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“His stethoscope, his beard, her breasts”:
Narrative Gaps, Automaticity, and the Microfiction of Lydia Davis

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**Abstract**
What could be the value of a story so short that it would be called “microfiction”? According to Marc Botha, short fiction mirrors “the short attention span of modern readers,” as well as “the gaps and fragmented-ness of modern consciousness.” While microfiction is not necessarily the only form of fiction that engages with cognitive processes, as there is a rich history of describing literary studies such as poetry through the lens of cognitive science. This article explores microfiction’s structure and its relation to cognitive processes. Using 2013 Man Booker Prize-awardee Lydia Davis’s microfiction as a sample *oeuvre*, applied are a range of cognitive science methodologies—an interdisciplinary approach encompassing psychology, neuroscience, philosophy, artificial intelligence, anthropology, and linguistics—to consider how certain genres of literature mimic and even refract the ways in which the human brain processes information. Putting microfiction as a literary work in dialogue with cognitive processing demonstrates seemingly disparate fields can provide insight into both literature and cognitive science.

**Keywords**
cognitive science, Lydia Davis, contemporary literature, flash fiction, microfiction

**Peer Review**
This work has undergone a double-blind review by a minimum of two faculty members from institutions of higher learning from around the world. The faculty reviewers have expertise in disciplines closely related to those represented by this work. If possible, the work was also reviewed by undergraduates in collaboration with the faculty reviewers.
What could be the value of a story so short that it would be called “microfiction”? According to Marc Botha, short fiction mirrors “the short attention span of modern readers,” as well as “the gaps and fragmented-ness of modern consciousness” (203). I use Botha’s consideration of microfiction in the context of cognition as a springboard to consider how it is that “microfiction constitutes one of several fundamental ways in which literature comes to grips with reality itself” (Botha 203). While microfiction is not necessarily the only form of fiction that engages with cognitive processes, as there is a rich history of describing literary studies such as poetry through the lens of cognitive science (Meutsch; Peskin and Ellenbogen).

This article explores microfiction’s structure and its relation to cognitive processes. Using 2013 Man Booker Prize-awardee Lydia Davis’s microfiction as a sample oeuvre, I apply a range of cognitive science methodologies—an interdisciplinary approach encompassing psychology, neuroscience, philosophy, artificial intelligence, anthropology, and linguistics—to consider how certain genres of literature mimic and even refract the ways in which the human brain processes information. Putting microfiction as a literary work in dialogue with cognitive processing demonstrates seemingly disparate fields can provide insight into both literature and cognitive science.

Cognition and Narrative Gap-Filling
The definition of microfiction can vary from source to source. To some, it is simply an offshoot of a short story in that, according to Ilana Howe, “[t]he one thing we can be sure of is that the short short [story] is shorter than the short story” (quoted in Botha 206). Short written works can range from the novella, novelette, and short story to flash fiction (see Table 1). For the sake of this paper, I will be categorizing microfiction as an offshoot of flash fiction with a count of under one thousand words (Table 1). Aside from such counts, what differentiates microfiction from other subgenres of flash fiction, such as “shorter short” stories?

| Type       | Word Count       |
|------------|------------------|
| Novella    | 20,000–49,000 words |
| Novelette  | 7,500–19,000 words  |
| Short Story| 1,000–7,500 words   |
| Flash Fiction| Less than 1,000 words |

*Table 1. Range of approximate word counts of short written works, from most to least.*

According to William Nelles, who considers subcategorization not simply a matter of length, “most stories shorter than a couple of pages or so (say around seven hundred words) are not just quantitatively but qualitatively different than most stories above that length” (88). He and Dan Irving have observed that, compared to short stories, actions in microfiction tend to be more extreme, expend relatively little time in character arc development, expend less time in developing setting, utilize a more condensed time frame, and utilize closure (Irving 151; Nelles 91–96). Regarding temporality, a distinct aspect of is that it “interrogates the intricate relationship between presence and scale” where the sense of immediacy of the work is a result of the duration of the story and is closely mirrored by the amount of time one would take to read about and process the events of the story (Botha 210).

In creating a work that is concerned with temporality, Davis employs microfiction as a means of creating a “deeply natural narrative” that matches what is “ongoing . . . inside our heads” (Knight). In a 2008 interview with The Believer, Davis stated her focus with microfiction is to avoid “creating narrative scenes between characters,” suggesting that she aims to veer away “from a certain artificiality that I perceive to be present in many such scenes as written” (Mangusu).

In Davis’s iterations of microfiction, as Dan Irving states, readers are “actively engaged in the construction of narrative experience” (152). This is known as narrative gap-filling. Narrative gap-filling is at the crux of
microfiction; in narrative gap-filling, readers are put in the position of using inference and their own experiences to bridge existing narrative gaps. Yanna Popova describes the creation of narrative as a reconciliation between the two “sense making” agents: the reader and the teller. In her view, a sense of narrative literature can only be obtained when the reader and teller negotiate their potentially opposing world views (1). Popova’s view is also in line with that of German literary theorist Wolfgang Iser, who was of the belief that a literary work’s reality is at the halfway point between the what was written by the author and the reader’s “realization” of that text (279). In his essay, “The Reading Process: A Phenomenological Approach” (1972), Iser elaborates on narrative gap-filling:

one text is potentially capable of several different realizations, and no reading can ever exhaust the full potential, for each individual reader will fill in the gaps in his own way, thereby excluding the various other possibilities; as he reads, he will make his own decision as to how the gap is to be filled. In this very act the dynamics of reading are revealed. (285)

Iser’s theory suggests that the space left for the reader may be unintentional. While authors may choose to guide their readers to gap-fill along a certain line of thought, Christopher Knight contends Davis “is not the sort of writer to whom one turns for systematic instruction or guidance, even as her work, it seems fair to say, remains within the frame of a ‘philosophical inquiry’” (201). Writers like Davis have deliberately pushed the gap, forcing readers to consciously interact with the text, becoming more aware of themselves and that they are creating something beyond what is on the page.

In return, readers are rewarded with a more intense experience, and a more emotionally rich connection because they have become co-creator of the work. Similarly, according to Jeremy Gavron, omission is a form of creation. Limit, constraint and the compulsions of the unknown—the excluded—are the true foundation of narrative art. A place for the reader to enter more fully into the book. (par. 5)

Such a statement is particularly true of Davis’s work, in which narratives can be left hanging or characters can be stripped down to their bare bones. While gap-filling can be found in any work of literature, microfiction is distinct in its higher degree of “gaps-per-capita” compared to longer works (Irving 150).

Gap-filling is a key aspect of how human brains make sense of the world, and is similar to the process of narrative gap-filling that occurs in storytelling. Another way in which gap-filling occurs is in the process of reconciling gaps in retinal images known as “filling in” (Vanderbilt University). To determine whether one looked at objects first through the contour or through surface features, researchers at Vanderbilt University determined through study of individual visual cortex neurons that one determines a contour and then fills in the details. Because the brain in essence only truly sees the contour of an object, the filling in the brain undergoes causes a viewer to “see” something that is not really there (Vanderbilt University). This process occurs by the brain using unconscious assumptions of the natural world. While Daniel Dennett, among others, have argued that the brain instead promotes coherency by ignoring details as opposed to adding details, the overwhelming consensus on the topic is that the brain primarily engages in gap-filling through the addition of details as opposed to gap-filling through the unconscious rejection of discontinuity (Chong).

The findings of Vanderbilt University, built on the work of neuroscientist Karl Friston and of Klaas Stephan in “predictive coding,” suggest the brain does not merely process information it receives, but can also work to predict future input (417); “the brain’s main
function is to minimise surprise—that is what it has evolved to do” (University of Glasgow).

One way to relate narrative formation to cognition is to consider that narrative has long been regarded as the basic organizing principle of memory; storytelling becomes intrinsic to one making sense of their actions and experiences (Gots). Coherence of narrative, not accuracy, is the primary goal, demonstrated by the phenomenon of brains occasionally manufacturing false memories in order to maintain narrative coherence (Gots). Lisa Cron goes so far as to argue that storytelling and narrative formation were intrinsic to human evolution:

story or narrative takes those big ideas, abstract concepts, dry facts and translates them into something very specific that we can experience, and so feel, and that’s what tells us how we feel about it, what it means to us and that’s what moves us to action. (Cron)

Narrative formation is so important that it has become a center of attention for clinical application of the treatment of trauma; as trauma disrupts narrative formation through interference of psychophysiological coordination, cognitive processes, and social connections causing symptoms of posttraumatic distress, promoting narrative cohesion could be of note in clinical treatment programs (Wigren).

**Lydia Davis: A Case Study**

The way in which Davis constructs narratives in her microfiction works of her book, *Break It Down*, closely mirrors how the brain constructs cohesive narratives through gap-filling. Her work, “The Bone,” is one such example. As the narrator in the story seeks out help for her husband, she notes her interaction with “several nurses who wanted to help him but could not do more than spray his throat and then stand back and laugh, and he would laugh too, as best he could. I did not know what they were laughing about” (89). This provides intense insight into the relationship between the narrator and her husband beyond what might be on the page. It suggests a sort of inherent disconnect between them, and the sort of disconnect between them is an extension of the experiences of the reader. The reader would project their own feelings and experiences onto the story, bridging narrative gaps. Particularly, when the narrator in the story specifies at the very end that she and her husband have “gone their separate ways” implying they’re no longer married, it causes the reader to fill in the gaps of why exactly she was referring to him as her husband even so long after their divorce (90). Davis gives little to no context as to why this may have occurred, providing only slight insights of their incompatibility when the narrator is confused as to why her husband was laughing.

At the end of the story, the narrator also notes how her and her “husband” recollect this incident quite differently, and this is one of the very few times we’re given any insight into the husband’s feelings in this story other than his “unease”; he merely praises the “great Jewish doctor” who treated him (90), and the reader is left to connect the dots between his remark and that he may also identify as Jewish. Further, questions are evoked regarding the nature of their relationship and how amicable it truly is, as the narrator chose to include that detail in particular, suggesting she might have intended it as a sort of parting jab or sign of shame at being married to a Jewish man. The reader is left to fill in the gaps between those two remarks, much in the same way brains rely on a sort of narrative skeleton onto which it fills in the details that are not explicitly presented. The reader’s prior experiences act as a context for predicting details Davis deliberately left out, similar to the brain’s own predictive nature.

Another example from Davis is, “In a House Besieged,” which I provide here in its entirety:

In a house besieged lived a man and a woman. From where they cowered in
the kitchen the man and woman heard small explosions. “The wind,” said the woman. “Hunters,” said the man. “The rain,” said the woman. “The army,” said the man. The woman wanted to go home, but she was already home, there in the middle of the country in a house besieged. (81)

Davis starts out the work with the first sentence “in a house besieged” rather than the line “a man and a woman lived in a house besieged” (81). The two characters are given only the generic titles of “the man” and “the woman,” as if they could be anyone at any time; the reader is left to draw an impression not from their material possessions or any physical attributes, but only by the contrast in what they say (81). The man lists things such as hunters and the army, while the woman lists elements of climate, such as the wind and rain. Whether the exchange is regarded as disagreement or as isolated interpretations of what is transpiring outside their house is up to the reader to bridge. Further, the reader might contemplate that, if the woman believes it is just nature making these “explosions,” why is she still cowering in the kitchen with her husband? No answers are given in this particularly short work of sixty-five words, and yet a deliberate sketch is made of their personalities with very little extraneous detail. Concluding with “the woman” thinking about how she wished she were home but already home, “home” is problematized and extracted from physical space.

Likewise in “Two Sisters,” the narrator explains “two sisters grow up at different times and despise one another for being such children. They quarrel and turn red” (Davis 117). Davis again does not provide many physical identifying characteristics, allowing the reader to project onto the characters with their own experiences. The names of the characters are not provided; they are only identified by their relationship to each other: “caged together, two sisters contain their fury. Their features are the same.” In this case of gap-filling, while their features are “the same,” Davis never provides an indication of what even one of their faces looks like, and so the additional detail would provide no additional clarification without the reader’s involvement in gap-filling (118). The story closes with a funeral during which the two sisters, in black, shop for food together, husbands dead, sons dead in some war; their hatred is so familiar that they are unaware of it. They are sometimes tender with one another, because they forget. But the faces of the two sisters in death are bitter by long habit. (118)

The two sisters do not have a clear resolution and it is up to the reader to involve themselves in the work and decide upon an ending based on their own experiences.

The story “Safe Love” opens with the line “she was in love with her son’s pediatrician” (153). There is no mention of who exactly “she” is based on appearance or even in dialogue, as was the case in “In a House Besieged.” Who exactly “she” is Davis instead fills in with on what “she” fixates:

the child on the examining table, the office itself, the staff, his wife, her husband, his stethoscope, his beard, her breasts, his glasses, her glasses, etc.” (153)

The incorporation of “her breasts” into the last sentence listing a series of mundane items like “glasses” and “stethoscope” mirrors the associative nature of human thought, in which seemingly unrelated objects are linked together with a common thread (Suzuki). In fact, human memory relies primarily on association between objects and events (Salk Institute).

Associated memories are thought to result from the creation of and subsequent strengthening of connections between the neurons that pertain to the associated objects (Salk Institute). When the narrator lists the objects between her and her son’s pediatrician, she begins her list quite general in nature with
the office itself, and the list steadily grows more specific and intimate. This occurrence is indicative of associated memory, as she recalls the objects in the room with increased fervor and intimacy. Davis leaves it unclear to the reader as to whether the narrator is making the connections between the objects for the first time or whether she is strengthening associations between the objects she already had. In any case, the listing that occurs at the end of “Safe Love” is another effective mirror of human thought processes.

Davis ends the listing of items in “Safe Love” with an “etc.” to indicate to the reader that the story trails on and what happens next is entirely up to them regarding how best to bridge the gap with their own experiences shaping what is set to happen (153). Further, it is an act of subversion of the microfiction genre for which, according to Nelles, closure is a key component (91–96). The lack of closure also indicates that Davis’s work acts as a particularly effective mirror for human thought, as one’s mind does not necessarily have a clear end point to a particular rumination or daydream; a given topic merely fades in and out of obscurity.

The degree to which readers are conscious of their bridging narrative gaps is not yet a point of consensus, however. Bridging narrative gaps, also known as creating an inference, can be a point of “automaticity,” in that inferences are executed in order to achieve a specific reader goal (i.e., the “why” of an event or action that occurred in the text) (Gerrig 21). An example of automaticity would be if a reader of Davis’s work, “Fears of Mrs. Orlando,” read the line “she struggles back over the sand. When she gets home, she immediately calls her daughters and tells them what she has seen” to mean that she drove her car over the sand to get home, as she arrived at the scene in her car (11). The reader is likely not mulling over all the possibilities of how she managed to go from point A to point B and back to point A; the assumption likely comes quite seamlessly and without excessive rumination.

By contrast, inference can be a point of “memory-based processing,” which is of the view that a reader’s inference is not necessarily there to execute a particular goal; instead, inferences will specifically be a consequence of the reader’s own memories and experiences (Gerrig 22). An example of memory based processing would be if a reader of Davis’s work, “Two Sisters,” projected experiences with their own siblings onto the descriptions of the two sisters, such as imagining the characters of Petunia Evans and Lily Evans from the Harry Potter series by J.K. Rowling: “when there are two sisters, one is uglier and clumsier than the other, one is less clever, and one is more promiscuous” (117). A mix of both automaticity and memory-based processing are therefore integral for readers of Davis’s work to better bridge narrative gaps.

Conclusions

Microfiction, and Davis’s approach to microfiction in particular, provides a particularly effective mirror through which to consider how the human mind functions. Both microfiction and the human mind utilize a process known as gap-filling, with the brain utilizing both visual and narrative gap-filling in order to make better sense of the world. Microfiction utilizes gap-filling in a way that is distinct to other genres of short fiction as a result of the constraints in its word count and genre, leading to a higher number of “gaps-per-capita” and making gap filling an integral aspect of the work (Irving 150). Because there is a lack of room through which an author can elaborate on the background of a character, characters are stripped down to their bare essences and the reader is able to follow their journey throughout a very specific circumstance almost as it’s transpiring. This work also demonstrated the potential of expanding upon the dialogue between microfiction and cognitive processing.

Davis’s works are particularly illuminating mirrors for human thought because of her goal to, as previously stated, veer away “from a certain artificiality that I
[she] perceive[s] to be present in many such scenes as written” (Mangusu). She does not feel the need to abide by every convention of microfiction, such as the clear narrative end, and instead is so bold as to end a story with an “etc.” (as in “Safe Love”) and / or with other degrees of ambiguity of ending (as in “Two Sisters”). Such endings mirror a reader’s tendency to mull over the ending of a work or circumstance well after it is completed; if we do not tend to have hard stops regarding our own ruminations, why should our stories? Davis’s characters are not fully fleshed, only indicating what is absolutely crucial for the understanding of the character, and inviting the reader to fill in the rest of the blanks themselves. Deeper insight into how exactly readers tend to fill in gaps in narrative through automaticity and memory-based processing both in the reading of narrative and the utilization of narrative in one’s daily life would provide a keener awareness of how people process texts attempting to replicate psychological strategies.

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