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Abstract

This paper uses two analytical procedures, i.e., corpus-based and manual, to analyse the motif of food and food-making in Julie Powell's (2005) memoir Julie and Julia 365 days 524 recipes 1 Tiny Apartment Kitchen, and two novels, namely, Jeanne Ray's (2003) Eat Cake and Judith R Hendrick's (2001) Bread Alone. In these works, food and food-making can be seen as a tool for portraying the characters' situations, feelings, and possibilities in life. The act of cooking does not only have a tangible representation but a symbolic metaphorical level where it is associated with depression, fear, pleasure and desire for selffulfillment. Each protagonist - Julie in Powell's memoir, Wynter in Bread Alone and Ruth in *Eat Cake* – goes through a redemptive journey to find meaning in her life. This paper, through providing a manual analysis as well as a corpus-based analysis of the selected works, attempts to explore the ways in which corpus linguistics can enrich traditional literary analysis. The three texts are manually examined to explore their major literary themes. The corpus-based analysis involved using the software tool, WMatrix5,¹ to extract the keywords and the semantic fields in each text. The keywords and the semantic fields are examined and those relating to food and the food making process are identified. The evaluation of the results of both the corpus-based and manual analyses attests to the effectiveness of corpus linguistics in underpinning manual literary analysis.

Keywords: Corpus linguistics, WMatrix5, keywords, semantic fields, food in fiction

¹ Wmatrix5 is a software tool for corpus analysis and comparison. It was launched in 2021 and is available at https://ucrel-wmatrix5.lancaster.ac.uk/wmatrix5.html

1. Introduction

"[W]omen's writing manifests far more diverse areas of engagement [with food] [...], ranging from explorations of female culinary sensuousness, creativity and authority in cooking, to the exercise of power or political responsibility through food and acts of eating, to the revisiting of earlier depictions of women's sexuality through appetite and eating, from Genesis onwards." (Sceats, 2000: 2)

"Food is life, and life can be studied and understood through food" (Counihan et al., 2018: 1). It is described a "currency of love and desire, a medium of expression and communication" (Sceats, 2000: 11). The field of food studies, which has emerged in 1970s (Mannur, 2010: 11), is "an academic discipline that studies the relationships between food and the human experience" (Zhen, 2019, p. 19). Although "anthropology has been a particularly fitting home for what we might schematically refer to as food studies", food has captured the interest of academia as a subject for cultural and literary inquiry (Mannur, 2010: 10). It has always been an important ingredient of narratives since the Biblical story of Adam and Eve falling from grace due to the consumption of an apple. The centrality and versatility of food as a motif in literature is evident in many stories from Brothers Grimm fairytales to contemporary literature. The importance of food in narratives is stressed by Biasin (1991: 3) when he states that "when the novel deals with food, a culinary sign, it adds richness to richness, it superimposes its own system of signs and meanings onto the signifying system, variously codified, of cooking". Cooking is a process in which the natural raw materials are transformed and served according to cultural conventions (Ashley et al., 2004: 40; Fischler, 1988: 284; Leach, 1989: 34). Cooking, which "has never been sufficiently emphasized, is with language a truly universal form of human activity: if there is no society without a language, nor is there any which does not cook in some manner'' (Lévi-Strauss, 2018: 21).

There are many detailed cultural studies of food (e.g., Counihan and Kaplan, 1998; Mennell, Murcott, and van Otterloo, 1992). However, other critical and literary studies have dealt with food in literature. One of the first known studies was James Brown's (1982) examination of the culinary symbols in 19th century French literature. Annette Cozzi (2010) discussed the relations between cooking and nationalism in 19th century British fiction. Some studies have examined gender-related aspects in relation to food imagery, such as, for example, the issue

of female consumption, sexuality and relationships to food in fiction (Adolph, 2009; Sceats, 2000). Ronald D. LeBlanc (2009) also worked on issues of food and gender as he examined relations between sexuality and food in 19th century Russian fiction. Culinary symbols for communities of immigrants in diaspora have been investigated in Asian American literary studies such as Sau-Ling Cynthia Wong's (1993) study of food as a metaphor in Asian American literature and Anita Mannur's (2010) investigation of how food in fiction reflected the group identity of South Asians in diaspora. Food has also been studied in films such as Laurel Forster's (2004) examination of the metaphorical meaning of food in science fiction films. However, hitherto, there has been a scarcity of linguistic studies, and more particularly corpus stylistic studies, of food and food making in literature.

The current study is particularly concerned with the use of cooking as a source of healing and/or self-fulfilment in three selected works: Powell's (2005) *Julie and Julia 365 days 524 recipes 1 Tiny Apartment Kitchen* (henceforth *Julie and Julia*), Ray's (2003) *Eat Cake*, and Hendrick's (2001) *Bread Alone*. The three female writers considered in this paper have been selected because of their evident concern with women's journeys to self-fulfilment. Adopting a corpus-linguistic approach, the paper explores the effectiveness of corpus-based approaches in supporting traditional literary analyses. It employs two analytical procedures: first, a manual analysis is performed to investigate the major literary themes of the three selected works; then, a corpus-based analysis, using WMatrix5, is also conducted and its results are evaluated against those of the earlier manual analysis.

This study aims to answer the following research question: (1) To what extent do keywords and semantic domains reflect major literary themes in a literary work? The use of corpus-linguistic tools to examine literary texts is not a novel practice, being the core of the field of Corpus Stylistics (cf. Adolphs, 2006; Adolphs and Carter, 2002; Biber, 2011; Culpeper, 2002, 2009; Fischer-Starcke, 2010; Hoover, 2002; Hori, 2004; Louw, 1993; Lawson, 2000; Mahlberg, 2007, 2010, 2012, 2013, 2014; Mahlberg and McIntyre, 2011; Mahlberg and Smith, 2010; McIntyre, 2008, 2015; McIntyre and Walker, 2010, 2011; O'Halloran, 2007a, 2007b; Romaine, 2010; Scott, 2006; Semino and Short, 2004; Starcke, 2006; Stubbs, 2005; Toolan, 2006; Walker, 2010, 2011; Walker and McIntyre, 2015). For the purposes of this study, I use the corpus tool Wmatrix5, which affords word frequency and keyword lists, part-of-speech annotation and semantic tagging, to extract the keywords and semantic fields of *Julie and Julia, Eat Cake*

and *Bread Alone*. The study aims to probe whether corpus analysis can supplement and enrich manual literary analysis. To my knowledge, a number of studies have also used this tool to extract semantic fields from literary texts (cf. Walker, 2010, 2012; Wijitsopon, 2008).

2. Traditional Manual Analysis of the Selected Texts

2.1 Summary of the Selected Works

Julie and Julia (Powell, 2005), Bread Alone (Hendricks, 2001), and Eat Cake (Ray, 2003) are three bestselling books written by female authors. Each book depicts the journey of a female protagonist to overcome life anxieties and problems. In Julie and Julia, Julie Powell, nearing thirty, trapped in a dead-end secretarial job and unable to get pregnant, resolves to reclaim her life by cooking in the span of a single year, every one of the 524 recipes in Julia Child's cookbook, Mastering the Art of French Cooking (henceforth MtAoFC). Julie began the Julie/Julia Project, a blog chronicling her attempt to cook all the recipes in MtAoFC. The blog quickly gained a large following, and Powell signed a book deal with Little, Brown and Company. The resulting book, Julie and Julia: 365 Days, 524 Recipes, 1 Tiny Apartment Kitchen, won a James Beard Award for food journalism in 2005 and was described as "irresistible [...] A kind of Bridget Jones meets The French Chef'' (Philadelphia Inquirer). A film adaptation, based on this bestselling memoir as well as Julia Child's autobiography My Life in France, was released in August 2009. The film which was directed by Nora Ephron, and titled Julie and Julia, has Amy Adams starring as Julie Powell and Meryl Streep as Julia Child.

Jeanne Ray is the author of four best-selling novels – Julie and Romeo (2000), Step-Ball-Change (2002), Eat Cake (2003) and Julie and Romeo Get Lucky (2005) – which all revolve around women whose lives are in transition through no fault of their own. Eat Cake is about middle-aged Ruth Hopson's journey to self-discovery. Ruth has always found baking cakes to be a source of relief from the stresses of life. When she is alone, she dreams up variations on recipes. When she meditates, she imagines herself in the warm, comforting centre of a gigantic Bundt cake. Ruth is married to a hospital administrator, Sam, and has two children, Wyatt, a first-year university student, and Camille, a high school student. Her mother moves in to stay with her and her father, a lounge singer and pianist, shatters both wrists and, having nowhere else to go, moves in, too. Ruth's

husband just loses his job and has few prospects of getting another. Suddenly, Ruth is faced with an unemployed husband who thinks his life's dream is to rebuild yachts and two parents who have hated each other for years and must now live under the same roof. Ruth feels helpless, and the only thing that makes her feel better is baking cakes. Guy, Ruth's father, has the brilliant idea that it may be Ruth's turn to make money to provide for the family by selling her wonderful cakes. And so Ruth starts her business *Eat Cake*, with a little help from Camille, who has a flair for marketing, her mother who designs gorgeous gift boxes and her father who has wide connections in hotels and restaurants.

Hendrick's debut novel, Bread Alone, is the uplifting journey of a thirtyone-year-old trophy wife, Wynter, whose entire life changes course when her husband announces one evening that he wants to end their marriage. Wyn's husband, David, had encouraged her to spend her days among other society wives at wine tastings, French films, and trendy restaurants in order to improve their social relations and his array of business contacts. So, after seven years of marriage, when David informs Wyn that he feels confined and that their marriage was a mistake, she is left emotionally devastated and without direction, wondering how she let herself become so dependent. Wyn, who is often portrayed as confused and weak, finds solace in making bread. She goes to visit her friend, CM, in Seattle and takes a job at a bakery there, hoping that the baking will help her move on. Eventually, Wyn discovers that the making of bread, particularly the kneading of the dough, possesses an unexpected and wondrous healing power. A healing power that will ultimately renew her heart and her soul. She gets emotionally involved with both the son of her mother's new husband, Gary, and her friend Mac, a local bartender and aspiring writer. She has to make a choice based on what she wants in life between Gary, who would only offer her another chance of becoming a trophy wife, and Mac, who would let her become more independent.

2.2 Exploring Major Literary Themes

Analysing fiction, Genette (1980) uses the term "focalisation" to refer to who is presented as perceiving the narrated events. Although there is a diversity of terminology throughout the literature on fiction, all refer to the same broad phenomenon referred to by focalisation as, for example, point of view, perspective, filter, and slant. In focalised narratives, according to Gerald Prince (2001: 45), situations and events in the narrative are "filtered through" the

perception of an entity, which is referred to as the focaliser. The focaliser can be seen as a camera operator in a film who uses the camera to convey to others each action, event, setting, character, and so on, from a certain perspective (Graesser et al., 2002: 238). Genette (1980) distinguishes between internal and external focalisation and further subdivides internal focalisation into fixed (i.e., the narrated events are perceived from the point of view or perspective of a single focaliser), variable (i.e., there are different focalisers, each responsible for the perception of a different segment in the narrative), and multiple (i.e., there are different focalisers, but each provides his own account of the same segment in the narrative).

The three texts are all first-person narratives and belong to the category of fixed internal focalisation (Genette, 1980), whereby each text is told from the perspective of its protagonist. Julie, Ruth and Wynter are not only the protagonists but also the first-person narrators of their stories. This gives them a privileged position within the set of fictional characters due to the fact that in the absence of an anonymous third-person narrator, the first-person narrator assumes the role of constructing the narrative world.

The three texts tend to share their main themes. Each book opens with its protagonist suffering from depression or stress: Wynter's world is shattered when her husband declares that he wants to end their marriage; Ruth is stressed due to having two teenage children, an unemployed husband, and two parents who cannot stand each other under the same roof; and finally, Julie feels that she has not achieved anything with her life being unable to get pregnant and being stuck in a dead-end secretarial job.

"I'm twenty-nine, I'm never going to have kids or a real job, my husband will leave me and I'll die alone in an outer-borough hovel with twenty cats and it'll take two weeks for the stench to reach the hall (*Julie & Julia*: 19)."

Julie even used to have crying fits. She describes how she was "sobbing, [...]. Eric was holding me in one of those tight hugs [...], which he does whenever he's trying to comfort me when what he really wants to do is smack me (Julie & Julia: 11)." Julie's mother is aware of her situation and sums up her problems saying that "you are, miserable, [...] and for what? You're getting older, you're not taking advantage of the city, why do this to yourself?" (*Julie & Julia*: 12). Ruth, in turn, was so stressed that she attended a stress-reduction class.

"YEARS AGO, I WENT TO A SEMINAR ON STRESS reduction [...] Most of what the instructor told us struck me as either obvious [...], but there was one thing he said that made the whole class worthwhile, a trick I still use when I find myself getting overwhelmed: He told us we should visualize a place where we felt completely safe and peaceful. [...] I had no idea where I was supposed to go [...] But when I finally closed my eyes and tried, what I wanted came to me with complete clarity. The place that I went, the place that I still go, was the warm, hollowed-out center of a Bundt cake. [...]

It's about being inside of cake, being part of something that I find to be profoundly comforting." (*Eat Cake*)

The three protagonists tend, however, to find a strange comfort in making food, or more specifically, in baking, making cakes, and cooking respectively. "Cooking, like sex, has been considered a mode through which women can express their feelings, rewarding the husband with a special dish, or producing a late or unpleasant dinner as a punishment" (Sceats, 2000: 142). However, Julie, Ruth and Wynter use cooking to fulfil their dreams and become empowered, each transforming "a disempowered position into a nearly invincible one" (Sceats, 2000: 145).

Wynter is betrayed by her husband, who left her for another woman. According to (Sceats, 2000: 133), "[b]etrayal is a concept that seems to have a ready affinity with food". This affinity is explained as "cooking and eating experiences always run the risk of disappointment, of the mild betrayal of hopes and expectations" (Sceats, 2000: 133-134). Wynter finds a cure to her depression and loneliness in baking. She sometimes has "a sudden urge to ward off the loneliness goblins by baking bread." She believes that "the smell of baking bread is a proven antidote to depression" (*Bread Alone*). Making cakes offers Ruth a form of solace.

How had I come to this point? I couldn't comfort my husband or discipline my daughter or help either of my parents. I couldn't even decide if it was okay to throw out a pair of shoes. I sat down on the bed and felt a terrible lump coming up in my throat. Then just when I thought I was going to really break down for a good cry, I remembered a large bag of pistachio nuts in the back of the pantry. [...] I stood up like a sleepwalker [...] I would take care of all of this once the cake was in the oven. [...] I would find it. I would bake a cake.

It was the steps, the clear and simple rules of baking, that soothed me (*Eat Cake*).

When Ruth decides to start her "Eat Cake" project, she states that "the thought of having to bake cakes morning, noon, and night filled my heart with inestimable joy." Julie, on the other hand, struggles to find her balance in the world. She is on the verge of a nervous breakdown and needs something to break the monotony of her life. She comes up with the idea of cooking her way through Julia Child's cookbook.

Julie Powell was looking for a challenge. And in the Julie/Julia Project she found it. Risking her marriage, her job, and her cats' well-being, she has signed on for a deranged assignment. 365 days. 524 recipes (*Julie & Julia*: 23).

And somewhere along the line she nourishes her spirit and quenches her thirst for a new appreciation of life.

Each protagonist – Wynter, Ruth and Julie – undergoes a transformation experience and eventually gets her problems solved. While working at a bakery in Seattle, Wynter stays in a cottage on her own. There she has a chance to contemplate what she wants to do with her life. By the time she has to move out of that cottage she is a different person. In an exchange between Wynter and her friend, CM, this transformation is expressed both metaphorically and ironically since the transformation is the opposite of the expected.

'Oh, I love paperwhites. They smell so good.' Her shrewd green eyes focus on me. 'Quite a little nest you've made yourself. Or maybe I should say a cocoon.'

I laugh. 'Yeah, it's a cocoon. I'm going in as a butterfly and coming out as a caterpillar'. (*Bread Alone*)

Ruth's transformation is summed up in an exchange with her husband, Sam.

'I used to pretend I was standing inside a giant cake,' I told him.

'Whenever I got upset about something I would close my eyes and

imagine that I was surrounded by cake. It always made me feel better.'

'I bet you don't do that anymore,' he said. 'Now you're surrounded by cake all the time.'

'Exactly. Now when I feel stressed I see myself on a boat. You and I are sailing in a beautiful wooden boat [...]'

'So you've gone from being in the middle of a dark cake to being out in the open water on a boat,' Sam said. 'That sounds like progress.' 'I've gone from being alone inside a cake to being with you on a boat,' I said. (*Eat Cake*)

Julie's transformation is represented in terms of a journey. She starts off as an ordinary secretary and ends up as a writer. She values her cooking project and sees it as a way to change her life, "[w]ithout the Project I was nothing but a secretary on a road to nowhere, drifting toward frosted hair and menthol addiction (*Julie & Julia*: 160)'. She describes the transformation she achieves by the end of the project as follows:

Two years ago, I was a twenty-nine-year-old secretary. Now I am a thirty-one-year-old writer. I get paid very well to sit around in my pajamas and type on my ridiculously fancy iMac, unless I'd rather take a nap. Feel free to hate me – I certainly would (*Julie & Julia*: 303-304).

A connection between food and sex can be traced in both *Julie and Julia* and *Bread Alone*. In *Bread Alone*, Wynter always associates tasty, nice-smelling pastries or bread with incredible sex experiences. There is a number of instances in the text where Wynter equates the pleasure of smelling and eating bread with the pleasure of having sex.. In one incident, she is at a café "[s]itting at my table with a warm slice of banana-cinnamon swirl bread and a glass of cold milk, I think it doesn't get much better than this. Maybe sex". She also describes her taste of bread in Paris saying that

It wasn't until I went to France that I tasted bread that wasn't full of additives and air. It was like a religious conversion for me. In fact, it's kind of like sex – one of those things that everyone thinks they know all about and they tell you how great it is, but which is actually

pretty uninspiring until you have it one time the way nature intended it to be. (*Bread Alone*)

Julie also makes this connection but considers good food to be better than sex, "[t]he taste of marrow is rich, meaty, intense in a nearly too-much way. In my increasingly depraved state, I could think of nothing at first but that it tasted like really good sex" (*Julie & Julia*: 76). She even makes a weird connection between sex and food when she evokes a rape scenario while describing some of the recipes particularly those dealing with preparing marrow bones and chicken.

It's true. I am a fanatical eater of flesh. But bone marrow, it struck me, was something I had no right to see, not like this, raw and quivering on my cutting board. Unbidden, the word violate popped into my head. 'It's like bone rape. Oh God, did I just say that out loud? (*Julie & Julia*: 75-76)

Trussed chickens always look like sex-crime victims, pale and flabby and hogtied. It turns out that this goes double for trussed half-chickens (*Julie & Julia*: 111).

The analysis above shows that the three texts share the same plot line: a female protagonist suffers from depression or stress, finds comfort in food making, experiences a kind of transformation and finds her way to salvation in the process. In addition, the three texts revolve around the same major themes including depression and stress, making food as a way to reduce stress and find salvation, and as a vehicle for transformation experiences.

3. Corpus-based Analysis of the Selected Texts

There are many procedures in Corpus Stylistics including keywords, partof-speech tags, semantic tags and semantic domains (e.g., Scott, 1997; Scott and Tribble, 2006; Rayson, 2008, 2021). This paper is particularly interested in examining both keywords and semantic domains in the selected texts.

3.1 Keywords

Scott's (1999) definition of keywords allows for any word to be potentially key if it occurs frequently enough and is statistically significant when compared to a reference corpus. Scott classifies keywords into three types: proper nouns,

content words which are indicators of the "aboutness" of a particular text, and finally, function words which may be indicators of style, rather than aboutness. An examination of the keywords extracted by comparing a corpus to a reference corpus should reveal the most significant lexical features of the corpus at hand, in terms of aboutness and style. Keywords are usually ranked in order of keyness (the most statistically significant or 'strongest' keywords appearing first in the keyword list). Since keywords are indicators of a text's topic, or what a text is about, i.e., its "aboutness", they are likely to provide an idea about the major themes or plot elements of fictional works.

In order to test this hypothesis, I used WMatrix5 (Rayson, 2021) to extract the keywords of the three texts, using the BNC Sampler-Written as a Reference Corpus. The "cut-off" point for determining whether a word was a key-word was set at p=0.000001, a threshold which is frequently used in corpus-based research (McEnery 2006: 233). A total of 500 keywords were extracted. I examined only the top 200 keywords and grouped them into seven categories according to their related or shared semantic space. These categories include: pronouns, character names/roles, food and food making, places, processes, objects, and sex.

Keywords Categories

1. Pronouns

Pronouns are extracted from the keyword lists of the three novels as shown in Tables 1, 2, and 3 below.

	Key			RC.			
Ν	word	Freq.	%	Freq.	RC. %	Keyness	Р
1	Ι	5021	4.085535049	6217	0.595096231	8675.9375	1.23953E-21
4	MY	1649	1.341773987	1951	0.186751291	2908.42334	3.36851E-20
5	YOU	1963	1.597272515	4044	0.387094915	2163.218262	8.28761E-20
7	ME	1125	0.915400684	1414	0.135349214	1899.969482	1.23134E-19
10	SHE	1129	0.918655455	2485	0.237866193	1152.824341	5.71221E-19
12	HE	1536	1.249827147	4890	0.468074709	942.5983887	1.06653E-18
14	IT	1915	1.55821538	7951	0.761076093	687.9404297	2.86072E-18
22	HER	755	0.614335597	2447	0.234228805	447.7207642	1.12971E-17
45	HIM	377	0.306760937	1184	0.113333426	235.4086151	9.79165E-17
69	MYSELF	109	0.088692158	150	0.01435812	171.6901703	3.06465E-16

Table 1 Pronouns in Bread Alone

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	Key			RC.			
Ν	word	Freq	%	Freq.	RC. %	Keyness	Р
1	Ι	3190	4.171625137	6217	0.595096231	6053.825684	3.66723E-21
3	MY	1292	1.689573526	1951	0.186751291	2869.62793	3.50867E-20
7	YOU	1272	1.663419127	4044	0.387094915	1564.109009	2.23318E-19
19	ME	478	0.625089884	1414	0.135349214	629.7926636	3.78272E-18
20	SHE	616	0.805555165	2485	0.237866193	569.8041992	5.20082E-18
24	IT	1157	1.513031483	7951	0.761076093	406.1744995	1.55185E-17
26	HER	497	0.649936557	2447	0.234228805	342.8989258	2.71419E-17
29	HE	761	0.995174527	4890	0.468074709	313.6922913	3.65636E-17
50	HIM	256	0.334776193	1184	0.113333426	194.6156311	1.93075E-16
14							
2	YOUR	226	0.295544595	1589	0.152100354	74.11135864	1.23962E-14
15							
6	MYSELF	50	0.065385975	150	0.01435812	64.80165863	2.73759E-14
18							
1	WE	342	0.447240055	2985	0.285726607	54.94248199	8.70975E-14

Table 2 Pronouns in Eat cake

Table 3 Pronouns	in Julie and Julia
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	Key			RC.			
Ν	word	Freq	%	Freq.	RC. %	Keyness	Р
1	Ι	3169	3.255231142	6217	0.595096231	4773.870117	7.51261E-21
5	MY	904	0.928598583	1951	0.186751291	1239.54126	4.56608E-19
11	IT	1563	1.6055305	7951	0.761076093	620.3222046	3.969E-18
13	ME	512	0.525931954	1414	0.135349214	544.092041	6.0276E-18
15	YOU	944	0.969686985	4044	0.387094915	532.6432495	6.45238E-18
46	SHE	502	0.515659809	2485	0.237866193	210.583252	1.45292E-16
97	HER	414	0.425265282	2447	0.234228805	109.5655594	1.85404E-15
140	MYSELF	64	0.065741494	150	0.01435812	80.81167603	7.79879E-15

Table 3 Pronouns in Julie and Julia

It should be noted that the singular first-person subject pronoun 'I' and the singular first-person possessive pronoun 'MY' come at the top of the keyword lists of the three texts. The plural first-person pronoun 'WE' is only statistically significant in *Eat Cake* since the plot of this first story revolves around a family and how the mother feels responsible for all of them. This supports the findings of the manual analysis which described the plots of the three first-person narratives. Tables 1, 2 and 3 above include the pronouns extracted from the keyword list of each novel.

2. Character Names / Roles

The character names and roles are extracted from the keyword list of each novel, see Tables 4, 5, and 6 below.

		Frag		RC. Freq			
Ν	Key word	Freq	%	rreq •	RC. %	Keyness	Р
15	WYN	142	0.115543909	0		639.5333252	3.6031E-18
23	MAC	101	0.082182638	3		428.3286438	1.30471E-17
27	DAVID	165	0.134258777	110	0.010529288	397.4289246	1.6666E-17
32	ELLEN	99	0.08055526	17		352.9494019	2.46561E-17
35	СМ	150	0.122053429	160	0.015315328	281.6945496	5.2643E-17
37	LINDA	63	0.051262438	2		266.2822266	6.38325E-17
51	MOTHER	201	0.163551599	413	0.039532691	220.6244812	1.23079E-16
	WYNTE						
54	R	46	0.037429716	0		207.1405945	1.54132E-16
63	DIANE	41	0.033361271	0		184.6238251	2.34104E-16
66	GARY	55	0.044752922	15		178.2656708	2.66441E-16
67	TYLER	42	0.03417496	2		173.3000183	2.95962E-16
78	KELLEY	32	0.026038064	0		144.0945435	5.99505E-16
12	JEAN-						
0	MARC	32	0.026038064	11		97.63832092	3.10409E-15
14							
2	NEAL	20	0.016273791	1		82.23908997	7.12677E-15
16							
8	SYLVIE	17	0.013832722	1		69.04664612	1.85845E-14
17							
4	ERICA	15	0.012205343	0		67.54245758	2.11985E-14

				RC.			
Ν	Key word	Freq	%	Freq	RC. %	Keyness	Р
6	SAM	351	0.459009528	25		1706.227661	1.71082E-19
					0.0302477		
9	FATHER	409	0.534857273	316	74	1249.894287	4.45044E-19
10	CAMILLE	169	0.22100459	0		907.9614868	1.19843E-18
					0.0395326		
12	MOTHER	352	0.460317254	413	91	894.3814697	1.25608E-18
	FLORENC						
22	Е	105	0.13731055	10		497.4960632	8.03437E-18
34	RUTH	54	0.070616849	7		247.5568542	8.2139E-17

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72	WYATT	36	0.047077902	12		141.0639954	6.51868E-16
77	HOLLIS	29	0.037923865	3		136.2659607	7.47992E-16
87	ALLEN	31	0.040539302	12		117.2734833	1.38538E-15
98	RUTHIE	21	0.027462108	1		104.7910385	2.25504E-15
10							
2	DAD	50	0.065385975	84		103.3743362	2.39604E-15
11							
0	MOM	18	0.023538951	0		96.67281342	3.24977E-15
11					0.0123479		
9	PARENTS	55	0.071924567	129	83	89.16986084	4.76414E-15
77	HOLLIS	29	0.037923865	3		136.2659607	7.47992E-16

Table 5 Character Names / Roles in Eat cake

				RC.			
Ν	Key word	Freq	%	Freq	RC. %	Keyness	Р
4	ERIC	300	0.308163255	13		1372.348755	3.3372E-19
7	JULIA	206	0.21160543	2		992.6485596	9.08054E-19
14	JULIE	123	0.126346931	9		541.74823	6.11146E-18
21	SALLY	87	0.089367338	3		402.7328796	1.59571E-17
22	MOM	79	0.081149653	0		389.0961304	1.7867E-17
25	GWEN	84	0.08628571	9		356.1925659	2.3919E-17
27	ISABEL	74	0.076013602	3		339.6477661	2.80173E-17
	HEATHCLIF						
28	F	65	0.066768706	0		320.1338196	3.41493E-17
76	NATE	27	0.027734691	0		132.9690247	8.25263E-16
10							
8	PAUL	55	0.056496594	84		99.23796082	2.8813E-15
11							
0	AMANDA	20	0.020544216	0		98.49425507	2.98213E-15
19					0.01005		
9	HUSBAND	46	0.047251698	105	06	59.59871674	4.76909E-14

Table 6 Character Names / Roles in Julie and Julia

The keyword lists include the names of all characters in each book. They also include character roles such as 'MOTHER' in *Bread Alone*, 'FATHER', 'MOTHER', 'DAD', 'MOM', and 'PARENTS' in *Eat Cake*, and 'MOM' and 'HUSBAND' in *Julie and Julia*. Hence, through the keyword lists we are introduced to the population of each fictional world.

3. Food and Food-making

According to the manual analysis, food or food-making is the theme around which the three stories revolve. The occurrence of a large number of statistically significant keywords which relate to this theme supports the results of the manual analysis.

				RC.	RC.		
Ν	Key word	Freq.	%	Freq.	%	Keyness	Р
							5.08965E-
19	BREAD	167	0.135886148	35		573.677124	18
							1.45626E-
103	OVEN	32	0.026038064	5		115.9000015	15
							1.69681E-
106	BAKING	28	0.022783305	2		111.8308868	15
							5.48243E-
135	COOKIES	21	0.01708748	1		86.64683533	15
							7.68022E-
146	LOAVES	18	0.014646411	0		81.05134583	15
							1.05376E-
153	CAKE	33	0.026851755	24		76.34311676	14

Table 7a Bread and Bread-making in Bread Alone

				RC.	RC.		
Ν	Key word	Freq	%	Freq.	%	Keyness	Р
50	FLOUR	57	0.046380304	5		223.0280304	1.18444E-16
53	DOUGH	51	0.041498166	3		207.1523895	1.54101E-16
91	YEAST	28	0.022783305	0		126.0819092	1.02463E-15
139	SUGAR	38	0.030920202	31		83.06455231	6.77308E-15
172	TEASPOON	15	0.012205343	0		67.54245758	2.11985E-14

Table 7b Ingredients in Bread Alone

				RC.	RC.		
Ν	Key word	Freq.	%	Freq.	%	Keyness	Р
5	CAKE	411	0.537472725	24		2026.987061	1.01059E-19
11	CAKES	187	0.244543537	14		905.081543	1.21036E-18
38	BAKING	46	0.060155094	2		230.7231445	1.05081E-16
62	DINNER	53	0.06930913	43		158.700882	4.12555E-16
78	FROSTING	28	0.036616147	2		135.9700012	7.54523E-16
150	SLICE	18	0.023538951	7		68.01390839	2.03292E-14

Table 8a Cakes and Cake-making in Eat Cake

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				RC.	RC.		
Ν	Key word	Freq	%	Freq	%	Keyness	Р
37	SUGAR	65	0.085001767	31		232.7324677	1.01926E-16
43	BUTTER	60	0.078463167	25		222.8173065	1.18841E-16
44	TEASPOON	40	0.052308779	0		214.8392029	1.35273E-16
67	FORK	41	0.053616498	19		147.973938	5.40348E-16
69	LEMON	34	0.044462461	8		142.8399506	6.20476E-16
80	FLOUR	29	0.037923865	5		128.0657043	9.61161E-16
91	VANILLA	24	0.031385269	2		115.0794678	1.50092E-15
10	CHOCOLAT						
1	Е	32	0.041847024	21		103.6601181	2.36667E-15
10							
3	SYRUP	19	0.024846669	0		102.0437546	2.53937E-15
11							
4	JUICE	20	0.02615439	2		94.29322815	3.64993E-15
11							
6	SALT	31	0.040539302	25		93.03932953	3.88746E-15
12							
6	EGGS	31	0.040539302	31		84.92486572	6.0576E-15
14	INGREDIEN						
6	TS	24	0.031385269	20		71.09086609	1.56779E-14
16							
9	RAISINS	11	0.014384914	0		59.07688904	5.07305E-14
17							
7	CREAM	30	0.039231583	58		56.38925934	7.12805E-14
19							
2	COCONUT	12	0.015692635	3		49.85937881	2.00554E-13

Table 8b Ingredients in Eat Cake

				RC.	RC		
Ν	Key word	Freq	%	Freq	%	Keyness	Р
30	COOKING	83	0.085258499	19		314.1049805	3.64022E-17
37	DINNER	82	0.084231287	43		250.6171722	7.87066E-17
39	ASPIC	48	0.049306121	0		236.3988495	9.64864E-17
54	RECIPE	43	0.044170067	6		176.4065704	2.77013E-16
10							
5	PASTRY	25	0.02568027	4		100.5625763	2.71269E-15
10	BOURGUIGN						
9	ON	20	0.020544216	0		98.49425507	2.98213E-15
11							
1	CREPES	20	0.020544216	0		98.49425507	2.98213E-15

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11						
2	RECIPES	24	0.02465306	4	95.94009399	3.36647E-15
11						
3	CREPE	23	0.023625849	3	95.20688629	3.4889E-15
13						
2	CAKE	32	0.032870747	24	85.38400269	5.89666E-15
15						
3	BEURRE	15	0.015408162	0	73.86998749	1.26227E-14
15						
7	DOUGH	18	0.018489795	3	71.9540863	1.46324E-14
19						
3	COOKIE	14	0.014380951	1	61.77545547	3.73342E-14

Table 9a Food and Recipes in Julie and Julia

				RC.	RC		
Ν	Key word	Freq.	%	Freq	%	Keyness	Р
19	SAUCE	90	0.092448972	5		404.9970398	1.56667E-17
20	BUTTER	107	0.109911554	25		403.3513794	1.58771E-17
47	EGG	63	0.064714283	28		202.9306946	1.65945E-16
50	RICE	55	0.056496594	19		189.954834	2.10908E-16
	MAYONNAIS						
52	Е	37	0.038006801	0		182.2202911	2.45678E-16
66	GELÉE	30	0.030816324	0		147.7442017	5.43628E-16
67	CHICKEN	38	0.039034013	8		146.0631256	5.68462E-16
72	EGGS	48	0.049306121	31		136.0899811	7.51866E-16
82	MEAT	43	0.044170067	23		130.5301666	8.89408E-16
84	KIDNEYS	25	0.02568027	0		123.1189957	1.13026E-15
88	BEEF	32	0.032870747	9		116.0418701	1.44872E-15
90	LIVER	28	0.028761903	4		114.4933395	1.53395E-15
93	YOLKS	23	0.023625849	0		113.269043	1.60612E-15
95	ONIONS	30	0.030816324	8		110.0556793	1.81842E-15
96	LAMB	27	0.027734691	4		109.8399353	1.83399E-15
10							
0	POTATOES	33	0.033897959	15		105.5672836	2.18246E-15
10							
1	LOBSTER	27	0.027734691	6		102.7446899	2.46248E-15
10							
6	DUCK	27	0.027734691	7		99.64144897	2.8285E-15
11							
4	MARROW	23	0.023625849	3		95.20688629	3.4889E-15
12	LADYFINGER						
3	S	18	0.018489795	0		88.6444931	4.90287E-15

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14						
1	CHEESE	32	0.032870747	28	79.67147064	8.3976E-15
14						
4	SPINACH	16	0.016435374	0	78.7947998	8.90035E-15
15						
1	SUGAR	32	0.032870747	31	75.79601288	1.09568E-14
15						
8	MUSTARD	16	0.016435374	1	71.36655426	1.53335E-14
16						
1	VEAL	17	0.017462583	2	71.28912354	1.54292E-14
m 11	01. The second structure starts	T 1.	1 7 1.			

 Table 9b Ingredients in Julie and Julia

As shown in Tables 7a, 7b, 8a, 8b, 9a, and 9b, I divided the food-related keywords in each text into two groups: the first relates to food and food making, i.e., bread and bread-making in *Bread Alone*, cakes and cake-making in *Eat Cake*, food and recipes in *Julie and Julia*, while the second relates to ingredients. It should be noted that the number of statistically significant food-related keywords in *Julie and Julia* is considerably more than the other stories. This is accounted for in the plot itself since it describes how the protagonist cooked more than 500 different recipes as compared to the other two stories which focus mainly on cakes and bread.

4. Places

Places and locations constitute an important element of the setting of any story. The keyword lists of the three texts include a range of places which relate to the setting of each story, see Tables 10, 11, 12 below.

		Freq		RC.	RC.		
Ν	Key word	•	%	Freq	%	Keyness	Р
36	BAKERY	61	0.04963506	0		274.6931152	5.73719E-17
79	SEATTLE	32	0.026038064	0		144.0945435	5.99505E-16
14							
3	KITCHEN	50	0.040684476	65		82.14566803	7.16834E-15
19	TOULOUS						
3	E	15	0.012205343	1		60.28353882	4.40594E-14

Table 10 Places and Locations in Bread Alone

Ν	Key word	Freq.	%	RC. Freq	RC. %	Keyness	р
31	KITCHEN	93	0.121617913	65	Re. 70	294.6879883	4.51572E-17
82	ROOM	113	0.147772297	400	0.038288321	122.5028229	1.15403E-15

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				RC.	RC.		
Ν	Key word	Freq.	%	Freq	%	Keyness	Р
31	KITCHEN	102	0.104775503	65		290.7253723	4.72807E-17
34	APARTMENT	60	0.061632648	4		266.2923279	6.38242E-17
92	SUBWAY	23	0.023625849	0		113.269043	1.60612E-15
16							
8	THEATER	14	0.014380951	0		68.94519043	1.87468E-14
17							
2	QUEENS	18	0.018489795	4		68.49500275	1.94904E-14

Table 11 Places and Locations in Eat Cake

Table 12 Places and Locations in Julie and Julia

It should be noted that the keyword 'BAKERY' occurs in the list of *Bread Alone*, while the keyword 'KITCHEN' occurs in both *Eat Cake* and *Julie and Julia*. In the former, Wynter works in a bakery while in the latter, both Ruth and Julie respectively make cakes and cook recipes in their kitchen of their homes.

5. Processes

Processes can be classified, according to whether they represent actions, speech, states of mind or simply states of being, into material processes (processes of doing), verbalisation processes (processes of saying), and mental processes (processes of sensing). "Literary representations of the handling, cooking and consumption of food and its effects embrace widely differing degrees of physicality" (Sceats, 2000: 61). Hence, a number of material processes have been identified in the keyword lists of the three selected works.

	Key			RC.			
Ν	word	Freq.	%	Freq.	RC. %	Keyness	Р
25	GET	325	0.26444909	561	0.05369937	424.030365	1.34833E-17
46	SIT	92	0.074859433	56		230.4335175	1.05546E-16
65	DO	346	0.281536579	1203	0.115152121	180.3636627	2.55147E-16
94	PULL	55	0.044752922	45		120.0494843	1.25558E-15
10							
1	PULLS	33	0.026851755	6		116.4448166	1.42758E-15
10							
2	SITS	41	0.033361271	18		116.0432968	1.44864E-15
11							
1	GO	195	0.158669457	666	0.063750051	105.0205383	2.23325E-15
13	MAKE						
6	S	74	0.060213026	143	0.013688074	86.53315735	5.5181E-15

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					14
115 0.011007892 82.81649017 6.87686E-15	115	0.052889816	65	TAKES	0
					16
2 72.79046631 1.37061E-14	2	0.015460101	19	LEANS	0
					17
1 64.66139984 2.77533E-14	1	0.013019032	16	SIGHS	7
					18
711 0.068057492 63.10732651 3.24402E-14	711	0.14076829	173	MAKE	1
711 0.068057492 63.10732651 3.2440			173	MAKE	1

Table 13 Material Processes in Bread Alone

				RC.			
		Fr		Freq			_
Ν	Key word	eq	%	•	RC. %	Keyness	Р
33	BAKE	51	0.066693693	3		251.178009	7.80985E-17
		16					
56	GET	1	0.210542828	561	0.05369937	177.7996063	2.6904E-16
		16					
68	GO	3	0.21315828	666	0.063750051	147.7997742	5.42832E-16
		13					
81	PUT	0	0.170003533	511	0.04891333	123.989418	1.09778E-15
		21					
84	DO	7	0.283775121	1203	0.115152121	121.2812881	1.20317E-15
85	BATTER	26	0.034000706	3		120.774292	1.22438E-15
94	SHOOK	44	0.057539657	53		110.1750183	1.80989E-15
11		14					
7	MAKE	0	0.183080733	711	0.068057492	91.49058533	4.21017E-15
12							
0	GLAZE	21	0.027462108	5		88.0352478	5.07059E-15
12							
1	BITE	25	0.032692987	13		87.28197479	5.2887E-15
13							
7	EAT	40	0.052308779	77		75.42061615	1.12575E-14
15							
9	PICK	32	0.041847024	56		64.41233063	2.84407E-14
16							
0	KISSED	25	0.032692987	30		62.71614075	3.37841E-14
16							
2	LET	63	0.08238633	242	0.023164434	61.8473053	3.70459E-14
16							
3	BEAT	34	0.044462461	69		61.70056534	3.76378E-14
16							
5	LEANED	16	0.020923512	6		60.99661636	4.06595E-14

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16							
8	PREHEAT	11	0.014384914	0		59.07688904	5.07305E-14
17							
4	TOOK	88	0.115079314	445	0.042595755	57.9055481	5.8559E-14

Table 14 Material Processes in Eat Cake

				RC.			
Ν	Key word	Freq.	%	Freq.	RC. %	Keyness	Р
35	GET	224	0.230095223	561	0.05369937	264.5770874	6.52592E-17
45	COOK	66	0.067795917	28		215.54422	1.33703E-16
65	EAT	68	0.069850333	77		148.1694794	5.37576E-16
117	COOKED	26	0.026707482	8		92.36873627	4.02299E-15
139	POURED	28	0.028761903	17		81.25558472	7.58107E-15
147	MAKE	155	0.159217671	711	0.068057492	76.29068756	1.05768E-14
167	SAUTÉED	14	0.014380951	0		68.94519043	1.87468E-14
178	EATING	30	0.030816324	33		66.42923737	2.34574E-14
181	TASTED	18	0.018489795	5		65.45031738	2.57167E-14
184	STARTED	62	0.063687071	174	0.016655419	64.5328064	2.81054E-14

Table 15 Material Processes in Julie and Julia

Material processes constitute a key ingredient of a plot since they reflect what the characters are doing. As shown in Tables 13, 14, and 15 above, there is a number of material processes related to food-making such as: 'COOK', 'COOKED', 'MAKE', 'PREHEAT', 'BATTER', 'GLAZE', 'POURED', 'SAUTEED', 'TASTED', and so on. It should be noted that the material processes related to consumption of food, i.e., 'EAT', 'BITE' and 'TASTED' are only found in *Eat Cake* and *Julie and Julia*. In contrast to Wynter who bakes bread as a profession, Ruth and Julie cook in their homes, and they eat what they cook with their families. In addition, the business Ruth started near the end of the story is branded 'Eat Cake' which also explains the significance of the frequent occurrence of the process 'EAT'.

6. Objects

Objects are items which furnish the fictional world and are used by characters. Names of objects are detected only in the keyword lists of *Eat Cake* and *Julie and Julia*. These objects mainly include kitchen equipment. However, it should be noted that the keyword list of *Eat Cake* includes the object 'PIANO' whereas the keyword list of *Julie and Julia* includes the object 'Blog' which respectively relate to the plot of each story.

	Key			RC.			
Ν	word	Freq.	%	Freq.	RC. %	Keyness	Р
25	PIANO	85	0.111156158	23		347.9690857	2.58481E-17
42	PAN	60	0.078463167	25		222.8173065	1.18841E-16
46	BOWL	54	0.070616849	21		204.0641022	1.62649E-16
53	CUP	84	0.109848432	129	0.012347983	183.7130737	2.38403E-16
60	OVEN	36	0.047077902	5		163.6544495	3.67052E-16
64	PANS	34	0.044462461	5		153.4460297	4.69434E-16
70	BOATS	43	0.056231938	27		141.4154053	6.45491E-16
75	CUPS	33	0.043154743	8		137.8969727	7.13315E-16
106	MIXER	20	0.02615439	1		99.51531982	2.84486E-15
111	PLATE	37	0.04838562	41		96.58919525	3.26281E-15
113	BOAT	47	0.061462816	82		94.80311584	3.55887E-15
129	BED	57	0.074540012	152	0.014549562	82.69063568	6.93033E-15

Table 16 Objects in Eat cake

	Key			RC.			
Ν	word	Freq.	%	Freq.	RC. %	Keyness	Р
48	BLOG	41	0.042115644	0		201.9213104	1.68956E-16
69	POT	37	0.038006801	9		138.3463898	7.04138E-16
74	PAN	45	0.046224486	25		134.8295898	7.80416E-16
75	MTAOFC	27	0.027734691	0		132.9690247	8.25263E-16
83	DISHES	34	0.034925167	8		127.969101	9.64128E-16
103	OVEN	26	0.026707482	5		101.542923	2.59627E-15
121	STOVE	21	0.021571428	2		90.18527222	4.51048E-15
137	COUCH	30	0.030816324	21		82.38072205	7.06436E-15
162	BOWL	27	0.027734691	21		70.91991425	1.58967E-14
198	FRIDGE	19	0.019517006	9		60.00806427	4.54743E-14

Table 17 Objects in Julie and Julia

7. Sex

The occurrence of the keyword 'SEX' only in *Julie and Julia* can be explained by referring to the plot whereby sex is a recurrent issue in Julie's thoughts and a frequent topic of conversation between Julie and her friends. Although the word is also mentioned in *Bread Alone*, it was not statistically significant enough to appear in the top 200 keywords of this novel.

	Key			RC.			
Ν	word	Freq.	%	Freq.	RC. %	Keyness	Р
51	SEX	67	0.068823121	44		188.7425537	2.15904E-16

Table 18 Sex in Julie and Julia

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3.2 Semantic Fields

Semantic annotation is a corpus-linguistic technique, particularly easy to carry out using the computer tool Wmatrix5 (Rayson, 2021). This technique involves adding semantic tags to every word in a corpus to identify its semantic category and then fully automatically producing sets of words which are related semantically. The semantic tags are composed of (Rayson, 2003: 66):

- 1. An upper-case letter indicating general discourse field
- 2. A digit indicating a first subdivision of the field
- 3. A decimal point followed by a further digit to indicate a finer subdivision (optional)
- 4. One or more 'pluses' or 'minuses' to indicate a positive or negative position on a semantic scale (optional)

The semantic content component within Wmatrix5, which is called the UCREL Semantic Analysis System (<u>USAS</u>), contains 21 major semantic categories, as shown in Table 19 below.

Tag	Semantic	Tag	Semantic	Tag	Semantic	Tag	Semantic
	Category		Category		Category		Category
Α	General and	B	The Body	С	Arts and Crafts	Ε	Emotion
	Abstract		and the				
	Terms		Individual				
F	Food and	G	Government	Η	Architecture,	Ι	Money and
	Farming		and Public		Housing and		Commerce in
					the Home		Industry
K	Entertainment,	L	Life and	Μ	Movement,	Ν	Numbers and
	Sports, and		living		Location,		Measurement
	Games		Things		Travel and		
					Transport		
0	Substances,	Р	Education	Q	Language and	S	Social
	Materials,				Communication		Actions,
	Objects, and						States and
	Equipment						Processes
Т	Time	W	World and	Χ	Psychological	Y	Science and
			Environment		Actions, States		Technology
					and Processes		

Ζ	Names and					
	Grammatical					
	Terms					

 Table 19 Semantic Categories in Wmatrix5 (adapted from <u>Rayson, 2003</u>)

These twenty-one categories in Table 19 are further refined and categorized. For example, if a word is tagged with the value A5.1+, it indicates a word in the category 'General and Abstract Terms' (A), the subcategory 'Evaluation' (A5), the sub-subcategory 'Good and Bad' (A5.1), and 'Good' (A5.1+) as opposed to 'Bad' (A5.1–).

I have used Wmatrix5 to examine the semantic fields of the three texts at hand and explore how these semantic fields can shed light on the themes and the plot elements of these texts.

Tag	Freq.1	RF	Freq.2	RF	LL value	Semantic	Top 5 Words in
			BNC			Category	Category
F1	1469	1.33	2974	0.31	+1697.94	Food	bread, dinner, flour,
							dough, kitchen, bakery
F2	424	0.38	963	0.10	+432.65	Drinks and	coffee, wine, drink,
						Alcohol	bar, espresso
X3.5	84	0.08	109	0.01	+142.05	Sensory:	smell, scent, musty,
						Smell	reeked, perfumed
S3.2	181	0.16	508	0.05	+141.10	Relationship:	kiss, love, kisses, hug,
						Intimacy and	romantic
						Sex	
X3.1	94	0.09	176	0.02	+117.41	Sensory:	sweet, taste, flavor,
						Taste	sour, aroma
A5.1+	559	0.51	2905	.30	+113.53	Evaluation:	good, well, okay,
						Good	great, fine

Table 20 Semantic Fields in Bread Alone

Tag	Freq.1	RF	Freq.2	RF	LL value	Semantic	Top 5 Words in
			BNC			Category	Category
F1	1551	2.55	2974	0.31	+3320.78	Food	cake, kitchen, butter,
							sugar, bake
S4	956	1.57	4002	0.41	+1035.17	Kin	father, mother,
							parents, dad, family
F2	159	0.26	963	0.10	+101.27	Drinks and	drink, milk, rum, juice,
						Alcohol	bar
M6	879	1.45	9859	1.02	+90.30	Location and	this, there, out, here,
						Direction	where

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A5.1+	310	0.51	2905	0.30	+68.54	Evaluation:	good, well, great, fine,
						Good	ok
X3.1	47	0.08	176	0.02	+57.71	Sensory:	sweet, sour,
						Taste	sweetened, taste,
							sweetness
K2	145	0.24	1207	0.12	+46.12	Music and	piano, music, song,
						Related	pianist, guitar
						Activities	
N5	24	0.04	65	0.01	+39.96	Quantities:	empty, slightest,
						Little	single, minimal, tinge
M4	107	0.18	843	0.09	+39.33	Sailing,	boats, sailing, sail,
						Swimming,	swim, cruise-ships
						etc.	

Table 21 Semantic fields in Eat Cake

Tag	Freq.1	RF	Freq.2	RF	LL value	Semantic	Top 5 Words in
			BNC			Category	Category
F1	2357	2.6	2974	0.31	+4807.93	Food	kitchen, butter, eat,
		1					dinner, sauce
F2	240	0.2	963	0.10	+150.43	Drinks and	wine, drinking, vodka,
		7				Alcohol	juice, milk
A5.1	509	0.5	2905	0.30	+147.56	Evaluation:	good, well, great, ok,
+		6				Good	fine
X3.1	90	0.1	176	0.02	+133.76	Sensory:	taste, sweet, tart, bitter,
		0				Taste	sour
S3.2	146	0.1	508	0.05	+114.49	Relationship:	fuck, sexy, kissed,
		6				Intimacy and	boyfriend, love
						Sex	
X3.1	21	0.0	0	0.00	+103.31	Tasty	delicious, deliciously,
+		2					tasty, yummy
L2	485	0.5	3225	0.33	+84.91	Living	eggs, chicken, lobster,
		4				Creatures:	lamb, duck
						Animals,	
						Birds, etc.	
I3.2	37	0.0	48	0.00	+74.19	Work and	secretary, secretaries,
		4				Employment:	colleagues, concierge,
						Professionali	accountant
						sm	
01.2	184	0.2	983	0.10	+63.69	Substances	water, oil, vinegar,
		0				and	puree, syrup
						Materials:	
						Liquid	

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-	1	1	1	1	1	1	
04.6	177	0.2	988	0.10	+54.59	Temperature:	hot, boiling, heat, warm,
+		0				Hot / on fire	fire
A5.1-	123	0.1	624	0.06	+48.30	Evaluation:	disaster, worst,
		4				Bad	disasters, catastrophic,
							atrocious
01.1	282	0.3	1991	0.21	+38.51	Substances	crepe, ice, glass, pecan,
		1				and	gelatin
						Materials:	
						Solid	
S3.2+	7	0.0	0	0.00	+34.44	Relationship:	cocotte, prostitutes,
		1				Sexual	vamped, arousal
E5-	128	0.1	757	0.08	+33.43	Fear/Shock	fear, terror, horror,
		4					afraid, creepy

Table 22 Semantic fields Julie and Julia

The key semantic fields are quite relevant to the categories of keywords defined earlier. It should be noted that a number of the words included in the semantic categories also appear in the keyword lists and that these words relate to the major themes and plot elements in the three texts. Examples include 'kitchen', 'piano', 'sex', 'boats', and so on. However, semantic fields offer more links to the plot elements. For example, the semantic fields of 'Evaluation: Bad' and 'Fear and Shock' relate more to Julie's concern with the evaluation and success of her recipes as well as with her psychological fears.

By examining the tables above, the semantic fields that relate to the themes and plot elements of the texts in question are outlined in Table 23 below:

Themes/Plot E	Bread Alone	Eat cake	Julie and Julia
Food and Food-	'Food',	'Food',	'Food',
making	'Drinks and	'Drinks and	'Drinks and Alcohol',
	Alcohol',	Alcohol',	'Sensory: Taste', 'Tasty',
	'Substances and	'Sensory: Taste',	'Living Creatures:
	Materials: Solid',	'Quantities: Little'	Animals, Birds, etc.',
	'Sensory: Smell',		'Substances and
	'Sensory: Taste',		Materials: Liquid',
			'Temperature: Hot, on
			Fire', 'Substances and
			Materials: Solid',
Sex	'Relationship:		'Relationship: Intimacy
	Intimacy and Sex'		and Sex', 'Relationship:
			Sexual'

Work		'Work and Employment: Professionalism'
Family and their	'Kin', 'Music and	
activities	Related	
	Activities',	
	'Swimming,	
	sailing, etc.'	

Table 23 Semantic fields in the three texts in relation to themes and plot elements

The comparison of the key semantic categories of the three texts shows the preoccupation with issues related to food, food making and consumption, as evidenced by such categories as 'Food', 'Drinks and Alcohol', 'Substances and Material: Solid', 'Substances and Material: Liquid', 'Sensory: Taste', and 'Tasty'. Two texts, namely, *Julie and Julia* and *Bread Alone* share semantic categories related to sex such as 'Relationship: Intimacy and Sex' and 'Relationship: Sexual'. *Eat Cake*, on the other hand, is distinguished by the high statistical significance of the semantic categories of 'Kin', 'Music and Related Activities' and 'Swimming, Sailing, etc.' which can be related to its plot.

It should be noted, however, that the procedure of semantic domains is more effective in identifying literary themes since it covers more aspects than the keyword procedure alone and is easier to conduct. In order to relate keywords to themes, one has to go through the keyword list, examine keywords and group what seem to be thematically linked together. The procedure of classifying into semantic domains, on the other hand, provides the analyst with a list of the significant themes and groups of thematically linked words without much effort.

The similarities across the three texts are revealing as regards the themes and topics which are significantly common to all of them. It should be noted, however, that due to limitations of space, I could not go further with my analysis to examine the concordances of the lexical items in each semantic field. The study of the concordances of each lexical item could further support or refute the relation of semantic fields to the literary themes and plot elements of the texts in question. This can be a venture to be taken up in future research.

4. Conclusion

All three books – *Julie and Julia, Bread Alone,* and *Eat Cake* – revolve around women whose lives are in transition and who are striving to find direction in life and overcome their problems. Each book traces the journey of its female protagonist to self-discovery. The three protagonists (Ruth, Wynter, and Julie)

experience the healing power of food through cooking. They have found in foodmaking a source of relief from the stresses of life, a form of solace. Corpus linguistic analysis has enriched the manual analysis in offering the keywords as well as the semantic fields distinguishing each book. The statistically significant semantic fields and keywords can be seen as indicators of the major themes and plot elements of each text, with semantic domains fulfilling the task more easily and effectively than keywords. The extraction of semantic fields and keywords can thus benefit stylistic analysis by providing statistical evidence that supports intuitive observations. By conducting a corpus-based study that integrates the methods of traditional manual analysis and corpus linguistics, this paper has demonstrated how these two areas of linguistic enquiry can be combined to achieve a more comprehensive stylistic analysis.

References

- Adolph, A. (2009). Food and Femininity in Twentieth-Century British Women's Fiction. Ashgate Publishing Limited.
- Adolphs, S. (2006). Introducing Electronic Text Analysis. A Practical Guide for Language and Literary Studies. Routledge.
- Adolphs, S. & Carter, R. (2002). Point of view and semantic prosodies in Virginia Woolf's To the Lighthouse. *Poetica* 58: 7-20.
- Ashley, B., Hollows J., Jones, S., & Taylor, B. (2004). *Food and Cultural Studies: Studies in Consumption and Markets*. Routledge.
- Biasin, G.P. (1991). Flavors of Modernity. Princeton University Press.
- Biber, D. (2011). Corpus linguistics and the study of literature: Back to the future? *Scientific Study of Literature* 1(1): 15-23.
- Brown, J. (1984). *Fictional Meals and Their Function in the French Novel*, 1789– 1848. University of Toronto Press.
- Child, J. & Prud'homme A. (2006). My Life in France. Alfred A. Knopf.
- Counihan, C. & Kaplan, S. (1998). Food And Gender: Identity and Power. Harwood.
- Counihan, C., van Esterik, P. & Julier, A. (2018). *Food and Culture: A Reader* 4th *Edition*. Routledge.
- Cozzi, A. (2010). *The Discourses of Food in Nineteenth-Century British Fiction*. Palgrave Macmillan.
- Culpeper, J. (2002). Computers, language and characterisation: An analysis of six characters in Romeo and Juliet. In U. Melander-Marttala, C. Östman & M.

Kytö (eds) *Conversation in Life and in Literature*, pp. 11-30. Universitet stryckeriet.

- <u>Culpeper, J.</u> (2009). <u>Keyness: Words, Parts-of-Speech and Semantic Categories in</u> <u>the Character-talk of Shakespeare's *Romeo and Juliet*. International Journal of Corpus Linguistics 14 (1): 29-59.</u>
- Fischler C. (1988). Food, self and identity. *Social Science Information* 27(2):275-292. doi:10.1177/053901888027002005
- Fischer-Starcke, B. (2010). *Corpus linguistics in literary analysis: Jane Austen and her contemporaries*. London: Continuum.
- Forster, L. (2004). *Futuristic Foodways: The Metaphorical Meaning of Food in Science Fiction Film.* Routledge.
- Genette, G. (1980). Narrative Discourse. New York: Cornell University Press.
- Graesser, C., Olde B., & Klettke B. (2002). How Does the Mind Construct and Represent Stories?. In M. Green, J. Strange & T. Brock (eds) *Narrative Impact: Social and Cognitive Foundations*, pp. 231-263. Mahwah NJ: Lawrence Erlbaum Associates.
- Halliday, M. (1994). An Introduction to Functional Grammar. 2nd edn. London: Arnold.
- Hendrick, J. (2001). Bread Alone. Harper Collins Publishers.
- Hoover, D., L. (2002). Frequent word sequences and statistical stylistics. *Literary* and Linguistic Computing 17(2): 157-180.
- Hori, M. (2004). *Investigating Dickens' Style. A Collocational Analysis*. Basingstoke: Palgrave Macmillan.
- Lawson, A. (2000). 'Die schöne Geschichte': a corpus-based analysis of Thomas Mann's Joseph und seine Brüder. In B. Dodd (ed.) *Working with German Corpora*, pp. 161-80. Birmingham: University of Birmingham Press.
- Leach, E. (1989). Claude Levi-Strauss. Reprint. University of Chicago Press.
- LeBlanc. R. D. (2009). Slavic Sins of the Flesh: Food, Sex, and Carnal Appetite in Nineteenth-Century Russian Fiction. University of New Hampshire Press.
- Lévi-Strauss, C. (2018). The Culinary Triangle. Trans. by Doreen and John Weightman. In C. Counihan, P. van Esterik & A. Julier (eds) Food and Culture: A Reader 4th Edition, pp. 21-28. Routledge.
- Louw, B. (1993). Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies. In M. Baker, G. Francis & E. Tognini-

Journal of Scientific Research in Arts

Bonelli (eds.), *Text and Technology: In honour of John Sinclair*, pp. 155-176. Amsterdam: John Benjamins Publishing.

- Mahlberg, M. (2007). Clusters, key clusters and local textual functions in Dickens. *Corpora*(2) 1: 1-31.
- Mahlberg, M. (2010). Corpus Linguistics and the Study of Nineteenth-Century Fiction. *Journal of Victorian Culture* 15(2): 292-298.
- Mahlberg, M. (2012). *Corpus Stylistics and Dickens's Fiction* (Routledge Advances in Corpus Linguistics). London: Routledge.
- Mahlberg, M. (2013). Corpus Stylistics and Dickens' Fiction. New York: Routledge.
- Mahlberg, M. (2014). Corpus stylistics. In M. Burke (ed.), *The Routledge Handbook of Stylistics*, pp. 378-392. London: Routledge.
- Mahlberg, M. & McIntyre, D. (2011). A case for corpus stylistics: Ian Fleming's *Casino Royale. English Text Construction* 4(2): 204-227.
- Mahlberg, M. & Smith, C. (2010). Corpus Approaches to Prose Fiction: Civility and Body Language in *Pride and Prejudice*. In D. McIntyre & B. Busse (eds.), *Language and Style*, pp. 449-467. Basingstoke: Palgrave Macmillan.
- Mannur, A. (2010). *Culinary Fictions: Food in South Asian Diasporic Culture*. Philadelphia, Temple University Press.
- McEnery, T. (2006). Swearing in English: Bad Language, Purity and Power from 1586 to the Present. Psychology Press.
- McIntyre, D. (2008). Integrating multimodal analysis and the stylistics of drama: a multimodal perspective on Ian McKellen's *Richard III. Language and Literature* 17(4): 309-334.
- McIntyre, D. (2015). Towards an integrated corpus stylistics. *Topics in Linguistics* (16)1: 59-68.
- McIntyre, D. & Walker, B. (2010). How can corpora be used to explore the language of poetry and drama? In A. O'Keeffe & M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*, pp. 516–530. London: Routledge.
- McIntyre, D. & Walker, B. (2011). Discourse presentation in Early Modern English writing: A preliminary corpus-based investigation. *International Journal of Corpus Linguistics* 16(1): 101-130.
- Mennell, S., Murcott, A., & van Otterloo, A. H. (1992). *The Sociology of Food: Eating, Diet and Culture*. London: Sage.

- O'Halloran, K. (2007a). The subconscious in James Joyce's 'Eveline': a corpus stylistic analysis that chews on the 'Fish hook'. *Language and Literature* 16(3): 227-244.
- O'Halloran, K. (2007b). Corpus-assisted literary evaluation. *Corpora* 2(1): 33-63. doi:10.3366/cor.2007.2.1.33.
- Powell, J. (2005). *Julie and Julia 365 days 524 recipes 1 Tiny Apartment Kitchen*. Little, Brown and Company.
- Prince, G. (2001). A Point of View on Point of View or Refocusing Focalization.In W. van Peer and S. Chatman (eds) *New Perspectives on Narrative Perspective*. Albany: State University of New York (SUNY) Press.
- Ray, J. (2003). Eat Cake. Crown.
- Rayson, P. (2003). *Matrix: A Statistical Method and Software Tool for Linguistic Analysis through Corpus Comparison*. Ph.D. Thesis. Lancaster University.
- Rayson, P. (2021). Wmatrix5: A Web-based Corpus Processing Environment. Computing Department, Lancaster University. https://ucrelwmatrix5.lancaster.ac.uk/ wmatrix5.html

Rayson, P. (2008). From Key Words to Key Semantic Domains. *International Journal of Corpus Linguistics* 13(4): 519-49.

- Romaine, S. (2010). 19th Century key words, key semantic domains and affect: In the rich vocabulary of love 'most dearest' be a true superlative. *Studia Neophilologica* 82(1): 12-48.
- Sceats, S. (2000). Food, Consumption, and the Body in Contemporary Women's *Fiction*. Cambridge: Cambridge UP.
- Scott, M. (1997). PC Analysis of Keywords and Key Key Words. *System* 25(1): 1-13.
- Scott, M. (1999). *WordSmith Tools Help Manual, Version 3.0*. Oxford: Oxford University Press.
- Scott, M. (2006). Key words of individual texts. In M. Scott & C. Tribble (eds), *Textual Patterns: Key Words and Corpus Analysis in Language Education*, pp. 55–72. Amsterdam: John Benjamins.
- Scott, M. & Tribble, C. (2006). *Textual Patterns: Key Words and Corpus Analysis in Language Education*. Amsterdam: John Benjamins.
- Semino, E. & Short, M. (2004). *Corpus Stylistics: Speech, Writing and Thought Presentation in a Corpus of English writing*. London and New York: Routledge.
- Starcke, B. (2006). The phraseology of Jane Austen's Persuasion: phraseological

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units as carriers of meaning. ICAME Journal 30: 87-104.

- Stubbs, M. (2005). Conrad in the Computer: Examples of Quantitative Stylistic Methods. *Language and Literature*, 14(1): 5-24.
- Toolan, M. (2006). Top keyword abridgements of short stories: A corpus linguistic resource? *Journal of Literary Semantics* 35(2): 181-194.
- Walker, B. (2010). Wmatrix, Key-Concepts and the Narrators in Julian Barnes' Talking It Over. In D. McIntyre & B. Busse (eds) Language and Style, pp. 364-387. Palgrave MacMillan, Basingstoke.
- Walker, B. (2012). <u>Character and Characterisation in Julian Barnes' Talking it</u> <u>over: A Corpus Stylistic Analysis</u>. Ph.D. Thesis. Lancaster University.
- Walker, B. & McIntyre, D. (2015). Thinking about the News: Thought Presentation in Early Modern English News Writing. In A. McEnery & P. Baker (eds) Corpora and Discourse Studies: Integrating Discourse and Corpora, pp. 175-191. London, UK: Palgrave Macmillan.
- Wijitsopon, R. (2008). *Direct Speech in Jane Austen's Emma: Textual Analytical and Corpus-based Approaches.* Ph.D. Thesis. Lancaster University.
- Wong, S. (1993). *Reading Asian American Literature: From Necessity to Extravagance*. Princeton University Press.

صناعة الطعام في الروايات كطريق لتحقيق الذات: دراسة في إطار علم المخزونات اللغوية

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مستخلص

يقوم هذا البحث على إستخدام إجرائين من إجراءات التحليل اللغوي: الأول هو الإجراء التقليدي الذي يقوم به الباحث يدويا بدون مساعدة برمجيات الحاسب الألى والثاني يعتمد على برمجيات الحاسب الألى في إطار علم المخزونات اللغوية وذلك لتحليل موضوع "الطعام وإعداد الطعام" في عدد من النصوص التي تشمل مذكرات جولي باول (2005) "جولي وجوليا" وأيضا رواية جين راي (2003) "تناول كيك" وأخيرا رواية جوديث هندريكس (2001) " الخبز فقط". وفي هذه الأعمال يمكن إعتبار الطعام وإعداد الطعام وسيلة لرسم الشخصيات ومواقفها ومشاعرها والإمكانات المتاحة لها في الحياة. فعملية الطهي لا تحمل فقط المعنى السطحي الملموس ولكن تقدم أيضا مستوي إستعاري حيث ترتبط تلك العملية بالإكتئاب والخوف والمتعة وتحقيق الذات. فكل شخصية نسائية رئيسية في هذه الأعمال الثلاث تمر بتجرية تعويضية لكي تجد معنى لحياتها. ومن خلال تقديم تحليل يدوى تقليدي وتحليل أخر في إطار علم المخز ونات اللغوية لتلك الأعمال المنتقاة، يحاول هذا البحث ان يستكشف الطرق التي من خلالها يستطيع علم المخزونات اللغوية إثراء التحليل الأدبى التقليدي. ويتبع البحث الخطوات التالية: أو لا يتم در اسة هذه الأعمال وتحليلها بالطريقة التقليدية لفحص الموضوعات الأدبية الرئيسية التي تدور حولها. ثانيا يتم إجراء الدراسة في إطار علم المخزونات اللغوية بإستخدام برنامج وماتريكس (الاصدار الخامس) والذي يستطيع إستخلاص الكلمات المفتاحية وحقول المعانى من كل نص. وبعد ذلك بتم فحص الكلمات المفتاحية وحقول المعاني وتحديد ما يتعلق منها بموضوع الطعام وعملية إعداد الطعام وأخيرا يتم تقييم نتائج الإجرائيين السابقين وتؤكد نتائج هذا البحث على قدرة وفعالية علم المخزونات اللغوية في دعم وإثراء التحليل الأدبي التقليدي.

كلمات مفتاحية: علم المخزونات اللغوية، وماتريكس الاصدار الخامس، الكلمات المفتاحية، حقول المعاني، الطعام في الرواية