What emotions do Kazuo Ishiguro's readers feel?: A corpus-based approach to reader responses[1]

Haruko Sera

Abstract

When we read and review a work of literature, we usually comment about how we feel about the work, including whether we like it or not. Focusing on reader responses to some of Kazuo Ishiguro's works, this article aims to find out what emotions the readers feel and how they are related to the stories. The reader reviews data were collected from the *Goodreads* website. The analyses were carried out both quantitatively and qualitatively using Wmatrix and other corpus analysis tools. The result of the semantic analysis done by Wmatrix showed that 'sad' is the most characteristic emotion of Ishiguro's readers, although there are other emotions, depending on each work. It also showed that readers' emotions are not directly related to the feelings expressed in the works. Each software has its own semantic categories and its own distinctive ways of assigning each word to a category. However, the results of analyses done using two different tools both showed that more emotional expressions are found in readers' comments than in the stories themselves. The results of the analyses also suggest that the frequency of the words belonging to the semantic category 'Sad' is strongly correlated with reviewers' ratings. This study contributes to the understanding of an ordinary reader's emotional response—an important, though under-researched aspect of literature.

Keywords : emotion, reader response, Kazuo Ishiguro, semantic analysis, corpus stylistics

1．Introduction: Emotion and the corpus-based approach

When we read a work of literature, we feel various emotions. Is it possible to

---

[1] This article is based on the presentation given at the PALA (Poetics and Linguistics Association) annual conference in July 2019 at Liverpool University in England.

measure emotions? Even if it is possible, it is very difficult to define 'emotion' as we define other abstract concepts. According to Oxford English Dictionary[2], 'emotion' stems from Latin, and originally meant physically moving. It also signified political and social agitation. A little later, in 1660, it meant 'agitation of … mind, feeling, passion'. This last example is the same definition with the one that we know today.

OED

Emotion

1. A moving out, migration, transference from one place to another.（1603 -）
2. A moving, stirring, agitation, perturbation（in physical sense）.（1603 -）
3. A political or social agitation; a tumult, popular disturbance.（1579）
4. *fig.* Any agitation or disturbance of mind, feeling, passion; any vehement or excited mental state.（1660 -）

   b. *Psychology*. A mental 'feeling' or 'affection'（*e.g.* of pleasure or pain, desire or aversion, surprise, hope or fear, etc.）as distinguished from cognitive or volitional sates of consciousness.（1808 -）

Emotion has been a central concern to not only researchers of literature but also to researchers in many other academic fields（Sera, 2018）. Damasio（1999）, a neuroscientist, discussed emotion as follows:

> The mention of the word emotion usually calls to mind one of the six so-called primary or universal emotions: happiness, sadness, fear, anger, surprise, or disgust. Thinking about the primary emotions makes the discussion of the problem easier, but it is important to note that there are numerous other behaviors to which the label 'emotion' has been attached. They include so-called secondary or social emotions, such as embarrassment, jealousy, guilt, or pride; and what I call background emotions, such as well-being or malaise, calm or tension. The label emotion has also been attached to drives and motivations and to the states of pain and pleasure. [emphasis added]
>
> Damasio（1999: 50-51）

---

[2] The Oxford English Dictionary, Vol. III

According to Paul Ekman, 'the Atlas of Emotion' consists of 'Anger, Disgust, Enjoyment, Fear, Sadness'[3]. In *Inside Out*, a Disney film, basic emotions of Riley, the heroine, is 'Joy, Fear, Anger, Disgust, Sadness'. Even the numbers of primary emotions vary. They all have 'sadness', 'anger', 'fear', and 'disgust', but 'happiness', 'enjoyment', and 'joy' seem to be slightly different. Besides, how should we deal with 'surprise', and secondary and background emotions? As biologically explained by Damasio (1999:51), emotions 'are complicated collections of chemical and neural responses, forming a pattern'. How could we define and 'measure' such a complicated thing?

On the other hand, it is comparatively easy to answer what a corpus is and what a corpus-based approach is. According to the introduction page of the UCREL ([Lancaster] University Centre for Computer Corpus Research on Language) website[4], corpora (sg. corpus) are 'large bodies of naturally-occurring text'. A corpus-based approach is an 'approach to statistical natural language processing based upon information from large bodies of naturally-occurring text'.

As indicated above, it seems impossible to statistically process 'emotion', especially as it is defined by a biologist. However, with a corpus-based approach, which deals with naturally occurring language, concrete words depicting emotions, such as 'happy', in a sentence like 'I'm happy' will be statistically processed in this article.

2. Research questions

The research questions of this article are:
1) What emotions do Kazuo Ishiguro's readers feel?

Sera (2018) showed that the most significant emotion expressed by the readers of both John William's *Stoner*[5] and Ishiguro's *The Remains of the Day* was 'sad'. In this article six of Ishiguro's novels are analysed, along with the comments of readers. Do the readers report similar emotions in reading all of these novels, or do they report distinctive emotional response to each novel?

2) How are the readers' emotions related to emotions portrayed in the works?

Sera (2018) also showed both with *Stoner* and *The Remains of the Day*, emotions

[3] Atlas of Emotions in the New York Times. Retrieved from https://www.paulekman.com/blog/atlas-of-emotions/.

[4] UCREL Home Page (University Centre for Computer Corpus Research on Language) (http://ucrel.lancs.ac.uk/) WHAT IS UCREL? (http://ucrel.lancs.ac.uk/whatis.html).

[5] Williams, J. E., & McGahern, J. (1965, 2012). *Stoner*. London: Vintage.

expressed by their readers were different from those expressed by the protagonist or the narrator in the works. This research aims to find whether this is also the case with emotions felt by the readers of the other works by Ishiguro.

3．Methodology: Data collection and quantitative/qualitative analyses

The research reported in this article analyses and compares six novels by Kazuo Ishiguro and six texts of readers' reviews. The text data of the works were created through scanning and character recognition. The reader reviews data were collected from the *Goodreads* website[6], which is a social book site where anybody can post reviews. The site provides access to a large amount data consisting of natural responses from a broad range of general readers, making it ideal for corpus building. In collecting data from the *Goodreads* website[7], the comments in English from the first 10 pages were taken, because the only first 10 pages are retrievable. These pages are regularly updated, and each page contains 30 reviews. The numbers of words of the 12 texts, 6 works, and 6 comments' texts are listed in Table 1. 'Gr' indicates the readers' comments data taken from the *Goodreads* website.

Table 1. Number of words per text.

Text	No. of words	Text	No. of words
A Pale View of Hills	50,930	*A Pale View of Hills*_Gr	42,457
An Artist of the Floating World	62,716	*An Artist of the Floating World*_Gr	50,944
The Remains of the Day	71,373	*The Remains of the Day*_Gr	55,071
When We Were Orphans	100,855	*When We Were Orphans*_Gr	48,659
Never Let Me Go	93,294	*Never Let Me Go*_Gr	72,522
The Buried Giant	100,738	*The Buried Giant*_Gr	66,183

The works and readers' comments were analysed and compared both quantita-

---

[6] *Goodreads*（https://www.goodreads.com/）.
[7] The dates of data collected are as follows: *A Pale of Hills*_Gr: April 27, 2019; *An Artist of Floating World*_Gr: April 21, 2019; *The Remains of the Day*_Gr: April 7, 2019; *When We Were Orphans*_Gr: April 20, 2019; *Never Let Me Go*_Gr: April 4, 2019; *The Buried Giant*_Gr: April 18, 2019.

tively and qualitatively using corpus analysis tools, mainly Wmatrix with supplementary uses of DocuScope and KH Coder. Although Wmatrix can analyse and compare the texts at the word, part-of-speech, and semantic level, in this article the analyses and comparisons are carried out only at the semantic level, since the semantic field of 'emotion' is the focus of the present study. Wmatrix uses USAS tagset[8] for semantic analysis. According to the USAS Home Page[9], it was 'originally loosely based on Tom McArthur's *Longman Lexicon of Contemporary English*（McArthur, 1981）and 'has a multi-tier structure with 21 major discourse fields ... subdivided ...in certain cases'. Table 2 shows 21 major discourse fields of the USAS tagset.

Table 2. USAS tagset major discourse fields.

A general and abstract terms	B the body and the individual	C arts and crafts	E emotion
F food and farming	G government and public	H architecture, housing and the home	I money and commerce in industry
K entertainment, sports and games	L life and living things	M movement, location, travel and transport	N numbers and measurement
O substances, materials, objects and equipment	P education	Q language and communication	S social actions, states and processes
T Time	W world and environment	X psychological actions, states and processes	Y science and technology
Z names and grammar			

（http://ucrel.lancs.ac.uk/usas/）

Among these 21 fields, 'emotion' and its subfields（E）are focused on in the present study, although 'psychological action, states and processes'（X）could also be related and should be considered in future studies. E is divided into the following six subdivisions, E1 − E6. E4 is further divided into E4.1 and E4.2. Some of their prototypical examples are also listed.[10] '+' or ' − ' indicates a positive or negative position on a semantic

---

scale.

E1 General
General terms depicting emotional actions, states and processes

DEROGATORY (-) , EMOTION, INTUITIVE ...

GUT FEELING, HARD FACED (-) ...

E2 Liking
Terms depicting fondness/affection/partiality/attachment, or the lack of

ABHOR (-) , ADORE (+) , AFFECTIONS (+) ...

NOT CARE FOR (-) , CAN'T BEAR TO (-) ...

E3 Calm/Violent/Angry
Terms depicting (level of) serenity/composure/anger/violence

AGITATE (-) , APPEASE (+) , GENTLE (+) ...

HOT-HEADED (-) , CEASE FIRE (+) ...

E4 Happy/sad
Entries are sub-classified into the following:

E4.1 Happy/sad: Happy
Terms depicting (level of) happiness

AMUSED (+) , BLISS (+) , DEJECTED (-) ...

BURST INTO TEARS (-) , CLOUD NINE (+) ...

E4.2 Happy/sad: Contentment
Terms depicting (level of) contentment

AGGRIEVED (-) , CHUFFED (+) , CONTENT (+) ...

FED UP (-) , HAD ENOUGH OF (-) ...

E5 Fear/bravery/shock
Terms relating to (level of) trepidation/courage/surprise, etc

AMAZED (-) , ASTONISH (-) , BRAVE (+) ...

EYE OPENER (-) , FACE UP TO (+)

E6 Worry, concern, confident
Terms relating to (level of) apprehension/confidence, etc

AGONIZING (-) , ANXIOUS (-) , CONFIDENTLY (+) ...

AT HOME WITH (+) , HANG UP (-) ...

４．Results

Twelve texts, six novels and six reviews' texts, were semantically analysed by Wmatrix. From these, three novels and their readers' comments were chosen to be explained and to illustrate the comparison between a work and its readers' response.

Table 3. E category comparison:
*The Remains of the Day*_Goodreads
and British National Corpus（BNC）Sampler Written.[11]

Item		*The Remains of the Day* Goodreads		BNC Sampler Written			LL	%DIFF
		Freq.	%	Freq.	%		LL	%DIFF
E1	Emotional Actions, States And Processes General	134	0.24	373	0.04	+	238.83	531.64
E4.1-	Sad	214	0.39	979	0.10	+	236.52	284.33
E2+	Like	218	0.40	1372	0.14	+	154.90	179.37
E4.2+	Content	66	0.12	352	0.04	+	60.04	229.67
E2+++	Like	26	0.05	74	0.01	+	45.53	517.75
E4.1+	Happy	123	0.22	1370	0.14	+	20.75	57.85
E3-	Violent/Angry	53	0.10	1647	0.17	-	20.02	-43.72
E2++	Like	6	0.01	384	0.04	-	15.55	-72.53
E4.1---	Sad	4	0.01	5	0.00	+	11.57	1306.57
E4.2-	Discontent	20	0.04	157	0.02	+	9.39	123.98

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *The Remains of the Day*_Goodreads; LL: log-likelihood value.

Table 3 shows the result of semantic analysis and comparison between the comments of readers of *The Remains of the Day* and the reference corpus, the BNC Sampler Written corpus[12], regarding the Emotion category（E）. The log-likelihood statistic（LL）is employed by Wmatrix. Since 6.63 is the cut-off for 99% confidence of significance[13],

---

[11] Only statistically significant tags are listed in Table 3 and in the following tables. To be statistically significant, items with a LL value over about 7 should be looked at, since 6.63 is the cut-off for 99% confidence of significance.

[12] BNC Sampler written: 968,267 words from BNC Sampler written corpus.

[13] 'You should just look at items with a '+' code since this shows overuse in your text as compared to the standard English corpora. To be statistically significant you should look at items with a LL value over about 7, since 6.63 is the cut-off for 99% confidence of significance'. Introduction to Wmatrix（http://ucrel.lancs. ac.uk/wmatrix/）.

items with a LL value over about 7 are statistically significant. Items with a '+' code shows overuse in the text examined. Compared against the BNC Sampler Written corpus, in the *Goodreads* data for *The Remains of the Day*, the words classified into the emotional fields such as 'Sad', 'Like', 'Content', 'Happy', are statistically overused. 'Sad' is the most significant semantic field, with the high LL value, 284.33, except 'General' (E1), into which general terms depicting emotion, such as 'feeling' or 'emotion' are classified.

Table 4. E category comparison:
The Remains of the Day and British National Corpus (BNC) Sampler Written.

Item		*The Remains of the Day*		BNC Sampler Written			LL	%DIFF
		Freq.	%	Freq.	%			
E4.2+	Content	81	0.11	352	0.04	+	66.66	212.18
E4.1+	Happy	173	0.24	1370	0.14	+	38.76	71.31
E1	Emotional Actions, States And Processes General	65	0.09	373	0.04	+	33.43	136.41
E6-	Worry	114	0.16	961	0.10	+	20.38	60.93
E2++	Like	8	0.01	384	0.04	-	19.38	-71.74
E4.1-	Sad	113	0.16	979	0.10	+	18.11	56.59
E3-	Violent/Angry	81	0.11	1647	0.17	-	14.32	-33.28

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *The Remains of the Day*; LL: log-likelihood value.

The result of comparison between *The Remains of the Day* and BNC Sampler Written is shown in Table 4. 'Content' and 'Happy' are the most significant emotional fields in this novel. Unlike the novel's readers, its protagonist and narrator, Steven, does not seem to be very sad, or at least does not express his sad feelings using words depicting sadness as often as his readers. Towards the end of the story, Steven was chatting with a stranger who happened to sit next to him on the bench. When the stranger offered him a 'hankie'[14], we know that Steven became so sad that he burst into tears. 'Hankie' is certainly not a word depicting sadness.

---

[14] 'Oh dear, mate. Here, you want a hankie? I've got one somewhere. Here we are. It's fairly clean. Just blew my nose once this morning, that's all. Have a go, mate.' (Kazuo Ishiguro, *The Remains of the Day*, 2005:255).

Table 5. E category comparison:
*The Buried Giant*_Goodreads and British National Corpus (BNC) Sampler Written.

Item		*The Buried Giant* Goodreads		BNC Sampler Written			LL	%DIFF
		Freq.	%	Freq.	%			
E2+	Like	304	0.46	1372	0.14	+	265.82	224.17
E3+	Calm	104	0.16	623	0.06	+	57.40	144.23
E2+++	Like	32	0.05	74	0.01	+	55.89	532.65
E4.2-	Discontent	38	0.06	157	0.02	+	37.35	254.11
E1	Emotional Actions, States And Processes General	59	0.09	373	0.04	+	29.26	131.42
E3-	Violent/Angry	170	0.26	1647	0.17	+	23.44	51.01
E2-	Dislike	63	0.10	453	0.05	+	23.35	103.47
E2++	Like	6	0.01	384	0.04	-	21.17	-77.14
E4.1-	Sad	107	0.16	979	0.10	+	18.76	59.90
E4.1+++	Happy	6	0.01	11	0.00	+	12.37	698.01

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *The Buried Giant*_Goodreads; LL: log-likelihood value.

On the other hand, as is indicated in Table 5, the readers of *The Buried Giant* do not seem to be very emotional. The examples of words included in the E2+ category are: love, like, and enjoy. Those in the E4.2- category, 'Discontent', are: disappointed, disappointment, and disappointing. These words indicate readers' discontent or disappointment with this work, rather than sympathy for the characters as is shown in the following examples.

-- That's why it pains me a little to say that I found *The Buried Giant* <u>disappointing</u>. (William2)

-- I'm not angry Kaz, I'm just very <u>disappointed</u>. (Barry Pierce)

-- Fantasy fans are most likely to be <u>disappointed</u> by *The Buried Giant* .... (Maciek)

-- In fact, the entire ending, aside from the exact end, was just a heap of <u>disappointment</u>. (Joey Woolfardis)

-- First of all, if your exposure to Kazuo Ishiguro is limited to *The Remains of the Day* or *Never Let Me Go*, you might be <u>disappointed</u>. (Bonnie)

-- Kazuo Ishiguro is a singular writer, but this particular effort was <u>disappointing</u> on

pretty much every level. (Hesper)

-- Ishiguro's masterful storytelling skills and handle on emotional depth were there, but hidden. Coming from him, "*The Buried Giant*" was a great <u>disappointment</u>. (Vonia)

[emphasis added]

Table 6. E category comparison:
The Buried Giant and British National Corpus (BNC) Sampler Written.

Item		*The Buried Giant*		BNC Sampler Written			LL	%DIFF
		Freq.	%	Freq.	%			
E3+	Calm	269	0.27	623	0.06	+	301.91	315.02
E5-	Fear/shock	276	0.27	757	0.08	+	254.47	250.44
E5+	Bravery	66	0.07	134	0.01	+	84.63	373.41
E3-	Violent/Angry	310	0.31	1647	0.17	+	79.96	80.91
E6-	Worry	193	0.19	961	0.10	+	59.91	93.03
E2++	Like	5	0.00	384	0.04	-	46.16	-87.48
E4.2+	Content	78	0.08	352	0.04	+	30.93	112.99

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *The Buried Giant*; LL: log-likelihood value.

Table 6 shows the result of comparison between *The Buried Giant* and BNC Sampler Written. In *The Buried Giant*, the narrator and the protagonists, an elderly British couple, seem to be more emotional than the novel's readers. However, the emotional subfields shown as statistically significant are 'Calm', 'Fear/shock', 'Bravery', 'Violent/Angry', and 'Worry'. It seems natural that these feelings are frequently expressed by the characters and in the narration of this story, which is set in post-Arthurian Britain with a dragon, ogres, and fierce battles.

Table 7. E category comparison:
*Never Let Me Go*_Goodreads and British National Corpus (BNC) Sampler Written.

Item		*Never Let Me Go* Goodreads		BNC Sampler Written				
		Freq.	%	Freq.	%		LL	%DIFF
E2+	Like	316	0.44	1372	0.14	+	254.02	207.51
E4.1-	Sad	223	0.31	979	0.10	+	176.37	204.12
E1	Emotional Actions, States And Processes General	127	0.18	373	0.04	+	163.81	354.59
E5-	Fear/shock	119	0.16	757	0.08	+	47.19	109.88
E2+++	Like	24	0.03	74	0.01	+	29.45	333.02
E6-	Worry	122	0.17	961	0.10	+	26.32	69.50
E4.2-	Discontent	34	0.05	157	0.02	+	24.91	189.14
E4.1+	Happy	59	0.08	1370	0.14	-	20.62	-42.50
E2++	Like	8	0.01	384	0.04	-	19.99	-72.18

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *Never Lt Me Go*_Goodreads; LL: log-likelihood value.

Considering the tragic nature of *Never Let Me Go*, a story of children who are destined to donate their organs, it is expected to give rise to sad emotions. But as shown in Table 7, the readers of this novel are not as sad as the readers of *The Remains of the Day*, although 'Fear/shock' is naturally be seen. Some readers feel 'disappointment' in the story as in the case of *The Buried Giant*.

Table 8. E category comparison:
Never Let Me Go and British National Corpus (BNC) Sampler Written.

Item		*Never Let Me Go*		BNC Sampler Written				
		Freq.	%	Freq.	%		LL	%DIFF
E4.1+	Happy	328	0.35	1370	0.14	+	180.56	148.48
E2++	Like	7	0.01	384	0.04	-	34.50	-81.08
E6-	Worry	132	0.14	961	0.10	+	13.34	42.56
E3+	Calm	91	0.10	623	0.06	+	12.39	51.60

Freq.: frequency; %: relative frequency; +/-: overuse/underuse in *Never Let Me Go*; LL: log-likelihood value.

Table 8 indicates the result of comparison between *Never Let Me Go* and BNC Sampler Written data. Considering the fate of the protagonists, it might be surprising that 'Sad' does not appear here. Instead, 'Happy' is the most statistically significant semantic field. This is probably because, on the surface, they live lives like ordinary school students, although it requires a more in-depth examination to find out why the words belonging to the subfield, 'Happy' occur so frequently.

Regarding twelve texts, the relative frequencies (occurrences per 1,000 words), of the words belonging to emotional discourse field (E) are shown in Table 9. There are some exceptions, but overall, more emotional words are found in the readers' comments than in the works.

According to the results of analyses done by Wmatrix, readers' comments tend to contain more words denoting emotions than the works themselves, although in some cases, no significant differences are found. How do the results of analyses done by other software tools compare? Figure 1 shows the result of rhetorical analysis done by Docuscope (Ishizaki et al., 2011). As defined in its webpage, 'DocuScope is a text analysis environment with a suite of interactive visualization tools for corpus-based rhetorical analysis'.[15] To obtain more data for comparison, the works of two other authors from my previous studies, Haruki Murakami and Yasunari Kawabata, are also analysed. Therefore, Figure 1 shows the result of the analysis of the 19 texts—six novels by Kazuo Ishiguro, six texts of each novel's reviews, three novels by Yasunari Kawabata, and four novels by Haruki Murakami. The added texts by other authors are as follows;

Yasunari Kawabata: *The Izu Dancer*, *Snow Country*, *The Master of Go*
Haruki Murakami: *After Dark*, *Colorless Tsukuru Tazaki and His Years of Pilgrimage*, *Kafka on the Shore*, *Norwegian Wood*

---

[15] DocuScope: Computer-aided Rhetorical Analysis (https://www.cmu.edu/dietrich/english/research/docuscope.html).

Table 9. Relative frequencies of 'emotion'（E）subfields in each text.

Item	PV	PV_Gr	AF	AF_Gr	RD	RD_Gr	WO	WO_Gr	NL	NL_Gr	BG	BG_Gr
E1	0.07	0.12	0.07	0.11	0.09	0.25	0.06	0.18	0.05	0.18	0.05	0.09
E2-	0.02	0.05	0.02	0.04	0.04	0.03	0.04	0.00	0.03	0.05	0.04	0.10
E2+	0.26	0.51	0.19	0.43	0.17	0.46	0.22	0.59	0.20	0.48	0.12	0.52
E3-	0.14	0.09	0.13	0.13	0.11	0.10	0.19	0.18	0.19	0.20	0.31	0.26
E3+	0.09	0.09	0.07	0.08	0.07	0.09	0.11	0.06	0.10	0.06	0.27	0.16
E4.1-	0.13	0.29	0.14	0.19	0.16	0.41	0.13	0.17	0.12	0.31	0.12	0.16
E4.1+	0.50	0.08	0.39	0.08	0.24	0.22	0.33	0.09	0.35	0.08	0.17	0.11
E4.2-	0.00	0.05	0.03	0.04	0.03	0.04	0.02	0.08	0.03	0.05	0.01	0.06
E4.2+	0.10	0.04	0.16	0.18	0.11	0.12	0.06	0.06	0.05	0.03	0.08	0.05
E5-	0.07	0.18	0.12	0.06	0.09	0.07	0.16	0.07	0.11	0.16	0.27	0.09
E5+	0.00	0.01	0.03	0.04	0.01	0.01	0.03	0.01	0.01	0.01	0.07	0.03
E6-	0.18	0.19	0.22	0.13	0.16	0.12	0.17	0.13	0.14	0.17	0.19	0.13
E6+	0.04	0.03	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.03	0.00
Total	2.91	3.01	2.82	2.83	2.32	3.64	2.72	2.99	2.50	3.20	2.96	3.24

E1: General; E2: Liking; E3: Calm/Violent/Angry; E4.1 − : Sad; E4.1+: Happy; E4.2: Contentment; E5: Fear/bravery/shock; E6: Worry, concern, confident.
PV: *A Pale View of Hills*; AF: *An Artist of the Floating World*; RD: *The Remains of the Day*; WO: *When We Were Orphans*; NL: *Never Let Me Go*; BG: *The Buried Giant.* -Gr: Goodreads
If an item has further subdivisions, they are added to each item. For example, the figures of E2++ （e.g. prefer）and E2+++ （e.g. favourite）are added to that of E2.

On the left-hand side of Figure 1, the list of rhetorical effects is indicated. Here, 'Positive Emotion' is the focus and the right-hand side ranks the texts in descending order. 'Gr_*Never Let Me Go*', for example, stands for the comments of *Never Let Me Go*'s readers. Regarding 'Positive Emotion', all *Goodreads* data rank high, except for the work *The Remains of the Day*, which ranks second. Therefore, the result of the analysis done by Docuscope shows that readers' comments tend to contain more words denoting 'positive' emotions.
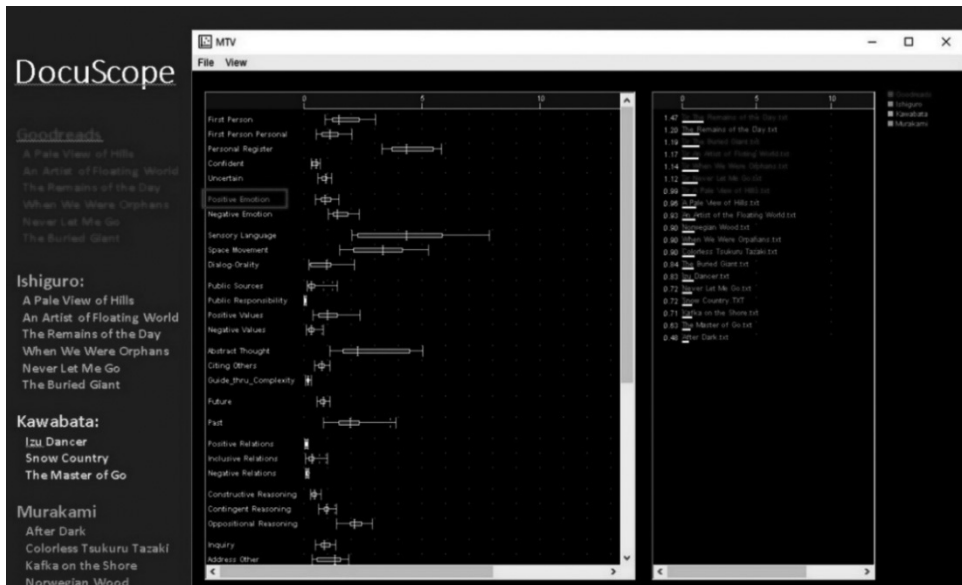
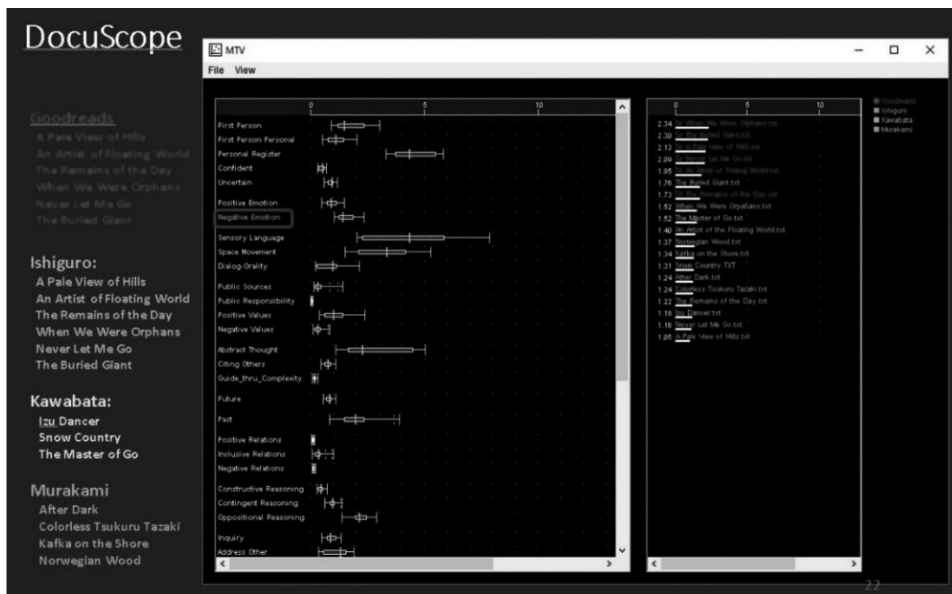Figure 1. DocuScope's analysis: Positive Emotion highlighted.

Figure 2. DocuScope's analysis: Negative Emotion highlighted.

In Figure 2 'Negative Emotion' is highlighted. Again, it is clear that the readers' data rank high, except for the work *The Buried Giant*, which ranks sixth. The result of the analysis done by Docuscope shows that readers' comments tend to contain more

words denoting 'negative' emotions. Therefore, the analysis done by Docuscope indicates a similar result to that of Wmatrix: readers' comments tend to contain more words denoting both 'positive' and 'negative' emotions than the works themselves. Furthermore, this is true even when the works of other writers are included.

Although people usually express various emotions when they give comments after reading a work of literature, it cannot necessarily be said that they are more emotional than the characters or the narrators of works of fiction. Some novels can be very emotional. Therefore, it is significant that the analyses done by two different tools yield the above results despite the fact that each tool has a distinctive classification system. Figure 3 shows an example of the result of DocuScope's analysis of Gr_*Never Let Me Go*. The words classified under 'Negative Emotion' are underlined. This classification does not necessarily correspond with that of Wmatrix. Table 10 shows how these words are classified by Wmatrix. It is clear that the classification systems of Docuscope and Wmatrix greatly differ.

Figure 3. Details of a DocuScope's analysis: Negative Emotion words underlined.

Table 10. Classification systems of DocuScope and Wmatrix.

Docuscope		Wmatrix	
Negative Emotion	Sem. Tag	Major discourse field	Subdivision
pity	E1	E：emotion	General
alienation	A6.1-	A：general and abstract terms	Comparing：Similar/different
alienated	A6.1-	A：general and abstract terms	Comparing：Similar/different
lies	A5.2-	A：general and abstract terms	Evaluation：True/false
horrible	O4.2-	O：substances, materials, objects and equipment	Judgement of appearance (pretty etc.)
hated	E2-	E：emotion	Liking
grotesque	A6.2-	A：general and abstract terms	Comparing：Usual/unusual
frightening	E5-	E：emotion	Fear/bravery/shock
disturbing	E6-	E：emotion	Worry, concern, confident
horror	E5-	E：emotion	Fear/bravery/shock
inflicted	A2.2	A：general and abstract terms	Affect：Cause/Connected
ravages	A1.1.2	A：general and abstract terms	Damaging and destroying
victims	A1.1.2	A：general and abstract terms	Damaging and destroying
too	N5.2+	N：numbers and measurement	Exceeding; waste
nightmarish	Z99		Unmatched
nightmare	X4.1	X：psychological actions, states and processes	Mental object：Conceptual object
disturbing	E6-	E：emotion	Worry, concern, confident
disorientation	M6	M：the body and the individual	Location and direction
anxiety	E6-	E：emotion	Worry, concern, confident
worse	A5.1--	A：general and abstract terms	Evaluation：Good/bad
lacking	A9-	A：general and abstract terms	Getting and giving; possession
painful	B2-	B：the body and the individual	Health and disease
lost	X9.2-	X：psychological actions, states and processes	Ability：Success and failure
simply	A13.6	A：general and abstract terms	Degree：Diminishers

As for the words appeared twice（victims, disturbing, nightmare, lost, too）, only one is listed in this table.

KH Coder is free software for quantitative content analysis or text mining.[16] Although it does not analyse texts semantically, it has many useful functions for statistical analyses. Figure 4 gives a correspondence analysis of the words in twelve texts—six Ishiguro novels and six review texts. Here, only adjectives are examined, as emotions are often expressed using adjectives, in sentences such as 'I'm happy' or 'This is a sad story'. The words 'sad' and 'emotional' appear around where the readers' data, indicated by '_Gr', (for example, RD_Gr stands for *The Remains of the Day*'s readers review data) are clustered, and are considered to be closely related to the readers' comments. Here, individual words, rather than categories like those in Wmatrix and Docuscope, are analysed.

Figure 4. Correspondence analysis of adjectives.
PVH: *A Pale View of Hills*; AFW: *An Artist of the Floating World*; RD: *The Remains of the Day*; WWO: *When We Were Orphans*; NLMG: *Never Let Me Go*; BG: *The Buried Giant*. -Gr: Goodreads

---

16　KH Coder Index Page (http://khcoder.net/en/).

The KH Coder allows the user to generate their own categorisation. The format for writing coding rules is as follows (Higuchi, 2016). A detailed explanation of its coding rules can be found in the *KH Coder 3 Reference Manual*.[17]

1 *Name_of_a_Code_1
2 Condition to Apply to Code 1
3 # Memo about Code 1 (Write only if required)
4
5 *Name_of_a_Code_2
6 Condition 2
7
8 *Name_of_a_Code_3
9 Condition 3

Following is an example of coding rules. These rules are based on USAS semantic categorisation. *Happy and *Fun are two categories, while according to Wmatrix semantic analysis, they are both classified into E4.1+, 'Happy'. I have decided to make 'Happy' and 'Fun' distinct categories because they express different kinds of emotions, and should therefore not be conflated. The second line of each code indicates that, if a sentence has one of these words connected with 'or', the sentence will be classified according to the category — *Happy, for example.

＊ Emotion_General
emotion or emotional or emotionally or feel or mood or nostalgia or pity or sentiment or touching
USAS E1

＊ Happy
delight or enjoy or happy or happily or happiness or joy or relief or smile
 # USAS E4.1+ Happy

＊ Fun

amuse or cheer or comic or comedy or fun or funny or grin or humour or humorous or joke or laugh or laughter

USAS E4.1+ Happy

＊ Sad

break+heart or cry or depress or depression or despair or desperate or embarrass or embarrassment or emptiness or feel+sorry or grief or grim or heartbreak or jealous or melancholy or miserable or misery or pity or poignant or regret or sad or sorrow or suffer or tragic or tragedy or unhappy or upset or weep

USAS E4.1-

＊ Contentment

content or contentment or fulfil or glad or pleased or pleasure or pride or proud or satisfy or satisfaction

USAS E4.2
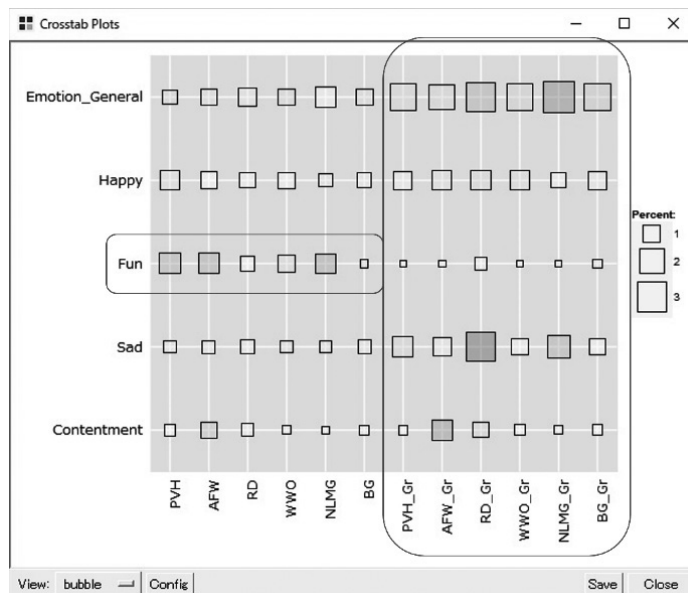
Figure 5. Coding rules cross-tabulation chart.

Figure 5 shows the crosstab plots of coding rules. The codes are shown on the

vertical axis and the texts are on the horizontal axis. It is clearly shown that the readers data (_Gr) contain more emotional expressions than the works themselves, except 'Fun'. 'Sad' is especially noticeable in the readers' data for *The Remains of the Day* and *Never Let Me Go*.
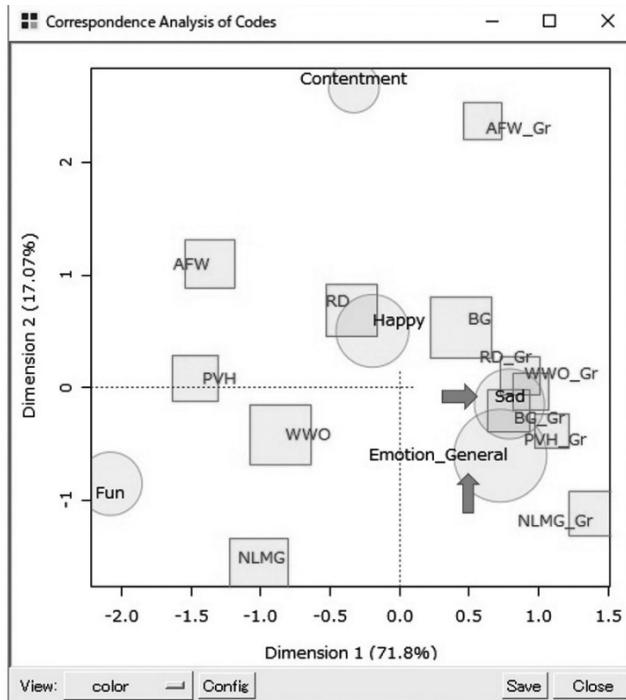

Figure 6. Correspondence analysis of codes.

The result of correspondence analysis of five codes generated in this study is shown in Figure 6. Except for *The Artist of the Floating World* 's readers' data (AFW_ Gr), all the readers' reviews data clustered around 'Sad' and 'Emotion_General'. This indicates that the words belonging to these categories are correlated to the readers' data (_Gr).

5 . Discussion

The first research question of this study is 'What emotions do Kazuo Ishiguro's readers feel?' Although emotional expressions in the readers' comments are different depending on the novels, the results of analysis show that almost all readers' comment

data contain more emotional expressions than the works themselves. Here we are going to concentrate on the readers' comments and examine what kinds of emotions they indicate. Figure 7 shows the relative frequency (per 1,000 words) of the words in the readers' comments which are classified by Wmatrix into the E Category. E2+, 'Liking' (love, like, enjoy, etc.) accounts for the largest part in each bar. This is natural, because readers often say, 'I like/do not like this book' or 'I enjoyed/did not enjoy reading this novel'. The second largest section indicated by the arrows is 'Sad' except in *The Buried Giant*, in which 'Calm/Violent/Angry' is the second largest.
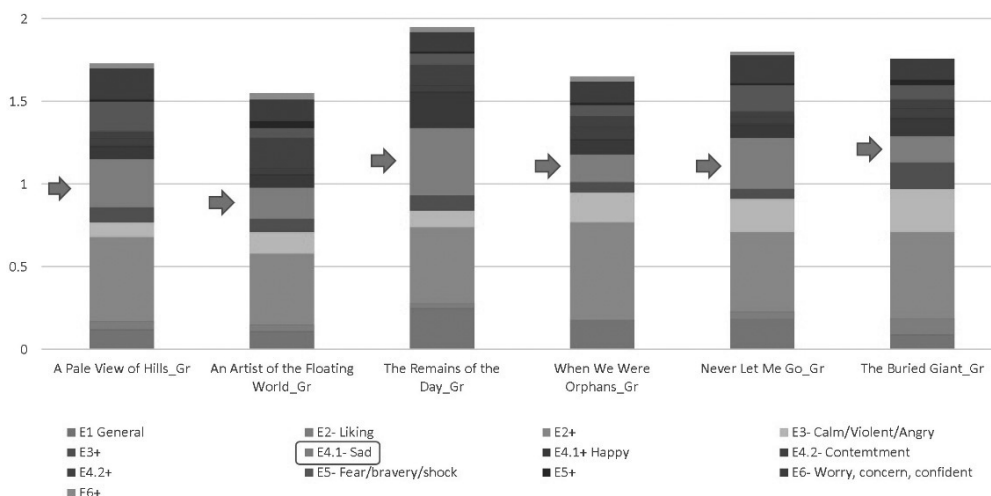
Figure 7. Relative frequencies of E category words in readers' comments.

As the first question itself is rather simple, it has a relatively simple answer. Readers of Kazuo Ishiguro feel various emotions depending on the novels, and the emotional subfield shown as most statistically significant is 'Sad'. This is clarified and visualised by the correspondence analysis of words, the cross-tabulation chart for coding rules, and correspondence analysis of codes done by the KH Coder.

The second research question is 'How are readers' emotions related to emotions portrayed in the works?' As the comparison concerning emotional discourse field of the works and their readers' comments showed, emotions in the work and in readers' comments do not always correspond (Table 3 - Table 8). To visualise their differences, the word clouds of the work and readers' reviews for both *Never Let Me Go* and *The Remains of the Day*, are shown in Figure 8 and Figure 9.

Figure 8. Word clouds of Emotion:
Never Let Me Go and *Never Let Me Go*_Gr.

Figure 8 shows the word clouds generated based on the words classified as Emotion (E) by Wmatrix sematic analysis. The numbers in the brackets show the number of the words in the E category and the total number of the words in each text. On the left, some of the conspicuous words are 'like', 'laugh', 'laughing', 'smile', and 'upset'. On the right, in its readers' data, 'like', 'emotional', 'emotions', 'sad', and 'sadness' are noticeable.

Figure 9. Word clouds of Emotion:
The Remains of the Day and *The Remains of the Day*_Gr.

Figure 9 shows the words clouds pertaining to *The Remains of the Day* and its readers' comments. In the work, 'smile', 'laugh', 'pleased', 'happy', and 'regret' are no-

ticeable. In the readers' comments, 'emotions', 'emotional', 'regret', and 'sad' are shown to be frequently used by the readers.

As we have just seen, the readers' emotions are not necessarily related to emotional expressions in the works. In a phone interview[18], Ishiguro said;

'I'd gone through various ways of writing songs, and I ended up with something that was quite plain on the surface,' he says. 'The emotions would be there, but they'll be slightly obliquely there, in the words themselves. People have to feel it between the lines'. [emphasis added]

(Time: http://time.com/3723602/the-return-of-the-king/)

Whatever it might be, it could not be in the words expressing emotions in the novels. Then, in what words should the reader feel what emotions? Or as Hogan (2003) pointed out, not only individual words, but also 'patterns of imagery, scenes, characters, narrative sequences' should probably be examined.

A central principle of classical Indian aesthetics is that artistic works communicate emotion through their 'dhvani' or suggestiveness. Dhvani includes all the associations that cluster around anything that a reader encounters in a work of literature or a viewer encounters in a performance. It derives from individual words, patterns of imagery, scenes, characters, narrative sequences, and so on. [emphasis added]

Hogan (2003:156)

Cultural differences should also be considered. For example, many Japanese people feel sadness from the following two Haiku by Basho Matsuo.

閑かさや　岩にしみいる　蝉の声
(Quietness sinking into the rocks the chirping of cicadas)

---

[18]　TIME Review: *The Buried Giant* Is an Arthurian Epic, by Lev Grossman, Feb 26, 2015, (http://time. com/3723602/the-return-of-the-king/).

夏草や 兵どもが 夢の跡

（Summer Grass the warriors the remains of their dreams）

The first one is felt sad because of the word 蝉, cicada. Until quite recently, it has been widely believed in Japan that cicadas live in the ground for several years and after coming out of the earth live only for several days. We even clearly state the number, 'seven years and seven days'. Therefore, 蝉 reminds Japanese people of the ephemerality of life. The cicada does not have the same significance for people from other culture. On the other hand, in the second Haiku, 'the warriors' and 'the remains of their dreams' could elicit sad feelings in the minds of people, irrespective of their cultural backgrounds.

As shown so far, it is not possible to find one definite answer or set of answers to the second question, 'How are the readers' emotions related to emotions portrayed in the works?' However, this article shows that, regardless of the contents of the stories, readers articulate their emotions, positive and negative, using words that can be categorised semantically as emotional more than happens in the fiction they are describing, and that the readers' emotions are not directly related to the feelings expressed in the works. In order to find out 'the words themselves' in which people feel emotions and to examine the relation between those words and the readers' emotions, not only the words classified as emotion （E） but also those in other categories should be examined in the future study. Finding key words and key semantic fields in each work of literature would be the first step in this direction.

One result of this analysis was that, among six Ishiguro's novels examined, *The Remains of the Day* has the highest percentage of all the categories of emotion, especially the category of 'Sad'. This novel is probably the most well-known and popular among Ishiguro's works. Thus, the readers' ratings should be examined to see if frequencies of words expressing readers' emotions have something to do with their evaluation of each work.

Table 11 shows the same data as Figure 7. The readers' ratings of the works are added in the bottom row, and the correlation coefficient of the relative frequency of emotional words and the readers' ratings are added in the right column. Some emotions expressed by the readers seem to be related to their ratings of the works, especially in case of 'Sad'.

Table 11. Correlations between relative frequencies of emotional words and ratings.

Relative Frequency (%) Item	A Pale View of Hills_Gr	An Artist of the Floating World_Gr	The Remains of the Day_Gr	When We Were Orphans_Gr	Never Let Me Go_Gr	The Buried Giant_Gr	Correlation coefficient
E1 General	0.12	0.11	0.25	0.18	0.18	0.09	0.6783
E2- Liking	0.05	0.04	0.03	0.00	0.05	0.10	-0.207
E2+	0.51	0.43	0.46	0.59	0.48	0.52	-0.696
E3- Calm/Violent/Angry	0.09	0.13	0.10	0.18	0.20	0.26	-0.652
E3+	0.09	0.08	0.09	0.06	0.06	0.16	-0.287
E4.1- Sad	0.29	0.19	0.41	0.17	0.31	0.16	0.9227
E4.1+ Happy	0.08	0.08	0.22	0.09	0.08	0.11	0.6835
E4.2- Contemtment	0.05	0.04	0.04	0.08	0.05	0.06	-0.784
E4.2+	0.04	0.18	0.12	0.06	0.03	0.05	0.3757
E5- Fear/bravery/shock	0.18	0.06	0.07	0.07	0.16	0.09	0.0382
E5+	0.01	0.04	0.01	0.01	0.01	0.03	-0.273
E6- Worry, concern, confident	0.19	0.13	0.12	0.13	0.17	0.13	-0.016
E6+	0.03	0.04	0.03	0.03	0.02	0.00	0.4171
All Emotions	3.01	2.83	3.64	2.99	3.20	3.24	0.6133
Ratings	3.73	3.75	4.12	3.48	3.81	3.48	

Figure 10 focuses on E4.1-. E4.1- 'Sad' has a very strong positive relationship with the ratings. Although the number of the texts are limited to only six, this statistic suggests that, if readers feel sad, they tend to evaluate the work more highly.
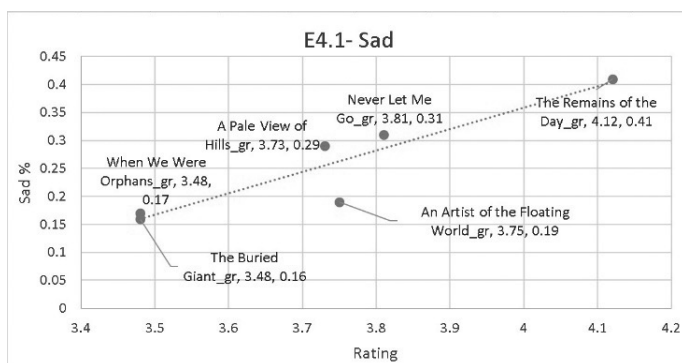

Figure 10. Correlations between relative frequencies of E4.1- Sad in readers' comments and ratings.

6．Conclusion

One of the research questions of this article was 'What emotions do Kazuo Ishig-

uro's readers feel?'　The results of analyses showed that 'sad' seems to be the most characteristic emotional response of his readers. Of course, other emotions are reported, but they vary depending on each work.

The second research question was 'How are the readers' emotions related to emotions portrayed in the works?'　This study could not find any single definite answer to the question, although it could clarify that, regardless of the contents of the stories, more emotional expressions are found in readers' comments than in the stories themselves, and that the readers' emotions are not directly related to the feelings expressed in the works. As is shown by the examples of Haiku, we sometimes need to consider the cultural background of readers. Therefore, a simple answer, such as the relation of a certain emotion with certain words, events, or other elements in a story, could not be found in the scope of the present study.

Through the analysis, it is shown that 'Sad' is often the most statistically significant emotional field in readers' comment data. It is also suggested that readers' ratings of works and the frequency of the words belonging to 'Sad' in the readers' data are correlated. It could be assumed that when a reader feels sad, it often means the reader sympathises, or even empathises, with the characters of the novel, leading to a high evaluation of the work. To further explore this possibility in future research, more data and more in-depth qualitative analyses are necessary.

References

Damasio, A.（1999）*The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt.

Goodreads. Available at: https://www.goodreads.com/.

Grossman, L.（2015）*Time.com*. *Review*, 26 February. *The Buried Giant* Is an Arthurian Epic. Retrieved from http://time.com/3723602/the-return-of-the-king/（accessed 20 January 2018）.

Higuchi, K.（2015）KH Coder（Version Ver. 2.00f）. Kyoto, Japan: Ritsumeikan University. Available at: http://khcoder.net/en/.

Hogan, P.C.（2003）*Cognitive Science, Literature, and the Arts*. New York and London: Routledge.

Ishiguro, K.（1982, 2005）*A Pale View of Hills*. London: Faber and Faber.

Ishiguro, K.（1986, 2001）*An Artist of the Floating World*. London: Faber and Faber.

Ishiguro, K.（1989, 2005）*The Remains of the Day*. London: Faber and Faber.

Ishiguro, K.（2000, 2012）*When We Were Orphans*. London: Faber and Faber.

Ishiguro, K.（2005, 2006）*Never Let Me Go*. London: Faber and Faber.

Ishiguro, K. (2015, 2016) *The Buried Gian*t. New York: Vintage Books.

Ishizaki, S. and Kaufer, D. (2011) The DocuScope text analysis and visualization environment', in McCarthy, P. and Boonthum, C. (eds) *Applied Natural Language Processing and Content Analysis: Advances in Identification, Investigation, and Resolution.* Hershey, PA: Idea Group Inc. (IGI), 275 - 296.

Kawabata, Y. (1956, 1957) *Snow Country* (trans. Seidensticker, E.G.). Tokyo: C. E. Tuttle.

Kawabata, Y. (1951, 1976) *The Master of Go* (trans. Seidensticker, E. G.). London: Penguin Books.

Kawabata, Y. (1955, 2002) *The Izu Dancer* (trans. Seidensticker E. G.), in Goossen, T. W. (ed) *The Oxford Book of Japanese Short Stories.* Oxford ; New York : Oxford University Press.

McArthur, T. (1981) *Longman Lexicon of Contemporary English.* Harlow: Longman.

Murakami, H. (2008) *After Dark* (trans. Rubin, J.). London: Vintage Books.

Murakami, H. (2000, 2003) *Norwegian Wood* (trans. Rubin, J.). London: Vintage.

Murakami, H. (2014) *Colorless Tsukuru Tazaki and His Years of Pilgrimage* (trans. Gabriel, P.). London: Vintage.

Murakami, H. (2003, 2005) *Kafka on the Shore* (trans. Gabriel, P.). London: Vintage.

Rayson, P. (2008) From key words to key semantic domains. *International Journal of Corpus Linguistics.* 13:4 519-549. doi:10.1075/ijcl.13.4.06ray

Sera, H. (2018) A corpus-stylistic approach to John Williams' *Stoner.* How does the story arouse emotion in the reader?'人文論集 = *Journal of cultural science*, 53, 61-78.

The Oxford English dictionary, Vol. III(1933, 1970). Oxford: Oxford University Press.