

Growing Beyond Fiction: Solarpunk as an Ethos of Care

by

Kyra Woodend

A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Master of Arts

in

Philosophy

Waterloo, Ontario, Canada, 2025

© Kyra Woodend 2025

Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

This thesis explores the intersection of care theory, a branch of feminist ethics that emphasizes relationality, responsiveness, and the moral significance of care, with the emerging aesthetic and political movement of solarpunk. Care theory challenges traditional ethical frameworks by focusing on interdependence, context, and the transformative role of emotions. Meanwhile, solarpunk, originating as a science fiction subgenre and expanding into a broader social imaginary, envisions sustainable futures grounded in environmental stewardship, technological innovation, and post-capitalist forms of cooperation. I argue that solarpunk not only embodies the central themes of care ethics but also extends them by offering a practical, imaginative, and mobilizing ethos for contemporary political and environmental challenges. Through an interdisciplinary methodology, this project demonstrates how solarpunk's narratives and practices can respond to critiques of care ethics. Finally, by analyzing the figure of the cyborg as developed in feminist theory and reinterpreted through solarpunk, I contend that the cyborg operates as a metaphorical caregiver—dissolving boundaries between human, technology, and environment—thereby expanding the ontology of care itself. In doing so, this thesis positions solarpunk as a vital and actionable framework for imagining and enacting a livable, care-centered world.

Acknowledgements

Thank you to my supervisors, Dr. Katy Fulfer and Dr. Nick Ray. Thank you both for your continued engagement and mentorship. This thesis would not have been possible without your help. I also thank Dr. Adan Jerreat-Poole for being my reader on this project. Thank you for sharing your time, expertise, and thoughtful feedback. Your insights pushed me to think more critically and approach my work with clarity.

To the entire Philosophy department at Waterloo, thank you not just this past year, but the last 5 years of conversations, thoughts, and experiences. From graduate students, faculty, staff, post-docs, and undergraduate students throughout the years – I am beyond grateful for everything.

Lastly, I would like to thank those in my life that I can't imagine not having around for their invaluable support: my dad and Donna for always believing in me no matter what and Olivia and James, the two smartest people I know, for constantly inspiring me.

Table of Contents

Author’s Declaration	ii
Abstract	iii
Acknowledgements	iv
Chapter 1 Introduction.....	1
Chapter 2 A Relevant History of Care Theory	7
2.1 Early Theorists.....	7
2.2 90s Theorists.....	9
2.3 2000s Theorists.....	12
2.4 Turn Towards Collective Care	13
2.5 Critique of Care Theory.....	17
Chapter 3 Solarpunk: A Movement as Much as a Genre	20
Chapter 4 Cyborgs For Earthly Survival!.....	37
Chapter 5 Conclusion	53
References	55

Chapter 1

Introduction

Care theory is the approach of feminist ethics that aims to prioritize care in our moral deliberations. A widely accepted definition of care comes from Joan Tronto and Bernice Fisher, who state that care is “everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web”.¹ Humans are relational beings that require care at some point in our lives and often would like care throughout in interpersonal ways. While some care theorists propose ways of extending care in disciplines such as healthcare or education, it is my intention here to endorse extending care through solarpunk as an implementable ethos that can guide action on the micro, meso, and macro levels while carrying out the values that care ethics emphasizes. What is of particular interest to make this connection is the relational approach to morality that care ethics takes, turning its focus towards community care. I contend that solarpunk as both a genre of science fiction and more recently a social and political movement, both embodies and expands upon care theory, making it the perfect avenue to enact mobilization of the values of care ethics.

Care theory is often compared to normative political theories such as Rawlsian liberalism and libertarianism, among others. Maurice Hamington has made numerous contributions to care ethics beginning in the early 2000s and in his 2015 edited anthology with Daniel Engster, *Care Ethics and*

¹ Fisher & Tronto 1991, 40; Tronto 1993, 103; qtd. Engster, Daniel, and Maurice Hamington, eds. *Care Ethics and Political Theory*. First edition. Oxford University Press, 2015. 5.

Political Theory, they identify two overlapping reasons which motivate the exploration of care ethics and political theory. The first is purely scholarly because significant gaps remain in knowledge, and the second is social and political benefits to usefully guide both analysis and action under contemporary conditions. They state that in care theory, the centre of moral action shifts from interactions amongst citizens in the public forum and the marketplace, towards personal relationships. This in turn points towards a more relational perspective on social and political problems by offering a more comprehensive understanding of a person's actions, which are enmeshed in the relationships and environments one is involved in.² Hamington and Engster note that like many other frameworks and theories, there is no one unified definition of care ethics. It is an ever-expanding area that gets more detailed as theorists continue to make new contributions or respond to previous writers. Care ethics tends to be bound together by a set of related themes, and they outline five main ones that most care theorists prioritize in their work. The first is a relational approach to morality. Care theorists suggest that humans are fundamentally relational and interdependent, and that this plays a role in one's decision-making. There are two main ways that the relational aspect can be seen. The first is a relational view of the person and the second, is that the beginning of moral deliberations are relationships rather than actions. They also note that not all relational approaches to ethics are necessarily care approaches and warn against this conflation. The second theme is a responsiveness to the other. According to some care theorists, care is incomplete without the other's response, that is, a response to an expressed need. The third theme is that of context - essentially, that it matters! Care ethics places value on particularism unlike many other Western universalization's of ethical approaches. An authentic caring response is unique and individualized and "requires understanding

² Engster and Hamington, *Care Ethics and Political Theory*. 1.

the particularities of the other's experience, including their history, relative power, relationships, and so forth".³ The fourth theme is that of crossing moral boundaries, that is, rejecting or reimagining traditional moral boundaries. Tronto identifies at least three moral boundaries that need to be redrawn. They are the divide between morality and politics, between disinterested ethical theory and particularist approaches, and between public and private life.⁴ The final theme is that of emotions being informative and motivating moral tools. Again, going against traditional Western moral notions, care ethics recognizes the positive role that emotions have in helping to create empathetic connections and promoting caring actions.

Solarpunk is a subgenre of science fiction/speculative fiction inspired by the earlier genre of cyberpunk which arose around the 1970s. Science fiction/speculative fiction has long been understood as a realm to imagine future possibilities. It operates as a future imaginary, which is a vision shared by a group of individuals depicting a desired future's political, economic, and social configurations.⁵ It is often classified into two subfields; dystopian and utopian, where the former serves as a warning for our future and the latter a space for hope and possibility.⁶ Solarpunk belongs to this second group, but its inspiration, cyberpunk, comes from the first. Cyberpunk depicts the various ways in which the phrase 'high-tech, low life' can be conceptualized. It often depicts cyborgs of some form: either indiscriminate bits of tech implemented with human apparatus, or deliberate creations that are either clearly mechanical, or blur the line between human and machine. Solarpunk

³ Engster and Hamington, "Care Ethics and Political Theory," 4.

⁴ This is based off of a summarized version of Tronto's views in Ibid.

⁵ Gillam, William Joseph. 2023. "A Solarpunk Manifesto: Turning Imaginary into Reality." *Philosophies* 8 (4): 73. <https://doi.org/10.3390/philosophies8040073>.

⁶ Weik Von Mossner, Alexa. 2024. "Wish We Were There: Hope, Desire, and Utopian Community in Contemporary Solarpunk." *Utopian Studies* 35 (2-3): 467-89. <https://doi.org/10.5325/utopianstudies.35.2-3.0467>. 471.

also draws inspiration from countercultural movements such as “the punk movement of the 1970s, denoting dissent, iconoclasm, and rebellion against an established vision or mainstream society, while also incorporating its DIY ethos and sense of grassroots development”.⁷ Solarpunk adopts cyberpunks openness to technology and human-tech relationships yet distances itself from value hierarchies that prioritize the mind or digital landscapes above all else.⁸ Instead, solarpunk widens the human-tech interface to include environmental-stewardship⁹ in this progress.

Rather than rejecting modernity, solarpunk fuses both eco-friendly living with the increasing technological sophistication of our society, to create sustainable modes of technology that can support everyone. The term solarpunk first surfaced in 2008 on a blog entitled ‘Republic of Bees’, which “envisioned a solarpunk society being completely dependent on renewable energy and the revival of older, less damaging technologies, such as sailing”.¹⁰ The discussion and circulation of solarpunk ideas was relatively localized until 2014, where the user missolivialouise on Tumblr brought it into the limelight. Discussions and conceptions of solarpunk thus began circulating online on other platforms such as Reddit, and into stories and art – all of which culminated to the creation of *A Solarpunk Manifesto* in 2021.¹¹ As the manifesto defines it, “[s]olarpunk is a movement in speculative

⁷ Walther, D. “Solarpunk – Between Aesthetics and Activism.” *Anglistik* 35, no. 1 (2024): 163–81. <https://doi.org/10.33675/ANGL/2024/1/15>. 167.

⁸ *Ibid.* 168.

⁹ Environmental stewardship and the relationship implied by it, is unique to settler culture. Many Indigenous theorists, writers, and scholars make different sense of this relationship. For more on Indigenous approaches, see: Whyte, Kyle P., and Chris Cuomo. “Ethics of Caring in Environmental Ethics: Indigenous and Feminist Philosophies.” In *The Oxford Handbook of Environmental Ethics*, edited by Stephen M. Gardiner and Allen Thompson. Oxford Handbooks Online. Oxford University Press, 2017. <https://doi.org/10.1093/oxfordhb/9780199941339.001.0001>.

¹⁰ *Ibid.*

¹¹ In this thesis, there are two documents titled “A Solarpunk Manifesto”. The first by Flynn is commonly referred to as *the* manifesto that people in the movement will reference, whereas the second is the shortened title of Willam Gillams paper *A Solarpunk Manifesto: Turning Imaginary into Reality*.

fiction, art, fashion, and activism that seeks to answer and embody the question ““what does a sustainable civilization look like, and how can we get there?””¹² It most often gets deployed as a subgenre of literature and art, and there are several stories and anthologies dedicated to solarpunk fiction. However, with the movements that have happened online and their employment into action in the real-world, “[t]he themes of anarchism, ecology, and justice prevalent in solarpunk writings provided guiding principles for governance to adopt for building a better future”.¹³

A Solarpunk Manifesto states, “[s]olarpunk can be utopian, just optimistic, or concerned with the struggles en route to a better world, but never dystopian. As our world roils with calamity, we need solutions, not only warnings”.¹⁴ It also functions as an expression of anarchism and is “thus defined by two interconnected tenets: post-capitalism and post-scarcity anarchism”.¹⁵ Anarchism is a political philosophy which advocates for the abolishment of hierarchical government and the organization of society of a voluntary and cooperative basis. This identity that solarpunk build upon, “was built from a feeling of being trapped as spectators in a fast-moving and heavily consuming society”.¹⁶ This feeling still rings true today just as it did during the punk movement of the 70s, with production and consumption at an all time high, and an environment that cannot withstand the sheer number of products that are being produced.

This project asks how we can best envision a livable world where care is centred. What social and political movement best instills caring values? It ultimately argues that the solarpunk movement

¹² Flynn, *A Solarpunk Manifesto (English) – ReDes – Regenerative Design*.

¹³ Gillam, “A Solarpunk Manifesto.” 9.

¹⁴ Flynn, Adam. *A Solarpunk Manifesto (English) – ReDes – Regenerative Design*. n.d. <https://www.re-des.org/es/un-manifiesto-solarpunk/>.

¹⁵ Gillam, “A Solarpunk Manifesto: Turning Imaginary into Reality.” 3.

¹⁶ Ibid. 2.

offers a comprehensive and exploratory way to approach care theory. It also argues that following solarpunks origins from cyberpunk, we can explore the image of the cyborg as frequently used in feminist approaches such as cyberfeminism, as a fruitful avenue for extending care. Coming from an interdisciplinary background in philosophy and cognitive science as well as being a fan of science fiction, I am interested in the connections that I have noticed between these disciplines and pursuing ways of thinking about them in non-standard ways.

The following chapter will outline care theory, focusing on contributions to the field that have guided a shift from interpersonal, to political, to community-oriented forms of care. I will end this chapter by introducing a criticism of care theory that I believe solarpunk can address. Chapter three will introduce solarpunk as a social and political movement by framing it in terms of the five themes of care theory as introduced by Engster and Hammington. It will end by responding to the criticism from Chapter two and turning towards the extension of care theory that I believe solarpunk can provide. This will be the undertaking of Chapter four, where I analyze the figure of the cyborg by Donna Haraway, and trace its movement from cyberfeminism through cyberpunk, and into solarpunk. I argue that the cyborg can be seen as the ultimate caregiver, blurring the boundaries between technology, humans, and the environment, offering a novel way of thinking about what our care can achieve, and give back to care ethics.

Chapter 2

A Relevant History of Care Theory

This project is about solarpunk as a way of organizing ourselves socially and politically as communities of mutual support, aid, and care. The argument of this thesis is that solarpunk embodies and extends care ethics. Understanding more about solarpunk will inform care ethics itself, but knowing more about care ethics will also inform how to better live in accordance with solarpunk commitments. In Chapter three, we will return to a deeper discussion of solarpunk, but this chapter will be devoted to a useful overview of care ethics, its history, and key tenets, to inform that discussion.

2.1 Early Theorists¹⁷

Care ethics emphasizes the importance to moral decision-making and moral action of interpersonal relationships and care that we give. It also provides a new way to approach social and political thinking. There have been numerous contributions to the literature on care theory, all centring the relational aspects of human nature in their approach. Its roots are commonly traced to feminist care ethics in the early 1980s. Virginia Held, a prominent contributor in the ongoing studies of care, credits Sara Ruddick's *Maternal Thinking* (1980) as the first contribution to the field of care theory. This work philosophically explored how mothers think and reason and what values can be extracted from this thinking.¹⁸ A common consensus credits psychologist Carol Gilligan's *In a Different Voice: Psychological Theory and Women's Development* (1982) as being a foundational

¹⁷ For interest of clarity, I use subheadings in this chapter and not in subsequent chapters.

¹⁸ Engster, Daniel, and Maurice Hamington, eds. 2015. *Care Ethics and Political Theory*. First edition. Oxford, United Kingdom; New York, NY: Oxford University Press. 4.

work for care theory. In this work, Gilligan conducted and analyzed interviews with people about moral issues and problems. From this empirical research, Gilligan argued that male subjects tended towards solutions of fairness whereas female subjects tended more so towards solutions of care. She concluded that there exists an alternative moral value contrary to other ethical frameworks such as utilitarianism or deontology -- what she called 'justice ethics.' This alternative moral value became what she dubbed 'care ethics'.¹⁹

Gilligan's articulation of an ethic of care directly responds to that of her mentor Lawrence Kohlberg. In *Moral Orientations and Moral Development* (1987), Gilligan claimed that Kohlberg's model renders women 'less morally mature' than men due to his use of primarily boy participants in his studies and thus a universalization of the male perspective. Her response to his work provided language that resonated with feminist critiques of ethics, primarily Kantian ethics and consequentialism, combatting the held mindset that there are universal moral rules which guide right action which can be applied by anybody. In this work, she draws on the rabbit/duck illusion from Gestalt psychology which presents the idea and fact that while looking at the picture, we can shift our view to see one or the other, but we cannot see both simultaneously. She expands the same thinking to both care and justice and sees them as alternative perspectives or moral orientations. The key observation is that a shift in the focus from concerns about justice to concerns about care changes the very definition of what constitutes a moral problem. Where Kohlberg used an all-male sample and generalized his findings to both sexes, Gilligan noted that when women speak about their own

¹⁹ Although Gilligan's contributions to feminist philosophy have been influential, the empirical findings of her work have been questioned. For more see: Graham, Ruth. *"Voice" of an Era ; What Did Carol Gilligan's Landmark Book Really Change?* 2012.

experiences of moral conflict, they often define moral problems in ways that elude categories of moral theory, which had been laid out by the all-male sample as the empirical basis for theory construction. She observed that within a construction of justice, care is the mercy that tempers justice and highlights the special obligations that arise in personal relationships. She also noted that children are able to see both orientations towards moral problems - resolving any concerns about biological determinism – and can select either moral standpoint, showing an element of moral decision. This decision, whether implicit or explicit, may later become linked with self-respect and self-definition. She concludes that care and justice have two different moral logics, but both perspectives are necessary for a complete understanding of morality, where neither should be prioritized over the other. Rather, she views them as complementary, with care providing context for justice and justice offering a framework for care. Virginia Held offers a complementary view to Gillian, which will be given space in the next section.

2.2 90s Theorists

In the 1990s, care ethics expanded beyond what was primarily a contrast between a relational, care perspective with an individualistic, rights-based perspective, towards incorporating political theory. Early works in this regard were praised for their revolutionary insights yet criticized for their personalized and parochial accounts of care, as well as essentializing care as a feminine trait. The response to these concerns from feminist theorists was to both broaden and clarify their account and carrying it into political theory. A central contribution in this was Virginia Held's *Feminist Morality: Transforming Culture, Society, and Politics* (1993) where she drew on the central insights from Ruddick, Gilligan, and Nodding's to develop a care-inflected feminist philosophy which could

address several social and political issues, such as caregiving, international relations, and the role of markets.

Held in *The Meshing of Care and Justice* (1995), asserts that in feminist traditions, care and justice have been viewed as distinct elements that reflect different ways of both interpreting moral problems and expressing moral concern. Her main question that she attends to in this paper is whether structures like justice, equality, rights, and liberty are inherently incompatible with networks of care, relatedness, and trust, and whether we must choose between them in certain contexts. Held claims that care seems to be the most basic of moral values since without it, we could have no life at all. All humans require care and the start of their lives and most want and need caring relationships throughout. As a moral value, care indicates what many practices should involve. Justice on the other hand, is also an important moral value, however much life has gone on without justice and has remained moderately good, for example within a family where there is very little justice but often much care. Without care, there would be no one to respect, either in the public system of rights or within the family. By examining this intersection of care and justice, Held aims to develop a more comprehensive and nuanced approach to ethics that incorporates the relational and contextual aspects emphasized by care ethics while still maintaining the importance of fairness and individual rights associated with justice. Similarly to Gilligan, she says that neither one can be done away with as both are essential for morality, a statement that not all feminists will agree with.²⁰ Held is in agreement with Gilligan in that she also sees care and justice as alternative interpretations that can be applied to the same moral problem, and that they are different but equally valuable and not always compatible.²¹

²⁰ Ibid.

²¹ Ibid, 129, 131.

However, she believes that as a basic moral value, care should be the wider moral framework under which justice should be fitted.²² I agree with Held's assertion that justice should be fitted under the broader framework of care. If we try to fit care under a framework of justice, we risk acting out our care only in situations where it has been deemed the correct thing to do under a justice-centred framework. This could disproportionately have us caring for some and not others who are just as deserving of care. Care, and assuring its availability for those who need it, should be of chief political concern, and not strictly delegated to select groups in the private sphere. These groups are disproportionately women and other minorities, onto whom much of the unpaid and badly paid work of caring for those who need it falls.²³

Another key contribution was Joan Tronto's *Moral Boundaries: A Political Argument for an Ethic of Care*. Here she outlined a broader and now considered classic definition of care, co-developed with Bernice Fisher, which states that care is "everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life sustaining web".²⁴ She further divided, and outlined four phases of care and their corresponding virtue. The first of which is caring about, which involves care recognition, and its virtue is attentiveness. The next phase is taking care of, which follows from recognition and is owning or taking responsibility for the need, making its virtue responsibility. The third phase of care is caregiving, the direct act of giving care, and its virtue is competence. The final phase of care is care-receiving which is the responsiveness of the one caring that completes the feedback loop, and its virtue is responsiveness. Tronto later in

²² Virginia Held, "The Meshing of Care and Justice," *Hypatia* 10, no. 2 (1995): 128.

²³ *Ibid*, 129.

²⁴ Fisher and Tronto 1991, 40; Tronto 1993, 103; qtd. Engster and Hamington, 5.

Caring Democracy (2013) added on a fifth phase of care, that of caring-with which can be described as solidarity and whose associated moral quality is trust and communication. This final phase will be given more space later in this chapter when discussing contemporary thinkers in the 2000s.

2.3 2000s Theorists

Engster and Hamington in *Care Ethics and Political Theory* (2015) claim that care is not limited to private or interpersonal relationships but is also deeply relevant to both social and political contexts. This highlights a political turn in care theory and argues that societies and governments have moral responsibilities to structure political institutions, policies, and practices around the needs and capabilities that arise from human interdependence. Hamington holds a performative view of care and sees care as embodied, contextual and relational acts with political significance. This allows care to be widened beyond the origins of familiar relationships to include strangers and marginalized groups. Care ethics challenges traditional political boundaries, such as public/private, and sees the recognition of dependency and interdependency as central to just societies. It critiques prevailing norms that focus on individual independence and instead calls for models of citizenship, justice, and public policy that prioritize care, relationality, and responsiveness to the needs of all members of society, including non-citizens and marginalized populations. This “political turn” in care theory, as articulated by Engster and Hamington, places care at the centre of political thought and practice by focusing on human dependency, advocating for policies and institutions that support care across social and political domains, and challenging the adequacy of individualistic or purely rights-based models of politics.

2.4 Turn Towards Collective Care

The turn of care ethics that I am most interested in with this project is the turn to community-oriented or collective care. Along with this comes work on care theory by people who are not necessarily academics but community organizers, public scholars, activists, and others. One such example is work by Leah Lakshmi Piepzna-Samarasinha's 2018 book, *Care Work: Dreaming Disability Justice*. This work arises from their disability justice activism, and care theorists have found it a great site of generative potential. Piepzna-Samarasinha's positionality as a queer, brown, disabled femme is fundamental to their approach to disability justice. Their work centers not just disability, but the overlapping structures of race, gender, and sexuality, creating space for QTBIPOC communities while also challenging able-bodied readers to engage deeply with disability justice.

In the first chapter, Piepzna-Samarasinha exemplifies what they call 'care webs' – reciprocal and non-hierarchical networks of support. These webs are often created by marginalized communities to procombat the lack of needs being met by traditional state or institutional structures meant to offer support. This support can come in the form of providing care, resources, and access, depending on the specific needs of those involved. Rather than draw universal insights, the upshot of Piepzna-Samarasinha's approach is that they exemplify how we draw theoretical insights from particular contexts and lived experience, further highlighting the dynamic nature of care. I will now turn back to care theory and discuss how collective care has been articulated.

Myisha Cherry in *Solidarity Care* (2020), builds on Tronto's fifth phase of care; caring-with, or solidarity-focussed care. Here Cherry discusses solidarity through the phenomenon of 'wokeness' and

defines ‘being woke’²⁵ as when a person is aware of the theoretical ins and outs of the world which they inhabit. The phrase itself is meant to signal the idea of waking up, as an encouragement to people to ‘wake up’ and question dogmatic social norms. This requires one to engage in an active process of deprogramming social conditioning which one has been brought up under and a focus on consistent efforts to challenge universal infractions.²⁶ One should not only be aware of injustices, but also be aware of one another and restore, repair, and reaffirm each other, which is how we can stay both well and woke.

Cherry’s method for this is “solidarity care”, similar to Tronto’s final phase of care, where solidarity is unity, mutual support, and recognition. She builds this idea of solidarity from Tommie Shelby’s normative requirements of solidarity, the first of which is that members of a group identify with each other to the point of treating each other as extensions of the self. The second is a special concern and disposition to assist and comfort members. The third requirement of solidarity is shared values and goals between members which could include social visions, ideals, or policies. The fourth requirement is loyalty to each other and faithfulness to the group’s values. The final requirement is mutual trust between members. Any form of solidarity has content and for Shelby this is defined by the goals that the group embrace as being a member of the group.²⁷ Cherry takes Shelby’s normative requirements and makes care more central in her approach, not that Shelby has no regard for care, but it is not as explicit as Cherry wants it to be. She applies these requirements by asking what people’s

²⁵ I use the term ‘woke’ here as was originally intended by Cherry, emerging from the Black community to mean waking up to an awareness of white supremacy and anti-Black racism, and without the connotations that it currently holds in mainstream usage.

²⁶ Myisha Cherry, “Solidarity Care,” PubHub by MSU Libraries, 2020, <https://pubhub.lib.msu.edu/read/solidarity-care/section/05ddcde8-1f13-4f29-88fe-052fe4e49338>.

²⁷ Ibid.

individual needs are, not to accomplish some goal, but because they themselves are worthy of our care. Care has largely been neglected in liberal theory and feminist philosophy has taken it in and recognizes its moral significance while also asserting the importance of the individual and views it as a self-made person in need of their rights to be respected without outside interference. Solidarity care is about caring for and about each other with the goal of making members be and stay well. This should not be a replacement for existing solidarity, but an essential and necessary complement to other kinds of group solidarity. Cherry also adds that someone can be in solidarity with another and gave no kind of affiliation at all, so long as they fulfill Shelby's normative requirements. There are three ways that members can extend solidarity care. The first is to figure out how they are each other's problem and then to stop being that problem. This involves reflection on one's ego, privilege, and biases. The second is by reciprocating care, a mutual responsiveness to care that one receives. This practice can never be exact, but Cherry says that this is no reason why it still should not be extended. The final way is through affirmation and encouragement. Providing care in response to fragility should be avoided. A caring critic should aim to correct and change problematic behaviour, not tear it down. Solidarity care is an essential form of care in communities because without it, we will never truly be free or well, no matter how 'woke' or aware we think we are. Solidarity care or caring-with is an essential part of collective care, acting as the foundational support for building and maintaining mutual support systems. This again shows how care theory departs from rule-based ethical systems and prioritizes context. Now, I shall turn to discuss care as both a practice and ethos.

Maurice Hamington in *Revolutionary Care* (2024) places care in terms of an ethotic approach, not as a replacement for an ethic of care but rather that an ethos of care is a means for capturing a

broader spectrum of the experiences.²⁸ It does not mean that it is an ethical system of adjudicating moral dilemmas, but that “it establishes the human groundwork for the moral work of care: the spirit and disposition that make care practices possible and desirable”.²⁹ Hamington has indicated that an ethic of care has normative and extra-normative elements, but that an ethos of care further diffuses care’s adjudicative and normative role. He applies three significant elements of modern ethos theorizing to care. The first is that contemporary thinkers view ethos as an open-ended moral trajectory rather than a prescriptive ethical structure. The second is that many applications of ethos employ an identity-building moral alignment between the speaker and the speech act co-created by the individual and society. The final is that an ethos describes the integration of emotional and cognitive commitments.³⁰ An ethos is meant to connote a dynamic moral trajectory, and endorsing or claiming an ethos is to make a moral commitment or participate in the moral commitment of a community but not in a narrowly prescribed way. Ideally, when one responds out of an ethos of care, they do not know in advance what choices they will make in any given situation, but they are committed nonetheless, to performing care, inquiring, connecting, and acting. An ethic of care risks being misinterpreted as another normative framework, like consequentialism, whereas a caring “ethos is a disposition more comfortable with the ambiguity of a posteriori moral decision-making than is an ethic”.³¹ Care ethos is a “‘speculative commitment’ that refuses to define moral action before the encounter”.³² Practices of care are always part of an emergent ethos, as Hil Melatino says, “[b]ecause

²⁸ Maurice Hamington, *Revolutionary Care: Commitment and Ethos*, 1st ed. (New York: Routledge, 2024), <https://doi.org/10.4324/9781003368625>. 90.

²⁹ Hamington, *Revolutionary Care*. 98.

³⁰ Ibid. 91.

³¹ Ibid.

³² Ibid. 92.

care isn't abstract, but only ever manifested through practice—action, labor, work—it is integral to our ways of doing”.³³

So far in this chapter, I have laid the foundation of care theory and the central tenets that will be relevant to examining solarpunk which I will come back to in the next chapter. Before we move on to a discussion of solarpunk as an extension of care ethics, I will consider some critiques that have been raised against care theory in the next section.

2.5 Critique of Care Theory

Care ethics may come across to some as an ambiguous ethical practice since it does not offer prescribed rules for one to abide by. There is no one correct way to respond or act in a given scenario, it often requires more of us to participate, and it can be more uncertain for us to follow, therefore it can be difficult to conceptualize how one should put care ethics into practice. The phrase ‘caring for others sounds simple enough but can easily become convoluted when we encounter nuanced instances of who or what we care about, what that means for the actions that we would take to express our care, and who we are and what we bring to situations where care is needed. Nancy Crigger in *The Trouble with Caring* (1997) identifies several arguments that have been levied against an ethic of care and why they remain persistent. Of particular concern here will be the fourth argument that she outlines: “caring as the sole basis for a moral decisions [sic] leads to relativism”.³⁴ This concern can also be raised against implementing solarpunk as an ethos, and I will respond to this worry and present how I believe solarpunk can respond to Crigger’s concern in the next chapter.

³³ Malatino, Hil. *Trans Care*. Minneapolis: University of Minnesota Press, 2020. <https://muse.jhu.edu/book/78334>. 41.

³⁴ Crigger, Nancy J. “The Trouble with Caring: A Review of Eight Arguments against an Ethic of Care.” *Journal of Professional Nursing* 13, no. 4 (1997): 217–21. [https://doi.org/10.1016/S8755-7223\(97\)80091-9](https://doi.org/10.1016/S8755-7223(97)80091-9).

For now, I shall focus on this concern in relation to care ethics. Crigger states that relativism occurs when there are no absolutes on which to base a moral decision and thus in turn can lead to immoral decisions. She states that a solution to this problem that has been raised is to augment caring by combining it with traditional moral theories. Virginia Held responds to this worry and dispels any need to combine care with other moral frameworks. She asserts that while care ethics avoids abstract principles, it does not reject all principles and offers normative guidance rooted in practical realities and moral significance of caring relationships. Philosophers since at least James Rachels³⁵ have referred to this problem of moral relativism in care theory as the ambiguity problem. The ambiguity problem emerges because care ethics often avoids traditional rule-based guidance which makes critics worry it lacks concrete ethical direction. However, Held clarifies that care ethics is grounded in the complexity of real-life relationships rather than universal rules, yet still allows for evaluation of moral claims and obligations. Held argues that the ambiguity reflects the nuanced and situated nature of human morality, which must accommodate the diversity and particularities of relationships rather than impose uniform rules. This in turn reveals a benefit of care ethics as opposed to traditional normative frameworks which rely upon individual self-interest or contractual-based rights. In this discussion, Held is centering herself against rights-based theories of morality such as deontology, contractualism, and utilitarianism.

Branching from individual self-interest, the move of care theory that is most intrinsic to this project is that of community-care. This will become apparent in the next chapter when we discuss solarpunk values beyond an aesthetic or genre of fiction but how it has also taken a political turn and

³⁵ Rachels, James. *The Elements of Moral Philosophy*. 7. ed. Edited by Stuart Rachels. McGraw-Hill, 2012.

become fostered as a social movement. The attractiveness of solarpunk as a movement at this moment in time is in large part due to the crises we are currently witnessing, from environmental collapse to social injustices. Maurice Hamington and Michael Flower in their book *Care Ethics in the Age of Precarity* (2021) suggest that such precarity,

signals that it is time for another international social movement infused with empathy and compassion that reconnects people separated by identity-based discrimination, disparate resources, and oppressive violence. The world seems weary of social and political approaches guided by abstract hierarchical moralities that can be co-opted by concentrated power whether financial, religious, or military. Too many people have become inured to fearmongering narratives, social fractionation, and violence. Care ethics reaffirms our interconnected humanity. Perhaps care represents “the only viable social revolution” in the face of today’s neoliberal precarity.³⁶

This chapter traced the origins of care theory from interpersonal beginnings to political and community-oriented turns. It then put forward a critique of care theory that I believe solarpunk can respond to. The next chapter will outline solarpunk in more detail and demonstrate its motives for social and political mobilization, embodying and expanding upon the core tenets of care theory.

³⁶ Hamington, Maurice, and Michael A. Flower, eds. *Care Ethics in the Age of Precarity*. University of Minnesota Press, 2021. 9.

Chapter 3

Solarpunk: A Movement as Much as a Genre³⁷

I ended the previous chapter on care ethics by highlighting the communal turn of care ethics in recent years. Here, we will discuss the main connection between post-communal turn care ethics and the solarpunk movement.

Solarpunk values embody a holistic approach to care towards individuals, communities, and the environment. It centres around hope which allows it to expand beyond fiction, with potential for practical applications. Weik von Mossner (2024) argues that solarpunk operates as a utopian desire, inspiring not only works of fiction but also collective transformative action.³⁸ Solarpunk's emphasis on sustainability, community, and optimism for the future in the face of despair, motivates its efforts to be actively employed by individuals and communities alike. The Republic of Bees Tumblr blog in 2008 advocated for a literary genre which explores the revival of old technology to solve modern problems.³⁹ As listed by von Mossner, the first collection of solarpunk stories which used the label of solarpunk was created in Brazil by Gerson Lodi-Ribeiro's entitled *Solarpunk: Histórias Ecológicas e Fantásticas em um Mundo Sustenavel* (2012). The first English collection was *Sunvault: Stories of Solarpunk and Eco-Speculation* (2017), edited by Phoebe Wagner and Brontë Christopher Wieland, and was soon followed by the English translation of Lodi-Ribeiro's book (2018).⁴⁰

³⁷ Flynn, Adam. *A Solarpunk Manifesto (English) – ReDes – Regenerative Design*. n.d. <https://www.re-des.org/es/un-manifiesto-solarpunk/>.

³⁸ Weik Von Mossner, Alexa. 2024. "Wish We Were There: Hope, Desire, and Utopian Community in Contemporary Solarpunk." *Utopian Studies* 35 (2–3): 467–89. <https://doi.org/10.5325/utopianstudies.35.2-3.0467>. 467.

³⁹ "SFE: Solarpunk." <https://sf-encyclopedia.com/entry/solarpunk>.

⁴⁰ Weik Von Mossner, "Wish We Were There: Hope, Desire, and Utopian Community in Contemporary Solarpunk." 469.

One such example of solarpunk ideals at work beyond fiction is an account on TikTok called *thesolarpunkfarmlet*.⁴¹ The account posts videos helping people learn about solarpunk values and take actions towards disengaging from capitalism and practicing self-sustenance. This includes things like making frozen convenience meals at home instead of buying them from a store, repairing and mending instead of throwing away clothes or other home goods, and trading and bartering goods or skills among neighbours and friends. The terms that the account uses are very purposeful, such as self-sustenance rather than self-reliance, because they recognize that the latter promotes individualistic thinking and that the change they are trying to inspire is community oriented.⁴² They also use the term ‘farmlet’ rather than homesteading because homesteading has conservative, alt-right, anti-queer connotations that are counterintuitive to what solarpunk stands for. This account is a prime example of the spirit that solarpunk fosters; community-resilience, knowledge sharing, and revolutionary action. Solarpunk expands upon what is possible for everyday people to accomplish in the face of global powers. Activists like *thesolarpunkfarmlet* show this with the care that they take to remove themselves from this system and through strategically using language that does not continue to justify its existence. Solarpunk has the ability to “offer alternatives to the conventional ‘cultural narratives’ pervading society”.⁴³

⁴¹ “The Solarpunk Farmlet (@the_solarpunk_farmlet) | TikTok.”

https://www.tiktok.com/@the_solarpunk_farmlet. At the time of writing this, the account is no longer active online since the United States restrictions on TikTok began on January 18th, 2025. The account remains viewable, but the owner made it known that they were moving to MeWe.

⁴² For more on a rejection of neoliberal frameworks and an alternative framework centred around care, see: Tronto, Joan. “There Is an Alternative: Homines Curans and the Limits of Neoliberalism.” *International Journal of Care and Caring* 1, no. 1 (2017): 27–43. <https://doi.org/10.1332/239788217X14866281687583>.

⁴³ Walther, D. 2024. “Solarpunk – Between Aesthetics and Activism.” *Anglistik* 35 (1): 163–81. <https://doi.org/10.33675/ANGL/2024/1/15>.

Because of this focus on responsible care, I will argue that solarpunk embodies and expands on the core values of care ethics, bringing care into practice by focusing on community, social justice, sustainability, and technology – including how we bring into practice community, social justice, sustainability, and technology to make a better world. Not only this, but solarpunk also continues the thread of care literature devoted to how to practice care in communities. Connecting to the five themes of care ethics that Engster and Hamington identify, we can see how solarpunk embodies each one, primarily using the *thesolarpunkfarmlet* as a model. While there are many other people, groups, and communities that can be used to demonstrate this embodiment, this account will be of primary focus for the purposes here.

The first theme of approaching morality relationally is evident. Much like care ethics, relationality and interdependence are vital elements in solarpunk. Those involved in solarpunk movements recognize that while there are things that can be done at the individual level, the only way that revolutionary action can take place is by working together, cultivating resources, and distributing them cooperatively between and within communities. This draws from solarpunks connection to anarchism where it “strives for a post-scarcity, post-capitalist society devoid of hierarchy and domination”.⁴⁴ While anarchism remains a contested philosophy with numerous interpretations, it is generally bound by a rejection of authority and replacement with decentralization and mutual aid efforts. Anarchism for solarpunk can be understood through two interconnected tenets: post-capitalism and post-scarcity anarchism.⁴⁵ The account *thesolarpunkfarmlet* demonstrates this by creating connections in their own community, supporting local when they can, and sharing resources

⁴⁴ Gillam, William Joseph. 2023. “A Solarpunk Manifesto: Turning Imaginary into Reality.” *Philosophies* 8 (4): 73. <https://doi.org/10.3390/philosophies8040073>. 1.

⁴⁵ *Ibid*, 3.

for mutual aid initiatives. Due to the account's online nature, they are able to connect with people across the world, widening the scope of their community. There is also the importance of interpersonal forms of care in relationships which is vital for care theory, and these will be addressed later.

While the approach of relationality in care ethics is more embedded in the filial ties that we hold with others, solarpunk tends to look at relationships as more ends-based: where we cannot achieve our goals without the help of others and collectively working together. However, this is not always the case in solarpunk, as different interpretations will lend themselves to different outcomes. For some, they may see connections with others being good in and of themselves, whether or not they serve some ulterior goal. For example, in his essay "On the Political Dimensions of Solarpunk" (2015) Andrew Dana Hudson looks at care towards the elderly in envisioning a solarpunk future, not because we can gain something from a relationship with the elderly as he notes much political and economic strife we undergo is caused by

living in a society with an aging population [which] also means living under the political power of an elderly majority. The youth have the energy to mobilize, but in the developed world today (and tomorrow) they just don't have the numbers to stage revolutions, win electoral battles or pass radical reforms. Societies of the old are societies of political stagnation. Their politics produce de facto dynasties (Bush vs. Clinton) and decadent paranoiacs (Berlusconi, Putin, et al). The economic agenda of the old is about preserving costly entitlements, hoarding jobs and wages for workers with seniority, and fighting inflation. The old tend to live off capital assets that decline in value as the economy inflates, while the young today must work to pay off debts that shrink as inflation rises.

As a "punk" ideology, solarpunk must be opposed to the political domination of the old. But we may also have to live with it. We just aren't likely to win the numbers game. Solarpunk's strategy should

be to create pockets of progress and imagination within a larger political landscape of decay, deadlock and long emergency.⁴⁶

He goes on to say that caring for the elderly will take huge amounts of effort but is well worth it for the longevity of care that solarpunk aims to nurture. This may seem ends-based, however Hudson emphasizes the compassion that solarpunk promotes not just for the ends, but because the elderly are apart of our communities, and are just as deserving of this care. He says that the

aesthetics [of solarpunk] speak of a gentleness, and a recognition that color and beauty can bring joy and give life meaning even in the most painful of circumstances. I'm all for solarpunk symphony halls, libraries and city centers, but of all the spaces that have been made drab, brutal and soul-sucking by modern consumer architecture and decor, surely hospitals and nursing homes must top the list. Solarpunk is partly about building infrastructure that can be sustainable into the long term — and that can sustain many generations. What better way to begin than by creating assisted living facilities as stone-sturdy as cathedrals, with sun-streamed stained-glass and ivy-roofed walkways? Places where we ourselves would want to live out our own infirm years, decades later. To borrow a phrase, let us approach geriatrics as if people mattered.⁴⁷

Whether relationality in solarpunk is built upon creating a community for the goal of revolution, or for the connections in and of themselves will be up to interpretation of each member. However, what will be present in both conceptions is caring attitudes towards others.⁴⁸ Largely construed, solarpunk recognizes relationality as a beginning point, in line with care theory. The starting point here is a community rather than atomized individuals.

⁴⁶ Hudson, Andrew Dana. "On the Political Dimensions of Solarpunk." *Solarpunks*, September 29, 2021. <https://medium.com/solarpunks/on-the-political-dimensions-of-solarpunk-c5a7b4bf8df4>.

⁴⁷ Ibid.

⁴⁸ For a deeper insight into community-building see this post on TikTok by *@thesolarpunkfarmlet* https://www.tiktok.com/@the_solarpunk_farmlet/video/7403427599608761631

The second theme, responsiveness to the other, functions through solarpunk in a variety of ways. The creation of solarpunk itself can be seen to be a response to the needs of others. The others in this respect are wide-ranging – from other people, primarily those who are marginalized or not being served nor protected by the government as it stands, to the environment on the brink of destruction, to non-human animals, who are mistreated for humanity’s selfish endeavours. Solarpunk is the ultimate action, responding to calls for aid from anyone or anything. This is exemplified in Jerri Jerreat’s story “Rules for a Civilization” where care is shown through support networks, group activities, and creating safe spaces for emotional well-being, especially for the youth in the story who are grappling with eco-anxiety. The emergence of care is also evident in the story. One of the characters Kavi, who begins the story quite bossy, redirects this trait toward constructive roles such as first aid and ensuring fairness among the others during a time of need. This exemplifies how care is not static, but something that can emerge and grow as situations evolve.

Piepzna-Samarasinha’s conception of care webs provides a succinct way of imagining this response to care that solarpunk provides. Care webs are built on the principle of mutual aid, where care is given and received reciprocally. This means that those who give care also receive care within the web, fostering interdependence between members. Helping others in mutually beneficial ways is at the crux of solarpunks’ ethos, and mutual aid is a huge portion of this. The account *thesolarpunkfarmlet* showed this during Hurricane Helene in late 2024. The account’s creator lives in Asheville, NC which was hit hard by the storm. They were able to mobilize the community that they had built and helped during other moments of crisis among them to receive the same care and aid that they gave returned to them.

The third theme that Engster and Hamington identify is that of context – considering the particularities of one’s position when providing care. Most other normative ethical frameworks approach morality in terms of universalizable principles, whereas care theory focuses on the context in which someone who is receiving and administering care is situated. Again, *thesolarpunkfarmlet* does an excellent job of considering their viewers’ potential social positions when sharing knowledge, acknowledging that farmletting (homesteading) can be inaccessible to many people due to not owning a home or having the financial capabilities to spend more on sustainable options. They share ways that people can save money while still practicing their values and ways to farmlet in rented spaces as well.⁴⁹ Solarpunk is for anyone, regardless of background, socio-economic status, gender, sexuality, race, ethnicity, religion, age, or ability.

This goes into the fourth theme, that of crossing moral boundaries, due to the political implications that social identities have. Identity is inherently political, and solarpunk itself also occupies an inherently political position. Like care theory, it works to cross some of the same moral boundaries such as the personal/political and public/private. Revolutionary Abolition Activists Kelly Hayes and Mariame Kaba write in their 2023 book *Let This Radicalize You: Organizing and the Revolution of Reciprocal Care*:

[w]e believe in caring for each other as a form of cultural rebellion. We believe in the need to foster a counterculture of care—a politics larger than any siloed issue, one that can challenge dehumanization and the erasure of atrocity while allowing us to hold on to each other and our humanity amid disasters daily and acute. The state has the capacity to help us all survive—and even thrive—but in its current

⁴⁹ *@thesolarpunkfarmlet* has an open-access document where they compile resources that they use or have been shared by other people cataloguing everything from home resources, to mutual aid groups, and more. https://docs.google.com/document/d/14L6PreVXU37YZX_-eyfcWj8UwcYkuiIhqBALHIOaAMs/edit?pli=1&tab=t.0#heading=h.9p8rw9b7pl0z

form, it is actively opposed to doing so. We must have the will to survive in collectivity, as people who are willing to seize, defy, and upend whatever they must for the sake of life, dignity, and decency—and for the sake of each other.⁵⁰

Like solarpunks, Hayes and Kaba are after a counterculture of care. They look specifically at how care efforts arise during times of crisis and theorize on how we can enact these attitudes without there needing to be a crisis in the first place. This calls our attention to the community-oriented nature of solarpunk, and the power that is held in collective action. Going beyond moral boundaries is necessary for solarpunk to upend the oppressive power dynamics within which we live, challenging them head-on. As point three of *The Solarpunk Manifesto* states, “Solarpunk is a vision of a future that embodies the best of what humanity can achieve: a post-scarcity, post-hierarchy, post-capitalistic world where humanity sees itself as part of nature and clean energy replaces fossil fuels”. Breaking down these divisions is vital for solarpunk just as they are important in care theory.

The final theme, that emotions are morally relevant in our ethical deliberations, is part and parcel of solarpunks existence. People are sick, frustrated, angry, betrayed, hurt, disappointed... insert any and all emotions that living under capitalism has caused.⁵¹ It is no surprise that instead of wallowing in despair, people hope for a better future. Not just any alternative future, but an attainable one. One that inspires people to get up and fight back, fight for, and fight with others. Many people who have joined the solarpunk movement were drawn to it as a way of channeling their own feelings of frustration into a movement that embodied values they already held. Solarpunk has this ability – by

⁵⁰ Hayes, Kelly, and Mariame Kaba. “Chapter 3 Care Is Fundamental.” In *Let This Radicalize You: Organizing and the Revolution of Reciprocal Care*, 55. La Vergne, UNITED STATES: Haymarket Books, 2023.

<http://ebookcentral.proquest.com/lib/waterloo/detail.action?docID=7220009>.

⁵¹ See this post from @thesolarpunkfarmlet:

https://www.tiktok.com/@the_solarpunk_farmlet/video/7399047104833850654

embodying care theory's tenets for practical employment. In the next section this will become apparent as we look at how solarpunk expands care ethics and the practical applications that materialize.

Beyond exemplifying the core tenets of care theory, solarpunk also makes novel contributions back to it. Solarpunk calls for a rethinking of our relationships with one another, the environment, and non-human animals. It gets us to ask not just who we should care for, but what. Such a rethinking is revolutionary in character, and one major theme of solarpunk theory is how to best think of bringing such revolutionary changes from the imagination to reality. Environmental ethics play a large role in solarpunk as a political movement and practice, however many of the specifics here lie outside the scope of this thesis. What is relevant here is how solarpunk broadens the scope of care beyond human relationships, also emphasizing the inclusion of environmental stewardship. Care towards the environment has been an under-developed endeavor in care theory, however solarpunk brings both together in novel ways. In Kyle P. Whyte and Chris Cuomo's essay *Ethics of Caring in Environmental Ethics: Indigenous and Feminist Philosophies* (2015), they note that "positive developments stemming from indigenous environmental movements are many and powerful reminders of the possibilities of applying environmental care ethics in practical political realms".⁵² While not an explicitly Indigenous environmental movement, solarpunk does overlap and resonate with many of the ideas. One example of a practice by solarpunk that aims to resist ecological decline, is that of degrowth, which "is a growing discourse that challenges the hegemonic nature of growth in

⁵² Whyte, Kyle P., and Chris Cuomo. "Ethics of Caring in Environmental Ethics: Indigenous and Feminist Philosophies." In *The Oxford Handbook of Environmental Ethics*, edited by Stephen M. Gardiner and Allen Thompson. Oxford Handbooks Online. Oxford University Press, 2017. <https://doi.org/10.1093/oxfordhb/9780199941339.001.0001>, 237.

the global economy”.⁵³ In solarpunk’s aim towards post-scarcity anarchism, degrowth is one way towards this goal which will require drastic institutional economic change, “however, it will require less than the complete social reconstruction to achieve post-scarcity anarchism”.⁵⁴ The elementary ideas that are presented through the common phrase ‘reduce, reuse, recycle’ are pushed to the limits in this conception, often involving the additional words; repurpose, repair, and restrict, among others. Solarpunk encourages people to strategically think about their consumption, what it means for the corporations or businesses that they are supporting, and also for the environment. This means that “[s]ustainability, then, in the way that solarpunk might utilize it, would encompass this radical rethinking, including a reverse of the logic of domination and exploitation that imbricates not only interhuman relationships but also interspecies ones”.⁵⁵ While solarpunk does not explicitly encourage adopting veganism, it follows from its motivations that this may be a way to engage with other sentient creatures as also worthy of care and support.⁵⁶

There are two main spheres of implementation that solarpunk focuses on: the community level and the individual level. Beginning at the community level, while an entire restructuring of our societies has been identified as a dire need, it is unlikely that it will happen in an organized and systematic way. Thus, community engagement becomes the closest and most effective way to address issues and implement change at a large enough scale that still makes radical change on the societal

⁵³ Gillam, “A Solarpunk Manifesto: Turning Imaginary into Reality,” 4-5.

⁵⁴ *Ibid*, 5.

⁵⁵ Walther, “Solarpunk – Between Aesthetics and Activism,” 174.

⁵⁶ An exploration of veganism as a form of care lies beyond the scope of this paper. For more on this see: Hamington, Maurice. “Chapter 8: Veganism and Post-Human Care.” In *Revolutionary Care: Commitment and Ethos*, 178–99. S.l.: Routledge, 2024. <https://doi.org/10.4324/9781003368625>. See also: Curtin, Deane. “Toward an Ecological Ethic of Care.” *Hypatia* 6, no. 1 (1991): 60–74. <https://doi.org/10.1111/j.1527-2001.1991.tb00209.x>.

level plausible. There are many ways that solarpunk values get implemented at the community level such as co-ops, community gardens, and citizen assemblies. Even something as simple as conversing with one's neighbours can be an expression of solarpunk values. Community action usually takes place in response to catastrophic events, such as natural disasters. However, community care can be re-thought to see "caring as a longer-term temporal development, not an on-off switch".⁵⁷ Creating connections in one's community can be a way to cultivate connections that otherwise may not have been formed. Supporting local institutions such as libraries, community centres, and farmer's markets can be a way to foster the spirit of solarpunk. All these interactions also display a care ethical approach for relationality, not just between individuals, but between individuals and the community at large. Communities, as exemplified here, are not to act as isolated pods of resources scattered around the world. Relying on others is not a deficit and cannot be captured purely by a contractual theory of relations; if anything, this further solidifies solarpunks embodiment of care theory, highlighting the intrinsic interdependence of humanity.

Communal action is not the only kind of action that is necessary for adopting a solarpunk lifestyle. Implementation at the individual level and within one's private life is also a driving force for revolutionary impact. While it can feel isolating and pointless to implement efforts to create change at the individual level, these practices can be rewarding in and of themselves, while also taking strides to inspire larger scale change. Some of these practices at the individual level include sustainable and eco-friendly living, skill-sharing, and supporting mutual aid. What forms of individual action does solarpunk promote? Within solarpunk, there is the idea of permaculture, which is the emphasis of human activity within natural surroundings. The three main principles of permaculture are earth care,

⁵⁷ Schaffer, "Care Communities: Ethics, Fictions, Temporalities," 530.

people care, and fair share.⁵⁸ This is often used in tandem with solarpunk to emphasize the caring aspects that solarpunk embodies. Another form of individual radical action that is often associated with solarpunk is guerilla gardening. Guerilla gardening is the act of planting native flowers and plants in unoccupied public areas to encourage biodiversity in often scarce and barren environments, such as roadblocks and construction sites.⁵⁹ Even these practices while seemingly isolated, contribute to the wider ethos that solarpunk implements. These isolated practices play into what Hamington describes as ethos co-creating a moral identity. He asserts that “[e]thos suggests a dynamic triangulation between one’s moral performance, society’s moral norms, and moral self-identity. Accordingly, ethos offers a postmodern deconstructive element that blurs the categorical distinction between the one-caring and the cared-for when applied to the caring relation.”⁶⁰

Perhaps individual action can feel counterintuitive to the concerns that were previously noted by the TikTok account *thesolarpunkfarmlet*, who voiced that they promote self-sustenance over self-reliance due to the individualistic attitude that the latter represents. This distinction, I believe, is more so to do away with the connotations that ‘reliance’ holds. Self-reliance would promote one to close themselves off from a community, perhaps shelter themselves away and not trust or rely on anyone but themselves for their needs. This idea would also contradict care theory as there would be no care in this case. Rather, the emphasis on self-sustenance inspires the idea of sustaining oneself, which is

⁵⁸ See “Parkrose Permaculture - YouTube,” n.d. <https://www.youtube.com/>.

⁵⁹ See Davies, Rachael. “Guerrilla Gardening: The Purest Form of Climate Rebellion.” euronews, 16:45:28 +02:00. <https://www.euronews.com/green/2022/08/25/what-is-guerrilla-gardening-and-how-does-it-help-the-climate> & Gayle, Damien. “‘I Call It Botanarchy’: The Hackney Guerrilla Gardener Bringing Power to the People.” *The Guardian*, September 28, 2023, sec. Environment. <https://www.theguardian.com/environment/2023/sep/28/i-call-it-botanarchy-the-hackney-guerrilla-gardener-bringing-power-to-the-people>.

⁶⁰ Hamington, Maurice. *Revolutionary Care: Commitment and Ethos*. 1st ed. Routledge, 2024. <https://doi.org/10.4324/9781003368625>. 93.

not to say that this cannot be done through interacting within a community. You could sustain yourself by shopping for produce at a local farmer's market, growing your own food, sharing ingredients between neighbours, making your own recipes, and other methods. By using the term "individual", I aim to capture the actions that an individual takes, perhaps in connection to the wider community, divorced from the connotations within liberal political theory of the individual as sovereign and not deeply connected to anyone, except through explicit contracts made with others for mutual benefit. Capitalistic hierarchies do not want to recognize communitarian action and these storylines "are often erased in favor of popular narratives about authority or individual acts of heroism, because those authority driven and masculinist narratives reinforce the necessity of hierarchies..."⁶¹ that the actions of solarpunk attempt to undermine. Solarpunk therefore exemplifies many of the key principles of care ethics and frames them into implementable actions, including a rethinking of what it means to be an individual within a collective, capable of thought and action.

For all the good that solarpunk aims to contribute to the world, there are some concerns with the implementation of solarpunk and its conceptual foundations. One concern is solarpunk's utopian origins, which signal practicality and feasibility concerns when we apply it socially. Derived from the literary genre and often categorized as a work of a sub-genre of science fiction, solarpunk also earns itself a place amongst speculative fiction, as do most works where a conception of the future state of the world, whether utopian or dystopian, find themselves. Seeing future worlds in this way, they can then be developed as goals that governance systems can aim to strive for.⁶² Rather than lay on the side of despair, solarpunk provides us with goals that we aim towards in our choices and decisions.

⁶¹ Hayes and Kaba, "Let This Radicalize You," 66.

⁶² Ibid.

Although solarpunk circulates as a literary genre most prevalently, it was always “meant to be a societal goal; not just a tool for fiction, but as a commentary on a new possible future”.⁶³ Solarpunk can also be categorized as a cultural formation, where we are able to “...utilize utopia not as a finite goal, by rather ... as an educational enterprise and process which ought to teach that *more* and *other* is possible, that to dream is not a flaw, and to reach for dreams is not lunacy”.⁶⁴

Utopian worlds are often seen as unrealistic realities to even consider, since they tend to focus solely on the positives that the world creates, yet:

solarpunk also at times counterbalances that optimism with a sense of ambiguity, acknowledging that the foundation from which such imaginaries operate (and against which it seeks to engender such optimism) is necessarily imbricated in the contemporary anthropogenic destruction of the planet. The desire it seeks to evoke is clear: a sustainable world marked by inclusivity and hope. Yet such changes are, in many respects, anathema to today’s corporatized world; and even for eco-conscious people, circumstances can make it seem difficult or even impossible to reach for hope. Thus, in the current climate of despondency, as well as endlessly deferred ecological and social responsibility, the radical difference these visions represent becomes increasingly important - not as a mere rebuttal to the dystopian critiques of ecological apocalypse, but in support of them, combatting anthropogenic ills from multiple angles.⁶⁵

If we are to see solarpunk as a social movement, we run the risk of “the dangers of both an uncritical wish-fulfillment and a capitalist incorporation might find themselves perpetuated with an ecological inflection that shows much beauty but has little muscle”.⁶⁶ I find that this concern may be a little outdated, considering how much solarpunk has grown beyond just a literary genre, especially in

⁶³ Ibid, 2.

⁶⁴ Walther, “Solarpunk – Between Aesthetics and Activism,” 171. Emphasis original.

⁶⁵ Ibid, 170-1.

⁶⁶ Ibid, 178.

recent years with the advent of COVID-19. People are more attuned to the problems that pervade society and taking on solutions themselves and within their community, which is solarpunk action, even if not by the name. Ecopunk, zero waste living, and sustainable living: there are definite affinities between these movements and solarpunk. For brevity's sake, I believe that so long as we are committed to the values of care that are embodied through solarpunk, what it is called should not matter. so long as we are committed to the tenets here associated with solarpunk, but also by other movements, it will still be a worthwhile endeavour. The name of the movement matters less than the impact that it has. The same can be said for care theory as well, where much care work occurs not under the classification of an explicit mobilization of 'care theory'.

This concern connects back to the criticism of care theory that was presented in chapter two. The issue of relativism creeps into solarpunk when faced with implementing it on a social and political level. Similarly to care theory, it can be seen as an ambiguous practice that also requires more people to participate to enact it. As Crigger states of care theory, there are no absolutes on which to base a moral decision which in turn can lead to immoral decisions. The upshot of solarpunk is just that there are no absolutes or 'right ways' to be a solarpunk. Solarpunk offers a resolution to this concern of care ethics by providing a plethora of options rooted in real-life situations. Interests and skills are prioritized and made relevant with solarpunk. As stated in *The Solarpunk Manifesto*, "[s]olarpunk embraces a diversity of tactics: there is no single right way to do solarpunk. Instead, diverse communities from around the world adopt the name and the ideas and build little nests of self-sustaining revolution".⁶⁷

⁶⁷ Flynn, Adam. *A Solarpunk Manifesto (English) – ReDes – Regenerative Design*. n.d. <https://www.re-des.org/es/un-manifiesto-solarpunk/>.

It has been shown how the subgenre of solarpunk embodies and expands upon care theory and is an attainable goal for society to work towards. Through environmental stewardship, community- building, and sustainable technologies, solarpunk expands upon care ethics and shows how it can be implemented while maintaining the core values of care theory. Care ethics is entrenched within the ethos that solarpunk stands for and as such, is a prime example of how to mobilize these values and put them into practice. Where care theory does not enforce ‘rule-based’ maxims, solarpunk inspires the kind of ethos that can guide our actions towards what is right, not just for us, but for others, whether human or otherwise. It recognizes that “[e]nmeshed as we are in networks of obligation, gratitude, and assistance, we need to recognize our own profound social ties”.⁶⁸ We all come from somewhere and may all not share the same values. Solarpunk offers solutions to many different and far-reaching concerns, but of course it may not be a case where one size fits all. Alternatives to solarpunk such as technofascism/technocracy or liberal growth economics to the point of collapse, are clearly no better. We must try to change things, and for solarpunk:

there is potentially a reciprocal influence between literary output and activism that is worth exploring, as the genre’s interplay with utopian and dystopian environmental discourse asks the question of how this particular kind of worldmaking, which is predicated on social justice, technology, and sustainability ... can aid or interact with the actual world, either through inspiring activism and systemic revolution, or by seeking to inculcate a lasting behavioral change - on a personal but also societal level.⁶⁹

Therefore, it is imperative that we continue to take small steps towards the kind of hopeful future that solarpunk envisions, while reflecting upon what may not work in our efforts. The practice of care

⁶⁸ Schaffer, “Care Communities: Ethics, Fictions, Temporalities,” 522.

⁶⁹Walther, “Solarpunk – Between Aesthetics and Activism,” 176.

may not always be perfect, and by reflecting as we go, we can get a better understanding of what our care is capable of accomplishing.

This chapter analyzed the social and political dimensions of the solarpunk movement, framed by the five main themes of care theory that Engster and Hamington outline, showing how solarpunk both embodies and expands care ethics. It also responded to the critique that was introduced of care theory in Chapter two. The next chapter turns from a general description of solarpunk to a central figure of cyberpunk and solarpunk imaginaries that has become a social reality—the cyborg. It will analyze cyberfeminism’s attempts to subvert dominating powers in cyberspace and contend that the cyborg allows this work to occur in the embodied world as well. I will argue that the cyborg is the ultimate caregiver, useful for not just solarpunk but also giving back to care theory a novel way of exploring what our methods of care are capable of.

Chapter 4

Cyborgs For Earthly Survival!

This chapter will analyze the cyborg in feminist theory as well as the cyborg in cyberpunk moving to solarpunk, ultimately showing that solarpunks cyborg is the ultimate caregiver.

While solarpunk is now commonly viewed as a social movement, its roots in literature are vital for understanding its motives. Solarpunk literature operates out of science fiction, which is used to imagine possible future worlds. As discussed in the Introduction, solarpunk is closely related to the subgenre of cyberpunk and its similarities do not end at their shared origins. Cyberpunk fiction endorsed the idea of cyborgs since its conception in stories such as *Neuromancer* (1984), *Do Androids Dream of Electric Sheep* (1968), and *Ghost in the Shell* (1995). Cyborgs are often depicted as human organisms coupled with technology, whether this be physical robotic apparatuses or implanted technologies – essentially any organic material coupled with the artificial and technological technically satisfies the conditions for a cyborg. The word ‘cyborg’ is a partnership between the prefix “cyb” to denote cybernetic aspects and “org” of organic. Cyborgs often play a central role in cyberpunk stories as they offer the opportunity to create novel commentary on the coupling between humans and technology. Stories of this kind rose to popularity in the middle of the 20th century and became the crux of the growing field of cyborg theory. This theory is mostly attributed to Donna Haraway’s 1980 essay *A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century*, where she employs the idea of the cyborg as a social mapping of human organism coupled with technology, to portray the possibility of transcending misogynistic, sexist, and oppressive patriarchal traditions and structures. This work will be further explored in this chapter by looking at the idea of the cyborg as has been utilized in feminist thought and in cyberpunk. This

chapter will analyze the shift in how the cyborg is conceptualized when moving into solarpunk and what this in turn lends back to feminist thought and conceptions of care.

‘Cyberpunk’ and ‘feminism’ may not be seen as terms that work in tandem since the majority of science fiction has been dominated by men.⁷⁰ However, beginning in 1980 the feminist movement of cyberpunk can be traced through two main subdivisions of time. The first between 1980 to 1990 was largely characterized by the masculinist sense of cyberpunk and the ways in which primarily male authors would write of female cyborgs which were mostly artificial intelligences and disembodied beings; a technological territory to be conquered by men.⁷¹ From 1990 until 2005 there was a shift in the representational politics of cyberpunk women which can most notably be attributed to cyberfeminist theory. Cyberfeminism is the approach of feminism within the realm of cyberspace, digital landscapes, and technology. Much of cyberfeminism is marked by Haraway’s *Cyborg Manifesto* as well as other contributing work by Sadie Plant and Rosi Braidotti. A common thread through each of these thinkers’ approaches that can be traced also in solarpunk is that they all embraced a common ethos of liberation from patriarchal control through the employment of machine integration with the body.⁷² The usage of the cyborg as a tool for liberation thus proves to be an important undertaking for solarpunk as well, in order to view how this identity along with our own is impacted by the integration of technology.

In the early feminist debates regarding cyberpunk’s cyborgs, the approaches were generally divided into two theoretical views, one which aimed to feminize the technobody and by extension, the

⁷⁰ Clute, John, and Peter Nicholls, eds. *The Encyclopedia of Science Fiction*. St. Martin’s Press, 1993. 1343.

⁷¹ Alejandro Rivero-Vadillo, “Solarpunk Cyborgs against Cyberpunk’s Pessimism: The Evolution of the Feminist Cyborg Archetype from Moxyland, to ‘Solar Child’ and ‘For the Snake of Power,’” *REDEN. Revista Española de Estudios Norteamericanos* 4, no. 2 (May 15, 2023), <https://doi.org/10.37536/reden.2023.4.2062>. 1.

⁷² Ibid.

technologized space for feminist purposes, and another based primarily on Haraway's manifesto.⁷³ This second approach views the cyborg as a tool for liberation from imposing patriarchal structures. The cyborg does not occupy a unitary place, it is comprised of both organic and artificial apparatus, meaning that it resists the limitations imposed by being one or the other – it embraces the multiplicity of its components which add up to create its identity. As Haraway states:

[t]he cyborg is a creature in a postgender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity. In a sense, the cyborg has no origin in the Western sense – a “final” irony since the cyborg is also the awful apocalyptic *telos* of the “West's” escalating dominations of abstract individuation, an ultimate self untied at last from all dependency, a man in space.⁷⁴

The cyborg, for Haraway, breaks down several other binaries that reinforce Western thought and politics, including the distinction between nature and culture, nature and technology, subject and object, whole and part, public and private, civilized and primitive, and creator and created. Embracing one's cyborg identity can lead to an empowered acceptance of personal epistemologies and contribute towards a greater understanding of what our unique perspectives bring to a wider social understanding and production of knowledge. It is important to think “through these relationships between normativity, difference, and technology through a focus on queer as both lived experience and theoretical perspective”.⁷⁵ This way, efforts can be made to not only address the harm that technology poses in the material sense of technological usage, but also in the hypothetical imaginings that come from knowledge production. Cyberfeminism acts as an umbrella to queer

⁷³ Ibid. 3.

⁷⁴ Donna Jeanne Haraway, *Manifestly Haraway*, Posthumanities 37 (Minneapolis: University of Minnesota Press, 2016). 8.

⁷⁵ Cockayne and Richardson, “A Queer Theory of Software Studies.” 1591.

identities which undergo much of the same exclusions that cisgendered women experience, which is why it is often worked with through cyberfeminism.

This second approach will be the one of prominence here because it has been arguably the most influential contribution to the image of cyborgs and also most closely aligns with the usage of cyborgs and cyborgism in solarpunk. Although solarpunk as an imagined reality does not tend to feature any equivalent to ‘cyberspace’ – that is technologized space –, there are some features of this realm that will be discussed in some detail further on in the chapter. Of main interest here is the theoretical dimensions of the cyborg, how this informs knowledge production in congruence with solarpunk, and what this lends back to an ethics of care.

I shall begin with a discussion of the motivations of the cyborg as a technological tool for knowledge production. I see Haraway’s “Cyborg Manifesto” working alongside her essay “Situated Knowledges”, as both frame power and its instrumentality to knowledge and technology. This is vital for discussing how cyborgs move in solarpunk since the origins of the cyborg is one dominated by men and most large-scaled, industrialized forms of technology follow this same lineage. Donna Haraway’s essay “Situated Knowledges” calls for a practice of positioning that attends to power relations in terms of the process of knowledge production, with an emphasis on power relations within science and technology, since they act as the precipice of empirical knowledge. It remains one of the seminal works which has informed standpoint theory – the examination of how an individual’s perspective emerges when critically examined against dominant epistemological perspectives, and how this in turn influences their knowledge and understanding of the world. Standpoints are beyond mere perspective and are neither purely perceptual nor experiential. They are what can be constructed out of perspectival differences based on social location. Standpoint comes from differential

experiences along with a great deal of critical work to identify these differences as epistemically significant.

When we face technology, it becomes apparent that it institutionalizes a conception of normativity which implicitly subjugates those of deviant identities — who depart from the norm established by those who created the technology, —: namely, white, heterosexual, cisgender males. This is the supposed ‘neutrality’ that is assumed by technology. Non- white, non-heterosexual, and non-cisgendered men, are the “embodied others”, a division that is both coded within and enforced by technology. Knowledge is not up for just anyone to define. It is only those individuals whose identities align with the dominant epistemologies, that possess the power to define what constitutes true knowledge, and objectivity by extension. Haraway undertakes the problem of objectivity, concluding that, “[f]eminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. It allows us to become answerable for what we learn how to see”.⁷⁶ This work by Haraway sheds light on the problems that arise when science and technology are defined as universal — a universality that masks the privileging of a limited set of perspectives. It is by obstructing diverse spatial and temporal bodies within technology that an overarching and dominating definition of science and technology treats these bodies as neutral and ubiquitous.⁷⁷ To claim that technology is universal, is to deny locality of marginalized groups, who are not represented through both its conception and sustainment. Much like the movements we make in physical space, those in cyberspace also manifest subtle cues within social practices and allow us to

⁷⁶ Donna Haraway, “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective,” *Feminist Studies* 14, no. 3 (1988): 575, <https://doi.org/10.2307/3178066>. 583.

⁷⁷ Daniel G. Cockayne and Lizzie Richardson, “A Queer Theory of Software Studies: Software Theories, Queer Studies,” *Gender, Place & Culture* 24, no. 11 (November 2, 2017): 1587–94, <https://doi.org/10.1080/0966369x.2017.1383365>. 1588.

observe how both privilege and power make themselves at home within interactions. This exhibits how bodies become marked by difference, whether that be “—race, gender, geography, literacy, sexuality, physical ability—and marginalized at the expense of sanctioned or encouraged practices”.⁷⁸

Technological literacy is an enormous marker of these divisions, where understanding and basic skills needed to use technology are often provided through institutions, where many do not have the privilege to attend. Even with those of us who do possess the privilege to have learned basic technological literacy and who also have access to these machines, there is an alarming distance between our understanding and all which encompasses the devices around us. For example, in online social media profile creation, we each find ourselves situated in our own socio-cultural contexts, much like what is highlighted by standpoint theory, as we each attempt to translate ourselves across to the computer interface. We must speak a language that the computer understands, a language that was written by the dominating powers who did not have us in mind when they created it. We attempt to communicate in a way that allows our identities to be captured through an (in)visible code that frames this interaction.⁷⁹ This is the main struggle that is presented to us at face-value when we interact with technologies such as social media. However, further issues lie behind the screen and are proliferate in our society of surveillance as profile creation provides a succinct catalogue to organize and arrange every singular person from within the multitude. Our online classifications are stored in a database not privy to us, for constant monitoring and supervision as a way to regulate our virtual movements.⁸⁰ Social media and similar modes of online profile creation, therefore strive “to identify, classify,

⁷⁸ Radhika Gajjala, Natalia Rybas, and Melissa Altman, “Racing and Queering the Interface: Producing Global/Local Cyberselves,” *Qualitative Inquiry* 14, no. 7 (October 2008): 1110–33, <https://doi.org/10.1177/1077800408321723>. 1131.

⁷⁹ Ibid. 1110.

⁸⁰ Ibid. 1115.

compare, differentiate, and homogenize the individuals who join the network, according to multiple categories: favorite movies, political views, birthdays, partnerships, political views, and others”.⁸¹ In the act of creating an online profile, one must immediately define themselves through preset parameters which are taken and stored as data against us. This proliferates the regulation and control that technology has over us. By transmitting ourselves into cyberspace, “a distance—both spatial/physical and between the mind/body—is created between the typist and subject typed into existence in such an encounter”.⁸² However, the usage of technology in solarpunk imaginaries do not exhibit these same limitations. This is because the domination of technology that is prevalent in a genre such as cyberpunk has been reworked. Rather, drawing from anti-establishment narratives, technology and its use is taken up by people, not corporations.

Here I wish to highlight the concerns of relying on a strict technological use of the cyborg when observing the shift to solarpunk. Technology is a core feature of solarpunk, one which needs to be approached carefully to avoid translating the same powers of domination into this new reality. While solarpunk is inspired by renewable technologies and is not dependent on the predominantly digital technology that we utilize today, it seems unlikely that we would completely abandon the use of digital technologies as opposed to using those technologies for new goals. However, these technologies would need to undergo certain shifts in energy sources to maintain commitment to maintaining sustainability. Haraway herself introduces a more updated version of the cyborg in *Staying with the Trouble: Making Kin in the Chthulucene* in which she makes explicit that the cyborg identity is not reliant upon technology — widening the classification of the cyborg into what could be

⁸¹ Ibid. 1117.

⁸² Ibid. 1119.

considered a (bio)cyborg.⁸³ This clarification in turn allows “solarpunk [to] take the idea of ecologically connecting with the non-human biotically (through connection with nonhuman life) or abiotically (through high or low non-organic tech).⁸⁴

Within *Situated Knowledges*, Haraway makes an argument for a reclamation “that metaphorically emphasizes vision again, because we need to reclaim that sense to find our way through all the visualizing tricks and powers of modern sciences and technologies that have transformed the objectivity debates”.⁸⁵⁸⁶ In critical analyses of this type, issues arise as to who speaks for technology, and as a result, who is spoken for by technology.⁸⁷ It is when technology claims to be a neutral party, that it generates and commits harm upon the marginalized groups under which it exploits. In our society, technology can be seen to mimic the overarching eye in the image that Haraway evokes. In the way that she intends to reclaim the metaphor of vision once more, the same can be said of technology. As she posits, “[v]ision is always a question of the power to see-and perhaps of the violence implicit in our visualizing practices. With whose blood were my eyes crafted?”.⁸⁸ Technology works in a similar vein, especially in our heightened surveyed society. The power inherent in these technologies is marketed to serve people equally, however we can observe

⁸³ Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene*. Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices. Duke University Press, 2016.

⁸⁴ Rivero-Vadillo, Alejandro. “Solarpunk Cyborgs against Cyberpunk’s Pessimism: The Evolution of the Feminist Cyborg Archetype from Moxyland, to ‘Solar Child’ and ‘For the Snake of Power.’” *REDEN. Revista Española de Estudios Norteamericanos* 4, no. 2 (2023). <https://doi.org/10.37536/reden.2023.4.2062>. 9.

⁸⁵ There exist some disability critiques of Haraway’s posthumanism and approach to embodiment more broadly construed which cannot be given adequate assessment in this work. Thinking about the cyborg alongside disability and crip theory is a site of great possibility – one that due to constraints, I do not have space to develop in this work, but I am interested in developing this work further. For more on a disability reading of Haraway’s cyborg, see: Kafer, Alison. *Feminist, Queer, Crip*. Indiana University Press, 2013.

⁸⁶ Haraway, “Situated Knowledges.” 582.

⁸⁷ Cockayne and Richardson, “A Queer Theory of Software Studies.” 1588.

⁸⁸ Haraway, “Situated Knowledges.” 585.

that this is not the case. The ones being served are the ones that the systems were designed for – those in the dominant positions of society.

Cyberfeminism, can be seen as attempting to show, “how gender is problematized or queered in cyberspace, while questioning the extent of such queering—and considering its cost”.⁸⁹ It is but one way to synthesize Haraway’s idea of situated knowledges, where social communities are sheltered from the overt essentialist notions that claim ownership over a universalized experience of what it means to be a woman. Rather, “these knowledges are circumstantial, particular to a specific position within and breaking from existing infrastructures”.⁹⁰

I see solarpunks’ cyborg as a conduit of care. It is the embodiment of hope that has been taken from cyberpunk cyborgs techno-defeatism, back onto a path towards optimism. Solarpunk envisions a future where technology and environmentalism go hand-in-hand, and who better to hold this symbiosis than the cyborg? Cyberfeminism attempts to subvert the dominant powers in cyberspace, where solarpunk does not have an equivalent or much use for this realm. The solarpunk cyborg therefore offers a way to hold both care for technology and care for the environment on the same level. Solarpunks’ cyborg cares about the future, it cares for marginalized voices, and it cares for the environment. It is also a tool that can be used alongside cyberfeminism to subvert the powers of domination in the places that cyberfeminism cannot reach, the embodied world.

A critique that can be raised against cyberfeminism, is that by interacting with the oppressive powers of cyberspace, we cannot build progressive or empowering results under the

⁸⁹ Bela Bonita Chatterjee, “Razorgirls and Cyberdykes: Tracing Cyberfeminism and Thoughts on Its Use in a Legal Context,” n.d. 204.

⁹⁰ Juliana Luchkiw, “Situating Glitches: Networks of Knowledge Production,” n.d. 7.

subversions that technology inherently impose upon us. Concerns of this kind argue that working with cyberspace only serves to repeat the same Cartesian themes of mind/body dualism, transcendence, and technology being coded as masculine.⁹¹ It is further argued that cyberspace is not the ‘postgender utopia’ that Haraway describes for the cyborg⁹², but that cyberspace and technology enforce gender binaries just as much or even more so than in the physical sphere. As Kira Hall points out:

Rather than neutralizing gender, the electronic medium encourages its intensification. In the absence of the physical, network users exaggerate societal notions of femininity and masculinity in an attempt to gender themselves. Gender may well be an unfortunate dichotomy, as postmodern virtual theorists argue, but cyberspace is generating goddesses and ogres, not cyborgs.⁹³

Going back to the creation of online profiles for example, this system encourages gendered categorization and division with the selection of gender upon signing up, and similar with a multitude of other services. Not only this, but through simply interacting with technologies one is inherently being funneled through a structure of oppression, which promulgates the ideology of the straight, white, male.

While this critique raises fair concerns, it also remains silent on the structures of domination that marginalized groups such as women, and the queer community have been working tirelessly to combat. Rather than submit to the oppression imposed by technology, what I argue, and what I believe cyberfeminism can do, is reclaim the power of the tool that attempts to subvert marginalized groups as a space of empowerment. This idea, as argued by Juliana Luchkiw, posits that

⁹¹ Chatterjee, “Razorgirls and Cyberdykes: Tracing Cyberfeminism and Thoughts on Its Use in a Legal Context.” 198.

⁹² Haraway, *Manifestly Haraway*. 8.

⁹³ Kira Hall, “Cyberfeminism,” in *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*, ed. Susan C. Herring, Pragmatics & Beyond, new ser. 39 (Amsterdam; Philadelphia: J. Benjamins, 1996), 147–70. 167.

“[f]eminist and queer productions of knowledge and interventions into digital platforms can disturb identity, system, and order—they can glitch the system”.⁹⁴ The idea of glitching the system that she presents is a powerfully pervasive one, since it reclaims the identities that are subjugated under the order of technology and reframes them in a way that provides power back to them. A glitch “can emerge spontaneously from the programming of the machine, but it can also be intentionally provoked and programmed by humans. In this sense, relating to glitches embraces failure and alludes to randomness, fragmentation, error, helplessness, the unexpected, and machine-driven processes”.⁹⁵ Glitches also refrain from a stationary position against technology, much like the pervasiveness of queerness, which

[i]s not stagnant, but porous, mutable, existing in a space outside of the dominant norm. It breaks from the rationalized schema that builds a taxonomized hierarchy, according to function, in order to perpetuate (re)production that is beneficial to neoliberalism/capitalism. Technology as well as feminized bodies are entangled in this system—subjugated to ordered regulatory systems and standardized totalities that have been established by White Male hegemony. Within the technological realm, a glitch resists functional norms by embodying “failure”—that something has gone wrong...⁹⁶

Much like the idea of the cyborg that Haraway leverages, glitches function against the dominating program, although they are still a by-product and somewhat reliant upon its existence, they transcend the power to obey, much like cyborgs do as “the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism”.⁹⁷ However, “illegitimate offspring are often exceedingly unfaithful to their origins. Their fathers, after all, are inessential”.⁹⁸ Luchkiw

⁹⁴ Luchkiw, “Situating Glitches: Networks of Knowledge Production.” 1.

⁹⁵ Ibid. 3.

⁹⁶ Ibid. 4.

⁹⁷ Haraway, *Manifestly Haraway*. 9-10.

⁹⁸ Ibid.

frames glitches in a similar way, stating that “[a]lthough science and technology are the products of capitalism, militarism, colonialism, racism (etc.) and their insistent male domination, cybertechnology has liberating possibilities”.⁹⁹ Technology pushes “...troubling dualisms [such as] self/other, mind/body, culture/nature, male/female, civilized/primitive, reality/appearance, whole/part, agent/resource, maker/made, active/passive, right/wrong, truth/illusion, total/partial, God/man”.¹⁰⁰ It is these dualisms that both the cyborg and glitches can rise beyond since glitches bring attention to the constructed apparatus. Glitching can be seen as a form of resistance, going against the dominating structure, and providing the ability to open a line of critique against the system from which it breaks.¹⁰¹ This effort of glitching is one I believe cyberfeminism most effectively undertakes. As we “struggle to individually articulate selves in these contexts, the coded interface permits, shapes, and disallows subject positions. As cyberfeminists, we negotiate the given technological infrastructures through attempts to subvert code and context in technical and social terms”.¹⁰² Re-imagining ourselves in the digital world and conceptualizing how we interact with it, can provide useful insights into what we want these spaces to do for us. It also allows us to situate our knowledge of the physical world within these digital landscapes, which have aimed to oppress us upon their conception. Technologies are instruments used to enforce meanings¹⁰³, and it is only by using technology to carve out our own meanings within them that we can use them to empower and create spaces for those identities they refuse to serve.

⁹⁹ Luchkiw, “Situating Glitches: Networks of Knowledge Production.” 6.

¹⁰⁰ Haraway, *Manifestly Haraway*. 59-60.

¹⁰¹ Luchkiw, “Situating Glitches: Networks of Knowledge Production.” 4.

¹⁰² Gajjala, Rybas, and Altman, “Racing and Queering the Interface.” 1111.

¹⁰³ Haraway, *Manifestly Haraway*. 33.

I contend that the idea of the cyborg and glitches, are but two ways that cyberfeminism can be visualized and synthesized within the usage of technologies around us. By positioning the unique standpoint of marginalized groups such as women and the queer community, cyberspace can be altered as a transformative landscape for creation, transmission, and protection of the knowledge of these groups. While this work is tackled in cyberspace, the physical embodiment of technology needs a solution as well. This is where solarpunks cyborg comes in. In settler capitalist Western culture, patriarchy and white supremacy largely shape and control how technology is developed and used which generates technological hegemony that aims to marginalize those who do not adequately fill the subject position it has created – in other words, segregation of those who are not worthy to control the code.¹⁰⁴ Cyberfeminist approaches to technology offer a valiant undertaking that aims to re-code the dominating structure implemented within technologies and create space for the standpoints that were missing in its conception.

With care, solarpunk encourages us to blur boundaries between embodiment and technology that are prominent in cyberpunk. The solarpunk cyborg blurs the boundaries between body and machine, following the blurring of boundaries undertaken by care theory. Whereas cyberpunk cyborg's main location is cyberspace, solarpunk mostly abandons this location as a place of subversion, although some techno-human alliances embodied by cyborgs remain. The model of the cyborg has mutated since its origins, which were techno-optimistic, turning to the post-cyberpunk techno-defeatism; solarpunk brings the cyborg back as a piece of techno-optimism. There are two ways that cyborgs get portrayed within solarpunk, and thus influence representations of female

¹⁰⁴ Luchkiw, "Situating Glitches: Networks of Knowledge Production". 9

cybernetic subjectivities.¹⁰⁵ The first is the more classic usage; a literal techno-body of both human flesh and machine where there lies symbolic power in the physical communion between organic and inorganic matter. The second is a new conception that gets introduced in solarpunk, which can be called the ‘post-cyborg’ representation of women. This is marked by a physical collaboration between a STEM technician and the machine that they operate, for example, and reflects a more realist approach toward cyberfeminist politics and ontologies.¹⁰⁶ ¹⁰⁷ The feminist cyborg body is inherently a queer one since the “deconstruction of the biological body through technology opens up the eventual deconstruction of sexual and gender identity paradigms”.¹⁰⁸ However, this alliance between cybernetics and (queer) feminism may be problematic for environmentalism as “cyberfeminist discourse becomes seemingly incompatible with environmental protection since for feminist liberation to be catalyzed techno-industrial and capitalist infrastructure must support human’s desire to escape their biological body, sexualities, and gender concerns”.¹⁰⁹

This concern, I believe, can be mediated by care ethics implemented alongside solarpunk. If we are to attend to a practice of caring such as exemplified by Hamington, in which we are committed not to a theory of care but a methodology, then concerns such as this which are founded upon widespread doctrines, become manageable. To claim an ethos is to make or participate in a moral commitment of a community without it needing to be in a narrowly prescribed manner.¹¹⁰

¹⁰⁵ Ibid. 4.

¹⁰⁶ Ibid.

¹⁰⁷ For examples of these two kinds of cyborgs in solarpunk fiction, see page 6 of Rivero-Vadillo, Alejandro. “Solarpunk Cyborgs against Cyberpunk’s Pessimism: The Evolution of the Feminist Cyborg Archetype from Moxyland, to ‘Solar Child’ and ‘For the Snake of Power.’” *REDEN. Revista Española de Estudios Norteamericanos* 4, no. 2 (2023). <https://doi.org/10.37536/reden.2023.4.2062>.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid. 5.

¹¹⁰ Hamington, *Revolutionary Care*. 91.

When one acts from an ethos of care, they do not follow prescribed rules for acting in each situation. They are committed to performing care wherever needed. Solarpunk takes the image of the cyborg back from cyberpunks defeatist lens and reframes it in its original optimistic one, while attempting to apply it to the ecological, but still feminist.¹¹¹ Cyberfeminism challenges the essentialist sentiment that is perpetuated by cyberspace and technology as a whole. Technology also has the potential to liberate queer forms of difference from domination. Although modern technologies have not been created to benefit the disempowered, the “present state of cyberstudies poses new questions of embodiment, of (gendered) relationships with technology, and the effects of cyberspace on queer issues such as identity, gender and sexuality”.¹¹² The idea of the cyborg presented by Donna Haraway presents a novel way to think about disenfranchised groups relationship with technology since it acts as, “a kind of disassembled and reassembled, postmodern collective and personal self. This is the self feminists must code”.¹¹³ It is through subverting the technology that aims to oppress us that cyberfeminists can reclaim this sphere as one of empowerment, since at the end of the day, “[t]he machine is us, our processes, an aspect of our embodiment”.¹¹⁴ By connoting a dynamic moral trajectory rather than a fixed one, care ethics’ alignments work well with solarpunks environmental and technological fusion, proving valuable connections and ongoing future for the cyborg.

Since Haraway’s cyborg gives up on the oedipal project and divorces itself from the hierarchies of gender and generation in the *oikos*, it proposes itself as a useful figure precisely because it shows us how we can think about care beyond the *oikos* (private sphere, home, immediate

¹¹¹ Rivero-Vadillo, “Solarpunk Cyborgs against Cyberpunk’s Pessimism.” 15.

¹¹² Chatterjee, “Razorgirls and Cyberdykes: Tracing Cyberfeminism and Thoughts on Its Use in a Legal Context.” 197.

¹¹³ Haraway, *Manifestly Haraway*. 33.

¹¹⁴ *Ibid.* 65.

family). It frees up care from its sole attachment to the *oikos* by making the private more public and vice versa. The cyborg thus becomes a technological solution for expanding the community of care. It provides care for all which encompasses solarpunk–community, social justice, technology, and the environment.

Chapter 5

Conclusion

This project set-out to examine solarpunk futures as a hopeful landscape to enact care theory. It began by tracing the history of care theory from its origins which focused on caregiving, to its political turn, towards a community-oriented approach. This communal approach, I argued, is exemplified by solarpunk as a social and political movement. By examining solarpunks values beyond its origins in literature, it became apparent that solarpunk both embodies and expands upon care theory and its relational approach to morality. It works as an ethos of care as introduced by Maurice Hamington, “establish[ing] the human groundwork for the moral work of care: the spirit and disposition that make care practices possible and desirable”.¹¹⁵ Solarpunk allows us to synthesize our care for technology, social justice, and the environment, into implementable actions. It also inspires us to rethink our connections to these elements and learn what care towards them and using them can achieve.

Then, I analyzed the cyborg, as a tool for feminist thought, and traced its trajectory from an icon of cyberpunk to a figure for cyberfeminism, and finally into how it has been reconceptualized as a caregiver in solarpunk. I believe that this turn towards solarpunk futurity holds immense potential for many fields of thought and that the cyborg image can continue to develop as this future becomes more attainable. The spin that solarpunk adds “on the cyborg figure recovers its original optimism and attempts to apply it to the ecological (but still feminist) concerns of the genre”.¹¹⁶ This lends itself back to care theory by reconceptualizing what it means to extend care beyond relationships, but to our

¹¹⁵ Hamington, Maurice. *Revolutionary Care: Commitment and Ethos*. 1st ed. Routledge, 2024. <https://doi.org/10.4324/9781003368625>. 89.

¹¹⁶ Rivero-Vadillo, Alejandro. “Solarpunk Cyborgs against Cyberpunk’s Pessimism: The Evolution of the Feminist Cyborg Archetype from Moxyland, to ‘Solar Child’ and ‘For the Snake of Power.’” *REDEN. Revista Española de Estudios Norteamericanos* 4, no. 2 (2023). <https://doi.org/10.37536/reden.2023.4.2062>. 15.

technology and environment as well. The cyborg is a powerful figure that can both exemplify care and lend itself as figure in ethics. “Care, flourishing, differences in power, scales of time – these matter for cyborgs”.¹¹⁷

As Donna Haraway states, the boundary between science fiction and social reality is nothing but an optical illusion.¹¹⁸ This project lays the groundwork for what I see as ongoing research into the connections between science fiction and care theory. The cyborg is one generation of the ways to envision a synthesis of care that I believe can be developed further than what has been presented here. Solarpunk as a movement has immense capabilities, ones that I hope to be able to see enacted in the world on a larger scale. Caring for others and the environment has in some sense become radical. My hope is that this can inspire change in our institutions and structures and aid in re-centring our commitments to one another and our planet.

¹¹⁷ Haraway, Donna Jeanne. *Manifestly Haraway*. Posthumanities 37. University of Minnesota Press, 2016. 113.

¹¹⁸ Haraway, Donna. *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 1991. 149.

References

- Balkan, Stacey. "Electric Ladyland: Anticolonial Solarpunk as Infrastructural Resistance in Two Works of Speculative Fiction." *ISLE: Interdisciplinary Studies in Literature and Environment*, July 24, 2024, isae043. <https://doi.org/10.1093/isle/isae043>.
- Chatterjee, Bela Bonita. *Razorgirls and Cyberdykes: Tracing Cyberfeminism and Thoughts on Its Use in a Legal Context*. n.d.
- Cherry, Myisha. "Solidarity Care." PubHub by MSU Libraries, 2020. <https://pubhub.lib.msu.edu/read/solidarity-care/section/05ddcde8-1f13-4f29-88fe-052fe4e49338>.
- Clute, John, and Peter Nicholls, eds. *The Encyclopedia of Science Fiction*. St. Martin's Press, 1993.
- Cockayne, Daniel G., and Lizzie Richardson. "A Queer Theory of Software Studies: Software Theories, Queer Studies." *Gender, Place & Culture* 24, no. 11 (2017): 1587–94. <https://doi.org/10.1080/0966369x.2017.1383365>.
- Crigger, Nancy J. "The Trouble with Caring: A Review of Eight Arguments against an Ethic of Care." *Journal of Professional Nursing* 13, no. 4 (1997): 217–21. [https://doi.org/10.1016/S8755-7223\(97\)80091-9](https://doi.org/10.1016/S8755-7223(97)80091-9).
- Curtin, Deane. "Toward an Ecological Ethic of Care." *Hypatia* 6, no. 1 (1991): 60–74. <https://doi.org/10.1111/j.1527-2001.1991.tb00209.x>.
- Engster, Daniel, and Maurice Hamington, eds. *Care Ethics and Political Theory*. First edition. Oxford University Press, 2015.

Flynn, Adam. *A Solarpunk Manifesto (English) – ReDes – Regenerative Design*. n.d. <https://www.re-des.org/es/un-manifiesto-solarpunk/>.

Flynn, Adam. “Solarpunk: Notes toward a Manifesto – Project Hieroglyph.” <https://hieroglyph.asu.edu/2014/09/solarpunk-notes-toward-a-manifesto/>.

Gajjala, Radhika, Natalia Rybas, and Melissa Altman. “Racing and Queering the Interface: Producing Global/Local Cyberselves.” *Qualitative Inquiry* 14, no. 7 (2008): 1110–33. <https://doi.org/10.1177/1077800408321723>.

Garforth, Lisa. “Environmental Futures, Now and Then: Crisis, Systems Modeling, and Speculative Fiction.” *Osiris* 34, no. 1 (2019): 238–57. <https://doi.org/10.1086/703910>.

Gillam, William Joseph. “A Solarpunk Manifesto: Turning Imaginary into Reality.” *Philosophies* 8, no. 4 (2023): 73. <https://doi.org/10.3390/philosophies8040073>.

Graham, Ruth. *“Voice” of an Era ; What Did Carol Gilligan’s Landmark Book Really Change?* 2012.

Haines, Christian. “Introduction: Hope Through Action—Solarpunk Blueprints, Desires, and Politics.” *Utopian Studies* 35, nos. 2–3 (2024): 462–66. <https://doi.org/10.5325/utopianstudies.35.2-3.0462>.

Haines, Christian P. “Response 3: ‘Unshakeable Want’: Solarpunk, Petromodernity, and the Death Drive.” *Utopian Studies* 35, nos. 2–3 (2024): 508–18. <https://doi.org/10.5325/utopianstudies.35.2-3.0508>.

- Hall, Kira. "Cyberfeminism." In *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*, edited by Susan C. Herring. Pragmatics & Beyond, new ser. 39. J. Benjamins, 1996.
- Hamington, Maurice. *Revolutionary Care: Commitment and Ethos*. 1st ed. Routledge, 2024.
<https://doi.org/10.4324/9781003368625>.
- Hamington, Maurice, and Michael A. Flower, eds. *Care Ethics in the Age of Precarity*. University of Minnesota Press, 2021.
- Haraway, Donna. *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 1991.
- Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575. <https://doi.org/10.2307/3178066>.
- Haraway, Donna Jeanne. *Manifestly Haraway*. Posthumanities 37. University of Minnesota Press, 2016.
- Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene*. Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices. Duke University Press, 2016.
- Hayes, Kelly E., and Mariame Kaba. *Let This Radicalize You: Organizing and the Revolution of Reciprocal Care*. The Abolitionist Papers Series. Haymarket Books, 2023.
- Held, Virginia, ed. *Justice And Care: Essential Readings In Feminist Ethics*. Routledge, 2018.
- Held, Virginia. "The Meshing of Care and Justice." *Hypatia* 10, no. 2 (1995): 128–32.

Hudson, Andrew Dana. "On the Political Dimensions of Solarpunk." *Solarpunks*, September 29, 2021. <https://medium.com/solarpunks/on-the-political-dimensions-of-solarpunk-c5a7b4bf8df4>.

Jerreat, Jerri. "Rules For a Civilization." In *Solarpunk*. Flame Tree Press, 2024.

Kafer, Alison. *Feminist, Queer, Crip*. Indiana University Press, 2013.

Luchkiw, Juliana. *Situating Glitches: Networks of Knowledge Production*. n.d.

Piepzna-Samarasinha, Leah Lakshmi. *Care Work: Dreaming Disability Justice*. Arsenal Pulp Press, 2018.

Rachels, James. *The Elements of Moral Philosophy*. 7. ed. Edited by Stuart Rachels. McGraw-Hill, 2012.

Reina-Rozo, Juan David. "Art, Energy and Technology: The Solarpunk Movement." *International Journal of Engineering, Social Justice, and Peace* 8, no. 1 (2021): 1. <https://doi.org/10.24908/ijesjp.v8i1.14292>.

Rivero-Vadillo, Alejandro. "Solarpunk Cyborgs against Cyberpunk's Pessimism: The Evolution of the Feminist Cyborg Archetype from Moxyland, to 'Solar Child' and 'For the Snake of Power.'" *REDEN. Revista Española de Estudios Norteamericanos* 4, no. 2 (2023). <https://doi.org/10.37536/reden.2023.4.2062>.

"SFE: Solarpunk." <https://sf-encyclopedia.com/entry/solarpunk>.

Tronto, Joan. "There Is an Alternative: Homines Curans and the Limits of Neoliberalism." *International Journal of Care and Caring* 1, no. 1 (2017): 27–43. <https://doi.org/10.1332/239788217X14866281687583>.

Tronto, Joan C. “Care as a Basis for Radical Political Judgments.” *Hypatia* 10, no. 2 (1995): 141–49.

<https://doi.org/10.1111/j.1527-2001.1995.tb01376.x>.

Tronto, Joan C. *Caring Democracy: Markets, Equality, and Justice*. New York University Press, 2013.

Walther, D. “Solarpunk – Between Aesthetics and Activism.” *Anglistik* 35, no. 1 (2024): 163–81.

<https://doi.org/10.33675/ANGL/2024/1/15>.

Weik Von Mossner, Alexa. “Wish We Were There: Hope, Desire, and Utopian Community in Contemporary Solarpunk.” *Utopian Studies* 35, nos. 2–3 (2024): 467–89.

<https://doi.org/10.5325/utopianstudies.35.2-3.0467>.

Whyte, Kyle P., and Chris Cuomo. “Ethics of Caring in Environmental Ethics: Indigenous and Feminist Philosophies.” In *The Oxford Handbook of Environmental Ethics*, edited by Stephen M. Gardiner and Allen Thompson. Oxford Handbooks Online. Oxford University Press, 2017. <https://doi.org/10.1093/oxfordhb/9780199941339.001.0001>.