(Re)imagining Gender Through Le Guin and Russ

Published in *Coreopsis Journal of Myth & Theatre*[*]

RORY W. COLLINS

In this paper, I discuss the myriad ways that gender roles are interrogated within The Left Hand of Darkness *and "When It Changed." I first examine gender as science in §1, outlining the ways Le Guin and Russ consider and critique essentialist perspectives holding that gender roles are 'natural' phenomena driven by rigid biological differences between men and women. Then, in §2, I explore gender as fiction, analyzing how each text presents gender roles as discursively constructed and malleable. In §3, I explicate these observations within a hybrid conceptualization of gender as science fiction*[1] *and argue that this suitably describes the gender portrayals Le Guin and Russ make in their texts.*

Carl Malmgren (2002) identifies Ursula K. Le Guin and Joanna Russ as prominent authors in meta-science fiction since their works examine "the relation between the fictive and the real" (p. 23). Le Guin's (1969/2017) *The Left Hand of Darkness* (*LHD*), for example, explores how gender is expressed within an imagined androgynous society, Gethen. She articulates how *LHD* can be suitably interpreted:

> This book is not extrapolative. If you like you can read it, and a lot of other science fiction, as a thought-experiment. Let's say…this or that is such and so, and see what happens…. Science fiction is not predictive; it is descriptive. (p. xiv)

Read in this way, *LHD* is not a premonition of how humankind might plausibly evolve, nor a prediction of future social arrangements, but an extended thought experiment into the ways gender roles might be constructed and enacted (see also Le Guin, 1989, pp. 137–38). Russ (2007) promotes an analogous view, remarking that "science fiction is *What If* literature" (p. 205). As such, her short story "When It Changed" can be approached similarly by considering how it suggests gender roles may be performed and the criteria on which they rest. In an almost Montaignian style (see Edelman, n.d., sec. 2), Le Guin and Russ 'test' different theories of gender in their narratives to clarify relevant features of social roles, problematize suppositions, and forge sophisticated depictions of gender that accommodate both real and fictive elements.

---

[*] This is the author's copy of a published paper. Full information for the version of record is below.

Collins, R. W. (2024). (Re)imagining gender through Le Guin and Russ. *Coreopsis Journal of Myth & Theatre, 12*(2). https://societyforritualarts.com/coreopsis/autumn-2024-issue/reimagining-gender-through-le-guin-and-russ/

[1] The term 'science fiction' eludes precise specification, though Andrew Milner's (2012) broad definition of the genre as "essentially and necessarily a site of contestation" (p. 40) is perhaps most apt in relation to discussions of gender.

I. Gender as Science

Essentialist approaches typically take gender roles to be a consequence of inherent biological and anatomical differences between men and women (Heyman & Giles, 2006). Within this paradigm, dissimilarities in cognitive abilities and dispositions are thought to stem largely from the average neurological properties of male and female brains (Baron-Cohen, 2003; Ingalhalikar et al., 2014). The behavioral performance of gender roles can, therefore, be thought a natural extension of these psychological group differences, a position Le Guin and Russ explore through literary means.

In *LHD*, gender roles—or lack thereof—are closely tied to Gethenians' hermaphroditic biological qualities. Since individuals on Gethen are neither primarily male nor female physiologically, except during a monthly 'kemmer' period, gender role differences fail to materialize most of the time. As Kathy Rudy (1997) summarizes, "no one group of people is biologically attached to the home or to childbirth or child care" (p. 34). However, shortly before kemmer begins, "hormonal changes are initiated by the pituitary control" (Le Guin, 1969/2017, p. 90) after which the "genitals engorge or shrink accordingly" (p. 90), inspiring a concomitant psychological change: "the sexual impulse is tremendously strong in this phase, controlling the entire personality" (p. 90).[2] Wendy Gay Pearson (2007) notes that this parallels menstruation, the hormonal fluctuations of which can elicit affective and behavioral changes (American Psychiatric Association, 2013). Le Guin thereby suggests through such a portrayal that biological attributes may motivate gender role expressions.

Russ (1972) also considers the idea that bodily differences between men and women are a key factor underlying gender distinctions in "When It Changed." The men who arrive on Whileaway are assessed by "the district biologist" (p. 2) and Janet's initial remark on seeing them relates to their physical stature: "They are bigger than we are" (p. 2). Gender-based anatomical differences are emphasized via animalistic imagery throughout the text, with men described as "apes with human faces" (p. 2), "heavy as draft horses" (p. 2), "muscled like bulls" (p. 6), and resembling "ten-foot toad[s]" (p. 7). Like Le Guin, Russ alludes to the idea that neurochemical changes can evoke psychological responses, with Yuriko said to be dreaming of "all the wonderful guff you think up when you're turning twelve *and the glands start going*" (p. 1, my emphasis). However, Russ' narrative consistently falls short of outright endorsing the notion that gender roles are due to physiological differences.

Russ satirizes the essentialist thesis that gender roles are a 'natural' consequence of biology through dialogue with one of the male visitors. The man describes Whileaway's female-only society as "unnatural," to which Katy ripostes, "humanity is unnatural" (p. 5). He responds that "seals are harem animals…and so are men; apes are promiscuous and so are men; doves are monogamous and so are men…. Whileaway is still missing something" (p. 5). This argument

[2] Certain aspects of kemmer can also be pharmacologically instigated: "Some Foretelling groups artificially arouse perversion in a normal person—injecting female or male hormones during the days before a session" (Le Guin, 1969/2017, p. 63).

makes an invalid jump from ‘is’ to ‘ought’ by insinuating that since certain gender relations occur in nature, and *Homo sapiens* comprises part of the natural world, humanity should emulate these patterns of interaction. Russ (1975, as cited in LeFanu, 2012) explains elsewhere that “one of the best things (for me) about science fiction” is being able to undercut the “poetic fancies of a weakly dimorphic species trying to imitate every other species in a vain search for what is ‘natural’” (pp. 188–89). In the conversation described, Russ exposes the fallaciousness of the man’s reasoning and in doing so undermines the general case for conforming to supposedly natural gender roles.

Le Guin poses a similar challenge to gender essentialism by problematizing the scientific basis on which it rests. Mona Fayad (1997) observes that through *LHD*’s presentation of truth as relative and Genly’s narration as severely limited, “Le Guin draws attention to the fallibility of the supposed neutrality of the scientific eye” (p. 65). The text opens with Genly asserting “that Truth is a matter of the imagination” and encouraging readers to “choose the fact you like best” (Le Guin, 1969/2017, p. 1), in stark contrast to the scientific ideal of objective, universal truth. Further, Genly’s unreliable narration throughout the novel highlights the biases prevalent in scientific observation. Sarah Hrdy (2006) notes that researchers’ own gender identities can distort their conclusions by focusing attention on different aspects of phenomena under scrutiny (p. 147).[3] Several critics argue that Genly, too, falls prey to such cognitive limitations because of his sociocultural background (Cornell, 2001; Fayad, 1997; Pennington, 2000). His male identity leads him to interpret Gethen through a gendered lens, despite the androgyny of its inhabitants:

> Though I had been nearly two years on Winter I was still far from being able to see the people of the planet through their own eyes. I tried to, but my efforts took the form of self-consciously seeing a Gethenian first as a man, then as a woman, forcing him into those categories so irrelevant to his nature and so essential to my own. (Le Guin, 1969/2017, pp. 11–12)

Le Guin, therefore, utilizes two methods to complicate scientific explanations underpinning essentialist notions of gender roles: legitimizing the idea of subjective truth and highlighting the theory-ladenness of observation.

Taken together, Le Guin and Russ paint an ambivalent picture of gender essentialism. Both recognize that biochemical factors often contribute to behavior and, in Le Guin’s case, partially explain gender role expressions such as sexual conduct. However, Russ complicates this reductive approach to gender roles by showing the fallacious is–ought logic that is frequently used to connect *empirical* biological facts with *prescriptive* sociocultural assertions. Le Guin provides alternative critiques. She challenges the assumption of there being a single, absolute truth and illustrates through Genly how observation can be distorted by the subjectivity of the

[3] Female zoologists, for example, have in recent decades provided fruitful insights into aspects of primate mating behavior that were ignored by Darwin and many of the male evolutionary scientists that followed (Hrdy, 2006).

observer. In both narratives, scientific understandings alone are deemed insufficient to explain gender expressions.

II. Gender as Fiction

How else, then, might the texts conceptualize gender roles? Rudy (1997) contends that deconstructionist approaches present an alternative framework "very similar to that of Le Guin's imagined Gethen" (p. 32). Deconstructionist analyses of gender are diverse, but center around critically unpacking the sociolinguistic factors that construct and perpetuate the categories 'male' and 'female' in different contexts (Rudy, 1997). One notable effort towards this end is Judith Butler's theory of performativity. Butler (1988) contends that gender is not a static property determined by anatomical or psychological facts, but an aspect of social reality composed of repeated acts. Gender roles, she argues, are analogous to theatrical roles: they are an ongoing performance of social behaviors using costumes, gestures, postures, and so forth, all of which are monitored by an audience. Thus, she concludes that gender is "like a fiction, perhaps a fantasy" (Butler, 1993, p. 5). Despite Butler's theorizing having only developed in the 1980s, scholars have adopted this lens to (re)interpret Le Guin's and Russ' fiction published during the 1970s.

Although researchers have examined Russ' (1975) novel *The Female Man* through Butlerian frameworks (e.g., Kara, 2017; Moslehi & Abbasi, 2016), "When It Changed" has largely evaded such scrutiny, despite the performative elements at play in the text. Russ (1972) characterizes Janet and Katy such that the socially constructed nature of their gender role expressions is evident. Both women are described as often behaving in traditionally masculine ways. Janet has "fought three duels, all of them kills" (p. 7) and consumes beer, while Katy "drives like a maniac" (p. 1), can dismantle and reassemble cars, and makes love in ways that are "a little peremptory" (p. 7). They also demonstrate stereotypically feminine attributes, however. Janet appreciates the "amazing, poignant warmth of an infant" (p. 6); Katy "will not handle guns" (p. 1) due to her emotional reactivity and sobs "as if her heart would break" (p. 6) after meeting the men. By combining these disparate behaviors, Russ demonstrates the fluidity of gender roles, with their expression unrestrained to preconceived notions of 'male' and 'female.' Janet and Katy implicitly answer the question that the men "never quite dared to ask…: *Which of you plays the role of the man?*" (p. 7, emphasis in original). The idea of a 'role of the man,' Russ suggests, is a social construction reified through performance but fictional at its core.

Bruce Robbins (1997) opines scholars "cannot assume they are doing anything intellectually or politically significant by sole virtue of showing that something is a social construct" because this merely "displaces the 'reality' question from the X and onto the 'society' or the 'culture' that's supposedly doing the constructing" (p. 468). Le Guin's *LHD*, however, supplements Russ' performative portrayal in "When It Changed" by investigating how *language* can function to discursively construct gender role performances.[4] Somewhat surprisingly, Le Guin

[4] Russ also examines the 'how' alongside the 'what,' to some extent. I discuss this further in §3.

achieves this through precisely those features of *LHD* that critical reviews identify as most contentious: using masculine pronouns to describe Gethenians, presenting the text through Genly's androcentric narration, and depicting Estraven in apparently male roles (Annas, 1978; Attebery, 2002; LeFanu, 1988). In the remainder of this section, I argue that these features serve not only to present gender roles as socially constructed phenomena, but also to explore *how* this process occurs.

Numerous critics observe that language is central to Le Guin's portrayal of gender roles in *LHD* (LeFanu, 1988; Rabkin, 1987; Rashley, 2007). Most notably, she has Genly use male pronouns to describe the androgynous Gethenians, which Pearson (2007) suggests may contribute to "an apparent masculinization of her hermaphrodites" (p. 186; see also Cornell, 2001; LeFanu, 2012). Genly recognizes the restrictions imposed by such terminological consistency—"*man* I must say, having said *he* and *his*" (Le Guin, 1969/2017, p. 5)—and finds it challenging to apply binary gendered terms to Estraven, whose performances do not clearly coincide with male or female roles: "For it was impossible to think of him as a woman, that dark, ironic, powerful presence near me in the firelit darkness, and yet whenever I thought of him as a man I felt a sense of falseness" (p. 12). Fayad (1997) remarks that Genly's linguistic difficulties show how "masculinist discourse retains its 'blind spot' when it comes to perceiving the other" (p. 72). Genly is constrained by his language and thus struggles to conceive of the androgynes as anything other than the conjunction of male and female attributes.

The restricting properties of language are not limited to Genly; *LHD*'s tripartite interpretative layers contribute to Le Guin's depiction of gender performances. Donna White (1999) notes that the novel follows an unorthodox structure, with Gethenian myths, Estraven's journal entries, and other writings imbricated with Genly's narration. Even so, Genly remains the "structuring consciousness of the book" (Bickman, 1977, p. 42) as the arbiter of information and thus comprises the first layer of analysis. Le Guin herself provides a second level, and the reader's social positioning forms the outermost layer, giving three interpretative strata: Genly, Le Guin, and the reader.

Reflecting on *LHD* years after the novel's initial publication, Le Guin (1989) readily acknowledges her role in crafting the text. She first defended using male pronouns, writing that "'he' is the generic pronoun, damn it, in English" (p. 145) but later questioned this decision: "If I had realized how the pronouns I used shaped, directed, controlled my own thinking, I might have been 'cleverer'" (p. 145). Russ (2007) criticizes Le Guin for creating "a world of men" (p. 215) by avoiding gender-neutral terms. Christine Cornell (2001), however, defends Le Guin's initial position and claims non-gendered pronouns "would fundamentally alter the experience of reading" (p. 323). Crucially, readers engage with *LHD* through the lens of pre-existing suppositions. Their image of Gethenians' gender roles and identities—like Genly's and Le Guin's—is produced, in part, by their sociolinguistic culture and background (Attebery, 2002; Jameson, 1975; Pearson, 2007; Pennington, 2000). Just as Genly tries to shape androgynes "into those categories so irrelevant to [their] nature and so essential to [his] own" (Le Guin, 1969/2017, p. 12), and Le Guin recognizes how terminological differences would

alter the reception of *LHD*, readers are typically "confronted with the same gender assumptions as Genly" (White, 1999, p. 76) and therefore *produce* gender while reading the text. *LHD* not only describes the gender expressions of Estraven and other Gethenians as non-essentialist and flexible but provides a performative illustration of social gender role construction via intersecting layers of interpretation: Genly, Le Guin, and the reader.

This is particularly evident in critical responses to Le Guin's depiction of Estraven expressing supposedly male attributes. Sarah LeFanu (1988) contends that Estraven is shown "in almost exclusively 'male' roles" (p. 138) and, on these grounds, Russ (2007) claims that "*he is* male – at least, 'he' is *masculine in gender, if not in sex*" (p. 215, emphasis in original). Such readings impose preconceived notions of gender roles onto the androgynous world of Gethen; they interpret Estraven's behavior through a binary gendered lens, just like Genly does for much of the novel.[5] As one of the early visitors to Winter, Ong Tot Oppong, reports of Gethenian society:

> There is no division of humanity into strong and weak halves, protective/protected, dominant/submissive, owner/chattel, active/passive. In fact the whole *tendency to dualism that pervades human thinking* may be found to be lessened, or changed, on Winter…. One is respected and judged only as a human being. (Le Guin, 1969/2017, pp. 94–95, my emphasis)

As evidence for Estraven's masculinity, Russ (2007) notes he is presented as "fiery, tough, self-sufficient, and proud" (p. 215), but these characteristics are meaningful only in a relative sense. Without a female Gethenian counterpart to compare these traits against, they cease to describe male gender roles as they might in certain dualistic human societies. Estraven may be atypical for a Gethenian, but Russ appropriates non-Gethenian norms to describe him as masculine. Le Guin (1989) recognizes the challenge *LHD* presents, acknowledging that Estraven is cast "into roles that *we are culturally conditioned to perceive as 'male'* – a prime minister…, a political schemer, a fugitive" and so on (p. 145, my emphasis). By creating this difficulty, however, she exposes the influence of hegemonic assumptions when people are forced to interpret Estraven's idiosyncratic (a)gender performance. Fayad (1997) and Fredric Jameson (1975) note that many readers struggle to imagine Gethenians outside the male/female binary. LeFanu and Russ show this occurring in practice through their andro*centric*, rather than andro*gynous*, reading of Estraven.

[5] After Genly and Estraven have attempted communicating through 'mindspeech'—which Fayad (1997) notes "cannot be gendered" (p. 73)—and in doing so escape some of the inflexibilities associated with verbal language, Genly comes to appreciate the complexity of Estraven's non-binary gender expression:

> "And I saw then again, and for good, what I had always been afraid to see, and had pretended not to see in him: that he was a woman as well as a man. Any need to explain the sources of fear vanished with the fear; what I was left with was, at last, acceptance of him as he was." (Le Guin, 1969/2017, p. 248)

III. Gender as Science Fiction

I have argued that Russ and Le Guin consider and reject essentialist approaches to gender, and instead suggest gender roles are largely performative. In this closing section, I aim to outline two key features of the texts that blend 'real' scientific components with 'fictional' performative elements. Specifically, (1) how both authors, recognizing that the meaning of gendered terms supervenes on their usage, intentionally extrapolate the application of these words to describe gender role expressions beyond typical referential boundaries, and (2) how *LHD* corroborates the notion that gender performances can be male or female to an intermediate degree of truth.

Russ and Le Guin endorse a Wittgensteinian approach to language. Wittgenstein (1953) argues that words develop meaning due to their usage within a speech community. In line with this, Russ (1972) describes how the term 'people' develops an alternate meaning after being spoken by a male visitor, since until this point it had been used differently: "he did not mean people, he meant *men*, and he was giving the word the meaning it had not had on Whileaway for six centuries" (p. 3, emphasis in original). This meaning-as-use theory of language also highlights the problem of linguistic incommensurability: without thorough knowledge of the social tapestry in which a term is used, its definition is often elusive. Le Guin (1969/2017) shows this through Genly's struggles with 'shifgrethor,' which he describes as "untranslatable" but notes that even "if it was I would not understand it" (p. 13), reminiscent of Wittgenstein's (1953) remark that "if a lion could talk, we could not understand him" (223e). Genly has immense difficulty talking to Estraven about gender roles, his thoughts constrained by his communicative history: "I can't tell you what women are like. I never thought about it much *in the abstract*" (Le Guin, 1969/2017, p. 234, my emphasis). Examining how the meaning of gendered words evolves is central to the 'science' part of Le Guin's and Russ' science fiction texts.

Extending scientific findings to fictional situations is integral to science fiction as a genre (Milner, 2012; Pringle, 1985), and Russ and Le Guin achieve this by extrapolating gendered terms to cases where gender roles are performed outside standard referential limits. Russ (1972) has Janet consistently narrate the story using the pronoun "she" when describing Katy's gender performance in ways that many readers are likely to associate with masculine roles: fixing cars, shooting a gun, and so on. Likewise, Le Guin (1969/2017) uses gendered words throughout *LHD* to challenge readers' understandings of what these terms can refer to. The oft-cited line, "the King was pregnant" (p. 99), problematizes assumptions regarding male and female roles by combining seemingly incompatible attributes in a nonetheless coherent narrative structure. Russ' and Le Guin's texts actively shift the meaning of gendered words outwards into a more inclusive concept of gender roles through their use.[6]

[6] In this sense, Russ and Le Guin go beyond what Malmgren (2002) identifies as an inherent limitation of meta-science fiction: "Even as the best meta-SF plays with and interrogates reality within its pages, it admits that it cannot deliver the impossible—the radical transformation of reality" (p. 33). To the extent that the meaning of words is determined by how they are used throughout a natural language, Russ and Le Guin

Due to these linguistic challenges, Brian Attebery (2002) suggests *LHD*'s portrayal of gender roles is aimed at "investigating the paradox of gender" (p. 130) but fails to articulate *why* it is paradoxical. Here is one interpretation: gendered terms like 'female' are vague since there exist borderline cases for which it is unclear whether or not such a term applies (Daly, 2015). We can imagine a continuum of thousands of individuals ranging gradually in their femaleness such that the statement 'X is female' is clearly true for those on one side, clearly false for those on the other, and unclear for those in between. The minute differences between two consecutive persons seems insufficient to warrant claiming 'X_n is female' is true while 'X_{n+1} is female' is false. Yet, applying the plausible rationale that 'if X_n is female, so is X_{n+1}' implausibly entails that all individuals must be deemed female. Thus, gender presents a sorites paradox,[7] and Le Guin imagines a society populated entirely by problematic borderline cases who appear to be male/female/neither/both all at once.

Pertinently, Le Guin (1969/2017) shows Estraven as expressing both male and female roles to an intermediate extent. Genly recognizes early in the novel that Estraven's "soft supple femininity" contrasts with his "dark, ironic, powerful presence," making him difficult to describe using binary gender categories (p. 12). After the pair share a tent for an extended duration, Genly grows to appreciate the complexity in Estraven's identity: "for the first time I saw him as he was…. neither man nor woman, neither and both" (pp. 201, 214). Estraven resists dichotomous gender categories, and the rigid true/false logic underpinning this binary opposition, by expressing male and female attributes to a non-absolute degree. As Fayad (1997) observes, "the Gethenian exists *in between*, in an arrested state of both union and separation, neither one nor the other" (p. 71, emphasis in original). Le Guin challenges deterministic and often presumed 'scientific' notions of absolute gender membership by constructing a fictional world "in which gender is not truth" (Pearson, 2007, p. 196).[8]

IV. (Re)imagining Gender

LeFanu (2012) notes that science fiction offers a productive venue for "picking apart the apparently seamless narrative ideology that defines us as women and men" (p. 178). Le Guin and Russ make full use of this potential by examining opposing conceptions of gender roles and their ideological bases. Both criticize essentialist theories and the scientific assumptions on which they rest, but also acknowledge that biochemical properties may be relevant to social behavior. In their place, Le Guin and Russ prefer understandings that take gender roles to be socially and discursively constructed: to a large degree, fictional. Moreover, by explicating findings from linguistics and the philosophy of language, they integrate scientific and fictional

influence the referential scope of gendered English words via their use in the texts, and therefore change linguistic reality itself (albeit perhaps not 'radically').

[7] For a less truncated explanation of how gender can be conceptualized as a sorites paradox, see Collins (2021).

[8] One plausible way of interpreting Pearson's point here, I believe, is to take 'not truth' to mean 'not *binary* truth.' Using fuzzy logic to express truth as an inclusive continuum ranging from complete truth to complete falsity may adequately capture Gethenians' unusual performance of gender without dispensing with objective truth altogether.

elements in their exploration of gender. By reimagining how gender roles are negotiated and performed, Le Guin and Russ simultaneously draw from, criticize, and contribute to theoretical frameworks: in true meta-science fiction style, they alter the perceived reality of gender roles through their narratives.[9]

[9] Many thanks to Daniel Bedggood for his insightful feedback on an earlier version of this paper, and to the *Coreopsis* reviewers and editorial team for their invaluable assistance in preparing the article for publication.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

Annas, P. J. (1978). New worlds, new words: Androgyny in feminist science fiction. *Science Fiction Studies, 5*(2), 143–156. https://www.jstor.org/stable/4239176

Attebery, B. (2002). *Decoding gender in science fiction*. Routledge.

Baron-Cohen, S. (2003). *The essential difference: Male and female brains and the truth about autism*. Basic Books.

Bickman, M. (1977). Le Guin's *The left hand of darkness*: Form and content. *Science Fiction Studies, 4*(1), 42–47. https://www.jstor.org/stable/4239066

Butler, J. (1988). Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre Journal, 40*(4), 519–531. https://doi.org/10.2307/3207893

Butler, J. (1993). *Bodies that matter: On the discursive limits of "sex"*. Routledge.

Collins, R. W. (2021). Modeling gender as a multidimensional sorites paradox. *Hypatia: A Journal of Feminist Philosophy, 36*(2), 302–320. https://doi.org/10.1017/hyp.2020.11

Cornell, C. (2001). The interpretative journey in Ursula K. Le Guin's *The left hand of darkness*. *Extrapolation, 42*(4), 317–327. https://doi.org/10.3828/extr.2001.42.4.317

Daly, H. L. (2015). Sex, vagueness, and the Olympics. *Hypatia: A Journal of Feminist Philosophy, 30*(4), 708–724. https://www.doi.org/10.1111/hypa.12184

Edelman, Christopher. (n.d.). Michel de Montaigne (1533–1592). In J. Fieser & B. Dowden (Eds.), *Internet Encyclopedia of Philosophy*. https://iep.utm.edu/montaign

Fayad, M. (1997). Aliens, androgynes, and anthropology: Le Guin's critique of representation in *The left hand of darkness*. *Mosaic: An Interdisciplinary Critical Journal, 30*(3), 59–73. http://www.jstor.com/stable/44029822

Heyman, G. D., & Giles, J. W. (2006). Gender and psychological essentialism. *Enfance, 58*(3), 293–310. https://www.cairn.info/revue-enfance1-2006-3-page-293.htm#

Hrdy, S. B. (2006). Empathy, polyandry, and the myth of the coy female. In E. Sober (Ed.), *Conceptual issues in evolutionary biology* (3rd ed., pp. 131–159). MIT Press.

Ingalhalikar, M., Smith, A., Parker, D., Satterthwaite, T. D., Elliott, M. A., Ruparel, K., Hakonarson, H., Gur, R. E., Gur, R. C., & Verma, R. (2014). Sex differences in the structural connectome of the human brain. *Proceedings of the National Academy of Sciences of the United States of America, 111*(2), 823–828. https://doi.org/10.1073/pnas.1316909110

Jameson, F. (1975). World-reduction in Le Guin: The emergence of utopian narrative. *Science Fiction Studies, 2*(3), 221–230. http://www.jstor.com/stable/4238971

Kara, M. (2017). Gender (re)construction and destabilization of patriarchy in Joanna Russ' *The female man*. *Idil: Sanat ve Dil Dergisi [Idil: Art and Language Journal], 6*(37), 2447–2456. https://doi.org/10.7816/idil-06-37-04

Le Guin, U. K. (1989). Is gender necessary? Redux. In U. K. Le Guin & S. Wood (Eds.), *The language of the night: Essays on fantasy and science fiction* (Rev. ed., pp. 135–147). The Women's Press.

Le Guin, U. K. (2017). *The left hand of darkness*. Gollancz. (Original work published 1969)

LeFanu, S. (1988). *In the chinks of the world machine: Feminism and science fiction*. Women's Press.

LeFanu, S. (2012). Popular writing and feminist intervention in science fiction. In D. Longhurst (Ed.), *Gender, genre and narrative pleasure* (pp. 177–191). Routledge.

Malmgren, C. (2002). Meta-SF: The examples of Dick, Le Guin, and Russ. *Extrapolation, 43*(1), 22–35. https://doi.org/10.3828/extr.2002.43.1.04

Milner, A. (2012). *Locating science fiction*. Liverpool University Press.

Moslehi, M., & Abbasi, P. (2016). Joanna Russ's *The female man*: A Butlerian approach. *3L: The Southeast Asian Journal of English Language Studies, 22*(1), 165–177. https://doi.org/10.17576/3L-2016-2201-13

Pearson, W. G. (2007). Postcolonialism/s, gender/s, sexuality/ies and the legacy of *The left hand of darkness*: Gwyneth Jones's Aleutians talk back. *Yearbook of English Studies, 37*(2), 182–196. https://www.jstor.org/stable/20479309

Pennington, J. (2000). Exorcising gender: Resisting readers in Ursula K. Le Guin's *Left hand of darkness*. *Extrapolation, 41*(4), 351–358. https://doi.org/10.3828/extr.2000.41.4.351

Pringle, D. (1985). *Science fiction: The 100 best novels*. Xanadu.

Rabkin, E. S. (1987). Determinism, free will, and point of view in Le Guin's *The left hand of darkness*. In H. Bloom (Ed.), *Ursula K. Le Guin's* The left hand of darkness (pp. 75–90). Chelsea House Publishers.

Rashley, L. H. (2007). Revisioning gender: Inventing women in Ursula K. Le Guin's nonfiction. *Biography, 30*(1), 22–47. https://doi.org/10.1353/bio.2007.0029

Robbins, B. (1997). Just doing your job: Some lessons of the Sokal affair. *The Yale Journal of Criticism, 10*(2), 467–474. https://doi.org/10.1353/yale.1997.0028

Rudy, K. (1997). Ethics, reproduction, utopia: Gender and childbearing in *Woman on the edge of time* and *The left hand of darkness*. *NWSA Journal, 9*(1), 22–38. https://www.jstor.org/stable/4316482

Russ, J. (1972). When it changed. In H. Ellison (Ed.), *Again, dangerous visions*. http://hscext1.weebly.com/uploads/2/8/7/5/28757403/when_it_changed.pdf

Russ, J. (1975). *The female man*. Bantam Books.

Russ, J. (2007). The image of women in science fiction. In J. Russ (Ed.), *The country you have never seen: Essays and reviews* (pp. 205–218). Liverpool University Press.

White, D. R. (1999). *Dancing with dragons: Ursula K. Le Guin and the critics*. Camden House.

Wittgenstein, L. (1953). *Philosophical investigations* (G. E. M. Anscombe, Trans.). Basil Blackwell.