

# **From Feminist Participatory Co-Design to Research-Creation: Developing a Digital Fiction for Body Image Bibliotherapy**

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## **1. Introduction**

Body image concerns affect the well-being of a generation who are coming of age immersed in digital culture. This is particularly true for young women and gender non-binary individuals of diverse intersectional backgrounds who regularly confront appearance-related pressures. The “Writing New Bodies” project (“WNB”; SSHRC IG 435-2018-1036; Ensslin et al. 2020) addresses these issues by developing a literary story game (digital fiction; “DF”) for body image bibliotherapy. Our target group is young woman-identified and gender non-binary individuals ages 18-25, from diverse intersectional backgrounds. Our work is a form of applied digital fiction research, which seeks to combine theory, feminist action research, and creative practice into a tool for wider public use. The DF is aimed to encourage emotional and verbal engagement with various challenges facing young people today, including cis- and heteronormative gender relations, racism, anti-fat attitudes, ableism, and familial influences on the ways women “ought to look” (Rice, 2014). WNB uses interactive digital storytelling that deconstructs normative conceptions of power to help reader/players build resilience to external and internal body-related pressures.

In this paper, we introduce the digital fiction collection resulting from the participant research the WNB team (Astrid Ensslin, Carla Rice, Sarah Riley, Christine Wilks, Megan Perram, Hannah Fowlie, Aly Bailey, Lauren Munro, Natali Panic-Cidic, and Antonia Mann) conducted in 2019. At the core of our paper lies a reflection on the

creative process, tracing the brief following the results of our participant research to ludonarrative and interface design and software development.

## **2. Body image concerns**

The starting point of our research are the disconcerting facts about the ubiquitousness of unhealthy body image amongst young people and its repercussions for their health and well-being but also for society in general. Particularly women identifying and non-binary individuals face appearance-related pressures from a very young age (Grogan 2016; Riley et al. 2018). We know for example that girls as young as six already express body dissatisfaction (Dohnt and Tiggemann 2006). 66% of girls aged 17-21 don't feel pretty enough and 59% of them feel they need to lose weight (Girl Guiding 2019). This is not entirely but partly related to media ideals centering around cisgendered, white, thin, sexualized bodies (Hobson 2016; Rice 2014). These representations tend to be particularly harmful when received passively, evoking appearance comparison and self-objectification, and this includes social media usage (Fardouly et al. 2018; 2015; Holland and Tiggemann 2016).

We also know that positive body image invokes self-respect and appreciation of diversity in beauty and can lead to superior wellbeing, optimism and coping mechanisms (Tylka & Wood-Barcalow 2015). Poor body image, on the other hand, can have a range of negative outcomes, like anxiety, distress, low self-esteem and disordered eating (Fardouly et al. 2018). And whilst there are a range of clinical interventions available, there's a lack of accessible, non-clinical ones that might involve informal gatherings and events like reading groups and dedicated meetings in school and youth organizations like the Girl Guides (Nair et al. 2020).

## **3. Digital fiction, feminism, and the body**

The main output of this project is a digital fiction, which is "fiction written for and read on a computer screen that pursues its verbal, discursive and/or conceptual complexity through the digital medium. It would lose something of its aesthetic and semiotic function if it were removed from that medium" (Bell et al. 2010). In other words, DF is born digital: it is made for computer-based interaction. The storyworld

and plot (singular or plural) don't emerge as semiotic and material phenomena until someone interacts with the DF via computational software and hardware. This is an embodied experience that immerses us in a fictional world on screen, no matter whether we are dually embodied, through an avatar, or whether our representation on screen is abstract, through a cursor, for example.

Digital fiction can range from more game-like, 3D or 2D audiovisual environments to more abstract, verbal, symbolical, and/or generative experiences. DF ranges from text-only Storyspace hypertext fiction and Interactive Fiction to web-based hypermedia fiction (often made in Flash or HTML with JavaScript), and, more recently, immersive 3D and VR fiction. Works made in 3D and VR environments may experiment with innovative spatialization of language, with bands of text wafting through the air, circles of monologue hovering in rooms, bundles of written memories wrapped around trees, or mysterious messages writing themselves onto walls as the reader-player walks along. DFs can come as literary games (Ensslin 2014), app fiction for touchscreens (Ensslin et al. 2018), Twine fiction (Ensslin & Skains 2017), and even some highly experimental forms of visual novels.

Digital fictions are often highly multilinear and hypertextual, which means that every reading experience can be very different. Multilinearity also enables authors to explore different narrative paths, trains of thought, or more freely associative structures. Finally, most of the work that falls under DF is experimental, avant-garde, and non-commercial and blends digital writing and verbal art with other digital arts.

Inspired by theories of *écriture féminine* (Cixous 1976; Irigaray 1985), feminist digital fiction has dealt with women's bodies in a variety of ways. For example, the theme of becoming women via social inscription (Grosz 1987) comes to the fore in Juliet Davis' dress-up e-poem, "Pieces of Herself" (2005). In this Flash work, women's "docile bodies" (Foucault 1995) are literally inscribed by interactive icons of domesticity, via symbolic patches that the reader-player picks up in the protagonist's domestic environment and attaches to her body, like that of a dress-up doll. Other key texts like Shelley Jackson's *Patchwork Girl* (1995) and Christine Wilks' *Fitting the Pattern or Being a Dressmaker's Daughter* (2008), engage with the idea of the patch, or

fragment, hypertextually, to evoke poststructuralist ideas of continual deconstruction and reconstruction of self in a postfeminist world.

Other body-themed digital fictions evoke entire new body spaces or body worlds. In Christine Wilks' and Andy Campbell's Unity-based *Inkubus* (2014), for example, we navigate the interior of a human body fighting off threats of binary decision making between looks and brains, much like a postfeminist first person shooter. Another, new embodied space for cyborg writing and "reading" (Hayles; in di Rosario 2017: 278) is offered by Mez Breeze in her 3D/VR sculpture, "The Thing Tableau", where we decode the story by navigating the cyborgian body, jumping from hotspot to hotspot whilst turning and haptically manipulating the seemingly shape-shifting sculpture.

#### **4. Writing New Bodies**

Aiming to take the creative field of digital body fiction into a new, more applied territory, the Writing New Bodies project is driven by three main research questions:

1. How might our target population of young women ages 18 to 25 contribute meaningfully to the design and development of a new digital fiction for body image bibliotherapy,
2. How might the co-design process help them reflect on body image concerns and build greater levels of resilience to sociocultural pressures that cause them to be dissatisfied with their bodies, and
3. What interactive, representational, and narrative designs and technologies might benefit bibliotherapists and our target population?

This paper focuses in particular on the third one, aimed at developing a DF for media-enhanced, medium-specific bibliotherapy. Bibliotherapy, or reading therapy, is an intervention method that employs directed reading (of fictional and non-fictional texts) to help with psychological issues. It is a cross-media method that can integrate various semiotic modes, and it is often deployed in combination with expressive disclosure writing.

Our participant methodology combined Feminist Participatory Action Research and Critical Community Co-Design. We held workshops with a total of 21 participants, aged 18-25, in three Canadian locations (Edmonton, Guelph, and Toronto). They engaged in a range of communicative activities, such as reflective dialog, and free, autonarrative writing on paper and in Twine, led by Wilks. Our data was coded in terms of prevalent body image themes, technological and narrative preferences and then translated into a design brief (see following sections).

Some of the predominant themes of the workshops included self-violence and self-love, fitting or not fitting stereotypes, alienation, resisting, respecting boundaries, peer pressure, healing, familial and cultural conditioning, and, prompted by the research team's introductory remarks, the gaze and the primacy of looking. Intersectionality is a key concern throughout. In what follows, we explain how the design brief and these themes informed the development of our digital fiction collection.

## **5. Reflections on the creative process**

Before they took place, the research team had hoped the participant workshops (there were four) would arrive at a form of 'collective autobiography' or at least some sense of a leading character and antagonists. But the reality was much less neat. Instead, a vibrant mix of voices emerged - so many points of view, memories and stories - including some wonderful interactive narratives created in Twine.

But how to shape a digital fiction from such a miscellany? Stories, particularly short stories, usually require only one protagonist, sometimes two. So, regarding character as a representation of viewpoint, Wilks pondered how to distill all these viewpoints into one protagonist. It was impossible. Therefore she proposed a world of stories. She is aiming to create four choice-based interactive short stories in the timescale available - but even so, there are still a lot of different perspectives to whittle down into four stories. Central to Writing New Bodies (WNB) is the process of critical community co-design and she feels a strong sense of responsibility towards the participants as a conduit for their concerns. But, to create anything, she has to rely on artistic judgement. Inevitably, some of the story ideas

and characters that have emerged resonate with her more than others. Feedback from the team and, in due course, the participants and other play-testers should act as a counterbalance.

Our participant data was coded in MAXQDA, a data analysis tool, which allows Wilks convenient access to all of the participant's written and verbatim spoken words - a mix of private reflections, creative writing, exuberant conversations, thoughtful discussions and some moving disclosures. However, the data codes impose logical classifications on this material, which she found unsettling at first. This level of detailed taxonomical segmentation is not a usual part of her creative process. When writing fiction, story (or story idea) typically precedes research. Rather than revealing narrative potential, the database seemed intent on burying it beneath a meshwork of codification. Although, as to be expected, MAXQDA is extremely useful for cross referencing, for finding commonalities that might suggest the significance of an issue or the strength of feeling it arouses.

Wilks needed to find other ways of looking at the data, or ways of sifting through it, that would support storytelling, not just analysis. So, she also added her own narrative-ideas-based codes to the database. These were informed by the initial coding, her own notes on the participants' writings, and also heavily influenced by feminist theories of embodiment (secondary research), including the renowned research of members of the WNB team.

After reappraising the participant's stories, memories and discussions through the lens of various feminist theories of the body<sup>[1]</sup>, Wilks went through a process of mapping (and mind-mapping) these theories onto the themes identified by the participants themselves and also themes highlighted by the coding. Eventually, she arrived at these story themes:

- Body size and shape
- Movement and exercise (movement, gesture, posture)
- Body as ornamented surface (and performing gender identity)
- Respecting boundaries

The first three are specifically informed by Sandra Bartky's three categories of disciplinary practice that, following Foucault, she argues produce 'docile bodies' that are recognizably

feminine through the process of internalizing norms (Bartky, 1988). The fourth, 'Respecting boundaries', is a theme that didn't surface in our initial data analysis but came up in one of our team discussions, detected by one of our most junior research interns<sup>[ii]</sup>. Subsequently, she added the code, 'boundaries', to MAXQDA.

In *The Language of New Media*, Manovich argues that "database and narrative are natural enemies" (2001, p.225), which could explain Wilks' initial (creative) discomfort with MAXQDA. The primary concern of a database is to structure data "for efficient search and retrieval" whereas "a narrative creates a cause-and-effect trajectory" (Manovich, 2001, p.223) which can be distinctly circuitous. A user queries a database and expects to get results directly. A narrative, on the other hand, is rarely (if ever) designed to furnish direct results quickly. Quite the opposite<sup>[iii]</sup>: "Narrative tension is primarily about withholding information" (Ian McEwan quoted in Zaleski, 2009). Furthermore, a database stores and organises a collection of *items*, whereas a narrative represents a sequence of story *events* (*fabula*) as structured or reordered by narrative discourse (*sjuzet*) (see Kukkonen, 2014).

Natural enemies, they may be but, as Manovich concedes, "a database can support narrative" (2001, p.228) - and not just in the traditional way, as a research tool. A database can be an integral component of an interactive narrative. "Together, data structures and algorithms are two halves of the ontology of the world according to a computer" (Manovich, 2001, p.223). Since an interactive digital fiction is computer-born, it is composed of both data structures and algorithms, and Wilks is authoring both, as well as the narrative content. The database should store units of narrative to be retrieved according to the algorithms of the interactive narrative program, the result of which is the narrative discourse.

In *Chris Crawford on Interactive Storytelling*, the author makes a useful distinction between story and storytelling. He says, "A story is data; it's fixed, permanent, and unchanging, so you can't interact with it. But storytelling is a process, a dynamic process that you can intervene in, alter, play with, and thereby interact with" (2012, p.46).

Therefore, when creating digital fiction, Wilks prefers to think about the act of creative writing as a process for producing story data, as distinct from the process of authoring the

behaviour of the interactive narrative program. The behaviour is governed by the algorithms that manipulate the story data, often in response to the reader-player's input (e.g. their choices in a choice-based narrative), which produces a dynamic narrative experience.

So, she needs to create a database whose design is optimal for the algorithms (or ludonarrative logic) she writes, which, in turn, must produce an engaging narrative experience for the reader-player via the user-interface design. Important things to consider are: 1) how much and what kind of data to store in those units of narrative; and 2) how to structure the database so that the algorithm can retrieve the narrative units in a way that supports the narrative discourse.

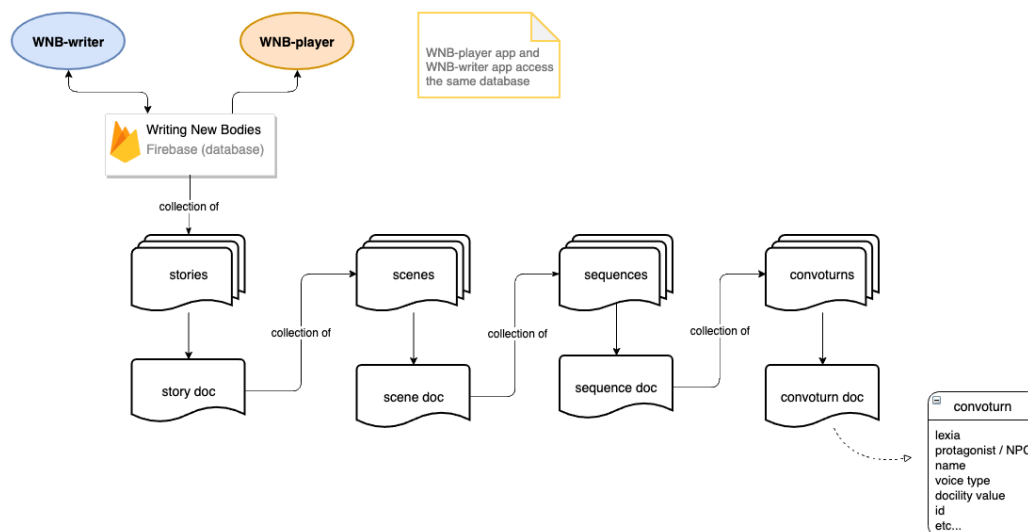


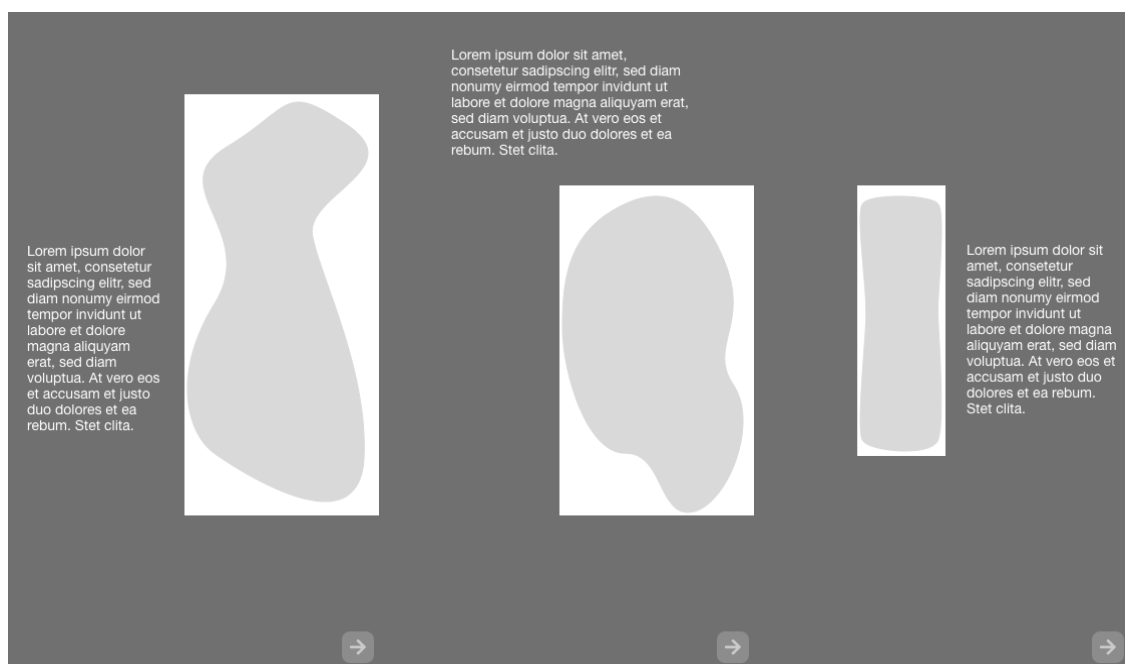
Fig. 1: WNB DF database design

Fig. 1 is a diagram of the current database design for WNB. Each interactive story is made up of scenes which are made up of sequences of, what Wilks calls, 'convoturns'. A *convoturn* contains a single lexia of "texte-à-voir" (Bootz, 2005) - or onscreen narrative text - along with metadata that the algorithms use to play the narrative. The algorithms she's developing have some unique features, which we'll come back to, but first we'll discuss the overall ludonarrative and UI design.



## 6. Design and rendering

The WNB digital fiction app will be delivered via the web but it will be optimized for mobile devices because that is what the target audience uses most. The design concept addresses the way the smartphone is a personal device that is also a portal to a wider world that impinges on the personal sphere. This can be a source of negative or oppressive messages but, as participants pointed out, it can also be a means of escape and/or connection. The design purposefully exploits the form of the smartphone - a boxed-in screen where messages can slide in from all sides (pop-ups, modals, alerts, etc.). But the screen is also a field of possibility that offers the potential for escape, connection, learning and, perhaps, reflection.



*Fig. 2: Design sketches*

Wilks is using the idea of **fitting the box** as a visual metaphor for the experience of (or resistance to) fitting the stereotype, the norm, the ideal, the binary, all of which came up frequently in the participant research data (see fig. 2). To avoid issues of prescriptive representations of the female body or body types, she is using abstraction so that the player may more easily read the particularities of their own personal circumstances and body image issues into the interactive narrative.

In each story, the protagonist is represented by an abstract curvilinear freeform shape,

which Wilks calls an '*organic*' (in the sense of living) matter. This animated, morphing shape can signify the self, the body or aspects of the body or self, and also other supportive characters, since "curvilinear forms are perceived as pleasant" (Larson, Aronoff and Steuer, 2012; also see de Rooij, Broekens and Lamers, 2013). Animation will bring the *organic* to life, suggesting human or bodily behaviour and characteristics. In this way, reader-players will be able to identify with the protagonists of multiple stories.

The box, rectangle or grid represents both external regulation and self-regulation. The box is significant both metaphorically and practically because the browser lays out a web page as a hierarchy of nested boxes - everything on a webpage is situated in a box, whether visible or not. This boxy structure can be revealed with CSS styles, and/or disrupted with animation. It becomes a metaphor for the hegemonic conditions that can be obscured by neoliberalism's promotion of individualism and variety of so-called 'choice'. The *organic* may not be able to escape the rectilinear structure but it doesn't have to be bound by it, nor imprisoned within it. This seems to me to be a good analogy for much of what the participants discussed and expressed in the workshops.

Lexia emanating from organic forms (e.g. free-floating text) will represent the protagonist's utterances (unless it's self-hate) or other supportive characters or sources. Lexia from antagonist sources (e.g. negative self-talk, judgemental characters, social media pressure, advertising) will tend to come in rectilinear forms, blocking or boxing in the protagonist.

Each story will visually express some form of struggle between an organic shape or shapes and a restricting or oppressive rectilinear geometry. The organic form may be contained, restrained or influenced by the rectilinear in some way but they can also push, bulge and maybe bend the grid or perhaps break out of the bounding box and float free - whatever is appropriate for the story. The idea is that this visual language is simple but rich enough to host a number of different types of story. Within each, the organic and rectilinear forms will represent different things, but all the stories will express a common aim or desire to resist and challenge the oppressive norm or ideal.

Foucault's concept of the state's disciplinary power, which, through constant surveillance and normalizing judgement, produces 'docile bodies', has been highly influential in feminist

theories of embodiment<sup>[iv]</sup> - and these, in turn, have directly influenced Wilks' ludonarrative design. Specifically, she is developing algorithms for WNB based on the concept of the docile body.

The appearance and behaviour of the *organic*, in terms of its dynamic morphing shape and animated motion, is governed by, what she calls, the **docility value**<sup>[v]</sup>. The higher the docility value, the more the *organic* conforms to a standard geometric shape (e.g. a rectangle or twin circles confined in a rectangle) and its motion is restricted. The lower the docility value, the more freeform is the shape and the more liberated its movement. The docility value (contained in the *convoturn*'s metadata) is affected by programmed narrative events and, crucially, the choices the reader-player makes.

The reader-player's navigation through the non-linear choice-based story is governed by, what Wilks calls, the **Docile-Body-Bearing**<sup>[vi]</sup> 'score', an accumulative value derived solely from the choices the reader-player makes. A low, medium or high Docile-Body-Bearing value will steer a different course through the narrative.

## 7. Concluding thoughts

We are acutely aware of the potential pitfalls of translating highly complex psychological issues and elements of affect into binary code and predictably operating algorithms. As feminists, we would favour a low docile-body bearing but we want to avoid offering facile solutions or escapist fantasies. It is complicated. For example, in the early 1980s, Foucault offered the notion of stoic self-care as a way of resistance to power but some latter-day feminist theorists caution that self-care and self-optimization can be (and indeed have been) appropriated by 21st century neoliberalism as a form of self-normalisation (Jansen and Wehrle, 2018). Nevertheless, we remain hopeful of offering strategies of resistance and therapeutic benefits.

We are also struck by the irony of reducing a concept such as the docile body to a numerical value. We want our digital fiction to offer a critique of oppressive judgements, classifications and ratings but, in order to create an algorithm that can drive an interactive narrative, Wilks must use numbers, she must use a measuring scale. This contradiction is

an interesting analogy for the very issues our project aims to address. We want to resist normalization but recognise that we can't completely escape it. We must find ways of being in the world as it is, whilst also finding ways of making changes in the world.

Storytelling comes to the rescue. Narrative transmutes the effects of the measuring scale because it's not the score that counts. The numerical score is read only by the algorithm, it's invisible to the reader-player. The numbers merely translate into the course the narrative takes and that's what affects the reader-player, not some rating value. As a collection of choice-based interactive fiction, the stories will actively engage the reader-player in a thoughtful process of making decisions on behalf of characters with whom they identify. This may help them reflect on their own issues. We look forward to discovering what the potential benefits may be. We invite our readers/viewers/players to get in touch with us to help us with beta-testing and by identifying ways in which our DF collection might support individuals in our target group and beyond.

## Notes

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<sup>[i]</sup> Such as Bartky (1988), Butler (1997), Evans and Riley (2014), Gay (2017), Gill (2008), Grosz (1994), Harryway (1991), Jansen and Wehrle (2018), Rice (2014), amongst others.

<sup>[ii]</sup> Karuna Nair.

<sup>[iii]</sup> If a reader or viewer treated a narrative the way a user queries a database, they would simply jump straight to the end to ascertain how it all turns out and thereby nullify narrative pleasure.

<sup>[iv]</sup> For example, Bartky, as mentioned above.

<sup>[v]</sup> In the JavaScript code, it is: *docilityValue*.

<sup>[vi]</sup> In the JavaScript code, it is: *DocileBodyBearing*.

## References

Bartky, S. L. (1988) 'Foucault, Femininity, and the Modernization of Patriarchal Power', in Conboy, K., Medina, N., and Stanbury, S. (eds) *Writing on the Body: Female Embodiment and Feminist Theory*, pp. 90–110.

Bell, Alice, Astrid Ensslin, Dave Ciccoricco, Jess Laccetti, Jessica Pressman & Hans Rustad (2010) "A Screed for Digital Fiction." *electronic book review*.

<https://electronicbookreview.com/essay/a-screed-for-digital-fiction/>

Bootz, P. (2005) *Transitoire Observable, A Laboratory For Emergent Programmed Art*, *Dichtung Digital: A Journal of art and culture in digital media*. Available at:

<http://www.dichtung-digital.de/2005/1/Bootz/index.htm> (Accessed: 30 October 2019).

Butler, J. (1997) 'Performative Acts and Gender Constitution', in Conboy, K., Medina, N., and Stanbury, S. (eds) *Writing on the Body: Female Embodiment and Feminist Theory*. New York: Columbia University Press.

Cixous, Hélène (1976) 'The Laugh of the Medusa,' trans. Keith and Paula Cohen. *Signs*, vol.1, no. 4, pp. 875-893.

Crawford, C. (2012) *Chris Crawford on interactive storytelling (Second Edition)*. 2nd Edition. [Berkeley, Calif.]; London: New Riders ; Pearson Education [distributor].

de Rooij, A., Broekens, J. and Lamers, M. H. (2013) 'Abstract Expressions of Affect', *International Journal of Synthetic Emotions*, 4(1), pp. 1–31. doi: [10.4018/jse.2013010101](https://doi.org/10.4018/jse.2013010101).

di Rosario, Giovanna (2017) "Gender as Patterns: Unfixed Forms in Electronic Poetry." *#WomenTechLit*, edited by Maria Mencia, Morgantown, WV: WVU Press, pp. 41-54.

Dohnt, H.K. and Tiggemann, M. (2006) "Body Image Concerns in Young Girls: The Role of Peers and Media Prior to Adolescence". *Journal of Youth Adolescence* 35, 135.

Ensslin, Astrid (2014) *Literary Gaming*. Cambridge, MA: MIT Press.

Ensslin, Astrid, Pawel Frelik and Lisa Swanstrom (eds) (2018), *Small Screen Fictions*, Special Issue of *Paradoxa*, vol. 29. 334 pp.

Ensslin, Astrid, Carla Rice, Sarah Riley, Christine Wilks, Megan Perram, Hannah Fowle, Lauren Munro, and Aly Bailey (2020) "These Waves ...: Writing New Bodies for Applied E-literature Studies," *electronic book review*, April 5th.

<https://electronicbookreview.com/essay/these-waves-writing-new-bodies-for-applied-e-literature-studies/>.

Ensslin, Astrid & Lyle Skains (2017) "Hypertext: Storyspace to Twine," in J. Tabbi (ed.) *The Bloomsbury Handbook of Electronic Literature*. London: Bloomsbury.

Evans, A. and Riley, S. (2014) *Technologies of Sexiness: Sex, Identity, and Consumer Culture*. 1 edition. Oxford ; New York: OUP USA.

Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, 13, 38-45.

Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance mediate the relationship between Facebook usage and body image concerns. *Body Image*, 12, 82-88.

Foucault, Michel (1995) *Discipline and Punish: The Birth of the Prison*. New York: Vintage Books.

Gay, R. (2017) *Hunger: A Memoir of (My) Body*. 01 edition. Corsair.

Gill, R. (2008) Culture and Subjectivity in Neoliberal and Postfeminist Times, *Subjectivity*, 25(1), pp. 432–445. doi: [10.1057/sub.2008.28](https://doi.org/10.1057/sub.2008.28).

Girl Guiding (2019) Girls' Attitude Survey, <https://www.girlguiding.org.uk/girls-making-change/girls-attitudes-survey/>.

Grogan, Sarah (2008) *Body Image: Understanding Body Dissatisfaction in Men, Women and Children*. 2nd ed. London: Routledge.

Grosz, Elizabeth (1994) *Volatile Bodies*. Bloomington, IN: University of Indiana Press.

Haraway, D. (1991) *Simians, Cyborgs and Women: The Reinvention of Nature*. 2nd edition edition. London: Free Association Books.

Hobson, J. (2016) Feminists Debate Beyoncé, in *The Beyoncé Effect: Essays on Sexuality, Race and Feminism*, ed. Adrienne M. Trier-Bieniek. London: McFarland.

Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, 17, 100-110.

Irigaray, Luce (1985) *Speculum of the Other Woman*, Cornell University Press.

Jansen, J. and Wehrle, M. (2018) 'The Normal Body: Female Bodies in Changing Contexts of Normalization and Optimization', in Fischer, C. and Dolezal, L. (eds) *New Feminist Perspectives on Embodiment*. Palgrave Macmillan.

Kim, J. W., & Chock, T. M. (2015). Body image 2.0: Associations between social grooming on Facebook and body image concerns. *Computers in Human Behavior*, 48, 331-339.

Kukkonen, K. (2014) 'Plot', in Hühn, P. and et al. (eds) *the living handbook of narratology*. Hamburg: Hamburg University. Available at: <http://www.lhn.uni-hamburg.de/article/plot> (Accessed: 13 September 2017).

Larson, C. L., Aronoff, J. and Steuer, E. L. (2012) 'Simple geometric shapes are implicitly associated with affective value', *Motivation and Emotion*, 36(3), pp. 404–413. doi: [10.1007/s11031-011-9249-2](https://doi.org/10.1007/s11031-011-9249-2).

Mabe, A. G., Forney, K. J., & Keel, P. K. (2014). Do you “like” my photo? Facebook use maintains eating disorder risk. *International Journal of Eating Disorders*, 47, 516–523.

Manovich, L. (2001) *The Language of New Media*. The MIT Press.

Nair, K., A. Bailey, H. Fowlie, L. Munro, M. Perram, C. Rice, S. Riley, and A. Ensslin (2020) Media-enhanced Reading Therapy for Body Image, poster given at FURCA 2020, University of Alberta, <https://sites.google.com/ualberta.ca/writingnewbodies/project-outputs?authuser=0>.

Rice, C. (2014) *Becoming Women: The Embodied Self in Image Culture*. University of Toronto Press.

Riley, Sarah, Adrienne Evans, and Martine Robson (2018) *Postfeminism and Health*. London: Routledge.

Zalewski, D. (2009) 'Ian McEwan's Art of Unease', *The New Yorker*, 16 February. Available at: <https://www.newyorker.com/magazine/2009/02/23/the-background-hum> (Accessed: 13 September 2017).