearance of the exact same sequence of five words is already relevant in itself. The fact that such sequences are found in the first place is a reflection of their functional relevance for the creation of fictional worlds (cf. Mahlberg 2013).

³ There is research in psychology that supports these observations. Argyle (2010: 209) refers to insights from Mehrabian (1969: 367) to explain, based on data from experimental studies, that the openness of arms was seen as signalling a positive attitude only when used by females in relation to liked male addressees. This supports our observation that clusters describing this type of body language are more frequent for female characters.

⁴ Women usually wore their pockets underneath their petticoats and they were tied round their waist (see e.g. <http://www.vam.ac.uk/content/articles/a/history-of-pockets/>).

⁵ Additionally, there is a cluster *put his arm round her*, occurring three times in the OCC2000+.

⁶ This cluster occurs in ChiLit only once and it does not occur at all in the nineteenth century reference corpus or any of the Dickens' novels (clic.bham.ac.uk).

⁷ See the famous TED talk by Amy Cuddy

(https://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are?language=en).

⁸ 'Hands on hips' is a posture of dominance (Argyle 2010) that is signalled by taking up more physical space and appearing larger, which, of course, links to the animal kingdom, a highly relevant theme in children's literature. Argyle (2010: 208), for example, discusses examples of animals conveying dominance by size or chest expanding, while in humans "dominance and status are shown by drawing up to full height, expanding the chest, hands on hips, expansive gestures - all ways of increasing apparent size". Additionally, Argyle (2010: 209) points to studies in psychology that find arms akimbo, i.e. on hips, were found to communicate negative attitudes, both for senders and receivers.